

SYLLABUS 2019-2020

KVR GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) KURNOOL
FIRST YEAR ENGLISH FOR B.A./ B.Com./B.Sc. COURSES UNDER CBCS
Syllabus 2018-19

SEMESTER -- I

UNIT - I PROSE

1. A.P.J. Abdul Kalam ----- The Power of Prayer
2. Ngugi wa Thiongo's ----- The Language of African Literature

UNIT - II POETRY

1. Robert Frost ----- THE Road Not Taken
2. William Wordsworth ----- Daffodils

UNIT - III SHORTSTORY

1. Mulk Raj Anand ----- The Lost Child
2. P. Satyavathi ----- What is My Name?

UNIT – IV ONE-ACT PLAY

William Shakespeare ----- The Merchant of Venice (Act IV scene i)

UNIT – V Language Activity

Classroom & Laboratory Activities

1. Sound (pronunciation)
2. Sight (Spelling)
3. Sound (Meaning)
4. Syntax (Usage)

Classroom Activity -- Grammar

1. Articles
2. Prepositions
3. Tenses
4. Question Tags

KVR GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) KURNOOL
COMMON FOR B.A./ B.Com./B.Sc. COURSES UNDER CBCS

Syllabus 2018-19

SEMESTER – II

Unit -- PROSE

1 J.B.S.Haldane ---- The Scientific Point of View

2. A.G. Gardiner --- On Shaking Hands

Unit –II POETRY

1.John Keats --- Ode to Autumn

2.Kishwar Naheed --- I am not that Woman

Unit –III SHORTSTORY

1.Ruskin Bond ---- The Boy Who Broke the Bank

2.R.K.Narayan ---- Half a Rupee Worth

Unit - - IV DRAMA

Cedric Mount --- Never-Never Nest

Unit—V LANGUAGE ACTIVITY

Classroom and Laboratory Activities

1 . Transformation of sentences (Voice, Direct & Indirect Speech and degrees of comparison)

2. Dialogue Practice (oral)

3. Listening Comprehension

Classroom Activities

1. Guided Composition

2. Dialogue writing

3 Reading Comprehension

KVR GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) KURNOOL
GENERAL ENGLISH SYLLABUS FOR B.A./B.Com./B.Sc. COURSES UNDER CBCS
w.e.f. 2015-2016 (Revised in April, 2016)
SEMRSTER - - III 2018-19

Unit - - I PROSE

1. M.K.Gandhi -- Shyness My Shield (from The story of My Experiments with Truth)
2. Steaphen Leacock -- The Conjuror's Revenge

Unit - - POETRY

1. Gabriel Okara- Once Upon Time
2. Seamus Heaney - - Digging

Unit -III SHORT STORY

1. O.Henry - The Last Leaf
2. Shashi Deshpande - - The Beloved Charioteer

Unit - -IV ONE-ACT PLAY

Gurajada Apparao - - Kanyasulkam (Act I&II)

Unit -V LANGUAGE ACTIVITY

- A. Classroom &Laboratory Activities
- 1 JAM Sessions
 - 2 Note-Taking
 - 3 Reporting for the Media
 - 4 Expansion of an Idea
- B) Classroom Activity
1. Note- Making
 2. Report Writing
 3. Letter Writing

KVR GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) KURNOOL
FIRST YEAR ENGLISH FOR B.A./ B.Com./B.Sc. COURSES UNDER CBCS

Syllabus 2019-20

SEMESTER -- I

UNIT - I PROSE

3. A.P.J. Abdul Kalam ----- The Power of Prayer
4. Ngugi wa Thiongo's ----- The Language of African Literature

UNIT - II POETRY

1. Robert Frost ----- THE Road Not Taken
2. William Wordsworth ----- Daffodils

UNIT - III SHORTSTORY

3. Mulk Raj Anand ----- The Lost Child
4. P. Satyavathi ----- What is My Name?

UNIT – IV ONE-ACT PLAY

William Shakespeare ----- The Merchant of Venice (Act IV scene i)

UNIT – V Language Activity

Classroom & Laboratory Activities

5. Sound (pronunciation)
6. Sight (Spelling)
7. Sound (Meaning)
8. Syntax (Usage)

Classroom Activity -- Grammar

5. Articles
6. Prepositions
7. Tenses
8. Question Tags

**KVR GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) KURNOOL
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3 Reading Comprehension

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GENERAL ENGLISH SYLLABUS FOR B.A./B.Com./B.Sc. COURSES UNDER CBCS
w.e.f. 2015-2016 (Revised in April, 2016)
SEMRSTER - - III 2019-20

Unit - - I PROSE

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Unit -V LANGUAGE ACTIVITY

B. Classroom &Laboratory Activities

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B) Classroom Activity

1. Note- Making
2. Report Writing
3. Letter Writing

2019-2020 Department of English -
(UG)

K.V.R. Government College for Women (A), Kurnool.

Date 14.8.2019

w.e.f. 2019-2020

Department of English

Minutes of BOS Meeting

Time: 2 o'clock.

The members of Board of Studies met in the department of English on 14.8.2019 at 2 P.M under the Chairman of Smt. P. Subbarajamma, Lecturer in English, In-charge of the department of English and discussed the proposals on the modification of curriculum of UG I II III Semesters English Syllabus (2019-2020)

I II III IV Sem. Advanced English & discussed the syllabus for certificate course, ^{15 hrs} and passed the following resolutions

1. Approval of UG English I II III Sem Syllabus
2. Approval of Adv. English I II III IV Sem Syllabus
3. To follow the Rayalaseema University pattern of question paper i.e. 40 + 60 : Internal 40 + External 60 = 100 Marks.

Division of Internal marks as follows

- a) Internal assessment - exam - 20 Marks
- b) Assignment - 5 Marks
- c) Seminar / project - 5 Marks
- d) Curricular aspects Quiz / viva - 5 Marks
- e) Group discussion / listening comprehension - 5 Marks.

40 Marks

3/ MEMBERS OF BOARD OF STUDIES

01. Smt P. Subbarajyanma lec in English K.V.R. Govt. College (w) (G), Kurnool	Chairperson	P.S. Raju 14/8/19	09
02. Prof. Y.S. Sharada Sri Padmavathi Mahila University Tirupati	University Nominee	Y.S. Sharada 14/8/19	10
03. Dr. A. Sunkanna, lec in English. Silver Jubilee College (G), Kurnool	Subject Expert	M. Anand 14/8/19	11
04. Sri M. Tafazulla Baig lec in English. Osmania College, Kurnool (G)	Subject Expert	M. Baig 14/8/19	
05. Dr. P. Sarinath Rayalaseema University, Kurnool.	Educationalist	P. Sarinath 14/8/19	
06. Dr. M. Farida Begum Asst. Prof. in English K.V.R. Govt. College (w) (G), Kurnool	Member.	M. Farida 14/8/19	
07. Smt. V. Sumithra lecturer in English K.V.R. Govt. College (w) (G), Kurnool	Member		
08. S. Sony, Contract lecturer in English K.V.R. Govt. College (w) (G), Kurnool	Member	S. Sony 14/8/19	

Studies

1. P.S. Rajan
14/8/19

2. S. Srinivas
14/8/19

~~3. S. Srinivas~~

4. S. Srinivas
14/8/19

5. S. Srinivas
14/8/19

6. S. Srinivas
14/8/19

9. Kum. A. Jeyaraj
M.A. SET

Alumni

A. Jeyaraj
14/8/19

10. Kum. Shakina Salamati Swan
III B.A. Adv. Eng
K.V.R. Govt College (w), Kurnool

Student
Representative

K. Shakina
14/8/19

11. Kum. Harini
I B.A. Adv. Eng
K.V.R. Govt. College Kurnool

Student
Representative

C. Harini
14/8/19

K.V.R. GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Established in 1988 under U.C. No. 197 Edn. Dt. 27-01-1988
 Accredited at "A" Grade by NAAC.

Date: 14-8-2019



KURNOOL
 BOARD OF STUDIES MEETING
 DEPARTMENT OF ENGLISH 2019-20

MEMBERS OF BOARD OF STUDIES

01	Smt. P. Subbarajamma, Lecturer in English K.V.R. Govt. College (W)(A), Kurnool	Chairperson	P. S. S. Signature 14/8/19
02	Prof. Y. S. Sharada Sri Padmavathi Mahila University, Tirupati	University Nominee	Y. S. Sharada 14/8/19
03	Dr. A. Sunkanna, Lecturer in English, Silver Jubilee College (A), Kurnool	Subject Expert	A. Sunkanna
04	Sri M. Jafarulla, Lecturer in English Osmania College, Kurnool (A)	Subject Expert	M. Jafarulla 14/8/19
05	D.P. Somnath, Rayalaseema University, Kurnool	Educationalist	D. P. Somnath
06	Dr. M. Farida Begum, Asst. Prof in English K.V.R. Govt. College (W)(A), Kurnool	Member	M. Farida Begum
07	Smt. Y. Sunitha, Lecturer in English K.V.R. Govt. College (W)(A), Kurnool	Member	ABSENT
08	S. Sony, Contract Lecturer in English K.V.R. Govt. College (W)(A), Kurnool	Member	S. Sony
09	Kum. A. Jemimah, M.A., SET	Alumni	A. Jemimah
10	Kum. Shakina Solamite Swan, III B.A., Adv. Eng K.V.R. Govt. College (W), Kurnool (A)	Student Representative	K. Shakina
11	Kum. Harini, I B.A., Adv. Eng. K.V.R. Govt. College, Kurnool (A)	Student Representative	C. Harini

K.V.R.GOVERNMENT COLLEGE FOR WOMEN,KURNOOL. (AUTONOMOUS)

II B.A SPECIAL ENGLISH SYLLABUS 2019-2020

(W.e.f 2017-2018)

Part-II, Semester-III ,Paper-III

UNIT-I

1.History Of English Literature :Restoration and Augustan Periods

(17th&18th Centuries)

UNIT-II

2.Literary Forms and Terms:i). Satire ii) Mock-epic iii),Heroic couplet

iv) Epistle v) Heroic tragedy vi) Comedy of manners

vii) Genteel comedy vii)Sentimental comedy viii) Periodical essay

UNIT-III

3.Poetry: Alexander Pope: Extracts from The Rape of the Lock,Canto-1

UNIT-IV

4.Prose: Daniel Defoe: Robinson Crusoe

UNIT-V

5.Drama: William Congreve: The Way of the World.

Recommended Reference Books:

1. A History of English Literature by W.J.Long.
2. A Critical History of English Literature by David Daiches (Published by supernova)
3. The Cambridge History of English Literature by Ward and Waller. (Published by Kessinger)
4. A Glossary of Literary Terms by M.H.Abrams (Published by Cengage)
5. The Penguin of Dictionary of Literary Terms and Theory by J.A. Cuddon.(Published by Penguin)

K.V.R.GOVERNMENT COLLEGE FOR WOMEN,KURNOOL. (AUTONOMOUS)

II B.A SPECIAL ENGLISH SYLLABUS2019-20

(W.e.f 2017-2019)

Part-II, Semester-IV ,Paper-IV

UNIT-I

1.History Of English Literature :Romantic and Victorian Periods

UNIT-II

2.Literary Forms and Terms:i). Biography ii) Autobiography iii) Melodrama
iv) Historical novel v)Sentimental novel vi) Gothic novel vii)Regional novel
viii) Flat characters ix) Round characters x) Protagonist xi) Antagonist

UNIT-III

3.Poetry I : John Keats:Ode to a Nightingale

UNIT-IV

4.Prose: Jane Austen: Pride and Prejudice

UNIT-V

5.Poetry 2: Robert Browning : How do I Love thee?

Recommended Reference Books:

1. A History of English Literature by W.J.Long.
2. A Critical History of English Literature by David Daiches (Published by supernova)
3. The Cambridge History of English Literature by Ward and Waller. (Published by Kessinger)
4. A Glossory of Literary Terms by M.H.Abrams (Published by Cengage)
5. The Penguin of Dictionary of Literary Terms and Theory by J.A. Cuddon.(Published by Penguin)

7/8/19
21

Bos meeting.

2019-20 విద్యా సంవత్సరానికి గాను డిగ్రీ విజ్ఞాన సంవత్సరము (III year) ప్రత్యేక తెలుగు సలహా గూఢాసాదియ ద్వారాగాను తేది 7/8/19 వ తేదిన తెలుగు ఉద్యోగ సంఘం ద్వారాగాను BOB సమావేశము ఏర్పాటు చేయబడుతున్నది. ఈ సమావేశములో III సమన్వయ మరియు IV సమన్వయ ప్రాంతాల పై చర్చ జరిపి తగిన నిర్ణయాలు తీసుకోవడం జరిగింది.

క్రింది సభ్యుల ద్వారా ప్రాంతాలను ఏకగ్రీవంగా తెలియజేయబడుతున్నది.

1. ఛైర్ పర్సన్ : డా. వి. కృషీవి. V. Sridhar
రీడర్ & HOD - KVR GCUW.
KVR కర్నూలు.
2. యుగాని విశ్లేషణ నామిని : ఆచార్య. వరసింహులు ఎ.కె. సత్యనాథులు
తాయలసమ విప్లవిద్యాలయము 7-8-2019
కర్నూలు.
3. ప్రాంత విప్లకులు :- డా. ఎం. సీంపాడి M. Srinivasulu
రీడర్ & ఆర్డీ & ప్లెన్ నాటివ్.
ఆనంతపురం.
2. డా. ఎస్. పుషిపాణి 5. Shamsulla
GDC బుకనవల్లుం.
ఆనంతపురం 7/8/19
4. విద్యావేలే : కె. తారాకృష్ణ నాయుడు H. Sridhar
GDC. ఎన్.ఎల్.ఎస్. కర్నూలు.
5. కళాశాల ప్రధాని : డి. వి. మలినేని D. Venkatesh
విశ్రాంత తెలుగు ఉద్యోగ సంఘం.
6. సభ్యులు :- డా. ఎం. సామిదబేగం P. Venkatesh
KVR. GCUW (A) కర్నూలు.
2. ఎ. వి. విద్యావాసిని దేవి S. Venkatesh
KVR. GCUW (A) కర్నూలు.
3. డా. ఎం. వెంకటలక్ష్మమ్మ K. Venkatesh
KVR. GCUW (A) కర్నూలు.
7. విద్యా నిహితారులు : 1. జి. వీరాచంద్ III B.A (RD). G. Mounika
(JBW) 2. చరిత్ర II B.A (RD) Chaitanya

K.V.R. GOVT.COLLEGE FOR WOMEN (A)

Department of Telugu

Syllabus and Model Question Paper

II Year

Advance Telugu

2019-2020

BOS Meeting

Advance Telugu

II Year

III

SEMESTER

2019-2020

Syllabus and Model Question Paper

రాయలసీమ విశ్వవిద్యాలయము కర్నూలు

బి .ఎ . ర ఠెండువ సంవత్సరము -

పర్యవేక్షక తరగతి గురుపాఠశాల పర్యవేక్షక - 2019-20

మూడవ సెమిస్టర్ - పాఠ చరీన సహాధికారి

చరిత్ర

1. వేణుజీననయ యుగం - సహజ వికాసం

2. శివకవి యుగం - న్నయ ,తికకన్ , ఎఱ్ఱన్

3. శ్రీనాథ యుగం - నాననచోడుడు, పండితారధయ్యడు, వేలకరికి సో
మనాధ్యుడు,

ద్విపద కరవయ సంపాదకం

4. పద సహాధికారి - అనమయ - క్షత్రయ - తామ్రయ - కంచల
గోపన

5. పాబంధ యుగం - పాబంధ్ కణాల్క - పెదదన్, తిమమన్, శ్రీకృష్ణదేవరాయల్క,
ధార్ణటి, పంగళి సూర్య, రమరజ భూష్ణుడు, పంగళి
సూర్యమొల్ల

7. ఆధునఱకాఱింధర కవఱితఱపఱిం సెంపఱరఱ్యయలలఱ - పఱరయఱగఱఱాలు -

ఱఱ.సి .నఱరఱయణ ర ఱఱఱఱ

క .వి.ఆర్.ప్రభుత్వ మహిళా డిగ్రీ కళాశాల (సవ.ప్ర)కర్నూలు
బి .ఎ .(ఆర్ .డి) రెండవ సంవత్సరము - పరీక్షా తీరుగు -
2019-20

మూడవ సెమిస్టర్ - పాఠ
చీన సాహితీ చిత్రముదారి
పాఠశాల పాఠము

సమయము : 3 గం ||

మార్కుల్య : 60

PART - A

I . ఈ క్రింది వాటిలో ఐదొంటిక లభురనప్ సముధనల
రాయండి 5 X4 =20

- | | |
|------------------------|-----------------|
| 1. ప్రాజ్ఞయ యుగం - భాష | 2. తికకన్ |
| 3 . పండితారధ్ చరిత్ర | 4. కకమార్ సంభవం |
| 5. శృంగరననైట్ | 6. పెదదన్ |
| 7 . పాబంధ్ వరణనల్క | 8. వసు చరిత్ర |
| 9. భాసకర్ రరమాయణం | 10. మొల్ల |

PART - B

II . ఈ క్రింది వాటిలో ఐదొంటిక వాసరనప్ సముధనల
రాయండి 5 X 8=40

- 1 . సహిత్ర యుగ విభజనన్
విశదీకరించండి .

లేదేదా

వీణా జీనన్‌నయ యుగ శరసనాళాన్‌ను

పీఠకన్‌ండి. 2. న్నయ కవితా లక్షణాల్ప

వివరించండి.

లేదేదా

తికకన్‌నాటకయత్‌క్షణానినసోదాహర్ణంగరతెల్పండి.

3. శివ కవి యుగ పాతఖే క ల్యషణాల్‌ను వనల్‌డించండి

లేదేదా

“ శివతత్‌ సరం ” ఆధారంగర మల్లకరజకన్

పండితారధ్యుని కవితా లక్షణాల్‌న్య

విశదీకరించండి

4. పాబంధ పాకీయ లక్షణాల్ప వివరించండి.

లేదేదా

ఆమకర మాలద పాబంధాధారంగర రయల్ కవితా లక్షణాల్ప తెల్లయజయండి .

5 . మొల్ రమయణం విశిష్టత్వ తెల్లయజయండి .

లేదేదా

భాసకర్ రరమయణ కర్పతానిన చరించండి

కవిత్వ ప్రభుత్వ డిగ్రీ

కళాశాల(సవ.పీ)ర కర్నూలు

(బి .ఎ /బి .కామ్ /బి.ఎస్సీ) ర రెండవ సంవత్సరం

మూడవ సమీక్ష - పోస్ట్ గ్రాడ్యుయేట్ - అంతర్గత పరీక్ష - మూడో రోజు పోస్ట్ గ్రాడ్యుయేట్

పాఠ్యము

సమయం:1గంట

మార్కులు 20

I. ఈ క్రింది పాఠ్యాలలో ఏదైనా రెండింటికీ లక్షణాలు సమన్వయంగా రాయండి 2 x 5 =10

- 1.అందమైన, తెనయగు, తలకగు పదాల పోకా చిన్న తల్లియజేయండి .
2. సరహిత్య వికరణ
3. ఎఱ్ఱన్ భారాంధికర్లు
- 4.మహాభారత్ వనశ్రీరూపానిన తల్లియజేయండి

II. ఈ క్రింది పాఠ్యాలకు వయస్సరూప సమన్వయం రాయండి 1 x 10 =10

1. పోకా జనననయ యుగ భాష లక్షణాలు తెలయజేయండి . (లక్షణాలు)
- 2.తిక్కన కవితా లక్షణాలు వివరించండి

క .వి.ఆర్.ప్రభుత్వ మహిళా డిగ్రీ కళాశాల (సవ.ప్ర)కర్నూలు

బి .ఎ .(ఆర్ .డి) ర రెండవ సంవత్సరము - మూడవ

సంవత్సరము పరీక్షలకు తీరేలగు

పాఠానికి పరీక్షయళిక - 2019-20

మూలాలాంకన విధయనెం

పరీక్షకు తీరేలగు ర రెండవ

సంవత్సరం 2019-20 1 . లఘు ర్నప్

సమలధయనయలు

కవి ప్రీచయెం 1

మలర్లు వరిషయ

వరిశాలషణ 2

మలర్లుల భాష 1

మలర్లు

2 . వరిశాలషణ సమలధయనయలు

కవి ప్రీచయెం 2 మలర్లులు

వరిషయ వరిశాలషణ 5

మరొకటి భాష 1

మలరొకటి

Advance Telugu

II Year

IV

SEMESTER

2019-2020

Syllabus and Model Question Paper

రాయలసీమ విశ్వవిద్యాలయము-కర్నూలు

బి .ఎ . ర ఠెండవ సెంవత్సర్కు

పర్వతయికాక త్రిలయగుపర్వతా పర్వతయళిక - 2019-20

నల్లగవ సరిమిసటర్ల ఆధునరిక

సహాభి ఠా చరిత్ర

1. నయయక రాజుల పాలనలో సాహితీఠాఠెం - యక్ష గీఠానయలు -వచన కావాఠాలు

శ్లాలు (సుమతి ,వేమన)విజ్య విలలసెం

2 . ఆధునిక కవిత్వెం- గుర్జఠాడ,కృషణశాసఠఠి,జ్ఠాషువా,శ్రీ శ్రీ,అబూఠారి

చయయలద్యవి

3 . నవల - కెండుకూరి ,ఉనూవ ,విశ్వనయథ , కొడవటిగెంటి ,ఠఠెంగనయయకమమ

వాసిర డి , కేశ్య ర డి

4 . నయటకెం - ఠఠమవఠఠెం ,వేదఠెం వేఠెంకటరఠాయ శాసఠఠి ,తిఠఠిప్పఠి

వ ఠెంకట కవులఠు

5 . కఠయనిక - శ్రీ పఠాద సఠుబరహఠఠణఠా శఠాసఠఠి ,చలఠెం ,కనవఠఠఠి

వఠఠక్షమమమ

మధుఠాఠెంత్తెంఠాజ్ఠాఠాఠెం

,ఠఠఠెంగనయయకమమ,కాళీఠ్ఠాఠెంఠామలఠావు

క .వి.ఆర్.ప్రభుత్వ మహిళా డిగ్రీ కళాశాల (సవ.ప్ర)కర్నూలు

బి .ఎ .(ఆర్ .డి) రిజిస్ట్రేషన్ సర్టిఫికేట్ కౌన్సిల్ - నల్లగవ

సామాన్య పాఠశాల పాఠ్య పుస్తకాల పాఠశాల

పాఠశాల - 2019-20 ఆధునిక సాహిత్య చరిత్ర

1. ఆధునిక కవిత్వం - గుర్జురాడ , కృష్ణశాసరీ , జ్ఞాపయవళాశ్రీ శ్రీ ,
అబ్దుల్ కరీం చయ్యలద్యవి

2 . నవల - కరిందలకూరి , ఉనయ , విశ్వనాథ , కొదవటి గరింటి
, రంగనయకమమ

వాసిర డి , కేశ్య ర డి

3 . నయటకం - ధర్మవర్ణం , వరదేం వేంకటరాయ శాసరీ , తిరియపతి
వేంకట కవలలు

4 . కథనానిక - శ్రీ పాద సుబరహ్మణ్య శాసరీ , చలం , కనకరతి
వరలక్షమమ

మధురాంత్కం రాజ్ శారాం

, రంగనయకమమ , కాళీపూరామలరావు 5 . సీవయ చరిత్ర

, జీవిత చరిత్రలు - బోయి భీమనయా , రాళ్ళప్పల అనంతకృష్ణ

శ్రీ

(పాఠశాల నుండి వేద్యుని వరకయ)

(వేమన)

ఆధునీకీకరణం

1. తెలంగాణ సరహిత్య చరిత్ర - దానినా శరణి
2. తెలంగాణ సరహిత్య చరిత్ర - దానినా వనలమల్ స్తమమన్న
3. సరహిత్య శిల్ప సమీక్ష - పంకజి ల్యషు కరణం
4. తిలగు సాహిత్య సమీక్ష - జి.నయగయా
5. సమగ్రీకరణం సహిత్రీకరణం - ఆర్దిదర
6. ఆధునీకీకరణం కవితీవరణం సంపరీరద్యయలల - పరీరయోగరీకాలు -
డ.సి .నరకాయణ ర డరీ

క .వి.ఆర్.ప్రభుత్వ మహిళా డిగ్రీ కళాశాల (సవ.ప్ర)కర్నూలు
బి .ఎ .(ఆర్ .డి) రెండవ సంవత్సరము - పరీక్షాకాండ తొలుగు -
2019-20

నల్లగ వసతిమిసటర్లు - పాఠ చీన

సాహితీ యోజనా

పాఠశాల పాఠ్యము

సమయము :3 గం ||

మార్కులు :60

PART -A

I . ఈ క్రింది వాటిలో ఐదొకటికే లభ్యమవునట్లు

రాయండి 5 X4=20

- | | |
|-------------------------|-----------------------|
| 1. ముత్యాలసరస్వతి | 2. అబూలకాసి చాపా దీవి |
| 3. న్యూట్ డిస్కవరీ | 4. విశాఖాధిపతి |
| 5. రెండవ ఐదుగ వజ్రయాత్ర | 6. చారిత్రాగ నాటకము |
| 7. కథానిక నిరంజనం | 8. కనకపరివర వర్ణనము |
| 9. స్వయం చరిత్రా లక | 10. జీవిత చరిత్రా లక |

PART - B

II. ఈ క్రింది వాటిలో ఐదొకటికే వాసర్ప సమలధయనయలు రాయండి

5X8=40

1. ఆధునీకత్నం నిరంజనం ఆధునీక కవితా లక్షణాలను విశదీకరించండి .

లేదా

జూపించువర కవితోం లో దళితో సప్యహ నీయ పరకకన్డి .

2. నవల్ నీయ నిరొంచంచ న్వల్లా వికరసరనిన సోద్లాహారణంగర తెల్పండి

లోద్లా

రొంగనలాయకమమ యం ండి

నవల్లలో స్థరవః ప్రల్లన్లు పరచ చయ .

3. నాటక లక్షణకాల్పన వివరణంగు పేరకకన్డం .

లక్షణకా

“ వదం వేంకటరాయ శర్మర ి నాటకకల్పన సమీక్షణం ండి .

4. కథానిక ఆరంభ వికరసరల్లన చరిచంచండి .

లక్షణకా

యం చేయండి .

మధ్యరంతకం రజకారం

కథానికల్పన పరచ

5 . తెలకగులలో రయబడిన స్థవియ చరితకాలన్ సమీక్షణంచండి

లక్షణకా

జీవిత చరితకా లక్షణకాల్పన వివరణంగా రకలపల్ల అనంత

కృషణ శరణ వేమన్య సమీక్షణంచండి .

క విఆర్ ప్రభుత్వ డిగ్రీ

కళాశాల(సవ.ప)ర కర్నూలు

(బి .ఎ /బి .కామ్ /బి.ఎస్సీస) ర రెండవ సంవత్సరం

నాణ్యత సరిమిసటర్లు - పరీక్షాక త్తెలుగులు - ఆ రెంట్ గత ర్ పరీక్షక ర్ ష ముదోర్ రి పరీక్షాకా
పరీక్షరమం

సమయం:1గంట

మార్కుకల్కు 20

I. ఈ క్రింద పాశనల్ లో ఏవైనా రెండింటికీ లక్షము సమకాధానకాల్క రయండి 2 x
5 =10

- 1.వచన్ కవితో లక్షణాలక తెల్లయజేయండి .
2. మహా పసారన్
3. కందయకూరి న్వల్లక
4. ఏకవీర్

II. ఈ క్రింద పాశనకక వయసర్పాప సమకాధానం రయండి 1 x 10 =10

1. ఆధునీకతన్ నిర్వచంచ ఆధునీక కవితో లక్షణాల్క తల్లియజేయండి . (లోద్కా)
2. సంఘ సంసకర్ణ న్వల్లక వివరించండి

క .వి.ఆర్.ప్రభుత్వ మహిళా డిగ్రీ కళాశాల (సవ.ప్ర)కర్నూలు

బి .ఎ .(ఆర్.డీ) రెండవ సంవత్సరము - నాలుగ

వ సామాజిక పాఠ్యాంశ తరలయగు

పాఠా పాఠా పాఠా - 2019-

20 మూలాలాంకన విధయనెం

పాఠాంశ తరలయగు రెండవ

సంవత్సరం 2019-20 1 . లఘు ర్నా

సమలధయనయలు

కవి ప్రీచయెం 1

మలర్ల వాషయ

వశాలషణ 2

మలర్లల భాష 1

మలర్ల

2 . వశాలషణ ర్నా సమలధయనయలు

కవి ప్రీచయెం 2 మలర్లలు

వాషయ వశాలషణ 5

మలర్లల భాష 1

మలర్ల

K.V.R. GOVT.COLLEGE FOR WOMEN (A)

KURNOOL

Department of Telugu

Syllabus and Model Question Paper

II Year

General Telugu

2019-2020

BOS Meeting

రాయలసీమ విశ్వవిద్యాలయము - కర్నూలు

బి .ఎ , బి.కళాశాఖ , బి ఎస్సీ రిజర్వేషన్లకు - మూడవ
సరిమొసటరాయి

సామలనా తర్రులుగు పాఠశాల ప్రణయళిక - 2016-17

పాఠశాల ప్రాథమిక భాగము

- 1 . బమ్మమర్ పోత్నీ - వరమనావతార్కు
- 2 . కొట్టి గోపరజు - శరల్లవరహాస్విజయము

ఆధునిక ప్రాథమిక భాగము

- 1 . కకసయమ ధృన్మ కవి - హరిజన్ శత్రుం
- 2 . రరయప్పోశా ల్క సయబూరరవు - సంకీరంతి సంబర్ం

గదా భాగము

- 1 . ఆచార్య గుజ్జులమూడో కృష్ణచారీ - తల్లెగల భూష
- 2 . ఆచార్య రుచిపాళం చందాశేఖరీ రడి - యుకరతో వికరసం

వార్షిక పరీక్ష

- 1 . చందసయము
- 2 . అలంకరరల్క

క .వి.ఆర్.ప్రభుత్వ మహిళా డిగ్రీ కళాశాల (సవ.ప్ర)కర్నూలు

బి .ఎ , బి.కళాశాల ,బి ఎస్సీస ర కెండ్వ సకెంవత్సరకేమయ -
మయాడవ సకెమరీసట రకేయ

సామలనా కేకెలుగు పాకేకా ప్రణయళిక - 2019-20

పార కీన స్థా భాగము

- 1 .బమ్మమర్ పోకే -వరమనావతార్కు
- 2 . నెండ్వ తిమమన్ -సత్యభామా సరంకేన్ము

ఆధునిక స్థా భాగము

- 1 . కకసయమ ధ్మన్న కవి - హరిజన్శత్రం
- 2 . రరయపేకా ల్క సయబూరరవు - సంకీరంతి సంబర్ం

గదా భాగము

- 1 . ఆచారకే గుజజర్లమయాడి కపేవరచారకే - తకెల్కగు భకాప్
- 2 . ఆచారకే రరచపేరళ ం చందాశేఖరకే రడి - వయకరకే వికరసం

వారకరెం

- 1 . ఛందసయ
- 2 .అలంకరరల్క

క .వి.ఆర్.ప్రభుత్వ మహిళా డిగ్రీ కళాశాల (సవ.ప్ర) కర్నూలు

బి.ఎ , బి .కాం, బి ఎస్సె ర డెండవ

సెవెన్తర్ను మూడవ సెమిస్టర్ - సామలనా

త్రికైలుగు - 2019-20 ముద్రీరీ

పరీక్షాపత్రం

సమయము : 3 గం ||

మార్కుల్య : 60

I . ఈ కరీకెండరీ పరీక్షరీకాలలో ఒక దరీనరీకరీ సమగీ వారీఖరీక రకాయరీకెండరీ . 1X10=10

రీవ బంబం బుపమంప బకారీమగు చరీంబరీ శరీరరీరీనమరీమరీ

శరీ వణారీంకృత్యరీ గళా భరీమరీ , సారీవరీ కరీయారీయరీ

చవి మరీకంకణమరీమరీ కరీ సకారీ నరీదంబ దరీసరీవరీమరీ నరీపరీ

పవరీం బరీ పద పవరీ మరీమరీ వరీంబరీ దరీ బరీమంబరీ నరీంబరీ చరీ .

లరీదరీ

ఎమరీమరీ ! కలూశన్యంబరీకరీ యరీతెంబరీ యరీలరీకరీ

యారీ మారీలరీచవి యరీగరీ తారీవరీయరీనారీ యారీగరీప కరీ వరీ

భుడరీమరీమరీ ర్యకరీమణరీ సరీయరీ ? నరీ వరీకరీకరీ

దరీకరీదరీ !

నరీ మారీమారీ మారీ నరీరీముఖరీ ! నరీకకం బ రరీగరీంపవరీ !

II . ఈ కరీకెండరీ పరీక్షరీకాలలో ఒక పరీక్షరీక యరీ కరీ సమరీధరీనరీం రకాయరీకెండరీ 1X10=10

1 . వరీమనారీవతారీ పరీరరీనరీ వరీరరీంబరీ .

2 . సరీభరీమరీ సరీంకరీం పరీరరీంకరీమరీధారీంగరీ సరీభరీమ గరీణ శరీలరీల్ తరీలయరీకరీయంబరీ

III . ఈ కరీకెండరీ పరీక్షరీకాలలో ఒక పరీక్షరీక కరీ సమరీధరీనరీం రకాయరీకెండరీ 1X10=10

1 . కరీసయమ దరీంబరీనరీ వరీరరీంబరీ వరీబరీనరీ దరీంబరీ నరీ వరీవరీంబరీ

2 . సుంకరీంకరీ సుంబరీం పరీరరీం ఆధారరీంగరీ తరీలరీగరీ వరీ సుంసకరీ సుంపదరీయరీల్పరీ
వరీంబరీ

IV. ఈ కథలెందరో పాఠశాలలో ఒక పాఠశాలలో కలు సముదానం రచయించి 1X10=10

1. తలెలకగు భాషా విశిష్టతను వివరించండి .
2. వయస్సుతో వికరస సోపానాల్ప వాచించండి

V. ఈ దానివాటిలో ప్రతి భాగం నుండి ర రెండింటికీ సందర్భసహిత వాఖ్యాలను రాయండి . 4X 2.5=10
కథలెం

అ - భాగము

1. వల్లీ దాని గీనున్
2. మాట తిక్క లోక మాన్వల్య
3. హరి చందన్ కోటయ్యక నాగ త్తణియు బో ల్పన్
4. అల్ప మాన్వ కదా ఇకననైనా యరరళకంట్టా

ఆ - భాగము

1. బతుకక భారమయే భామ దూరమయెర
2. బానిసవయ పర్వ బాస్త వోయెదవనల్
3. చూడ కనయనల్ వనడుకయెన్
4. వరా ల్పడే సంకీరతి మబుల్య

VI. ఈ కథలెందరో వానిలో ఒక దానినికీ సముదానం రచయించి . 1X 5 =5

1. “ ఇంతింతై వటుడింతై మరియు దానింతై న్నో వీధవ వై” .

పెరై పదయ పాఠశాలానికీ గణ విభజన్ చేస్త పదయ లక్షణాలన్ రరయండి .

లోదా

2. ఆటవనల్ప పదయ లక్షణాల్ప రరయండి .

VII. ఈ కథలెందరో వానిలో ఒక దానినికీ సముదానం రచయించి . 1X 5 =5

1. ఈ కథలెందరో పాఠశాలానికీ లక్షణ లక్షణ సమన్యం

చాయండి . ధాతిని హల్లకకన్యక సయ

క్షేతము బీజముల్ప ల్పసు చేకూర్భంగిన్

జితము గ దాత్యవీయు

బాతము సమకూర్ప స్థిట భాగయము గల్గో

లోదా

2. సిభావోకిర అలంకరయ్య

కవిత్ర ప్రభుత్వ డిగ్రీ

కళాశాల(సవ.వ)ర

కర్నూలు

(బి .ఎ /బి .కామ్ /బి.ఎసీస) ర రెండవ సెమెస్టర్

మూడవ సెమెస్టర్ - సామలనా తరెలుగు

తెంత్రగత ా ప్తరక్ష ముద్రీరి ప్తరశకాా ప్తత్రమం

సమయం:1గంట

మార్కకల్క 20 .

I . ఈ క్తీంద్ర

పదకానకీ సమగీ వరఖు

రయండి

$1 \times 10 = 10$ రకీవి బంబం

బుపమంప బాతకామగు ఛతకాంబలై శిరోరత్నమ్మై

శరీ వణకాలంకృత్మలై గళకా భరణమ్మలై , సకావరణ కయూరమ్మై

చవి మత్కంకణమమ్మై కటి సకాల్ న్దంచ దిసరమ్మై న్కాపం

పకావరం బలై పద పవరమ్మై వటండు దకా బాహమండమం నినండు చన్ .

II. ఈ క్తీంద్ర

పాశనకక వయసర్కాపసమకాధానం రయండి

$1 \times 10 = 10$

1.వరమనావతారం వరఖ భాగ సరరంశనిన వీవరించాడి .

2.హరిజన్ శత్రం లో కవి వనల్డించన్ భావరల్పం వీవరించాడి .

**క .వి.ఆర్.ప్రభుత్వ మహిళా డిగ్రీ కళాశాల (సవ.ప్ర)
)కర్నూలు**

(బ .ఎ /బ .కరమ్ /బ.ఎస్సవు) రంధంవ సంవత్సర్ము 2019-20

మూడవ సరిమోసటరం - సరిమలనరి తరిలగు -

మూలలారింకన విధయనెం

1 . సమగి వారిభరి

కవి కరలరిదయలక	2 మారిక
పతి పదరిరిరిరిరిరిరి	3 మారికలక
తారరిరిరిరిరిరి	3 మారికలక
విశరిరిరిరిరిరి	2 మారిక
<u>మెత్రిం</u>	<u>10 మారికలక</u>

2 . వారిసరిరి సమధయనయలు

కవి పరిరిరిరిరిరి	2 మారిక
విషయ విశరిరిరిరి	6 మారికలక
భాష	2 మారిక
<u>మెత్రిం</u>	<u>10 మారికలక</u>

3 .సెందరిరి సరిరిరి వారిభరి

కవి పరిరిరిరిరిరి

1 మారిక సెందరిరిరి

1/2

భావము 1 మారిక

4. చెందసుస

A . గణ విభజని 3

మారికలక లిరిరిరిరి

సమనిరిరిరిరిరి 2

మారిరిరిరిరిరిరి

B. పదయ లక్షణాలకు 3

మార్కలకు ఉదాహరణ 2

మార్కలకు

5. అలంకారాలు

A . అలంకారం గురించిన దయలకు 2

మార్కలకు లక్షణ సమన్వయం

3

మూలకలకు

B . అలంకార లక్షణాలకు 2

మార్కలకు ఉదాహరణ 3

మార్కలకు

KVR GOVT. COLLEGE FOR WOMEN(AUTONOMOUS)KURNOOL

Department of Urdu 2019-20

II Year Second Language Urdu (CBCS)

Resolution of the BOS Meeting

The members of the Board of Studies met in the department of Urdu on 25.07.2019 at 10.00 a.m. under the chairmanship of Dr. Irfana Begum, i/c of the Department of Urdu. The BOS discussed the proposals on the revision and modification of curriculum of II Year UG with CBCS for B.A Second Language Urdu Paper III 2019-20 .

The prescribed syllabus is modify the flexibility of autonomy of Second Language Urdu in Paper III 2019-20 .

- a) The Total Syllabus for the year 2019-20 of II nd year Second Language Urdu in Semester III have in Five (5) Units in Urdu Poetry.
- b) Five Units have in Semester III & there is no Semester IV in second language urdu.
- c) For Semester III, In Prose Part Unit I –Dastan Bagh o Bahar Agaaz Qissa a selected portion is changedomitted for the purpose of old version and added the new “ Inshayie Haq Part II Chapter “Safer o Sayahat” by Dr. Abdul Haq local prominent and great personality to enable the students with the knowledge of new version in Prose .
- d) Unit –II Khutoot e Galib ,, Unit- III Masnavi Ibne Nishati “Phool Ban” Agaze Dastan, Unit IV – Marsiya Meer Anees selected portion and in Unit –V Rubaiyat Amjad Hyderabadadi and Sagar Jaiyedi are the same poetry for ethical knowledge and improving social skills among the student.

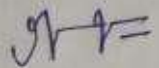
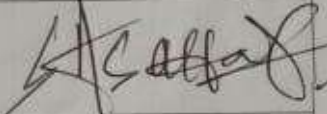
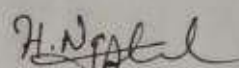

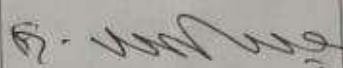
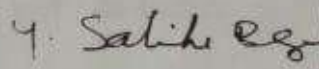
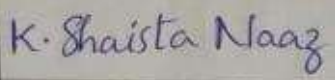
KVR GOVT. COLLEGE (W), KURNOOL. AUTONOMOUS (A Grade)

DEPARTMENT OF URDU

The BOS of Second Language Urdu meeting is held on 25- 07-2019 at 10.00 A.M at the Department of Urdu of KVR Govt. College (w) Kurnool.

The following members are attended .

BOARD OF STUDIES MEMBERS

S. No	Category	Name & Designation	Acted as	Signature
1.	In Charge Of Dept	Dr. IRFANA BEGUM	Chairperson	
2.	University Nominee	Prof. ABDUS SATTAR SAHEB	University Nominee	
3.	Faculty	H. NAZEER AHMED	Member	
4.	Subject Expert	S. MD. ZAHURULLAH	Member	
5.	Retd. Lecturer	Dr. SYED WAHEED KOUSER	Educationist	
6.	Urdu Lecturer	Y.SALEHA BEGUM	Alumni	
7.	Student	K. SHAISTA NAAZ III B.A(U.M)	Class Representative	
8.	Student	S. SABA SAMREEN II B.A(U.M)	Class Representative	

KVR Govt. College (w) Autonomous Kurnool.

Syllabus for (B.A./ B.Com. / B.Sc.) U.G. 2019-20

Under Common Core Scheme in Urdu – CBCS

As per Andhra Pradesh State Council of Higher Education

Second Language – Urdu Paper – III

SEMESTER - III

Prescribed Book: MUNTAKHAB ADAB – II

- UNIT – I** **Inteqab-e- InshaiyeHaq (New)**
- UNIT – II** **KhutooteGhalib –**
Banaam Mir Mehdi Majrooh
Aur Hatim Ali Mehar
- UNIT – III** **Masnavi – IbneNishati – Phoolbun – AaghazeDastan - 21**
Sher
- UNIT – IV** **Marsiya – Meer Anees – Jab Qatakimasafateshabaaftab ne (**
Ibtidayi 6 band musaddaske)
- UNIT – V** **Rubaiyaat**
- 1. AmjadHyderabadi – ‘ Harcheezkakhonabhi ‘**
- 2. SagharJayyedi –‘ Tareefkimeezaanpetuljatehain**

KVR GOVT. COLLEGE FOR WOMEN(AUTONOMOUS)KURNOOL

Department of Urdu 2019-20

II Year Advance Urdu (CBCS)

Resolution of the BOS Meeting

The members of the Board of Studies met in the department of Urdu on 25.07.2019 at 11.30 a.m. under the chairmanship of Dr. Irfana Begum, i/c of the Department of Urdu. The BOS discussed the proposals on the revision and modification of curriculum of II Year UG with CBCS for B.A Advance

Urdu Paper III & Paper IV 2019-20 .

The prescribed syllabus is modify the flexibility of autonomy of Advance Urdu in Paper III & Paper IV 2019-20 .

a) The Total Syllabus for the year 2019-20 of II nd year Advance Urdu in both Semester III & IV have in Ten (10) Units in Urdu Poetry.

b) Five Units have in Semester III & Five Units have in Semester IV.

c) For Semester III, In Poetry Part Unit I -Masnavi Gulzar-e- Naseem, selected portion, Unit –II Gazals of Galib ,Gigar and Majrooh, Unit- III Nazm of Alaama Iqbal and Maqdoomare the same for ethical knowledge and improving social skills among the student.

d) In Unit IV – Galib , Gigar and Majrooh Sawaneh are omitted because those poets Gazals are already in Unit II. For the purpose of repeatation of poets the Unit is changed and replace the local prominent poets Gazals in that paper.

The Unit IV “ Kurnool ke Gazal go Shora”

a) Allama Yaseer Kurnooli b) Dr. Waheed Kouser c) Dr . Quisi Qamar Nagri

a) “Jane kab aye mere dard ko darman hona”by Nafeer e Shauq.

b) “Main ne mangi hai ye dua bhayee” by Aks e Shafaq. Pg no. 136

c) Shayer ko saliqe se saza kion nahi dete. by Bilkuliyat. Pg no.111

Gazals. Each poet only one selected Gazal as a part of Unit – IV.

In Unit –V Swaneh Allama Iqbal and Majrooh are the same for the greatness of those poets.

e) For Semester IV In Poetry Part Unit I – Qaseeda Taaruf, Unit –II Qaseeda Mohsin Kakorvi selected portion . Unit- III Marsiya Ta aruf, & in Unit- IV Marsiya

Meer Anees selected portion are the same for ethical knowledge and improving social skills among the student.

f) In Unit-V: Biography of Poets a) Mohsin Kakorvi 2) Meer Aneesareomitted and added a new poetry type issubstituted with the place of new local prominent Poets Biography a) Wajdi b) Shah Filhal c) Dr. Zeenath Basher as to enable the students with the knowledge of new version in Poetry .

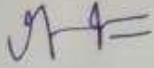
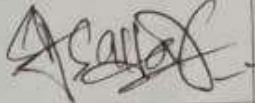
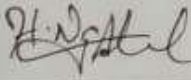


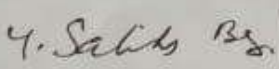
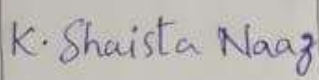
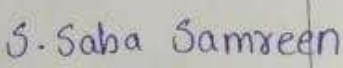
KVR GOVT. COLLEGE (W), KURNOOL. AUTONOMOUS (A Grade)

DEPARTMENT OF URDU

The BOS of Advance Urdu meeting is held on 25-07-2019 at 11.30 AM at the Department of Urdu of KVR Govt. College (w) Kurnool.

The following members are attended.

BOARD OF STUDIES MEMBERS

Category	Name & Designation	Acted as	Signature
In Charge Of Dept	Dr. IRFANA BEGUM	Chairperson	
University Nominee	Prof. ABDUS SATTAR SAHEB	University Nominee	
Faculty	H. NAZEER AHMED	Member	
Subject Expert	S. MD. ZAHURULLAH	Member	
Retd. Lecturer	Dr. SYED WAHEED KOUSER	Educationist	
Urdu Lecturer	Y.SALEHA BEGUM	Alumni	
Student	K.SHAISTA NAAZ III B.A(U.M)	Class Representative	
Student	S.SABA SAMREEN II B.A(U.M)	Class Representative	

KVR Govt. College (w) Autonomous Kurnool.

Syllabus for B.A. Urdu CBCS 2019-20

As per Andhra Pradesh State Council of Higher Education

Second year Optional Urdu Paper - III

SEMESTER - III

URDU POETRY

Prescribed book :GowhareAdab by A.P.UrduAcademy

UNIT – I **MASNAVI – A portion of Gulzar-e-Naseem**
‘Aanatajulmulookkasehraetivism se’

UNIT – II **GHAZAL – The following Ghazals only:**
1.‘Baskedushwarhaiharkaam’ by Ghalib
2. ‘Wohadaedilbari ho kenawae’ by Jigar
3. ‘Jalakemashalejan hum’ by Majrooh

UNIT – III **NAZM**
1. ‘Roohearziaadamkaisteqbalkartihai’
By Allamalqbal
2. ‘Sagarkekinare’ by Maqdoom

UNIT – IV

Kurnool keGhazalGoShora (New)

1.Yaseer 2. WaheedKouser 3.QaisiQamerNagri

UNIT – V

Nazmgoshorakisawaneh

1.Allamalqbal 2. Maqdoom

KVR Govt. College (w) Autonomous Kurnool.

Syllabus for B.A. Urdu CBCS 2019-20

As per Andhra Pradesh State Council of Higher Education

Second year Optional Urdu Paper - IV

SEMESTER - IV

URDU POETRY

Prescribed book :GowhareAdab by A.P.Urdu Academy

UNIT – I QASEEDA – Ta’aruf

UNIT – II QASEEDA – MohsinKakori (Selected portion)

‘Simtekashi se chalajanibemathurabadal’

UNIT – III MARSIIYA – Ta’aruf

UNIT – IV MARSIIYA – Meer Anees (Selected portion)

‘NamakekhwaneTakallumhaifasahatmeri’

UNIT – V Biography of following poets: (New)

1.Wajdi 2. Shah Filhal 3.ZeenathBasheer

KVR GOVT COLLEGE WOMEN (AUTONOMOUS) KURNOOL

Second Year Optional Urdu Paper - III CBCS 2019-20

SEMESTER - III : POETRY

Time: 3 Hours

MODEL QUESTION PAPER

Max.Marks : 60

PART – A

نوٹ : درج ذیل میں سے کسی پانچ (5) اشعار کی تخریج بحوالہ متن کیجئے۔

5 X4 = 20

1. جانے کبائے مرے درد کو دماں ہونا مشکل عشق کا آسماں نہیں آسماں ہونا
2. تیری دوری دہنوری کا ہے یہ جیب عالم اہلی زندگی تھوڑی ہے اہلی زندگی قسام
3. شاعر کو سلیقے سے سرا کیوں نہیں دیتے خود اس کی نوا میں اس کو ناکہ کیوں نہیں دیتے
4. دیار شام نہیں منزل میں سر بھی نہیں مجھ پر ہے یہاں دن چلے دردا چلے
5. وہ نظر بھی جو حوش پر لگا ہے طوبی سے فرماں میں ہوا ہے
6. بس کے دشوار ہے ہر کام کا آسماں ہونا آوی کو بھی بھیر نہیں آسماں ہونا
7. بچا کے لائے ہم اے یاد بچا رکھی نظر دغا اگرچہ لگتے ہوئے رہو لوں کے ہاتھ چلے
8. بس کے دشوار ہے ہر کام کا آسماں ہونا آوی کو بھی بھیر نہیں آسماں ہونا

PART – B

نوٹ : تمام سوالوں کے جواب لازمی ہیں۔ ہر سوال کے مساوی نکتہ ہیں۔

5 x 8 = 40

9. غالب کے کلام کی امتیازی خصوصیات بیان کیجئے۔ (۸)
10. نثر و مکتبہ کی نظم ”سارگر کے کنارے“ کا خلاصہ اپنے الفاظ میں لکھئے۔ (۸)
11. علامہ اقبال نے اپنی نظم ”روح ارضی آدم کا استقبال کرتی ہے“ میں کن خیالات کا اظہار کیا ہے۔ (۸)
12. مجرور کی شاعری کے فنی عناصر پر روشنی ڈالئے۔ (۸)
13. علامہ اقبال کی شاعری کی شاعری پر روشنی ڈالئے۔ (۸)
14. شہسوار شہسوار کی شاعری پر روشنی ڈالئے۔ (۸)
15. شہسوار شہسوار کی شاعری پر روشنی ڈالئے۔ (۸)
16. شہسوار شہسوار کی شاعری پر روشنی ڈالئے۔ (۸)
17. شہسوار شہسوار کی شاعری پر روشنی ڈالئے۔ (۸)
18. شہسوار شہسوار کی شاعری پر روشنی ڈالئے۔ (۸)
19. شہسوار شہسوار کی شاعری پر روشنی ڈالئے۔ (۸)
20. شہسوار شہسوار کی شاعری پر روشنی ڈالئے۔ (۸)

☆☆☆☆☆

KVR GOVT COLLEGE WOMEN (AUTONOMOUS) KURNOOL

Second Year Optional Urdu Paper - IV CBCS 2019-20

SEMESTER - IV : POETRY

Time: 3 Hours

MODEL QUESTION PAPER

Max.Marks : 60

PART - A

5 X 4 = 20

نوٹ : درج ذیل میں سے کسی پانچ (5) اشعار کی تخریج بحوالہ متن کیجئے۔

1. عمر گذری ہے اسی دشت کی سیاہی میں پانچویں پشت ہے غمہر کی مداحی میں
2. سست کاشی سے چلا تھا چاہب مہراہل برق کے کاندھے پر لائی ہے سیا گنگا نل
3. جس طرف دیکھئے نیلے کی کھلی ہیں گلیاں لوگ کہتے ہیں کہ کرتے ہیں فرنگی کونسل
4. اک ڈرا دیکھئے کیفیت، معراج، سخن ہاتھ میں جام زحل عیش و مد زہر بغل
5. چاند شرمندہ ہو چرے مٹھی ایسے نہ امام ایسا ہو پھر نہ مصلی ایسے
6. شے نہ فرمایا مجھے خود ہے شہادت منظور زبانی کی ہوں ہے نہ شجاعت کا غرور
7. ان سے منظور نہ تھی ہتک پر اب ہوں مجبور خیر لاکر جاتے ہیں بیے جرم و قصور
8. بس کے دشا رہے ہر کام کا آسان ہوتا آدی کبھی مہر نہیں انہی ہوتا

PART - B

5 x 8 = 40

نوٹ : تمام سوالوں کے جواب لازمی ہیں۔ ہر سوال کے مساوی نکتہ ہوتے ہیں۔

9. میر انیس کے کلام کی امتیازی خصوصیات بیان کیجئے۔ (۲)
10. محسن کا گوروی کی حالات زندگی کو اپنے الفاظ میں لکھئے۔ (۲)
11. وچدی کے حالات زندگی کو اپنے الفاظ میں لکھئے۔ (۲)
12. حضرت شاہ فی المال کی شاعری پر روشنی ڈالئے۔ (۲)
13. محسن کا گوروی کے قصیدہ میں سے کوئی دو اشعار لکھ کر اس کی تخریج لکھئے۔ (۲)

☆☆☆☆☆

Board of Studies - 2019-20

I year - Second Language Hindi

Held on 05/10/2019 at the department of Hindi

The members of the Board of Studies met in the department of Hindi on 05/10/2019 at 11:00 A.M. under the chairmanship of Dr. M. Farida Begum i.e. of the department of Hindi. The BOS members discussed the proposals on the revision and modification of model question paper pattern and curriculum of I year UG with CBCS for B.A, B.Com & B.Sc. Second Language Hindi for I & II Semester 2019-20.

The Prescribed syllabus of Rajalaseema University is modified under flexibility of autonomy for B.A, B.Com & B.Sc. Second Language Hindi.

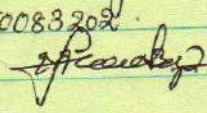
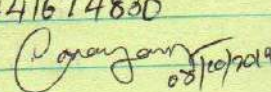
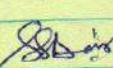
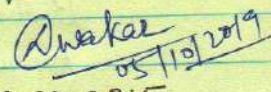

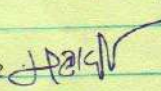
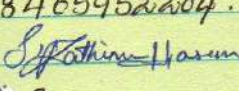
The total syllabus ~~part~~ body have in 10 units. Five units have in Semester I. Five units have in Semester II.

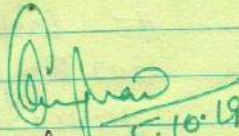
Semester I:- Syllabus:- Prose, Nonditail, Grammar, Ling - Vaehaw, Kal, Vaehya, correction of sentences, Letter, Prasarnik Sabdawali, English to Hindi.

Semester II:- Prose, ~~Prose~~ ^{Pocit} - Grammar, Prasarnik Sabdawali, English to Hindi - Padnam - Hindi to English - ~~Rajyog~~ Sabhe - Sandhi Parichedh, Letter writing.

We follow the same question paper patterns ^{syllabus} (i.e.) last year question paper patterns - 60+40 = 100 marks. Internal marks 40. and External marks 60. Total 100 marks.

Members of Board of Study 2019-20

- | S.No. | Category | Name & Designation | Cell No. | Signature |
|-------|--------------------|---|------------|---|
| 1. | Chairperson | Dr. M. Fardida Begum
1/c Dept of Hindi
KVR GCWA KNW. | 9550088202 |  |
| 2. | University nominee | Dr. Narayana HoD
Dept. of Hindi
SVU Thirupati | 9441674830 |  |
| 3. | Subject Expert | Dr. S. Saleem Basha
HoD Dept. of Hindi
Osmania college KNW. | 9440310333 |  |
| 4. | Subject Expert | Dr. Divakar Divya Rajyanshu
Lecturer in Hindi
GDC Men. KNW. | |  |
| 5. | Educationist | M. Parvathi
Lecturer in Hindi
GDC Nandikotkur. | 9908828215 |  |
| 6. | Member | Masipogu Chinna Mahadevudde
KVR GCWA KNW. | 7702407621 |  |
| 7. | Alumni students | Shaik Falthima Naseem
Rayalaseema University | 8465952204 |  |
| | | 1. M. Nasantha II B.A [A&E]
2. C. Haritha II Bio-tech | | |


5.10.19.
Chairman.

II year Second Language Hindi

The members of Board of Studies met in the department of Hindi on 05/10/2019 at 11.00 A.M. under the Chairmanship of Dr. M-Famida Bequm. i/c of the department of Hindi. The BOS members discussed the proposals on the revision and modification of curriculum of II year UG with CBCS for B.A, B.Com. & B.Sc. Second Language Hindi.

The prescribed syllabus of Rajasthan University is modified under the flexibility of autonomy for B.A, B.Com & B.Sc. Second Language Hindi paper - II.

The total syllabus of the body have in Five (5) units with Prose & poetry. Semester III is the end semester for II year Second Language Hindi students. The syllabus of the III semester.

1. Poetry :- Kabir ke Doha - Surdas -

In semester I & II Second Language Hindi. It is resolved to ~~have the same~~ follow the last year question paper patterns. (c) Rajasthan University and APSche question paper pattern. Section - A 20 marks and Section - B. 40 marks. Total 60 marks theory and 40 marks Internal marks. allocation. Inter-Exam 20 marks, Assignments 5 marks, Seminars 5 marks, Attendance 5 marks.

and surprise test [Objective] and Extra activities
5 marks. Total 40 marks.

Resolved to approve the modified
syllabus and question paper patterns by BOS
members.

Board of Studies members.

1. Dr. Narayana
2. Dr. S. Saleem Basha - *Saleem*
3. Dr. Divakar Divya Divyanshu
4. M. Parvathi *M. A. 5/10/19*
5. S. Fathima Hascew *S. Fathima Hascew*
6. Masipoguchinna Mahadevudu
7. M. Vasanthi *Vasanthi*
8. C. Haritha *Haritha*

**KVR GOVT. College for Women (Autonomous)
KURNOOL.**

**Department of HINDI
Board of Studies 2019-20.**

The members of the Board of Studies, Department of Hindi,
KVR.Govt,College for Women(A)Kurnool met on 05-10-2019 at 11.00 A.M.

The Board Unanimously resolved to approve the Hindi syllabus Internal
and model Question papers for First and Second years Under Graduate
Programme for second Language Hindi for the Academic Year 2019-20.

Members of the Board of Studies.

S.No	Name & Address	Designation	Signature
1	Dr.M.Famida Begum. Incharge of Dept of Hindi. KVRGCW(A) KURNOOL.	Chairperson	
2	Dr.Narayana. HOD. Department of Hindi. SV University.TIRUPATHI.	University Nominee	
3	Dr.M.Saleem Basha.HOD Dept.of Hindi.Osmania College.KURNOOL.	Subject Expert	
4	Dr.Diwakar Divya Diyanshu. Lecturer in Hindi GovernmentCollegeforMen.KURNOOL.	Subject Expert	
5	M.Parvathi.Lecturer inHindi GDC.Nandikotkur. KURNOOL.	Educationist	
6	Shaik.Fathima Hassen Rayalaseema Universty.KURNOOL.	Alumni	
7	M.C.Mahadevudu. KVR GCW (A) KURNOOL.	Member	
8	Kum.Vasantha II B.A(AE) KVR GCW (A) KURNOOL.	Student Representative	
9	C.Haritha. II Bio-Tech. KVR GCW(A) KURNOOL.	Student Representative	

**K.V.R.Govt . College for Women
(A) KURNOOL.**

DEPARTMENT OF HINDI

**B.A,B.Com&B.Sc
I,II&III SEMESTER
2019-20**

**Syllabus @ Model
Question Papers**

K.V.R GOVT COLLEGE FOR WOMEN(A), KURNOOL

DEPARTMENT OF HINDI

PART 1- B: SECOND LANGUAGE-HINDI

SEMESTER -1

TITLE OF THE PAPER 1: PROSE , SHORT STORIES, GRAMMAR , LETTER WRITING

UNIT - I

- गद्य भाग : 1. साहित्य की महत्ता
2. सच्ची वीरता
3. मित्रता

UNIT- II

- कहानी संग्रह : 1. मुक्ति धन
2. ~~सुख-सुख~~ मुग्धा
3. उसने कहा था

UNIT- III

व्याकरण : लिंग, वचन , काल , वाच्य, वाक्यों की शुद्धि

UNIT-IV

व्याकरण : शब्द प्रयोग (परिभाषिक शब्दावली अंग्रेजी से हिंदी)
विलोम शब्द

UNIT- V

पत्र लेखन : व्यक्तिगत पत्र
आदेश पत्र

K.V.R. Govt. College for Women (Autonomous), Kurnool

Dept of Hindi - 2019-20

I. SEMESTER SYLLABUS

MODEL QUESTION PAPER

TIME : 3 Hrs

MAX.MARKS : 60

SECTION - A

I. पाँच प्रश्नों का उत्तर दीजिए।

5 x 4 = 20M

1. कुसंग का ज्वर भयानक होता है - समझाइये।
2. उसने कहा था कहानी का उद्देश्य क्या है ?
3. गूदडसाई का चरित्र - चित्रण कीजिए ?
4. मित्रता के लक्षण बताइये ?
5. लिंग की परिभाषा क्या है? कितने प्रकार के हैं?
6. वचन किसे कहते हैं? उनके कितने प्रकार हैं?
7. वाच्य की परिभाषा देते हुए उनका विवरण दीजिए ?
8. काल की परिभाषा क्या है? कितने काल हैं?

SECTION - B

II. पाँच प्रश्नों का उत्तर दीजिए।

5 x 8 = 40M

9. साहित्य की महत्ता निबंध का सारांश लिखिए

अथवा

मित्रता के बारे में शुक्ल जी क्या कहते हैं?

10. मुक्तिधन का प्रतिपाद्य क्या है?

अथवा

गुप्ता

~~गुप्ता~~ के बारे में प्रसाद जी क्या कहते हैं?

11. परीक्षा शुल्क माँगते हुए पिता को पत्र लिखिए?

अथवा

उसने कहा था कहानी की विशेषताएँ।

12. सच्चीवीरता निबंध का सारांशलिखिए

अथवा

विलोम शब्द 8 अच्छा x। सुंदर x। लायक x। बलवान x। गरीब x। कोमल x। जड x। न्यायx।

13. परिभाषिक शब्द:

Face Value, contribution, study leave, ultimately, Act, Notification, estimate, reminder

अथवा

वाक्यों की शुद्धि हम हमारे घर में रहते हैं। दशरथ की तीन रानियाँ थीं। राम ने पुस्तक लाया। नल महाराज ने दमयंती को भूला। तुमने क्या बोला।

K.V.R GOVT COLLEGE FOR WOMEN(A), KURNOOL

DEPARTMENT OF HINDI

PART 1- B: SECOND LANGUAGE-HINDI

SEMESTER -2

TITLE OF THE PAPER 1: B PROSE , SHORT STORIES, GRAMMAR , LETTER WRITING

UNIT - I

- गद्य भाग : 1. ~~पूतकीकत~~ श्रद्धा और श्रमिता
2. भारत एक है
3. एच .आई. वी.

UNIT- II

- कहानी संग्रह : 1. ~~जन्म वापसी~~
2. भूख हड़ताल
3. परमात्मा का कुत्ता

UNIT- III

व्याकरण : कार्यालय हिन्दी - प्रशासनिक शब्दावली हिन्दी से अंग्रेजी, अंग्रेजी से हिन्दी

UNIT-IV

व्याकरण : अपने वाक्यों में शब्द प्रयोग (कार्यालयी हिन्दी - हिन्दी से अंग्रेजी)
संधि-विच्छेद

UNIT- V

पत्र लेखन : आवेदन पत्र

K.V.R. Govt. College for Women (Autonomous), Kurnool
I Year - II Language Hindi - Dept of Hindi - 2019-20
II - SEMESTER SYLLABUS

MODEL QUESTION PAPER

TIME : 3 Hrs

MAX. MARKS : 60

SECTION - A

5 x 4 = 20M

I. पाँच प्रश्नों का उत्तर दीजिए।

1. विवेक बत्तारा का चरित्र - चित्रण कीजिए ?
2. भूख हडताल शीर्षक की सार्थकता सिद्ध कीजिए ?
3. HIV Aids के लक्षण बताइए ?
4. भारत एक है? कैसे कह सकते हैं?
5. मोहन राकेश का परिचय दीजिए ?
6. ~~पूख की हडताल~~ ^{भूख हडताल} में किस विषय पर प्रकाश डाला गया है?
7. प्रेमचंद का परिचय दीजिए ?
8. परमात्मा का कुला कहानी के पात्रों का चरित्र - चित्रण कीजिए ?

SECTION - B

II. पाँच प्रश्नों का उत्तर दीजिए।

5 x 8 = 40M

9. ~~पूख की हडताल~~ ^{भूख हडताल} का सारांश लिखिए ?
अथवा
भारत एक है, सोदाहरण समझाइए ?
10. ~~पूख की हडताल~~ ^{भूख हडताल} की कहानी है कैसे?
अथवा
भूख हडताल कहानी की विशेषताएँ बताइए ?
11. परमात्मा का कुला कहानी में किस विषय पर प्रकाश डाला गया ?
अथवा
HIV Aids लक्षण बताइए ?
12. संधि विच्छेद की परिभाषा देते हुए उनके प्रकार कितने हैं?
अथवा
कार्यालय हिन्दी - English to Hindi, Hindi to English
13. हिन्दी प्राद्यापक पद के लिए आवेदन पत्र लिखिए ?
अथवा
अपने वाक्यों में शब्द प्रयोग - पूजा करना, पालन - पोषण - सुंदर - उन्नति - आदर करना - कानून - सफाई - होशियार।

K.V.R GOVT COLLEGE FOR WOMEN(A), KURNOOL

DEPARTMENT OF HINDI

PART 1- B: SECOND LANGUAGE-HINDI

SEMESTER -3

TITLE OF THE PAPER 1: B - POETRY , HINDI LITERATURE, GENERAL ESSAYS, TRANSLATION,
FUNCTIONAL HINDI

UNIT - I

काव्य दीप : प्राचीन कविता

1. कबीर दास - साखी
2. सूरदास - बाल वर्णन

आधुनिक कविता

१. मातृभूमि
२. तोड़ती पत्थर
3. गीत फरोश

UNIT- II

हिंदी साहित्य का इतिहास : भक्तिकाल

1. ज्ञानाश्रयी शाखा - कबीर
2. प्रेमाश्रयी शाखा - जायसी

UNIT- III

साधारण निबंध :

१. समाचार पत्र
२. बेकार की समस्या
३. कंप्यूटर
४. पर्यावरण और प्रदूषण
५. साहित्य और समाज

UNIT-IV

अनुवाद : अनुवाद अभ्यास से (चार या पांच पंक्तियों में)

UNIT-V

प्रयोजन मूलक हिंदी : गद्यांश (comprehension)

K.V.R. Govt. College for Women (Autonomous), Kurnool
I Year - Second Language Hindi (CBCS) Dept of Hindi - 2019-20
III - SEMESTER SYLLABUS

MODEL QUESTION PAPER

TIME : 3 Hrs

MAX.MARKS : 60

I. पाँच प्रश्नों का उत्तर दीजिए ।

5 x 4 = 20M

1. कबीरदास का संक्षिप्त परिचय दीजिए?
2. मैथिलीशाखा गुप्त जी के रचनाओं की विशेषताएँ क्या हैं?
3. सूर्यकांत त्रिपाठी निराला प्रगतिवादी हैं? समझाइये?
4. सूर के बालवर्णन कीजिये ?
5. सूर के अनुसार साधु को कैसे होना चाहिए ?
6. शुक्लजी के अनुसार काल विभाजन कीजिये?
7. कबीर के अनुसार गुरु का शरण कैसे पा सकते हैं?
8. गीत फरोश कविता में कवि किस तरह के गीत बेचना चाहते हैं?

II. पाँच प्रश्नों का उत्तर दीजिए ।

5 x 8 = 40M

9. ज्ञानाश्रयी शाखा की विशेषताएँ बताइये? (अथवा)
प्रेमाश्रयी शाखा में जायसी का स्थान निर्धारित किजिए ?
10. मातृभूमि कविता का सारांश लिखिए ? (अथवा)
गीत फरोश कविता के द्वारा कवि क्या संदेश देना चाहते हैं?
11. पर्यावरण और प्रदूषण (अथवा)
समाचार पत्र
12. तोडती पत्थर एक प्रगतिवादी कविता है? समझाइए? (अथवा)
अनुवाद कीजिए - Be grateful to your parents. Delhi is the capital of India. I am going to America. Sonu and Monu are good friends.
13. भक्तिकाल स्वर्णयुग है? समझाइए? (अथवा)

गद्यांश: Comprehension

सहशिक्षा का अर्थ है एक ही कक्षा में छात्रों और छात्राओं की एक साथ पढ़ाई। पहले भारत में स्त्री शिक्षा का प्रचलन नहीं था। किंतु आज के वैज्ञानिक युग में स्त्रियों शिक्षा, नौकरी राजनीति आदी में पुरुषों के समान कार्यरत है। हमारे संविधान में स्त्रियों को पुरुषों के समान अधिकार दिये गये हैं। आज सहशिक्षा का महत्व बढ़ गया है।

1. सह शिक्षा किसे कहते हैं?
2. प्राचीन भारत में किस शिक्षा का विरोध किया गया ?
3. वैज्ञानिक युग में स्त्री किन क्षेत्रों में कार्यरत हैं?
4. हमारे संविधान में स्त्री को क्या दिया है?
5. आज किस शिक्षा का महत्व बढ़ गया है?



K.V.R. Govt. College for Women (A), Kurnool.
Department of History

NAAC - Accredited 'A' Grade

Constitution of the Board of Studies of History 2019-20 for UG

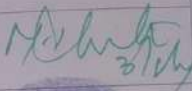
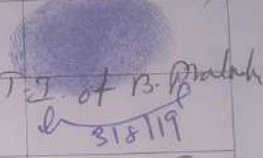
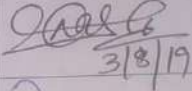

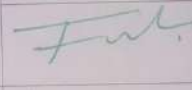
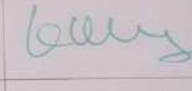
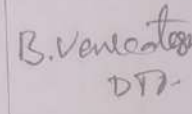
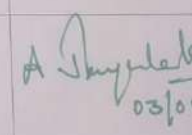
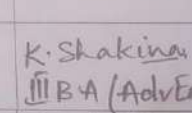
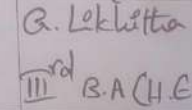
Sl.No.	Category	Name & Designation of the Person	Chariman /Member	Signature
I	Head	Dr. M. INDIRA SHANTHI	CHAIRMAN	 31/8/19
II	FACULTY	B. PRAKASH	MEMBER	 31/8/19
		G.B. EMMANUL	MEMBER	
III		NASREEN SHAHEDI	MEMBER	 3/8/19
IV	Two experts from outside the college to be nominated by the Academic council	DR. Athaulla Khan HOD, History Dept. Osmania College Kurnool .	MEMBER	
		Sri.C. JayaRamulu HOD, Silver Jubilee Govt. Degree College Kurnool		
V	One expert to be nominated by V.C	Prof. K.Mallikarjun Reddy, HOD, Dept of History, S.K. University, Anapattanam	MEMBER	
VI	One representative from Industry/ Corporate Sector/ Allied area relating to placements	B. Venkateshwarlu, District Tourism Officer Kurnool.	MEMBER	 DTT
VII	One P.G. Meritorious alumnus to be nominated by the Principal	Smt. Jayalakshmi, Lecturer in History, Tekkli, Srikakulam. A.P.	Co-opt Member	 03/08/19
VIII	Student	Kum. Solamate Shakina III B.A. EM	MEMBER	 III B.A (Adv Eng)
IX	Student	Kum. Nikita III B.A. T.M	MEMBER	 III rd B.A (H.C.P)

Table - 2

II. Term: The term of the nominated members in 2 academic years i.e. 2019-2020 & 2020-2021

III. Functions:

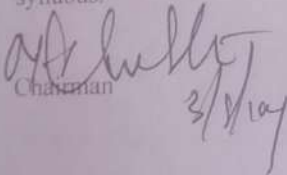
- a) Prepare syllabi for various courses keeping in view the objectives of the college. Interest of the stakeholders and national requirement for consideration and approval of the academic council.
- b) Suggest methodologies for innovative and evaluation techniques.
- c) Suggest panel of names to the academic council for appointment of paper setters and examiners.
- d) Coordinate research, teaching extension and other academic activities in the Departments and college.
- e) Certificate course on tourism for 45Days.
- f) Bridge course for first year Student.

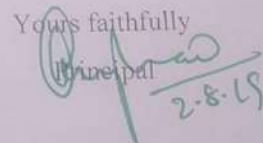
IV. Meeting:-

Sir

It is a pleasure to request and invite you to the meeting of B.O.S of Department for the academic year 2019-2020 which is schedule to be held on At 10.00 am in Osmania College (Autonomous), Kurnool.

We request you to attend the BOS meet and contribute your experience to prepare ideal syllabus.


Chairman
3/8/19

Yours faithfully

Principal
2-8-19



K.V.R. GOVT. COLLEGE FOR WOMEN (A)
Kurnool.

Department of History
K.V.R. Govt. College for Women (A), Kurnool.

Structure of U.G. History Syllabus under CBCS

Table - 2

SLNO.	Sem	Paper	Name of Paper	Nature	Hours Week	Credits	Marks	
							Mid Sem	Sem End
1	I	I	Ancient India History & Culture (From earliest times to 600 A.D.)	Core	6	4	40	60
2	II	II	Early Medieval India History & Culture (600 A.D. to 1526 A.D.)	Core	6	4	40	60
3	III	III	Late Medieval & Colonial History of India (1526 to 1857 A.D.)		6	4	40	60
4	IV	IV	Social Reform Movement & Freedom struggle (1857 to 1947 A.D.)	Core	6	4	40	60
6	V	V	Age of Rationalism and Humanism The World Between 1453 to 1821 A.D. Centuries	Core	5	4	40	60
		VI	History & Culture of Andhra Desha (from 12th to 19th Century A.D.)	Core	5	4	40	60
7	VI	VII (A)	History of Modern World (from 1453-1945 A.D.)	Core	5	4	40	60
		VII (B)	History of East Asia (from 19th Century A.D. to 1950 A.D.)	Core	5	4	40	60
		VII (C)	Contemporary History of The World (1945 to Circa 2000 A.D.)	Core	5	4	40	60
		VII (E)	Historical Application in Tourism	Core	5	4	40	60
		VII (F)	Modern Techniques in Archaeology	Core	5	4	40	60
		VIII (A-1)	Cultural Tourism In Andhra Pradesh	Core	5	4	40	60
		VIII (A-2)	Popular Movements In Andhra Desha (1848 to 1956 A.D.)	Core	5	4	40	60
		VIII (A-3)	Contemporary History of Andhra Pradesh (1956 - 2014)	C	5	4	40	60

K.V.R. Govt College for women (A)
Kurnool

Department of History

Board of studies Meeting for the year 2019-20

The members of the Board of studies of the Department of History met on 31/8/19 in the Department of History of K.V.R.G.C.W (A) Kurnool

The Board Unanimously resolved to approve the History Subject Syllabus, Internal, semester Model Question papers for IIIrd and IV, V, VI semesters for the two Academic year 2019-20 and 2020-21.

1. Dr. M. Indira Santhi HOD

Dept of History

K.V.R.G.C.W (A) Kurnool

M. Indira Santhi
3/8/19

2. Dr. K. Malhikarjuna Reddy
Prof SKU Aravindapuram
A.P.

K. Malhikarjuna Reddy

3. Dr. A. Athullah Khan HOD

Osmania Deen College

Kurnool

A. Athullah Khan

4. C. Jaya Ramulu HOD - Feb
BTAC Kurukul
AP

5. B. Venkateshwarlu DTO - B. Venkateshwarlu
Common to INTACH chapter
Kurukul
AP

6. A. Jaya Lakshmi HOD - A. Jayalaxmi
Lee in History GDC Tikkali
Srikakulam Dt
AP

7. B. Pradeesh
Lee in History - L.T. B. Pradeesh
SRIK

8. G. B. Emmanuel
Lee in History - G. B. Emmanuel
SRIK

9. Narsimha Shabedi - Narsimha Shabedi

10. K. Srinivas Reddy
B.A. (Z.H.) - K. Srinivas
B.A. (A+Eng)

11. K.M. Lakshmi
B.A. (Z.H.) - K.M. Lakshmi
B.A. (A+Eng)

12. B. Venkateshwarlu
DTO





K.V.R. Govt. College for Women (A), Kurnool.

II-B.A. History SEMESTER - III

PAPER : III Late Medieval & Colonial History of India (1526 to 1857A.D).

Unit – I	India from 1526 to 1707 A.D: Emergence of Mughal Empire- Sources, conditions in India on eve of Babur's invasion, Brief summary of Mughal polity-Sher Shah- Expansion and Consolidation of Mughal Empire- Rise of Marathas.
Unit – II	Administration ,Economy,Society,and Cultural Developments under the Mughals -Disintegration of Mughal Empire
Unit – III	India under Colonial Hegemony :Beginning of European Settlements- Anglo-French Struggle- policies of Expansion- Subsidiary alliance and Doctrine of Lapse Consolidation of British Empire in India upto 1857 A.D.
Unit – IV	Economic Policies of the British(1757-1857):Land Revenue settlements-commercialization of Agriculture-Impact of Industrial Revolution of India- Industry:Administration of the Company – Regulating Charter Acts :Cultural and social policies :Humanitarian Measures and Spread of Modern Education.
Unit-V	Anti – Colonial Upsurge- Peasants and Tribal Revolts- 1857 Causes,Nature and Consequences.

Reference :

1	Anil Seal, Emergence of Indian Nationalism
2	Benerjee, Sekhar, From Plassey to Partition
3	Bayly, C.A., Indian Society and Making of the British Empire
4	Brown, Judith : Gandhi's Rise to Power
5	Chandra, Bipan, et. Al India's Struggle for Independence
6	Chatterjee, Jaya, Bengal Divided : Hindu Communalism and Partition 1932-1947

Project Works : As part of Internal Assessment, Project Work may be given on regional or local history related to culture, economy, struggles land relations, cultural institutions and their influence on the society. They can also be asked to create a play centered on any event in social reform movement or freedom struggle



K.V.R. Govt. College for Women (A), Kurnool.

II B.A.Semester – IV Syllabus

Paper IV : Social Reform movement & Freedom Struggle (1857 - 1947)

Unit – I	Social. Religious & Self — Respect Movements, Social & Cultural Awakening — Brahma Samaj, Arya Samaj, Theosophical Society, Rama Krishna Mission, Aligarh Movement — Emancipation of Women — Struggle Against Cast: Jyothi ba Phule, Narayana Guru, Periyar, Dr. B.R. Ambedkar.
Unit – II	Growth of Nationalism in the 2 nd Half of 19 th Century — Impact of British Colonial Policies under Viceroy's Rule and the Genesis of Freedom Movement — Birth of Indian National Congress.
Unit – III	Freedom Struggle from 1885 - 1920 A.D Moderate Phase — Partition of Bengal — Emergence of Militant Nationalism — Swadeshi & Boycott Movement — Home Rule Movement
Unit – IV	Freedom Struggle from 1920 to 1947 : Gandhiji's Role in the National Movement Revolutionary — Subash Chandra Bose.
Unit – V	Muslim League & the Growth of Communalism — Partition of India — Advent of Freedom — Integration of Princely States into Indian Union — Sardar Vallabhai Patel.

Reference :

1	Anil Seal, Emergence of Indian Nationalism
2	Benerjee, Sekhar, From Plassey to Partition
3	Bayly, C.A., Indian Society and Making of the British Empire
4	Brown, Judith : Gandhi's Rise to Power
5	Chandra, Bipan, et. Al India's Struggle for Independence
6	Chatterjee, Jaya, Bengal Divided : Hindu Communalism and Partition 1932-1947
7	Desai, A.R. Social Background to Indian Nationalism
8	Dutt. R.P. India Today
9	Joshi, P.C. Rammohun and the Forces of Modernization in India
10	Sarkar Sumit Modern India 1885 to 1947
11	Stokes, Eric, Peasants and the Raj
12	R.C.Majumdar, The Struggle for Freedom, Bharatiya Vidhya Bhavan Series

Project Works : As part of Internal Assessment, Project Work may be given on regional or local history related to culture, economy, struggles land relations, cultural institutions and their influence on the society. They can also be asked to create a play centered on any event in social reform movement or freedom struggle.



K.V.R. Govt. College for Women (A), Kurnool.

II B.A III Semester Examination

Title of the Paper III: Late Medieval & Colonial History of India (1526-1857 A.D.)

Marks : 60

Section – A

Answer any Five of the following:

5x4=20

1. The First of Battle of Panipat
2. Humayun
3. Bairam Khan
4. Noorjahan Junta
5. Pitts India Act
6. Subsidiary Alliance
7. William Bentinck
8. Doctrine of Lapse.

Section — B

Answer any Five of the following:

8x 5 = 40

1. Write about the conditions of India on eve on Babur's Invasion?
(or)
Explain the Administration of Shershah Suri?
2. Explain the Mansabdari System of Akbar ?
(or)
Write about the Golden Age of Shajahan?
3. Explain the causes for the decline of Mughals ?
(or)
Explain anglo French Struggle in India?

4. Explain the British Expansion in India?

5. (or)

Explain the British Policies towards Land Revenue?

6. Explain Company Administration towards cultural and social policies and spread of modern education?(or)

Explain the Causes of 1857 Revolt.



K.V.R. Govt. College for Women (A), Kurnool.

II B.A. IV Semester Model Question Paper

Paper IV : Social Reform movement & Freedom Struggle (1857 to 1947 A.D.)

Marks :60

Section — A

Answer any Five of the following:

5 x 4 =

20

1. Brahma Samaj.
2. Joythi Ba Phule.
3. Indian National Congress
4. Vernacular Act.
5. Moderates
6. Patrition of Bengal
7. Subashchandra Bose
8. Growth of Communalism

Section — B

Answer any Five of the following:

5x 8= 40

1. Explain the Causes for Social Religious Movements in India .

(Or)

Explain Self-Respect movements against Caste System in India .

2. Explain the Causes for the rise of National Movement in India .

(Or)

Explain the Rippon Reforms in India.

3. Explain the Home Rule Movements in India.

(Or)

Explain the Swedishi Movement in India.

4. Explain the Non-Cooperation Movement in India.

(Or)

Write about Civil Disobedience Movement in India.

5. Explain the causes for partition of India.

(Or)

Explain the Integration of Princely States in India.

Board of Studies Meeting

Department of Economics

Held on 22.8.2019

Constitution of the Board of Studies

1) Dr. K. Veerachari	I/c of the Department	Chairman
2) Prof. N. T. K. Naik	University Nominee	Member
3) Prof. M. Nazeruddin	Subject Expert	Member
4) Dr. B. Madhava Reddy	Subject Expert	Member
5) Dr. N. Parvathi	Alumni	Member
6) Abdul Sattar	Griff officer	Member

AGENDA OF THE MEETING

- i) Syllabus for III and IV Semesters of B.A. Economics in CBCS Pattern for the Academic year 2019-2020
- ii) Panel of Question Paper Setters
- iii) Question Paper Pattern
- iv) Panel of Examiners.
Suggestion of Text books / Reference books.

The Board of Studies of the Department of Economics met on 22.8.2019 at 11 A.M. Under the chairmanship of Dr. K. Veerachari, Reader in Economics discussed and Finalised the draft of Syllabi for IIIrd and IVth semesters i.e. Macro Economics Prepared on the basis of Common Core Syllabus approved by the APSCHE and Prescribed by Sri Jayula Seema University KURNOOL.

The Syllabus framed by some other Autonomous Colleges are also considered in discussion and unanimously approved the following Academic Activities to be implemented from the Academic year 2019-2020.

Resolutions:

1) It is resolved to adopt the prescribed Syllabus for the IIIrd and IVth the Semesters of II.B.A.H.E.P as given in Annexure-I for the Academic year 2019-20.

2) It is resolved to allot 6 hours Per week

3) It is resolved to follow the Pattern of Exams as follows

Internal Examination 40 Marks.

Semester End Examinations 60 Marks.

In each Semester two internal assessment Exam will be conducted for 20 Marks, average of two internal exams + Attendance + Student Seminar + Assignments.

Marks allotted as follows: $20 + 10 + 10 = 40$ Marks

SEMESTER END EXAMINATION

Time: 3 hours

Max Marks: 60

Part-A

20 Marks

Answers any five of the following questions. Each question carries 4 Marks

$4 \times 5 = 20$ Marks

Part-B

5 x 8 = 40 Marks

Answers any four of the following questions. Each question carries 8 Marks.

4) It is resolved ^{to follow} the same pattern of internal and External Semester Examination to II.B.A.H.E.P Students.

5) It is resolved to authorise the Chairman of the BOS to perform:

i) Model question paper

ii) Panel of question paper setters

iii) Panel of Examiners

The chairman is authorised to incorporate the change and additions in the Syllabus as directed by Members of the BOS for the final approval of the Academic

Consent.

6) It is resolved that the Panel of Question Paper setters is as follows.

- i) Dr. B. Madhava Reddy Principal BDC Adur.
- ii) Dr. Kuma Devi Lec. in Economics SJEC KORNOL
- iii) Dr. K. Suresh Principal BDC Dhasmanaram.
- iv) K. Jella Krishna Lec. in Eco. BDC Nandikatkur.

7) It is resolved that the Panel of Examiners are as follows.

- i) Dr. M. Nazeeuddin Osmania College Kurnool
- ii) Dr. K. Parvathi Vasavi Mahila College KORNOL.
- iii) Dr. K. Rama Krishna Lec. in Economics. A.A.S. College Adoni.

The following members attended the Bas.

- 1) Dr. K. VEERACHARI K. Veerachari 22/8/19
- 2) Prof. N.T.K. NAIK N.T.K. Naik 22/8/19
- 3) O. Krishnaveni
- 4) Prof. M. Nazeeuddin M. Nazeeuddin
- 5) Dr. B. Madhava Reddy B. Reddy 22/8/19
- 6) Dr. N. Parvathi Dr. N. Parvathi 22/8/19
- 7) Abdul Sattar Abdul Sattar

K.V.R. Govt. College for Women (A), Kurnool

B. A. ECONOMICS

II Year B. A. Programme (UG) Courses – Under CBCS

Semester – III

Academic Year 2019-2020

Paper – III (Core Paper)

Macro Economics - National Income, Employment and Money

Module - 1

Meaning, definition, Evaluation of Macro Economics - Importance of Macro Economics- Difference between Micro and Macro Economics - Paradox of Macro Economics -Limitations

Module - 2

National Income - Definitions, Concepts of National Income - Measurement of National Income -Circular flow of Income in Two, Three and Four Sector Economy.

Module - 3

Classical theory of Employment - Say's Law of Markets – Pigou's Wage cut Policy,

Module - 4

Keynesian Theory of Employment - Consumption function – Investment Function - Marginal Efficiency of Capital (MEC)- Concepts of multiplier and accelerator

Module - 5

Meaning and Functions of Money - Classification of money - Gresham's Law - RBI classification of Money. Theories of Money - Fisher's Quantity theory of Money Cambridge approach (Marshall, Pigou, Robertson & Keynes).

REFERENCES:

1. G.Ackley - "Macro Economics Theory and Policy", Collier Macmillan, 1978.
2. E.Shapiro - "Macro Economic Analysis", Galgotia Publications, 1999.
3. Central Statistical Organisations - "National Accounts Statistics".
4. R.Dornbush, s.Fisher and R.Startz - "Macro Economics", Tata Mc.Graw Hill, 9/e, 2004.
5. M.L.Seth-"Macro Economics", Lakshmi Narayana Agarwal, 2015.
6. K.P.M. Sundaram - "Money, banking & International Trade", Sultan Chand, 2010.
7. Dillard, D - "The Economics of John Maynard Keynes", Crossby Lockwood & Sons.
8. M.N.Mishra & S.B.Mishra - "Insurance Principles & Practice" S.Chand 2012.
9. Bharati V.Pathak "The Indian Financial System Markets. Institutions & Services". Pearson 2008.
- 10. Telugu Academy Publication

K.V.R GOVT. COLLEGE FOR WOMEN (A) KURNOOL
B.A. ECONOMICS
II Year B.A. Programme (UG) Courses – Under CBCS Semester –III
Academic Year 2019 -2020.
Paper-III (Core paper)
Micro Economics – National Income, Employment and Money
Model Question Paper

Time: 3 Hours

Max.Marks: 60

PART – A

- I. ఈ క్రింది వానిలో 5 ప్రశ్నలకు సమాధానములు వ్రాయండి 5 × 4=20మా
1. స్థూల ఆర్థిక విశ్లేషణ
 2. జాతీయాదాయం - నిర్వచనాలు
 3. N.N.P. - నికర జాతీయోత్పత్తి
 4. ఆదాయ ప్రవాహం - చక్రరూప ఆదాయ ప్రవాహం
 5. సార్థక డిమాండ్ ప్రాముఖ్యత
 6. వినియోగ ప్రవృత్తి
 7. పెట్టుబడి ఫలం
 8. కోశ విధానం

PART – B

- II. ఈ క్రింది వాటిలో ఏవేని 5 ప్రశ్నలకు జవాబు వ్రాయుము 5×8=40
- 1) స్థూల అర్థశాస్త్రము యొక్క అర్థము, స్వభావం - పరిధిని వివరించండి?
(OR)
 - 2) స్థూల, సూక్ష్మ ఆర్థిక విశ్లేషణ మధ్య గల తేడాలు వివరించండి.
 - 3) జాతీయాదాయం భావనాలను వివరింపుము.
(OR)
 - 4) జాతీయఆదాయం మదింపు పద్ధతులు తెలుపండి.
 - 5) కీన్స్ సాంప్రదాయ ఉద్యోగిత సిద్ధాంతమును వివరించండి?
(OR)
 - 6) “సపై తనకు కావలసిన డిమాండ్ను, తనే సృష్టించుకొనును” వివరించుము?
 - 7) వినియోగ ప్రవృత్తిని నిర్ణయించు అంశములు ఏవి?
(OR)
 - 8) ఉపాంత మూలధన సామర్థ్యమును నిర్ణయించు అంశములు ఏవి?
 - 9) R.B.I. ద్రవ్య వర్గీకరణను వివరింపుము?
(OR)
 - 10) ఫిషర్ ద్రవ్య పరిమాణ సిద్ధాంతాన్ని వివరించండి?

B.A. ECONOMICS
II-YEAR B.A. Programme (UG) Courses – Under CBCS
Semester – IV
Paper – IV (Core Paper)
Banking and International Trade

Module-1

Meaning and functions of money – Classification of Money – Gresham's law – RBI Classification of Money – Fisher's Quantity theory of Money – Cambridge approach of Quantity Theory of Money – Inflation – Definition – types of inflation – causes and effects of inflation measures to control inflation.

Module – 2

Banking: Meaning and definition – Functions of Commercial Banks – Concept of Credit creation – Function of RBI – Recent development in Banking Sectors.

Module – 3

Non-Bank Financial Institutions – Types of NBFIs – Factors contributing to the Growth of NBFIs – Money market – Defects of Indian money market.

Module – 4

Concepts of Shares – Debentures – Stock Market – Functions – Primary and Secondary Markets – SEBI – Insurance – Life Insurance and General Insurance.

Module – 5

Macro Economic Policy – Fiscal, Monetary and Exchange rate policies Objectives and Significance – Importance of International Trade – Regional and International Trade – Defining Balance of Trade and Balance of Trade and Balance of Payment.

REFERENCES:

1. G.Ackley – "Macro Economics Theory and Policy", Collier Macmillan, 1978.
2. E.Shapiro – "Macro Economics Analysis", Galgotia Publications, 1999.
3. Central Statistical Organisations – "National Accounts Statistics".
4. R.Dornbush, S.Fisher and R.Statz – "Macro Economics", Tata Mc.Graw Hill, 9/e,2004.
5. M.L.Seth – "Macro Economics", lakshmi Narayana Agarwal, 2015.
6. K.P.M.Sundaram – "Money, Banking & International Trade", Sultan Chand, 2010.
7. Dillard, D – "The Economics of John Maynard Keynes", Crossby Lockwood & Sons.
8. M.N.Mishra & S.B.Mishra – "Insurance Principles & Practice" S.Chand 2012.
9. Bharati V.Pathak "The Indian Financial System Markets. Institutions & Services".
10. Pearson.
11. D.M.Mithani & G.K.Murty – "Business Economics", Himalaya Publishing House, 2015.
12. M.L.Jhingan – Economics Development – Vikas, 2012.
13. G.Omkarnath – Economics – A.Primer for India – Orient Blackswan, 2012
14. Agarwal, V.(2010) macroeconomics: Theory and Policy, Dorling Kindersley(India) Pvt. Ltd., New Delhi.
15. Ahuja, H.L. (2012) Macro Economics, Theory and policy, S.Chand and Company Ltd., New Delhi.
17. New Delhi.

K.V.R GOVT. COLLEGE FOR WOMEN (A) - KURNOOL

II B.A - II Semester

PAPER - IV: Banking and International Trade

Time - 3 Hrs

Max Marks - 60M

PART - A

ఈ క్రింది వాటిలో ఏవేని 5 ప్రశ్నలకు సమాధానములు వ్రాయుము. ప్రతి ప్రశ్నకు 4 మార్కులు
5×4=20మా

1. వ్యాపార చక్రాలు
2. ద్రవ్యోల్బనం రకాలు
3. వాణిజ్య బ్యాంకుల పరపతి సృష్టి
4. బ్యాంకేతర ద్రవ్య సంస్థలు
5. భారతదేశ ద్రవ్య మార్కెట్ లోపాలు
6. షేర్లు, డిబెంచర్లు
7. సెబి (SEBI)
8. అంతర్జాతీయ వ్యాపారం

PART - B

ఈ క్రింది వాటిలో ఏవేని 5 ప్రశ్నలకు సమాధానములు వ్రాయుము. ప్రతి ప్రశ్నకు 8 మార్కులు
5×8=40మా

9. ఎ) వ్యాపార చక్రాలు వివిధ దశలను తెలుపుము.
(లేదా)
బి) ద్రవ్యోల్బనానికి గల కారణాలను తెలిపి ద్రవ్యోల్బన నివారణ చర్యలను చర్చించుము.
10. ఎ) బ్యాంకేతర ద్రవ్య సంస్థల రకాలను వివరింపుము.
(లేదా)
బి) బ్యాంకేతర ద్రవ్య సంస్థల ప్రగతికి గల కారణాలను విశదీకరింపుము.
11. ఎ) వాణిజ్య బ్యాంకుల విధులను వ్రాయుము.
(లేదా)
బి) రిజర్వు బ్యాంకు విధులను వ్రాయుము?
12. ఎ) స్టాక్ మార్కెట్ విధులను వ్రాయుము?
(లేదా)
బి) జీవిత భీమా, సాధారణ భీమాలను గురించి వ్రాయుము?
13. ఎ) భారతదేశంలో ద్రవ్య విధానము గురించి వివరింపుము.
(లేదా)
బి) అంతర్జాతీయ వ్యాపారం ప్రాముఖ్యతను వ్రాయుము?

Department of Political Science
Board of Studies meeting, 29

6-8-2019

Minutes of the meeting held on
06-8-2019

The Board of Studies meeting was held today in the department of Political Science and discussed the Common Core Syllabus prescribed by DPSCHE (CBCS pattern), Syllabus prescribed by Rayada Seema University, of other Autonomous Colleges and unanimously finalized the Syllabi and approved the same pertaining II year BA Political Science Telugu and Urdu medium for the batch of 2019-20 of III and IV Semesters

Resolutions:-

- (1) Resolved to adopt the prescribed Syllabi for III and IV Semester as given in the Annexure-I.
- (2) On request of V and VI Semesters 40 (Internal marks) : 60 (External marks) pattern is to be adopted making uniformity.
- (3) Approve the list of Question Paper Setter and Examiners for evolutionary
- (4) Approved the Model Question

Paper for III, IV, V and VI Semesters.

- (5) The justification report alongwith additions/deletions/changes to be prepared to submit to the Academic Council for approval.

The Following Members have attended the BOS meeting
Signature

(1) Dr. B.V. Raghavulu University Professor & Nominee
Head of Department of Political Science
P.mentapur

(2) Dr. M. Siraj Ali Khan Subject Expert
Asst Professor
Osmani College (A)
KURNOOR

(3) Dr. R. Raghulathi Reddy Subject Expert
Asst Professor
Silver Jubilee Govt College (A)
KURNOOR

Signature
6/8/19

(4) C. Ramesh
1/c Department of Political Science
ICWA Govt College of Women
KURNOOR

Signature
6/8/19

T. T

III Sem. Indian Constitution

Unit: The Making of the Constitution

1. The Ideological Legacy of the Indian National Movement ~~of~~ on the Constituent Assembly

2. The Nature and Composition of the Constituent Assembly

Unit: 2: Philosophical Foundations of the Indian Constitution

1. Preamble of the Indian Constitution

2. Salient Features of the Indian Constitution

Unit: 3 Fundamental Rights and Directive

Principles of State Policy

1. Individual and collective Rights: ^{Limitations}

2. The doctrine of Basic Structure of the Constitution: Kesavananda Bharati Case

Unit: 4 Working of the Indian Constitution

1. Executive: ^{Union & State level} Composition & Powers & Functions

2. Legislature: Composition, Powers & Functions

3. Judiciary: Composition, Powers & Functions

Unit 4 Unitary and Federal Features of the Indian Constitution

1. Legislative Administration, Financial Relations between Centre & States

Semester IV

Unit: 1: Approach to the study of
The Political Processes in India

1. Theory of modernization:
Transition from Tradition to modernity
2. Marxist Approach: Transition from
Pre-Capitalism to Capitalism

Unit: 2: Social Structure in Indian
Democratic process

1. Transition of Caste system from
hierarchy to identity
Caste System in India from
hierarchy to identity - Role of Caste
groups

(2). Role of deprived classes (Dalits)
in Indian politics -

Unit: 3: Religion & Politics

1. Role of Religion in Indian
Politics - Recent Trend
2. Debate on Secularism: Role of the
State towards Religion

Unit: 4: Party and Electoral Process in
India

1. Electoral trends of the Lok Sabha from
1952-2017
2. Determinants of Voting behavior
in India: Caste, Class, Money
3. Evaluation of Party System
in India: The Ideology
Social bases of Major political
Parties INC, BJP, CPI, CPI (Maoist)
(Regional) DMK, TDP, YRCP

Resolved to approve the above
2nd year syllabus for both
III & IV Semesters.

Approve the resolutions made
and insert page no. 29 and 30 of the
book.

Approve the panel of question paper
setter and examiners.

Shankar
6/8/19

[Sri B.V. Raghavulu]

Anant
6/8/19

[DR. R. Raghupathi Reddy]

Mashi
6/8/19

[Madame Bani]
[Guest Faculty]

Ragh
6/8/19

[C.R. M. S. Khan]
6/8/2019.

[Dr. M. S. Sajid Ali Khan]

G. Sujatha (1st Batch)
6/8/2019.

K. Bhagya Lakshmi
6/8/2019

C. Devi (1st Batch)
6/8/2019

K.V.R. Government College For Women (Autonomous), Kurnool

II YEAR B.A. Political Science

CBCS: SYLLABUS - SEMESTER WISE (w.e.f:2019-20 onwards)

Semester-III Paper-III

As per Andhra Pradesh State Council of Higher Education

INDIAN CONSTITUTION (భారత రాజ్యాంగం)

Unit-1: The Making of the Constitution (రాజ్యాంగం తయారైనా విధానం)

1. The ideological legacy of the Indian National Movement on the Constituent Assembly (రాజ్యాంగ పరిషత్తు పై - భారత జాతీయోద్యమం సైద్ధాంతిక వారసత్వం ప్రభావం)
2. The Nature and Composition of the Constituent Assembly రాజ్యాంగ పరిషత్తు నిర్మాణం మరియు స్వభావం

Unit-2: Philosophical Foundations of the Indian Constitution (భారత రాజ్యాంగం సైద్ధాంతిక పునాదులు)

1. Preamble: of the Indian Constitution (భారత రాజ్యాంగ ప్రవేశిక)
2. Salient features of the Indian Constitution (భారత రాజ్యాంగంలోని విశిష్టమైన లక్షణాలు)

Unit-3: Fundamental rights and Directive principles of State Policy (ప్రాథమిక హక్కులు, మరియు అదేశిక సూత్రాలు)

1. Individual and Collective Rights: Limitations on the fundamental Rights (వైయక్తిక మరియు సామూహిక హక్కులు : ప్రాథమిక హక్కులపై పరిమితులు)
2. The doctrine of 'Basic Structure' of the Constitution: Kesavananda Bharathi Case (రాజ్యాంగ మౌలిక స్వరూప భావన-- కేశవానంద భారతి కేసు)

Unit-4: Indian Federalism (భారత సమాఖ్య వ్యవస్థ)

1. Unitary and Federal features in the Indian Constitution భారత రాజ్యాంగంలోని ఏక కేంద్ర మరియు సమాఖ్య లక్షణములు
2. Tension Areas between the Union and State Governments (కేంద్ర రాష్ట్రాల మధ్య ఉద్రిక్తత కు అవకాశం ఉన్న అంశాలు) Legislative, Administrative and Financial Relations (శాసన సంబంధ, పరిపాలనపరమైన, ఆర్థిక సంబంధ అంశాలు)

Unit_5 Working of the Indian Constitution (భారత రాజ్యాంగం పనిచేయు విధానము-)

At the Union and the State level (కేంద్ర మరియు రాష్ట్ర స్థాయిల్లో)

1. Executive-(Composition, Powers and Functions (కార్య నిర్వాహక శాఖ -నిర్మాణము, అధికారాలు , విధులు)
2. Legislature:-Composition, Powers and Functions (శాసన శాఖ -నిర్మాణము, అధికారాలు , విధులు)

3. Judiciary -Composition, Powers and Functions (న్యాయ శాఖ -నిర్మాణము, అధికారాలు , విధులు)

<p>Reference books:</p> <ol style="list-style-type: none">1. Granville Austin (1972) the Indian Constitution, Cornerstone of a Nation Oxford university Press, New Delhi.2. Madhavkhosla (2012) the Indian Constitution, oxford university press, New Delhi3. Granville Austin (1999) Working a Democratic Constitution; A History of the Indian Experience, Oxford University Press, New Delhi	<ol style="list-style-type: none">4. Zoya Hasan, Sridharan E and Sudharshan R (Eds) 2002 India's living Constitution, Permanent black, New Delhi5. BaxiUpendra (1980) the Indian Supreme Court and Politics Eastern book co, Lucknow
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కే.వి.ఆర్. ప్రభుత్వ మహిళా కళాశాల (స్వయం ప్రతిపత్తి),కర్నూలు

II YEAR B.A. Political Science

CBCS: SYLLABUS - SEMESTER WISE (2019-2020 onwards)

As per Andhra Pradesh State Council of Higher Education

Semester-III--Paper-III

INDIAN CONSTITUTION (భారత రాజ్యాంగం)

MODEL PAPER

Time : 3 hrs

Max Marks : 60M

PART – A

క్రింది ప్రశ్నలలో ఏ ఐదంటికి జవాబులు వ్రాయండి. ప్రతి ప్రశ్నకు 4 మార్కులు 5 X 4 మార్కులు = 20 మార్కులు

1.	Constitution Drafting Committee రాజ్యాంగ రచనా సంఘం
2.	Preamble of the Indian Constitution భారత రాజ్యాంగ ప్రవేశిక
3.	Identify the Directive Principles in our constitution which relate to Socialism రాజ్యగంలోని ఆదేశిక సూత్రాల లో సామ్యవాదమును ప్రతిబింబించే సూత్రాలు గుర్తించండి
4.	Limitations on the fundamental Rights ప్రాథమిక హక్కులపై పరిమితులు
5.	Legislative relations between Centre and States కేంద్ర రాష్ట్రాల మధ్య శాసన సంబంధాలు
6.	Article 356 356 వ అధికరణం
7.	Collective Responsibility సమిష్టిభాద్యత
8.	Judicial review న్యాయ సమీక్ష

PART-B

క్రీంది ప్రశ్నలకు జవాబులు వ్రాయండి. ప్రతి ప్రశ్నకు 8 మార్కులు 5 X 8 మార్కులు = 40 మార్కులు

9(a)	Write about The ideological legacy of the Indian National Movement on the Constituent Assembly భారత రాజ్యాంగ పరిషత్తు పై - జాతీయోద్యమం సైద్ధాంతిక వారసత్వం ప్రభావాన్ని తెలపండి (లేదా-OR)
(b)	Explain the Composition and formation of the Indian Constituent Assembly భారత రాజ్యాంగ పరిషత్తు నిర్మాణం, అది ఏర్పడిన విధము వివరించండి
10(a)	Explain the salient Features of Indian Constitution భారత రాజ్యాంగంలోని విశిష్టమైన లక్షణాలను వివరించండి (లేదా-OR)
(b)	What were the Sources of the Indian Constitution మన రాజ్యాంగం తయారీ సమయంలో వేటిని ఆదారంగా తీసుకున్నారో తెలపండి
11 (a)	Explain the Fundamental Rights incorporated in our Constitution భారత రాజ్యాంగం లో పొందుపరచబడిన ప్రాథమిక హక్కులను వివరించండి (లేదా-OR)
(b)	What is the importance of 'Kesavananda Bharathi Case' and explain The doctrine of 'Basic Structure' of the Constitution కేశవానంద భారతి కేసు ప్రాధాన్యతను అందులోని రాజ్యాంగ మౌలిక స్వరూప భావన ను వివరించండి
12 (a)	Identify the Unitary and Federal features in the Indian Constitution భారత రాజ్యాంగంలోని ఏక కేంద్ర మరియు సమాఖ్య లక్షణములు గుర్తించండి (లేదా-OR)
(b)	Explain the Tension Areas between the Union and State Governments కేంద్ర రాష్ట్రాల మధ్య ఉద్రిక్తత కు అవకాశం ఉన్న అంశాలు వివరించండి
13 (a)	Explain the powers and Functions of Indian Parliament భారత పార్లమెంటు అధికారాలు విధులను పేర్కొనండి(లేదా-OR)
(b)	Elaborate the powers and Functions of the Supreme Court of India భారత సుప్రీం కోర్టు అధికారాలు విధులను పేర్కొనండి

III Paper Blue Print- [Weightage to be given to each unit in this paper is as follows]			
Unit	No of Short Questions (4 marks type)	No of Essay Questions (8 marks type)	Marks
I	1	2	[1x4=4] + [2x8=16]=20 Marks
II	1	2	[1x4=4] + [2x8=16]=20 Marks
III	2	2	[2x4=8] + [2x8=16]=24 Marks
IV	2	2	[2x4=8] + [2x8=16]=24 Marks
V	2	2	[2x4=8] + [2x8=16]=24 Marks
			Total Marks= 112 Max Marks to be awarded= 60 Minimum Marks to Pass (40%)= 24 Marks

CBCS: SYLLABUS - SEMESTER WISE (2019-20)

SECOND YEAR; SEMESTER – IV

B.A. POLITICAL SCIENCE

PAPER-IV (CORE): INDIAN POLITICAL PROCESS

Unit-1: Approaches to the Study of the Political Processes in India

(భారత దేశం లో రాజకీయ ప్రక్రియల అధ్యయన దృక్పథాలు)

1. Theory of Modernization: Transition from Tradition to Modernity (ఆధునికీకరణ సిద్ధాంతాలు: సాంప్రదాయకత నుండి ఆధునికీకరణ వైపు మార్పు)
2. Marxian Approach: Transition from pre-capitalism to capitalism (మార్క్సిస్టు అధ్యయన దృక్పథం : పూర్వ పెట్టుబడిదారీ వ్యవస్థ నుండి పెట్టుబడిదారీ వ్యవస్థ వరకు)

Unit-2: Social Structure in Indian Democratic Process (భారత ప్రజా స్వామ్య వ్యవస్థ లో సాంఘిక నిర్మాణాలు)

1

1. Caste System in India from hierarchy to Identity -Role of Caste Groups.(భారత దేశం లో కుల వ్యవస్థ : వివిధ హోదాల వ్యవస్థ నుండి గుర్తింపు కోసం ప్రయత్నించే వ్యవస్థ దిశగా జరిగే మార్పు—కుల సంఘాల పాత్ర)
2. Role of deprived Classes (Dalits) అణగారిన వర్గాల (దళిత) వర్గాల పాత్ర

Unit-3: Religion and Politics (మతం మరియు రాజకీయాలు)

1. Role of Religion in Indian Politics – Recent trends (భారత రాజకీయాలలో మతం పాత్ర –ఇటీవలి పరిణామాలు)
2. Debates on Secularism; Role of the State towards religion (లౌకికవాదం పై చర్చ : మతం విషయంలో రాజ్యం పాత్ర)

Unit-4: Party and Electoral Processes in India (భారతదేశంలో రాజకీయ పార్టీలు మరియు ఎన్నికల ప్రక్రియ)

1. Electoral Trends of the lokSabha from 1952 to 2019:From the One Party Congress System to Multi Party Coalitions (భారతదేశంలో లోక్ సభ ఎన్నికల తీరుతెన్నులు 1952 నుండి 2019 వరకు – ఏక పార్టీ వ్యవస్థ నుండి బహు పార్టీ సంకీర్ణ రాజకీయాల వరకు)
2. Determinants of Voting Behavior in India; Caste, Class,, Money etc. (ఓటర్ల ప్రవర్తనను ప్రభావితం చేసే కారకాలు – కులం, వర్గం, డబ్బు మొదలగునవి)
3. Evolution of Party System in India: the Ideology and Social bases of major Political Parties: National Parties-- INC,BJP,CPI, CPM, Regional Parties--DMK, TDP and YSRCP (భారతదేశంలో రాజకీయ పార్టీ వ్యవస్థ పరిణామం, వివిధ రాజకీయ పార్టీ సిద్ధాంతాలు , సమాజం లోని వాటి పునాదులు –

జాతీయ పార్టీలు --భారత జాతీయ కాంగ్రెస్, భారతీయ జనతా పార్టీ, CPI, CPM; ప్రాంతీయ పార్టీలు --,
DMK తెలుగు దేశం పార్టీ, మరియు వై స్పార్ కాంగ్రెస్ పార్టీ)

Reference books:

1. Chandhoke N and Priyadarshini P (Eds) (2009) Contemporary India Economy, society, politics, Pearson, NewDelhi.
2. Vanaik A and Bhargava R (Eds) (2010) Understanding Contemporary India Critical perspectives orient black swan New Delhi.
3. Jayal N G and Mehta PB (Eds) (2010) Oxford Companion to Indian Politics Oxford University Press, New Delhi.
4. Kohliatul and Prema Singh (Ed) (2013) Routledge Hand book of Indian Politics
Routledge, NewYork.
5. Jaffrelot C (2003) India's Silent Revolution: The Rise of the Lower Caste in North India, C Hrust, London.
6. Stanely A. Kochanek, Robert L.Hardgrave, India Government and Politics in a Developing Nation, Boston, Wards Worth
Publishing, 200SN.
7. Rajeev Bhargava (Ed) Secularism and its Critics (1998), Delhi, UP.

[New-(for Regular Candidates)]

K.V.R. GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

II YEAR B.A. Political Science

CBCS: SYLLABUS - SEMESTER WISE (w.e.f:2019-20)నుండి

PAPER-IV (CORE): INDIAN POLITICAL PROCESS

MODEL PAPER

Time : 3 hrs

Max Marks : 60M

PART – A

క్రింది ప్రశ్నలలో ఏ ఐదంటికి జవాబులు వ్రాయండి. ప్రతి ప్రశ్నకు 4 మార్కులు 5 X 4 మార్కులు = 20 మార్కులు

1.	The Marxian Approach మార్కిస్టు అధ్యయన దృక్పథం
2.	MRPS మాదిగా రిజర్వేషన్ పోరాట సమితి
3.	The increasing awareness in backward castes-Recent Trends BC కులాల లో చైతన్యం –ఇటీవలి దొరణలు
4.	Communalism మతోన్మాదము
5.	Coalition Government సంకీర్ణ ప్రభుత్వము
6.	The role of money power in Indian elections భారత దేశంలో ఎన్నికలలో డబ్బు ప్రభావం
7.	YSR Congress Party వై స్పార్ కాంగ్రెస్ పార్టీ
8.	History and policies of DMK party DMK పార్టీ చరిత్ర, విధానాలు

PART-B

క్రీంది ప్రశ్నలకు జవాబులు వ్రాయండి. ప్రతి ప్రశ్నకు 8 మార్కులు 5 X 8 మార్కులు = 40 మార్కులు

9(a)	Explain the Theory of Modernization ఆధునికీకరణ సిద్ధాంతమును వివరించుము?
(b)	Explain how Transition took place in the society from pre-capitalism to capitalism as per Karl Marx మార్క్స్ ప్రకారం సమాజం పెట్టుబడిదారీ పూర్వ దశ నుండి పెట్టుబడిదారీ దశ కు ఎలా మార్పు జరిగిందో వివరించండి
10(a)	Analyze the main features of the Caste System in India భారతదేశం లో కుల వ్యవస్థ ముఖ్య లక్షణములు విశ్లేషించుము
(b)	Describe the role being played by the deprived classes in protecting their Rights in India భారత దేశం లో తమ హక్కులను రక్షించు కొనేందుకు అణగారిన వర్గాలు నిర్వహిస్తున్న పాత్రను తెలుపుము
11 (a)	Explain how Religion influencing Indian Politics భారత రాజకీయాలను మతం ఏ విధంగా ప్రభావితం చేస్తున్నదో వివరించండి
(b)	What is Secularism? Explain the role of State with the matters concerning religion లౌకికవాదం అంటే ఏమిటో తెలిపి : మతానికి సంబంధించిన విషయా లలో రాజ్యం పాత్ర ను వివరించండి
12 (a)	Explain how the caste system influencing Indian Elections భారత దేశం లో ఎన్నికలల ను కులం ఏ విధంగా ప్రభావితం చేస్తున్నదో వివరించండి
(b)	Write about the History and policies of Bharateeya Janata Party భారతీయ జనతా పార్టీ చరిత్ర , విధానాలు తెలపండి
13 (a)	Explain the decline in the influence of both the Communist Parties (CPI, CPIM) in Indian politics భారత రాజకీయాల్లో ఉభయ కమ్యూనిస్ట్ పార్టీల(CPI, CPIM) ప్రాభవం తగ్గిపోవడానికి గల కారణాలు వివరించండి?

(b)

Write an essay on '2019 General elections

'2019 సార్వత్రిక ఎన్నికలు 'గురించి ఒక వ్యాసము వ్రాయండి ?

Department of Rural Development
BOS Meeting on 18.10.2019

Constitution of the BOS Committee

Department of Rural Development

Sl. NO	Category	Name and Designation
1)	He of Rural Development	Dr. K. Venkatesh Reader in Economics
2	University nominee	Prof. G. Sreedhar, Dept. of R.D. S.K.U. Anantapur
3	Subject Experts	1) Dr. B. Madhava Reddy, Principal, P.D.C. Atur 2) Dr. M. Nazeeuddin, Associate Professor in Economics Osmania College (R) Kurmal
4	Members	B) Vasa Lakshmi G.F
5	Alumini	1) Dr. N. Parvathi, Principal, Vasavi Mahila Kalashala, Kurmal.

The Board of Studies of Rural Development has conducted in the Department of Rural Development on 18.10.2019 at 10:30 A.M under the chairmanship of Dr. K. Venkatesh He of the Department discussed and finalised draft Syllabus for III and IV the Semesters Prepared on the basis of Sri Krishnamacharya University Anantapur and Syllabus framed by some other Autonomous Colleges and unanimously Finalised and Approved the following academic Proposals of Rural Development to be implemented for the Academic year 2019-2020 -

RESOLUTIONS:- It is discussed in detail on the proposed Syllabus (based on Common Core) for II year B.A (Rural Development, Psychology and Advanced Telugu) and made some alterations and additions keeping in view of latest trends in rural development. It is also discussed and Finalised the Model Question Paper and Scheme of valuation for the Academic year 2019-2020.

and following resolutions are made:

- 1) It is resolved to adopt the Prescribed Syllabus for IIIrd and IVth the semesters of II.B.A (R.D. Psychology Advanced Telugu) as given ~~to~~ in the Annexure-I for the Academic year 2019-2020.
- 2) It is resolved to take Six teaching hours Per week 40 Marks for Paper shall be allotted for Internal Exams and 60 Marks for Semester End Examinations Conducted in each semester. 2 Internal Examinations will be Conducted for 20 Marks. Average of two Internals + Assignments / student Seminars + viva / Group Discussion + Attendance. Marks allotted are as follows $20+5+5+5+5=40$ Marks for the II Year B.A Rural Development.
- 3) AS Per the Directions given by the Special Commissioner of Collegiate Education for II B.A Rural Development Internal Marks are allotted 40 and 60 Marks are allotted for Semester end Examinations. Two Internal Exams will be Conducted for 20 Marks.
- 4) It is resolved to take six teaching hours Per week 25 Marks for Paper shall be allotted for Internal Exams and 75 Marks for Semester End Examinations. In each semester two Internal Exams will be Conducted for 15 Marks Average of two Internals + Assignment + viva voce Marks allotted are as follows. $15+5+5=25$ Marks for the IIrd and IIIth the semester B.A. Rural Development.
- 5) It is resolved to to submit the Panel of Question Paper setters and Examiners for theory External Examinations.
- 6) It is resolved to adopt Choice based Credit System for the Academic year 2019-2020.

The Board of Studies, of Rural Development meeting held on 18.10.2019 at 10.30AM in the Department of Rural Development K.V.R. Govt. College for Women Kurnool. The following members have attended.

Sl. No	Category	Name and Designation
1	H/C of Dept. of Rural Development	Dr. K. Venkatesh Reader in Economics.
2	University nominee	Prof. G. Sreedhar, Dept. of R.D. S.K.U. Anantapur.
3	Sub-Test Experts	Dr. B. Madhava Reddy Principal G.D.C. Alur. Dr. M. Naziruddin Associate Professor Osmania College, Kurnool.
4	Member	Varalakshmi G.F.
5	Alumni	Dr. N. Parvathi Principal. Vasavi Mahila Kalashala Kurnool

Agenda of the Meeting:-

- 1) To discuss the Pattern of Semester wise Syllabus for II year B.A Paper-III, Paper-IV for the Academic year 2019-2020 in B.A Rural Development Telugu Medium.
- 2) To discuss the Pattern of Question Paper
- 3) To discuss the Panel of Question Paper setters and Examiners.

The board of Studies in Rural Development resolved the following. It is resolved to follow the syllabus for II B.A R.D as Prescribed by the Sri Krishna devaraya University Anantapur for the Academic year 2019-2020

II B.A. Rural Development Telugu Medium.

Title of the Paper
 Semester - III Paper III
 Indian Rural Economic Scene.
 Semester IV Paper IV
 Indian Rural Social Scene.

The semester wise distribution of Marks for the above papers are as follows.

Internal Examinations : 40 Marks

Average of two Internals 20 + Assignment 5 Marks + Student Seminar, 5 Marks + Attendance 5 Marks + viva voce 5 Marks.
 For internals one Essay Question for 8 Marks and 3 Short notes question 3×4 Marks : 12 Marks. Total : 20 Marks are to be followed.

External Examinations : 60 Marks.

Part - A.

Answer any five questions $5 \times 4 = 20$ Marks.

Part - B.

Answer any five of the following questions. Each question carries 8 Marks $5 \times 8 = 40$ Marks.

Panel of Question Paper Setters.

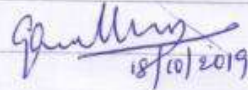
- 1) Dr. M. Nazeeruddin Associate Professor Annamalai College, Kurnool
- 2) Dr. B. Madhava Reddy Principal G.D.C. Alur.
- 3) Dr. P. Sreenivasa Naidu Rtd. Principal G.D.C. Kadiri
- 4) Dr. Hanumantha Rao Reader in Economics S.R.D.C. Nandyal.
- 5) Dr. N. Parvathi Principal, Vasavi Mahila Kalashala Kurnool
- 6) Mr. P. Lokari Rtd. Lecturer in Economics G.D.C. Banaganapalle
- 7) Dr. C. Uma Devi Principal S.J.C. Kurnool
- 8) Mr. M. Rama Krishna Lec. in Economics Adoni Arts and Science College

Panel of Examiners:-

- 1) Dr. Gureu Bhumarhari Reader in Economics SBSYH Kurnool
- 2) Dr. B. Madhava Reddy Principal, G.D.C. Alur.
- 3) Dr. K. Suresh, Principal G.D.C. Dharma Varam - Anantapur Dist
- 4) Dr. Mallikarjuna Lec. in Economics G.D.C. Hen Kurnool.
- 5) Dr. Yellakrishna Lec. in Economics G.D.C. Nandikal Kurn.
- 6) Dr. P. Sreenivasula Naidu. MEd. Principal G.D.C. Kaduri.
- 7) Dr. N. Parvathi Principal Vasavi Mahila Kalashala Kurnool.
- 8) Dr. M. Nazeehuddin Associate Professor eSmantha College Kurnool.

Approved By

1) Prof. G. Sreedhar


18/10/2019

2) Dr. K. Venkatesh


18/10/19

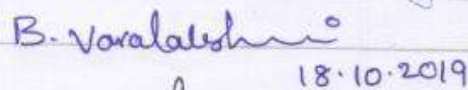
3) Dr. B. Madhava Reddy


18/10/19

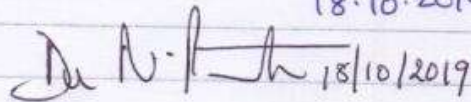
4) Dr. M. Nazeehuddin


18.10.2019

5) B. Varalakshmi


18.10.2019

6) Dr. N. Parvathi


18/10/2019

K.V.R.GOV.T. COLLEGE FOR WOMEN(AUTONOMOUS) KURNOOL

C.B.C.S., Semester-VI

B.A. RURAL DEVELOPMENT

(Revised Syllabus with effect from the Academic Year 2015-16)

Paper-III, Indian Rural Economic Scene

Unit-1

Demographic Structure of Rural India – Trends in Population Growth – Composition of Rural work Force – Over population: Causes and Consequences – Distress Migration – Chances in Rural Occupational Structure.

Unit-2

Development of Agriculture: Green Revolution – Land Reforms – Dri Land Farming-organic Farming – Non-Pesticide Management – Implications of the Use of Genetically Modified seeds – National Agriculture Crop Insurance Scheme – National Agricultural Policy – Implications of Globalization for India Agriculture.

Unit-3

Promotion of Rural Industries and activities allied to Agriculture: Khadi and Village Industries Commission – District Industries Centre – Programmes for the Development of Artisans – Promotion of Dairying, Sheep/Goat Regarding, Poultry and Aquaculture.

Unit-4

Rural Infrastructure Bharat Nirman – Prime Minister's Grameen Sadak Yojana – rural Infrastructure Development Fund – Provision of Urban Amenities in Rural Areas (PURA) – Rural Energy: Conventional and Non-conventional sources.

Unit-5

Role of information and Communication Technology in Rural Development - Technology Missions for Rural Development: Immunization Drinking Water – Sanitation – Communication – Waste land Development – Oilseeds and Pulses – Financial Inclusion.

Books and References.

1. N.I.R.D. : Facts of Rural Development in India
2. S.C. Jain : Rural Development
3. K.Venkata Reddy : Rural Development in India: Poverty and Development Himalaya Publishing House, Mumbai-2012.
4. Katar Singh : Rural Development: Principles, Policies & Management.
5. G.Sreedhar and D.Rajasekhar: Rural Development in India: Strategies and Process,
D.Rajasekhar : Concept Publishing House, New Delhi, 2014.
6. Susan Johnson and Ben Rogally : Micro Finance

Publications: of A.P.Telugu Academy.

Journals: Kurukshetra, Yojana, Jagruti, Khadi Gramodyog, Journal of R.D.

K.V.R. GOVT. COLLEGE FOR WOMEN (A) KURNOOL
II B.A.,-RD-III Semester
Paper-III, Indian Rural Economic Sence

Time: 3 Hours

Max.Marks: 60

PART – A

- I. ఈ క్రింది వాటిలో ఏవేని 5 ప్రశ్నలకు జవాబు వ్రాయుము, ప్రతి ప్రశ్నకు 4 మార్కులు $5 \times 4=20$ మా
- | | |
|-------------------------------|--|
| 1. భారత దేశంలో గ్రామీణ శక్తి? | 5. గ్రామీణాభివృద్ధిలో సమాచార సాంకేతిక పరిజ్ఞానం పాత్ర? |
| 2. భారత దేశంలో హరిత విప్లవం? | 6. త్రాగునీరు? |
| 3. గ్రామీణ పరిశ్రమలు? | 7. ఆర్థిక చేరిక? |
| 4. భరత్ నిర్మాన్ ? | 8. సేంద్రీయ వ్యవసాయం? |

PART – B

- II. ఈ క్రింది వాటిలో ఏవేని 5 ప్రశ్నలకు జవాబు వ్రాయుము ప్రతి ప్రశ్నకు 8 మార్కులు. $5 \times 8=40$ మా
9. (A) గ్రామీణ ప్రాంతాలలో జనాభా పెరుగుదలకు కారణాలు మరియు పరిణామాలను విశదీకరింపుము?
(OR)
(B) గ్రామీణ ప్రాంతాలలో వృత్తివారి విభజనలో వస్తున్న మార్పులను తెలుపుము?
10. (A) భారతదేశంలో వివిధ భూ సంస్కరణలు గూర్చి వివరింపుము?
(OR)
(B) భారతదేశంలో వ్యవసాయ విధానంను గూర్చి వివరింపుము?
11. (A) భారతదేశంలో గ్రామీణ పరిశ్రమల ప్రోత్సహం మరియు వ్యవసాయానికి సంబంధించిన కార్యక్రమాలు వ్రాయుము?
(OR)
(B) చేతి వృత్తుల అభివృద్ధి కార్యక్రమాలు సమగ్రంగా చర్చింపుము?
12. (A) భారతదేశంలో గ్రామీణ మౌలిక సదుపాయాలు - ప్రధానమంత్రి గ్రామ సడక్ యోజన?
(OR)
(B) గ్రామీణ ప్రాంతాలలో పట్టణ సౌకర్యాలు కల్పించుట (PURA)?
13. (A) గ్రామీణాభివృద్ధిలో సమాచార సాంకేతిక పరిజ్ఞానం పాత్రను వివరింపుము?
(OR)
(B) గ్రామీణ ప్రాంతాలలో త్రాగునీరు, పారిశుధ్యము అవశ్యకతను వివరింపుము?

K.V.R.GOV.T. COLLEGE FOR WOMEN(AUTONOMOUS) KURNOOL
C.B.C.S., Semester VI.
B.A. RURAL DEVELOPMENT
(Revised Syllabus with effect from the Academic Year 2015-16)
Paper-IV, Indian Rural Social Scene.

Unit-1

Types of Villages in India –Characteristics of Village Communities – rural Social Institutions – family, Marriage and Religion: Role and Functions.

Unit-2

Definition of Caste – Distinction between Caste and Class – Caste System in India – functions – Emerging trends.

Unit-3

Concept of Social Change – Factors of Social Change: Demographic, Economic Technological, cultural – Process of Social Change in India: Sanskritization, Westernization and Modernization.

Unit-4

Major Social Problems: Poverty – Unemployment – Illiteracy – Untouchability – child Labour – Trafficking of Women.

Unit-5

Social Legislation for Women, Children, Scheduled Castes and Scheduled Tribes and Backward classes.

Books and References:

1. Vasant Desai : Rural Development: Issues & Problems
2. Chitambar : Rural Sociology.
3. P.C.Deb : Rural Sociology.
4. A.R.Desai : Rural Sociology.
5. Katar Singh : Rural Development: Principles, Policies & Management.
6. K.Venkata Reddy : Rural development in India: Poverty and Development. Himalaya Publishing House, Mumbai.
7. G.Sreedhar and D.Rajasekhar : Rural Development in India: Strategies and Process, Concept Publishing House, New Delhi,2014.

Publications of A.P.Telugu Academy.

Journals: Kuirukshetra, Yojana, Jagruti, Kadi Gramodyog, Journal of R.D.

K.V.R. GOVT. COLLEGE FOR WOMEN (A) KURNOOL

B.A. ECONOMICS

III B.A., Rural Development

IV Semester Model Question Paper 2016-17

Paper-IV Indian Rural Social Scene

Time: 3 Hours

Max.Marks: 60

PART – A

5 × 4=20మా

1. భారతదేశంలో పల్లె సీమల రకాలు?
2. కులము?
3. సామాజిక మార్పు భావన?
4. పేదరికము?
5. బాల కార్మిక వ్యవస్థ?
6. మహిళ సామాజిక మార్పు కోసం చట్టాలు?
7. S. C. మరియు S. T.?
8. అంటరానితనము?

PART – B

ఈ క్రింది వాటిలో ఏవేని 5 ప్రశ్నలకు జవాబు వ్రాయుము 5×8=40

- 9) (A) గ్రామీణ ప్రాంతాలలో సామాజిక సంస్థలను గూర్చి వ్రాయుము?
(OR)
(B) సామాజిక మార్పుకు దోహదపడే కారకాలను చర్చించుము?
- 10) (A) భారతదేశంలో కులవ్యవస్థను వివరింపుము?
(OR)
(B) భారత దేశంలో సామాజిక మార్పు తీరుతెన్నులను వివరించుము?
- 11) (A) భారతదేశంలో పేదరికానికి గల కారణాలను వివరింపుము?
(OR)
(B) భారతదేశంలో గ్రామీణ నిరుద్యోగితను చర్చించుము?
- 12) (A) భారతదేశంలో నిరక్షరాస్యతకు గల కారణాలను, నివారణ చర్యలు వివరింపుము?
(OR)
(B) భారతదేశంలో మహిళ చట్టాలను వివరింపుము?
- 13) (A) భారతదేశంలో వెనుకబడిన తరగతుల సంక్షేమం కోసం ప్రభుత్వం తీసుకొనే చర్యలు?
(OR)
(B) భారతదేశంలో బాల కార్మికుల సమస్యలు పరిష్కార మార్గాలు చర్చించుము?

2019-20

The Board of Studies of Psychology met in the Department on 5-08-2019 at 10-00 AM under the chairmanship of Sri V.V. Seshareddy, Department incharge discussed and finalised draft syllabus for III, IV semester papers prepared on the basis of Common Core Syllabus approved by the APSHE, Vijayawada prescribed by Rayalaseema University, Kurnool and the syllabus framed by some other autonomous colleges and unanimously finalised and approved the following academic proposals of psychology to be implemented for the academic year 2019-2020 onwards.

RESOLUTIONS

It is discussed in detail on the proposed syllabus (Based on Choice Based Credit System) for II year B.A (Rural development, Psychology, Ad. Telugu) and made certain alterations and additions keeping in view of latest trends in psychology. It is also discussed and finalised the model question paper and scheme of valuation from the academic year 2019-2020 and following resolutions are made.

1. Resolved to adopt the syllabi, question paper pattern and prepare Model question paper under choice Based Credit system (CBCS) for II B.A Psychology for the academic year 2019-2020.
2. Resolved to introduce practical-III and practical IV (each paper 50 marks) in semester-III and semester-IV respectively for II B.A. Psychology and consider internal evaluation for practical-III

and external evaluation for practical-IV from 2019.
 3. Resolved to ~~Consider~~ offer Social Psychology-I and Social Psychology-II as core papers in Semester-III and Semester-IV respectively for II B.A. Psychology Course under choice Based Credit System (CBCS) from the academic year 2019-2020.

The Board of Studies of Psychology meeting is held on - - 2019 at 10-00 AM at the Department of Psychology, K.V.R. Govt. College for Women (A), Kurnool.

The following members have attended
 1. V.V. Seshareddy - Incharge Lecturer of the Department
 & Dr. K. Lalitha - one expert to be nominated by the vicechancellor from a panel of three recommended by the principal.

3. Dr. G. Koteswararaj - Subject Expert
 Prof. of Psychology

4. Dr. S. Shamsuddin - Subject Expert
 Senior Lecturer in Psychology.

5. Smt. D. Krishnaveni - one representative from Corporate sector/industry related to placements nominated by the Principal.

6. N. Pasvathi - one post graduate meritorious alumnus.

GA. Student representatives: 1. R. Mounika, III B.A

2. M. Rajeswari, II B.A

3. S. Sukanya, I B.A

K.V.R GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS)

KURNOOL

BOARD OF STUDIES FOR 2019-20

DEPARTMENT OF PSYCHOLOGY

S.No	Category	Name & Designation of the Person	Chairperson/Member
I	In-Charge Lecturer of the Department	V.V.Sesha Reddy Lecturer Psychology K.V.R. Govt College (W) Kurnool Cell : 9247781635	Chairman <i>V.V. Reddy</i>
II	Entire Faculty Members	V.V.Sesha Reddy	
III	Two Experts in the Subject from outside the College to be nominated by the Academic Council	G.Koteswaraiah Reader in Psychology Govt. College for Men Kadapa 2.Dr. S.Samsuddin Lecturer in Psychology IASE College Thandrapadu Kurnool Cell : 9440292891	Member <i>G.Koteswaraiah</i> <i>S.Samsuddin</i>
IV	One expert to be nominated by the Vice-Chancellor from a panel of six recommended by the Principal	Dr. K. Lalitha Asst. Prof. of Psychology Y.V.University Kadapa	Member <i>K. Lalitha</i>
V	One representative from industry/corporate sector related to placements nominated by the Principal	Smt. D.Krishnaveni Administrator Ambika Sishukendra Prakash Nagar Kurnool	Member <i>D. Krishnaveni</i>
VI	One Post graduate meritorious alumnus	N.Parvathi D/o N. Narasappa H.No.50/348-E19 Arora Nagar B.Camp Kurnool	Member <i>N. parvathi</i>

K.V.R.Govt.College (W), Kurnool
(Autonomus)
Degree II B.A Psychology Curriculum 2019-20
Semester-III

Paper-III SOCIAL PSYCHOLOGY

Time : 3 hours

Marks :60

Unit-I :- Nature and scope of social Psychology

- a) Definition, Nature and scope of Social Psychology
- b) Research method in Social Psychology- Observation, Survey, Field study correlation and Experimental Method.

Unit-II :- Social perception and Impression Formation

- a) Social perception-meaning and factors influencing social perception.
- b) Attribution- Meaning and Errors in attribution- Impression formation Techniques of Impression management

Unit-III :- Socialization

- a) Definition and goals of Socialization. Socialization process.
- b) Stages of Socialization. Agencies of Socialization, Self concept.

Unit-IV :- Communication

- a) Definition, Nature and types of communication
- b) Barriers to effective communication-Rumors and propaganda

Unit-V :- Attitudes

- a) Definition- features and formation of attitudes
- b) Measurement of attitudes – Methods by Likert, Bogardus and Thurstone.

Reference Books:

1. Myers, David G.(1988) Social Psychology, Nd Edition, McGraw Hill Book Company.
2. Baron, Robert.A. and Byrne.Donn . Social Psychology, 7th edition, Prentice Hall of India Pvt.Ltd
3. Lindgren, Henry.C.(1973), An Introduction to Social Psychology, John Wiley & Sons
4. Munn, N.L., (1948). Laboratory Manual in Experimental Psychology, Houghton Mifflin co., New York

5. Natraj.P (1970). A manual of laboratory experiments in psychology, Mysore printing and Publishing House. Mysore.

K.V.R.Govt.College (W), Kurnool

(Autonomus)

Degree II B.A Psychology Curriculum 2019-20

Semester-IV

Paper-IV SOCIAL PSYCHOLOGY-II

Time : 3 hours

Marks

:60

Unit –I: - PREJUDICE

Prejudice and text 179 Discrimination, Origin text 167 and causes of Prejudice, Techniques notes 40 of reducing prejudice.

Unit II:-AGGRESSION

Definition, Determinates of Human Aggression-Social, Personal and Situation Factors, Theoretical perspectives on Aggression- Biological Perspective, Drive Theories, Social learning Perspective, and General Aggression Model, Prevention and Control of Aggression

Unit III: - GROUPS AND INDIVIDUALS

Definition and Types of Groups, Functions of Groups: Role status, Norms, Cohesiveness; Individual Performance in groups – Social Facilitation, Social Loafing

Unit IV :- LEADERSHIP

Definition, Traits of Leader, Types of Leaders – Autocratic, Democratic and Charismatic Leaders; Classic studies on Leadership.

Unit V:- SOCIAL MOTIVATION

- A) Definition of Social Motivation, Types of Social motivation-Biogenic, Psycho-Social
- B) Achievement Motives- Social Incentives-Theories of Motivation-Psychoanalytic Theory-Gestalt Theory-Max Theory- Sociological Theory.

Reference Books:

1. Myers, David G.(1988) Social Psychology, Nd Edition, McGraw Hill Book Company.
2. Baron, Robert.A. and Byrne.Donn . Social Psychology, 7th edition, Prentice Hall of India Pvt.Ltd
3. Lindgren, Henry.C.(1973), An Introduction to Social Psychology, John Wiley & Sons
4. Munn, N.L., (1948). Laboratory Manual in Experimental Psychology, Houghton Mifflin co., New York
5. Natraj.P (1970). A manual of laboratory experiments in psychology, Mysore printing and Publishing House. Myso

KVR GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL SYLLABUS
UNDER CHOICE BASED CREDIT SYSTEM (CBCS)
DEGREE II B.A, PSYCHOLOGY CURRICULAM 2019-

20 PAPER-III-SOCIAL PSYCHOLOGY-I

SEMESTER-III

External examination at the end of third Semester

TIME: 3 Hours

MAX MARKS:60

PART-A

Answer any FIVE questions out of EIGHT. Each one carries 4 Marks

5 x 4 = 20 M

1. Explain the nature of Social Psychology.
2. Survey method
3. Social Perception
4. Socialization
5. Communication
6. Self-concept
7. Formation of Attitudes
8. Social distance scale

PART-B

Answer FIVE questions. Each one carries 8 Marks

5 x 8 = 40 M

9. Define Social Psychology? Explain its scope

OR

Explain the observation method and Experimental method of social psychology

10. Discuss fundamental attribution error

OR

Explain the socialization process

11. Describe barriers to communications

OR

How do you measure social Attitudes

12. What factors influencing Social Perception OR

Techniques of Impression management

13. Explain the Impression formation

OR

Types of communication

KVR GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
DEGREE II B.A,PSYCHOLOGY,SEMESTER-IV
PAPER-IV-SOCIAL PSYCHOLOGY-II

TIME : 3 HOURS

MARKS : 60

SECTION -A

Answer any FIVE questions out of EIGHT questions. Each question carries 4 Marks

4x5 = 20 M

1. Explain nature of prejudice
2. Theoretical perspective on Aggression
3. Roles
4. Norms
5. Social Facilitation
6. Social Lofting
7. Aggression
8. Social Motivation

SECTION -B

Answer all questions. Each question carries 8 Marks

8x5 = 40 M

9. Discuss about Prejudice and discrimination

OR

Examine the various methods of reducing Prejudice

10. Describe techniques of prevention and control of aggression
OR

Explain about Drive theory

11. What are the types of groups
OR

Explain the function of groups

12. Explain the determinants of human aggression OR
Explain about Psycho- Social motives

13. Discuss about classic studies on leader ship
OR

Describe the theories of social motivation

ANNEXURE - II
KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2016-17)
SECOND YEAR B.Sc. MATHEMATICS
FOURTH SEMESTER
CORE COURSE-IV: REAL ANALYSIS(w. e. f. 2016-2017)

UNIT – I (12 hrs) : REAL NUMBERS :

The algebraic and order properties of \mathbb{R} , Absolute value and Real line, Completeness property of \mathbb{R} , Applications of supremum property; intervals. No. Question is to be set from this portion.

Real Sequences: Sequences and their limits, Range and Boundedness of Sequences, Limit of a sequence and Convergent sequence.

The Cauchy's criterion, properly divergent sequences, Monotone sequences, Necessary and Sufficient condition for Convergence of Monotone Sequence, Limit Point of Sequence, Subsequences and the Bolzano-weierstrass theorem – Cauchy Sequences – Cauchy's general principle of convergence theorem.

UNIT –II (12 hrs) : INFINITE SERIES :

Series : Introduction to series, convergence of series. Cauchy's general principle of convergence for series tests for convergence of series, Series of Non-Negative Terms.

1. P-test
2. Cauchy's n^{th} root test or Root Test.
3. D'Alembert's Test or Ratio Test.
4. Alternating Series – Leibnitz Test.

Absolute convergence and conditional convergence, semi convergence.

UNIT – III (12 hrs) : CONTINUITY AND DIFFERENTIATION:

Limits : Real valued Functions, Boundedness of a function, Limits of functions. Some extensions of the limit concept, Infinite Limits. Limits at infinity. No. Question is to be set from this portion.

Continuous functions : Continuous functions, Combinations of continuous functions, Continuous Functions on intervals.

1. Borel's Theorem
2. Every Real valued continuous function defined on a closed interval is bounded.
3. Absolute Maxima – Minima Theorem.
4. If $f: [a, b] \rightarrow \mathbb{R}$ is continuous and $f(a), f(b)$ have opposite signs then there exists $c \in (a, b)$ such that $f(c) = 0$.
5. If $f: [a, b] \rightarrow \mathbb{R}$ is continuous and $f(a) \neq f(b)$ then f takes every value between $f(a)$ and $f(b)$ at least once. (only these 5 theorems)

DIFFERENTIATION :-The derivability of a function, on an interval, at a point, Derivability and continuity of a function, Graphical meaning of the Derivative (Only Problems)
Mean value Theorems – Rolle's Theorem, Lagrange's Theorem, Cauchy's Mean value Theorem

UNIT – IV (12 hrs) : RIEMANN INTEGRATION :

Riemann Integral, Riemann integral functions, Darboux theorem. Necessary and sufficient condition for \mathbb{R} – integrability, Properties of integrable functions, Fundamental theorem of integral calculus(6.1 to 6.12)

UNIT – V (12 hrs) :Laplace Transforms-II:

First Shifting Theorem, Second Shifting Theorem, Change of Scale Property, Laplace Transform of the derivative of $f(t)$, Initial Value theorem and Final Value theorem.

Prescribed Text Book: 1.A Text Book of B.Sc Mathematics by B.V.S.S. Sarma and others, Published by S.Chand & Company Pvt. Ltd., New Delhi.(Chapters- I to IV)
2. Laplace and Fourier Transforms by Dr. J.K. Goyal and K.P. Gupta, Published by Pragathi Prakashan, Meerut.(Chapter-V)

Reference Books :

1. Real Analysis by Rabert & Bartely and .D.R. Sherbart, Published by John Wiley.
2. Elements of Real Analysis as per UGC Syllabus by Shanthi Narayan and Dr. M.D. Raisingkania Published by S. Chand & Company Pvt. Ltd., New Delhi.

Suggested Activities:

Seminar/ Quiz/ Assignments/ Project on Real Analysis and its applications



KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2016-17)
SECOND YEAR B.Sc. MATHEMATICS
THIRD SEMESTER
CORE COURSE-III: ABSTRACT ALGEBRA
(w. e. f. 2019-2020)

UNIT – 1 : (12 Hrs) GROUPS : -

Binary Operation – Algebraic structure – semi group-monoid – Group definition and elementary properties Finite and Infinite groups – examples – order of a group. Composition tables with examples.

UNIT – 2 : (12Hrs) SUBGROUPS : -

Complex Definition – Multiplication of two complexes Inverse of a complex-Subgroup definition – examples-criterion for a complex to be a subgroups.Criterion for the product of two subgroups to be a subgroup-union and Intersection of subgroups.

Co-sets and Lagrange’s Theorem :-Cosets Definition – properties of Cosets–Index of a subgroups of a finite groups–Lagrange’s Theorem.

UNIT –3 : (14 Hrs) NORMAL SUBGROUPS : -

Definition of normal subgroup – proper and improper normal subgroup–Hamilton group – criterion for a subgroup to be a normal subgroup – intersection of two normal subgroups – Sub group of index 2 is a normal sub group – simple group – quotient group – criteria for the existence of a quotient group(up to theorem 14).

HOMOMORPHISM : -Definition of homomorphism – Image of homomorphism elementary properties of homomorphism – Isomorphism – kernel of a homomorphism – Fundamental theorem on Homomorphism and applications.(6.1 to 6.5)(only Theorems)

UNIT – 4 : (12Hrs) PERMUTATIONS AND CYCLIC GROUPS : -

Definition of permutation – permutation multiplication – Inverse of a permutation – cyclic permutations – transposition – even and odd permutations – Cayley’s theorem.

Cyclic Groups :-Definition of cyclic group – elementary properties – classification of cyclic groups(8.1 to 8.4)

UNIT – 5 : (10 Hrs) LAPLACE TRANSFORMS-I :

Definition of - Integral Transform – Laplace Transform Linearity, Property, Piecewise continuous Functions, Existence of Laplace Transform, Functions of Exponential order, and of Class A.

Prescribed Text Books: 1.A text book of Mathematics for B.A. / B.Sc. by B.V.S.S. SARMA and others, Published by S.Chand & Company, New Delhi. (For Units I to IV)

2. Laplace and Fourier Transforms by Dr. J.K. Goyal and K.P. Gupta, Published by Pragathi Prakashan, Meerut.

Reference Books :

1. Abstract Algebra, by J.B. Fraleigh, Published by Narosa Publishing house.

2. Modern Algebra by M.L. Khanna.

Suggested Activities:

Seminar/ Quiz/ Assignments/ Project on Group theory and its applications in Graphics and Medical image Analysis

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2016-17)

SECOND YEAR B.Sc. MATHEMATICS

FOURTH SEMESTER

CORE COURSE-IV: REAL ANALYSIS(w. e. f. 2016-2017)

UNIT – I (12 hrs) : REAL NUMBERS :

The algebraic and order properties of \mathbb{R} , Absolute value and Real line, Completeness property of \mathbb{R} , Applications of supreme property; intervals. No. Question is to be set from this portion.

Real Sequences: Sequences and their limits, Range and Boundedness of Sequences, Limit of a sequence and Convergent sequence.

The Cauchy's criterion, properly divergent sequences, Monotone sequences, Necessary and Sufficient condition for Convergence of Monotone Sequence, Limit Point of Sequence, Subsequences and the Bolzano-weierstrass theorem – Cauchy Sequences – Cauchy's general principle of convergence theorem.

UNIT –II (12 hrs) : INFINITIE SERIES :

Series : Introduction to series, convergence of series. Cauchy's general principle of convergence for series tests for convergence of series, Series of Non-Negative Terms.

1. P-test
2. Cauchy's n^{th} root test or Root Test.
3. D'Alemberts' Test or Ratio Test.
4. Alternating Series – Leibnitz Test.

Absolute convergence and conditional convergence, semi convergence.

UNIT – III (12 hrs) : CONTINUITY AND DIFFERENTIATION:

Limits : Real valued Functions, Boundedness of a function, Limits of functions. Some extensions of the limit concept, Infinite Limits. Limits at infinity. No. Question is to be set from this portion.

Continuous functions : Continuous functions, Combinations of continuous functions, Continuous Functions on intervals.

1. Borel's Theorem
2. Every Real valued continuous function defined on a closed interval is bounded.
3. Absolute Maxima –Minima Theorem.
4. If $f:[a,b] \rightarrow \mathbb{R}$ is continuous and $f(a), f(b)$ have opposite signs then there exists $c \in (a,b)$ such that $f(c) = 0$.
5. If $f:[a,b] \rightarrow \mathbb{R}$ is continuous and $f(a) \neq f(b)$ then f takes every value between and $f(a)$ and $f(b)$ at least once. (only these 5 theorems)

DIFFERENTIATION :-The derivability of a function, on an interval, at a point, Derivability and continuity of a function, Graphical meaning of the Derivative (Only Problems)

Mean value Theorems – Role's Theorem, Lagrange's Theorem, Cauchy's Mean value Theorem

UNIT – IV (12 hrs) : RIEMANN INTEGRATION :

Riemann Integral, Riemann integral functions, Darboux theorem. Necessary and sufficient condition for \mathbb{R} – integrability, Properties of integrable functions, Fundamental theorem of integral calculus(6.1 to 6.12)

UNIT – V (12 hrs) :Laplace Transforms-II:

First Shifting Theorem, Second Shifting Theorem, Change of Scale Property, Laplace Transform of the derivative of $f(t)$, Initial Value theorem and Final Value theorem.

Prescribed Text Book: 1.A Text Book of B.Sc Mathematics by B.V.S.S. Sarma and others, Published by S.Chand & Company Pvt. Ltd., New Delhi.(Chapters- I to IV)

2. Laplace and Fourier Transforms by Dr. J.K. Goyal and K.P. Gupta, Published by Pragathi Prakashan, Meerut.(Chapter-V)

Reference Books :

1. Real Analysis by Rabert & Bartely and .D.R. Sherbart, Published by John Wiley.

2. Elements of Real Analysis as per UGC Syllabus by Shanthi Narayan and Dr. M.D. Raisingkania
Published by S. Chand & Company Pvt. Ltd., New Delhi.

Suggested Activities:

Seminar/ Quiz/ Assignments/ Project on Real Analysis and its applications

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2016-17)
SEMESTER-III, Paper-III
MATHEMATICS: ABSTRACT ALGEBRA
MODEL QUESTION PAPER

Time: 3 Hrs

Max. Marks:60

PART-A

Answer any FIVE questions. Each question carries 4 marks.

5QX4M=20M.

1. Prove that in a group G , for $a, b, x, y \in G$, The equation $ax=b$ and $ya=b$ have unique solution
2. G is an abelian group. If $a, b \in G$ such that $O(a) = m, O(b) = n$ and $(m, n) = 1$, then show that $O(ab) = mn$.
3. If H is any subgroup of a group G , Then Prove that $H^{-1}=H$.
4. Prove that the intersection of two subgroups of a Group is also a subgroup.
5. A subgroup H of a Group G is Normal Then Prove that $xHx^{-1} = H$, for every $x \in G$
6. If f is a Homomorphism of a group G into G^1 , then prove that the $\text{Ker } f$ is a normal subgroup of G .
7. Write the product $(1, 3, 2)(5,6, 7)(2, 6, 1)(4, 5)$ as disjoint cycles.
8. Find the Laplace Transform of $(t^2 + 1)^2$

PART-B

Answer all questions. Each question carries 8 marks.

5QX8M=40M

9. (a) Prove that the n^{th} roots of unity forms an abelian group w.r.t. multiplication.
(OR)
(b) Show that the set Q_+ of all positive rational number forms an abelian group under the composition defined by 'o' such that $aob = ab/3$, for $a, b \in Q_+$
10. (a) If H is a non empty complex of a group G , then prove that H is a subgroup of G , if and only $a, b \in H$ implies $ab^{-1} \in H$.
(OR)
(b) State and Prove the Lagrange's Theorem
11. (a) If G is a group and H is a subgroup of index 2 in G , then prove that H is a normal subgroup of G .
(OR)
(b) State and prove Fundamental theorem of Homomorphism on Groups.
12. (a) State and Prove Caylay's Theorem.
(OR)
(b) Prove that every subgroup of a cyclic group is cyclic..
13. (a) Find the Laplace transform of $(\sin t - \cos t)^3$
(OR)
(b) Find the Laplace transform of $f(t) = f(t) = |t - 1| + |t + 1|, t \geq 0$.

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2016-17)
SEMESTER-IV, Paper-IV
MATHEMATICS : REAL ANALYSIS
MODEL QUESTION PAPER

Time: 3 Hrs

Max. Marks:60

PART-A

Answer any FIVE questions. Each question carries 4 marks.

5QX4M=20M.

1. Show that the sequence $\{s_n\}$ defined by $s_n = 1 + \frac{1}{1!} + \frac{1}{2!} + \dots + \frac{1}{n!}$ is bounded.
2. Prove that the sequence $s_n = \frac{3n+4}{2n+1}$ is decreasing and bounded below.
3. Test for convergence $\sum_{n=1}^{\infty} \frac{2n-1}{n(n+1)(n+2)}$.
4. Prove that $1 - \frac{1}{1!} + \frac{1}{2!} - \frac{1}{3!} + \dots$ converges.
5. Examine for continuity the function f defined by $f(x) = |x| + |x - 1|$ at $x = 0, 1$.
6. Find 'c' of the Cauchy's mean value theorem for $f(x) = \sqrt{x}$ and $g(x) = \frac{1}{\sqrt{x}}$ in $[a, b]$, where $0 < a < b$.
7. If $f(x) = x$ on $[0, 1]$ and $P = \{0, 1/3, 2/3, 1\}$, find $L(P, f)$ and $U(P, f)$.
8. Find $L\{\cos 2t\}$.

PART-B

Answer All questions. Each question carries 8 marks.

5QX8M = 40M.

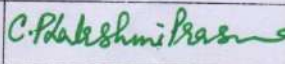
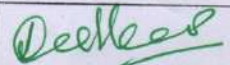
9. (a) Prove that a monotonic sequence is convergent if and only if it is bounded. (OR)
(b) State and prove Bolzano-Weierstrass theorem for sequences.
10. (a) Test for Convergence $\sum_{n=1}^{\infty} \frac{1.3.5 \dots (2n-1)}{2.4.6 \dots 2n} x^{n-1}$. (OR)
(b) Test for convergence $\sum_{n=1}^{\infty} \left(1 + \frac{1}{n}\right)^{-n^2}$.
11. (a) If $f: [a, b] \rightarrow R$ is continuous on $[a, b]$, then prove that f is bounded on $[a, b]$ and attains its bounds. (OR)
(b) State and prove Rolle's mean value theorem
12. (a) Prove that a bounded function $f: [a, b] \rightarrow R$ is Riemann integrable on $[a, b]$ iff for each $\varepsilon > 0$ there exists a partition of P of $[a, b]$ such that $0 \leq U(P, f) - L(P, f) < \varepsilon$. (OR)
(b) State and prove Fundamental Theorem of Integral Calculus.
13. (a) Find $L\{\sin \hat{a} \cos \hat{a}\}$. (OR)
(b) Find $\{ \sin^2(at) \}$ using Change of Scale Property.

RESOLUTIONS:

The members of BOS in Physics met on 17- 08 -2019 in the department of Physics, KVR Govt. Degree College for Women (A), Kurnool under the chairmanship of Dr. C. P. Lakshmi Prasuna, I/C of the department of Physics, discussed the proposals on the curriculum for the II year UG course (For Mathematics combinations) and passed the following resolutions.

The following resolutions are made and passed unanimously.

1. Resolved to approve the revised syllabus in Physics for II B.Sc., Semester-III and Semester-IV (for Mathematics combinations) decided by the members of the Board of Studies (UG) Physics
 - a) Course paperIII as prescribed in Annexure -I
 - b) Course paperIV as prescribed in Annexure -II
2. The revised syllabus will come into effect from the academic year 2019-20 II B.Sc. Semester-III and Semester-IV (for Mathematics combinations).
3. Resolved to conduct the practical examinations at the end of Semester-III internally and Semester-IV by the experts outside for II B.Sc. students (for Mathematics combinations) for 50 marks in each semester.
4. Resolved to approve lab practical and scheme of valuation for II B.Sc., Semester-III and Semester-IV (for Mathematics combinations) decided by the members of the Board of Studies (UG) Physics
 - a) Course paperIII as prescribed in Annexure -I(A)
 - b) Course paperIV as prescribed in Annexure -II(A)
 - c) Scheme of valuation for conducting practical examination as prescribed in Annexure-II (B)
5. For II B.Sc. (for Mathematics combinations), in each Semester there will be one paper i.e. Core Course-III for Semester-III, Core Course -IV for Semester-IV. Each paper carries 100 Marks(Internal assessment:40 marks, External assessment:60marks) .
6. It is resolved to approve the internal assessment pattern as prescribed in Annexure - III
7. The student should get 40% of marks both in internal assessment and in external assessment i.e., Internal assessment pass marks: 16, External assessment pass mark:24
8. Resolved to approve the justification report in the Annexure-IV
9. It is resolved to approve the pattern and model question papers for the external assessment for II B.Sc., Semester-III and Semester-IV (for Mathematics combinations) as prescribed in Annexure - V
10. It is resolved to approve the pattern and model question papers for the external assessment for III B.Sc., Semester-V and Semester-VI (for Mathematics combinations) as prescribed in Annexure - VI
11. It is resolved to conduct a skill enhancement course for the final year students , with a nominal fee of Rs 150/-
12. It is resolved that the skill enhancement course will be of 45 days duration with 2 credits.
13. It is resolved to approve the syllabus for the skill enhancement course as prescribed in Annexure-VII
14. Resolved to recommend panel of examiners and paper setters as prescribed in Annexure-VIII

Sl.No	Name & Designation	Acted as	Signature
1.	Dr.C.P.LakshmiPrasuna, In-charge of Dept. of Physics , KVR Govt. College for Women(A), Kurnool	Chairman	
2.	Dr.R.Suneetha, Lecturer in Physics, Silver Jubilee Govt.College (A), Kurnool	Member	

3.	Smt. TalatParveen, Lecturer in Physics, KVR Govt. College for Women(A), Kurnool	Member	Talat Parveen
4.	Smt. V.S. Noorjahaan, Contract Lecturer in Physics, KVR Govt. College for Women(A), Kurnool	Member	V.S. Noorjahaan
5.	Sri S. Purneswara Reddy, Contract Lecturer in Physics, KVR Govt. College for Women(A), Kurnool	Member	S. Purneswara Reddy
6.	Prof. C. V. Krishna Reddy, Professor, Department of Physics, Rayalaseema University	University Nominee	C. V. Krishna Reddy
7.	Dr. M.RaviKumar, HOD of Physics, Govt. Degree College for men(A), Anantapuramu	Subject Expert	M. Ravi Kumar
8.	Dr. Y.Muni Krishna Reddy, Associate Professor of Physics, Dept. of Physics, S.S.B.N College(A), Anantapuramu	Subject Expert	Y. Muni Krishna Reddy
9.	Dr. M.Sarada, Incharge of Dept. of Physics, GDC(M), Kurnool	Alumni	M. Sarada
10.	Sri. P. Prabhakara Naidu. Development Officer, NREDCAP Kurnool	Representative from Industry/ Allied Services	P. Prabhakara Naidu
11.	Naga Jyothi, II MPCs KVR Govt. College for Women(A), Kurnool	Representative from students	C. Naga Jyothi
12.	K. Renuka, II MPC KVR Govt. College for Women(A), Kurnool	Representative from students	K. Renuka

At the end of the course, students should be able to:

1. Explain the basic principles of reflection and refraction.
2. Describe the formation of images by reflection and refraction.
3. Explain the formation of images by reflection and refraction.
4. Describe the formation of images by reflection and refraction.
5. Explain the formation of images by reflection and refraction.
6. Describe the formation of images by reflection and refraction.

Signature of the University Member:

Signature of the Subject Expert:

ANNEXURE –I
KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
SECOND YEAR B.Sc. PHYSICS (FOR MATHEMATICS COMBINATIONS)
THIRD SEMESTER
CORE COURSE-III: WAVE OPTICS
(w. e. f. 2019-2020)

Work load:60 hrs per semester

4 hrs/week

UNIT-I (8 hrs)

1. Aberrations:Introduction – monochromatic aberrations, spherical aberration, methods of minimizing spherical aberration, coma, astigmatism and curvature of field, distortion. Chromatic aberration-the achromatic doublet. Achromatism for two lenses (i) in contact and (ii) separated by a distance.

UNIT-II (14hrs)

2. Interference : Principle of superposition – coherence-temporal coherence and spatial coherence-conditions for interference of light.Fresnel's biprism-determination of wavelength of light –change of phase on reflection.Oblique incidence of a plane wave on a thin film due to reflected and transmitted light (cosine law) –colors of thin films- Interference by a film with two non-parallel reflecting surfaces (Wedge shaped film).Determination of diameter of wire, Newton's rings in reflected light.Michelson's interferometer, Determination of wavelength of monochromatic light using Newton's rings and Michelson Interferometer.

UNIT-III (14hrs)

3. Diffraction: Introduction,distinction between Fresnel and Fraunhofer diffraction, Fraunhofer diffraction–Diffraction due to single slit and *circular aperture- Limit of resolution and Raleigh's criterion of resolution-* Fraunhofer diffraction due to double slit-Fraunhofer diffraction pattern with N slits (diffraction grating).Resolving power of grating, Determination of wavelength of light in normal incidence . Fresnel's half period zones-area of the half period zones-zone plate-comparison of zone plate with convex lens-difference between interference and diffraction.

UNIT-IV(10 hrs)

4.Polarisation:Polarized light: methods of polarization polarization by reflection, refraction, double refraction, scattering of light-Brewster's law-Mauls law-Nicol prism polarizer and analyzer-Quarter wave plate, Half wave plate-optical activity, determination of specific rotation by Laurent's half shade polarimeter- Babinet's compensator - idea of elliptical and circular polarization

UNIT-V (14hrs)

5. Lasers and Holography:Lasers: introduction,spontaneous emission, stimulated emission. Population Inversion, Laser principle-Einstein coefficients-Types of lasers-He-Ne laser-*CO₂ laser*, Ruby laser- Applications of lasers.Holography: Basic principle of holography-Gabor hologram and its limitations, Applications of holography.

6. Fiber Optics : Introduction- different types of fibers, rays and modes in an optical fiber, fiber material,principles of fiber communication (qualitative treatment only), advantages of fiber optic communication.

Signature of the University Nominee:

Signature of the Subject Experts: 1.

2.

ANNEXURE -II
KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
SECOND YEAR B.Sc. PHYSICS (FOR MATHEMATICS COMBINATIONS)
FOURTH SEMESTER
CORE COURSE-IV: Thermodynamics & Radiation Physics
(w. e. f. 2019-2020)

Work load:60 hrs per semester

4 hrs/week

UNIT-I (10 hrs)

1. Kinetic theory of gases:

Introduction - Deduction of Maxwell's law of distribution of molecular speeds, experimental verification. Transport phenomena - Mean free path - Viscosity of gases-thermal conductivity-diffusion of gases.

UNIT-II(12 hrs)

2. Thermodynamics:

Introduction- *Zeroth Law- Work done* in Isothermal and adiabatic process- Reversible and irreversible processes-Carnot's engine and its efficiency-Carnot's theorem-Second law of thermodynamics. Kelvin's and Clausius statements-Entropy, physical significance -Change in entropy in reversible and irreversible processes-Entropy and disorder-Entropy of Universe- Temperature-Entropy (T-S)diagram and its uses - Change of entropy of a perfect gas change of entropy when ice changes into steam.

UNIT-III(12 hrs)

3. Thermodynamic potentials and Maxwell's equations:

Thermodynamic potentials-Derivation of Maxwell's thermodynamic relations-Clausius-Clayperon's equation-Derivation for difference of two specific heats for perfect gas.Joule Kelvin effect-expression for Joule Kelvin coefficient for perfect and vander Waal's gas.

UNIT-IV(12 hrs)

4. Low temperature Physics:

Introduction-Joule Kelvin effect-Porous plug experiment - Joule expansion-Distinction between adiabatic and Joule Thomson expansion-Liquefaction of helium, Kapitza's method-Adiabatic demagnetization, *Properties of He-I and He-II* -properties of substances at lowtemperature- *applics of cryogenics*

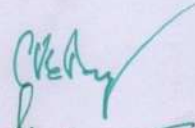
UNIT-V(14 hrs)

5. Quantum theory of radiation:

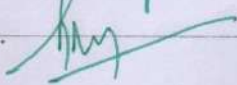
Blackbody-Ferry's black body-distribution of energy in the spectrum of black body-Wein's displacement law, Wein's law, Rayleigh-Jean's law-Quantum theory of radiation-Planck's

law-Measurement of radiation-Types of pyrometers-Disappearing filament optical pyrometer-exprimental determination - Angstrompyrheliometer-determination of solar constant, Temperature of Sun.

Signature of the University Nominee:



Signature of the Subject Experts: 1.



2.



ANNEXURE -I (A)
KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
SECOND YEAR B.Sc. PHYSICS (FOR MATHEMATICS COMBINATIONS)
THIRD SEMESTER
CORE COURSE-III: Lab Practical III
(w. e. f. 2019-2020)

Work load:30 hrs

3 hrs/week

Minimum of 6 experiments to be done and recorded

1. Determination of radius of curvature of a given convex lens-Newton's rings.
2. Resolving power of grating.
3. Study of optical rotation -polarimeter.
4. Dispersive power of a prism.
5. Determination of wavelength of light using diffraction grating-minimum deviation method.
6. Determination of wavelength of light using diffraction grating-normal incidence method.
7. Resolving power of a telescope.
8. Refractive index of a liquid-hallow prism
9. Determination of thickness of a thin wire by wedge method
10. Determination of refractive index of liquid-Boy's method.
11. **Determination of Wave length of Laser light using Diffraction grating**

Signature of the University Nominee:

Signature of the Subject Experts: 1.

(Dr. M. Ravi Kumar)

2.

ANNEXURE –II (A)
KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
SECOND YEAR B.Sc. PHYSICS (FOR MATHEMATICS COMBINATIONS)
FOURTH SEMESTER
CORE COURSE-IV: Lab Practical IV
(w. e. f. 2019-2020)

Work load: 30 hrs

3 hrs/week

Minimum of 6 experiments to be done and recorded

1. Specific heat of a liquid –Joule's calorimeter –Barton's radiation correction
2. Thermal conductivity of bad conductor-Lee's method
3. Thermal conductivity of rubber.
4. Measurement of Stefan's constant.
5. Specific heat of a liquid by applying Newton's law of cooling correction.
6. Heating efficiency of electrical kettle with varying voltages.
7. Thermoemf- thermo couple - potentiometer
8. Thermal behavior of an electric bulb (filament/torch light bulb)
9. Measurement of Stefan's constant- emissive method
10. Study of variation of resistance with temperature - thermistor.

Signature of the University Nominee:

Signature of the Subject Experts: 1.

2.

Annexure – III
KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
Re-Accredited by NAAC with Grade "A"
Board Of Studies in Physics
(w.e.f. 2019-20)

1. It is resolved to conduct Internal examination for 40 marks and external examination for 60 marks for students.

2 Internal marks deviation:

- (a) Two IATs for 20 marks in descriptive mode(One essay question carrying 10 marks, two short answer questions each carrying 5 marks) whose average is to be taken.
- (b) Assignment for 5 marks
- (c) seminar/project/Viva/Group Discussion for 5 marks
- (d) Surprise test for 5 marks
- (e) Attendance – 5 marks:
 - (i) 75% - 79% ---- 1 mark
 - (ii) 80% - 84% ---- 2 marks
 - (iii) 85% - 89% ---- 3 marks
 - (iv) 90% - 94% ---- 4 marks
 - (v) More than 95% --- 5 marks

2(a). Model Question Paper for IAT:

- I. Answer any one of the following -----1X 8 = 08 Marks
 - a) Or b)
- II. Answer any three of the following ----- 3X4 =12 Marks
 - 1)
 - 2)
 - 3)
 - 4)

Signature of the University Nominee:

Signature of the subject Experts: 1.

2.



**K.V.R GOVERNMENT COLLEGE (A), (W),
REACCREDITED WITH 'A' GRADE BY NAAC, KURNOOL
– 518001**

**BOARD OF STUDIES MEET FOR
B.Sc 2nd YEAR CHEMISTRY: III & IV – SEMESTERS
ON
8 – 08 – 2019**

DEPARTMENT OF CHEMISTRY

2019 – 2020

RESOLUTIONS

The members of BOS in Chemistry met on 8 - 08 - 2019 in the department of Chemistry, KVR Govt. Degree College for Women(A), Kurnool under the chairmanship of Dr B.Anusha, I/C of the Department of Chemistry, discussed the proposals on the curriculum for the II & I year UG course and passed the following resolutions.

The following resolutions are made and passed unanimously.

1. Resolved to approve the revised syllabus in Chemistry for II B.Sc., Semester-III and Semester-IV as decided by University nominee, subject experts and members of the Board of Studies (UG) Chemistry.
2. The revised syllabus will come into effect from the academic year 2019-20 for II B.Sc. Semester-III and Semester-IV.
3. Resolved to conduct the practical examinations with a maximum of 50 Marks at the end of IIIrd semester (Internal) and in the IVth semester (External) with a maximum of 50 Marks.
4. Resolved to approve the 60 - 40 marks Examination pattern for the II year students, with effect from this academic year 2019 - 20. It is decided to allot 40 Marks for the internal assessment which includes 20 Marks for the test, 5 Marks for assignment, 5 Marks for student seminar/ viva, 5 Marks for Attendance, 5 Marks for Surprise test. The Question Paper pattern for External Examination is as follows for III, IV papers.

Section	Type	Number of questions given	Number of questions to be answered	Marks per question	Marks
A	Short Essay	8	5	4	20
B	Essay	5 (Internal choice)	5	8	40
Total Marks					60

5. Resolved to approve the 60 - 40 marks Examination pattern for the III year students, with effect from this academic year 2019 - 20. It is decided to allot 40 Marks for the Internal assessment which includes 20 Marks for the test, 5 Marks for assignment, 5 Marks for student seminar/ viva, 5 Marks for Surprise test (objective) and 5 Marks for the student attendance for First and Second year students. The Question Paper pattern for External Examination is as follows for clusters, Elective papers are as follows

Section	Type	Number of questions given	Number of questions to be answered	Marks per question	Marks
A	Short Essay	8	5	4	20
B	Essay	8	5	8	40
Total Marks					60

6. Resolved to continue the Fair and Lively Skill Oriented Course for the academic year 2019 - 20.
7. Resolved to authorize the Chairman of Board of Studies to make any alterations either in syllabus or pattern in accordance with the instructions from APSCHE, University and CCE.

M. E. Rao
8.8.19
M. Anusha
8/8/19

K. J. Somaiya Institute of Engineering & Information Technology
M.Sc. ORGANIC CHEMISTRY

- Resolved to study one open elective paper in II semester choosing from other M.Sc Courses.
- Resolved to authorize the Chairman of Board of Studies to make any alterations either in syllabus or pattern in accordance with the instructions from APSCHE, University and CCE.

Sl. No.	Name of Paper	Cr.	Practical	Total
1	Organic Chemistry-I	3	0	3
2	Organic Chemistry-II	3	0	3
3	Physical Chemistry-I	3	0	3
4	Physical Chemistry-II	3	0	3
5	General Chemistry-I	3	0	3
6	General Chemistry-II	3	0	3

M. E. Rao
8.8.19
R. Amalendu
28/15



DEPARTMENT OF CHEMISTRY

Board of Studies Meet on 8-08-2019

Minutes of Board of Studies meeting held in the department of Chemistry, KVR Govt. College for Women (A), Kurnool on 8 - 08 -2019 at 10:00 AM and resolved the following:

CONSTITUTION OF THE BOARD OF STUDIES OF UG CHEMISTRY

SL.No.	Name & Designation	Acted as
1	Dr. B. Anusha, Lecturer InCharge, KVR Govt College (A) (W), Kurnool	Chairman <i>B. Anusha</i> 8/8/19
2	K.V. Murali Krishna, Lecturer in Chemistry, KVR Govt College (A) (W), Kurnool	Member <i>K.V. Murali Krishna</i> 8/8/19
3	A.Sreenu Babu, Lecturer in Chemistry, KVR Govt College (A) (W), Kurnool	Member <i>A.Sreenu Babu</i>
4	D.V. Ravi Kumar, Lecturer in Chemistry (Contract), KVR Govt. College for Women(A), Kurnool	Member <i>D.V. Ravi Kumar</i>
5	Dr. G. Nagaraja Reddy, Lecturer in Chemistry (Contract), KVR Govt. College for Women(A), Kurnool	Member <i>G. Nagaraja Reddy</i>
6	B.Narasimha Reddy, Lecturer in Chemistry (Contract), KVR Govt. College for Women(A), Kurnool	Member <i>B.Narasimha Reddy</i>
7	M.Sashidhariah, Lecturer in Chemistry (Contract), KVR Govt. College for Women(A), Kurnool	Member <i>M.Sashidhariah</i>
8	Prof M.E Rani, HOD of Department of Chemistry, Sri Rayalaseema University, Kurnool.	University Nominee <i>M.E. Rani</i> 8/8/19
9	Dr Y.Siva Chandra, Lecturer in Chemistry, Govt Degree college (A), Anantapur.	Subject Expert <i>Y.Siva Chandra</i> 8/8/19
10	S.Anwar, Lecturer in Chemistry, Silver Jubilee Govt Degree College (A), Kurnool.	Subject Expert <i>S.Anwar</i> 8/8/19
10	J.Sneha latha, Lecturer in Chemistry, Sankras College, Kurnool	Alumni <i>J.Sneha latha</i> 8/8/19
11	I.Surendra Nath Reddy, Vice President, SRAAC , Kurnool	Industry Representative <i>I.Surendra Nath Reddy</i>
12	K.B Rukimini, III MPC (EM)	Student Representative <i>K.B Rukimini</i>
13	B.Vani ,III B.Z.C (EM)	Student Representative <i>B.Vani</i>

K.V.R GOVERNMENT COLLEGE FOR WOMEN (A), KURNOOL
DEPARTMENT OF CHEMISTRY
SYLLABUS FOR SEMESTER – I 60 Hrs (4h/w)
Effective from Academic year 2019-20
PAPER – I: INORGANIC, ORGANIC & PHYSICAL CHEMISTRY

INORGANIC CHEMISTRY

UNIT –I

p-block elements –I

15 h

Group-13: Synthesis and structure of diborane and higher boranes
(B_4H_{10} and B_5H_9), boron-nitrogen compounds ($B_3N_3H_6$ and BN)

Group - 14: Preparation and applications of silanes and silicones.

Group - 15: Preparation and reactions of hydrazine, hydroxylamine.

UNIT-II

1. p-block elements -II

8 h

Group - 16: Classifications of oxides based on (i) Chemical behaviour and
(ii) Oxygen content.

Group-17: Inter halogen compounds-determination- Types- Methods of preparation and synthesis-
definition-examples-general properties of pseudo halogens.

2. Organometallic Compounds

7 h

Definition - classification- nomenclature- preparation, properties and synthetic applications of
Grignard reagents (alkyl Lithium).

ORGANIC CHEMISTRY

UNIT-III

Structural theory in Organic Chemistry

10 h

Types of bond fission-Homolysis-heterolysis-Types of organic reagents (Electrophiles, Nucleophiles).

Types of bond polarization: - inductive effect- (a) Basicity of amines (b) Acidity of carboxylic acids

(c) Stability of carbocations- resonance or Mesomeric effect- application to (a) acidity of phenol, and

(b) acidity of carboxylic acids-Hyper conjugation and its applications to stability of carbocations, Free
radicals and alkenes-carbocation, carbanions, carbenes and nitrenes.

Types of Organic reactions: Addition - electrophilic, nucleophilic and free radical. Substitution -
electrophilic, nucleophilic and free radical. Elimination(E1,E2 types)- Examples.

UNIT-IV

1. Acyclic Hydrocarbons

6 h

a) Alkenes – Preparations- Properties-Addition of hydrogen - heat of hydrogenation and stability of
alkenes. Addition of Br_2 and its mechanism. Addition of HX- Markovnikov's rule, addition of H_2O ,
HOX, H_2SO_4 addition of HBr in the presence of peroxide (anti - Markonikov's addition). Dienes -
Types of dienes, reactions of conjugated dienes - 1,2 and 1,4 addition of HBr to 1,3 - butadiene and
Diel's - Alder reaction.

Alkynes - Preparation by dehydrohalogenation of dihalides, by dehalogenation of tetrahalides, Acidity

of acetylenic hydrogen-explanation (formation of Metal acetylides)- Preparation of higher acetylenes-
-Chemical reactivity-addition reaction with H_2 , X_2 , HX , H_2O , Oxidation reaction with $KMnO_4$,
 OsO_4 , Polymerisation reactions of acetylene.

2. Alicyclic hydrocarbons (Cycloalkanes)

4 h

Nomenclature, Preparation by Freund's method, Wislicenus method. Properties - reactivity of cyclopropane and cyclobutane by comparing with alkanes and alkenes, Stability of cycloalkanes - Baeyer strain theory and limitations. Sachse and Mohr predictions and Pitzer's strain theory- Conformational structures of cyclobutane, cyclopentane and cyclohexane.

PHYSICAL CHEMISTRY

UNIT-V- Solid state

10h

Crystalline and amorphous solids- Laws of crystallography-Law of constancy of interfacial angles- Law of rational indices. Elements of symmetry. Definition of lattice point, space lattice and unit cell - crystal systems and Bravais lattices. X-ray diffraction and crystal structure- Derivation of Bragg's equation. Defects in crystals-Stoichiometric and non-stoichiometric defects.

List of Reference Books

1. Inorganic Chemistry by J.E.Huheey
2. Basic Inorganic Chemistry by Cotton and Wilkinson
3. A textbook of qualitative inorganic analysis by A.I. Vogel
4. Organic Chemistry by Morrison and Boyd
5. A Text Book of Organic chemistry by I L Finar Vol I
6. Concise Inorganic Chemistry by J.D.Lee

LABORATORY COURSE-I

30 hrs (2 h / w)

Practical-I Simple Salt Analysis

(At the end of Semester-I)

Qualitative inorganic analysis

Analysis of simple salt containing one anion and cation from the following

Anions: Carbonate, acetate, chloride, bromide, nitrate, borate,
sulphate,

cations: Lead, copper, iron, aluminum, zinc, manganese, nickel, calcium,
barium and ammonium.

**K.V.R.Govt. COLLEGE FOR WOMEN (A),
KURNOOL**

(Under the Jurisdiction of Rayalaseema University)

Accredited with "A" Grade by NAAC



BOARD OF STUDIES MEETING

2019-20

Subject: M.Sc BOTANY

7-8-2019

K.V.R. Govt. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

ACCREDITED BY NAAC WITH 'A' GRADE,

Established in 1958 under G.O.Ms.No.197 Edn. Dt.27-01-1958



DEPARTMENT OF BOTANY

CURRICULUM(CBCS)- M.Sc (Botany)
(syllabus W.e.f Academic Year 2019-20)

SEMESTER -1

S.NO	PAPER CODE	TITLE OF THE PAPER	NO OF CREDITS	SEMESTER END EXAM DURATION	TOTAL MARKS	
					IAE	SEE
THEORY						
1	1111	BIOLOGY AND DIVERSITY OF BACTERIA, FUNGI, VIRUSES & PLANT PATHOLOGY	4	3	20	80
2	1121	BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTA AND PTERIDOPHYTA AND GYMNOSPERMS	4	3	20	80
3	1131	PLANT TAXONOMY	4	3	20	80
4	1141	PLANT PHYSIOLOGY	4	3	20	80
PRACTICALS						
1	1111&	BIOLOGY AND DIVERSITY OF	4	3		100

	1121	BACTERIA, FUNGI, VIRUSES & PLANT PATHOLOGY & BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTA AND PTERIDOPHYTA AND GYMNOSPERMS				
2	1131 & 1141	PLANT TAXONOMY & PLANT PHYSIOLOGY	4	3		100

Total credits: 24

SEMESTER -II

S.NO	PAPER CODE	TITLE OF THE PAPER	NO OF CREDITS	SEMESTER END EXAM DURATION	TOTAL MARKS	
					IAE	SEE
THEORY						
1	2111	CELL BIOLOGY AND PLANT DEVELOPMENT	4	3	20	80
2	2121	MOLECULAR GENETICS AND TECHNIQUES IN BIOLOGY	4	3	20	80
3	2131	PLANT BIOCHEMISTRY	4	3	20	80
4	2141	OPEN ELECTIVE- PLANT AND HUMAN WELFARE	4	3	20	80
PRACTICALS						
1	2111 & 2121	CELL BIOLOGY AND PLANT DEVELOPMENT & MOLECULAR GENETICS AND TECHNIQUES IN BIOLOGY	4	3		100
2	2131	PLANT BIOCHEMISTRY	2	3		50

Total credits : 22

RESOLUTIONS

The members of BOS in Botany met on 7-08-2019 in the Department of Botany, KVR Govt. Degree College for Women(A), Kurnool under the chairmanship of **Dr.R. Vinolya Kumari** Incharge of M.Sc. Botany Course, discussed the proposals on the curriculum for the I year PG Botany course and passed the following resolutions applicable to the academic year 2019-20.

- Resolved to follow the Rayalaseema university revised syllabus in Botany for I M.Sc., Semester-I and Semester-II as decided by the expert members and members of the Board of Studies (PG) Botany.
 - It is unanimously resolved that there is 20% change in theory syllabus for First year M.Sc., The question paper pattern for theory shall have two sections . Section - A for 20 marks and Section - B for 40 marks. IAE: Internal assessment marks -20Marks(Internal examination 15, Seminar5) and extracurricular activity : NSS,YOUTHRED CROSS,NCC.
 - The BOS chairman is authorized to give the panel of Internal and external examiners to the controller of Examination
 - Resolved to approve the new syllabus in Botany for I M.Sc., Semester-I and Semester-II
 - The new syllabus will come into effect from the academic year 2019-20 for I M.Sc. Semester-I and Semester-II.
 - Resolved to conduct the practical examinations at the end of Semester-II for I M.Sc. students.
1. In each Semester there will be four papers i.e. four Core papers for Semester-I, for Semester-II There are three paper and one open Elective paper These Semester End Examinations will be for 80 Marks .
 2. Internal Assessment Examination will be for 20 Marks.
There will be two Internal Assessment Examinations in each semester.
(Average of two to be taken).

Seminar/Assignment/Project is given the weight age of 5 Marks.

Total Internal Assessment Marks =15 + 5 = 20 Marks

3. Model Question Paper for Semester End Examination :
 - i) The Semester End Examination Question Paper consists of
Part A with four questions to be answered out of eight questions of five marks each (4x 5 = 20) and

Part B with four questions of internal choice carrying 15 marks each (4 x 15 = 60)

- ii) Duration is 3 Hours
 - iii) Maximum marks are 80 and Minimum Passing marks are 30.
4. Model question paper for IAE.
- i) Internal Assessment Examination will be for 20 marks.
 - ii) One big question and one short answers
 - iii) Duration of Internal Assessment Examination is 45 minutes.
 - iv) The above pattern stands for Semester-I and Semester-II.
5. Practical Examination:-
- i) There will be **one** Practical Examination at the end of Semester-II.
 - ii) Maximum marks for Practical Examination is 100.
 - iii) Minimum passing marks for Practicals are 20.
 - iv) Duration of Practical Examination is 3 hours.
 - v) There will be no Internal Assessment Examination in Practical Examination.

Scheme of valuation for each subject paper Practical Examination:

Practical-I

i)	Major Experiment	20 Marks
ii)	Minor Experiment	10 Marks
iii)	Spotters	10 Marks
iv)	Record	05 Marks
v)	Viva	05 Marks
	Total =	50 Marks

6. Resolved to approve the syllabus (Theory Semesters I, II) as prescribed below
7. Resolved to approve the Model Papers for I-M.Sc. Semester-I and Semester-II as per
8. Resolved to follow the CBCS Semester pattern with a total of 96 Credits for 2400 marks. In each semester :
- Four instructional hours per week has been given four Credits for Theory and
 - Three instructional hours per week considered as two credits for Practicals.
 - Each open Elective has been given four credits

- Dissertation of Project work in last semester along with Viva and Seminar has been given four credits.



K.V.R. Govt. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

ACCREDITED BY NAAC WITH 'A' GRADE

PG DEPARTMENT OF BOTANY

2019-2020

MINUTES OF THE BOARD OF STUDIES MEETING

Board of Studies meeting was conducted in the department of Botany
On 7-08-2019 at 10.00 am with the following members.

S.NO	Name	Designation and Address	Signature
MEMBERS FROM THE DEPARTMENT			
1	Dr.R.VINOLYA KUMARI	CHAIRMAN	
2	Dr.S.SUNITHA	Member	
3	Dr. Y.RAGUNATH REDDY	Member	
4	Dr. R.VENKATA RATHNAM	Member	
5	Dr. BINDU PRASUNA	MEMBER	
UNIVERSITY NOMINEE			
6	PROF. C.SUDHAKAR	Prof. of Botany Sri Krishna Devaraya University Anathapure	
SUBJECT EXPERTS			
7	Dr. A. M. REDDY	Assistant Professor in Botany Yogivemana University Kadapa	
8	Dr. G. S.RANGANAYAKULU	Assistant Professor in Rayalaseema University Kurnool	
ALUMNAE			
9	Dr. M. SUSEELAMMA	SML Govt Degree College Yemmiganor, Kurnool	
INDUSTRIALIST			
10	SRI. R.VINOD KUMAR	The Area Manager National Seed Corporation Kurnool	
STUDENT REPRESENTATIVES			
11	CH.LIKITHA	M.Sc	
12	P. KRISHNA VENI	M.Sc	

K.V.R. Govt. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

ACCREDITED BY NAAC WITH 'A' GRADE,

DEPARTMENT OF BOTANY



SEMESTER -1

BOT1111- BIOLOGY AND DIVERSITY OF BACTERIA, FUNGI, VIRUSES & PLANT PATHOLOGY

Unit-I: Bacteria and Phytoplasma

General account; classification, ultrastructure, cell wall of bacteria, nutrition, reproduction: fission and genetic recombination (transformation, transduction and conjugation), economic importance (useful and harmful aspects), symbiotic and asymbiotic nitrogen fixation by bacteria. Phytoplasma; general characteristics and economic importance.

Unit- II: Fungi

General characteristics of fungi, cell wall composition, nutrition: (Saprobic, biotrophic, symbiotic); reproduction: (vegetative, asexual, sexual), heterothallism, Heterokaryosis; Para sexuality, recent trends in classification and Ainsworth's classification of fungi. economic importance of fungi (in industry, as medicine and food, biocontrol agents). Lichens: structure and reproduction, mycorrhizae. Mushroom cultivation methods

Unit-III: Viruses

General characters, virus genetic material, ultrastructure of virions, isolation and purification of viruses; chemical nature, replication and transmission of viruses (by grafting, seeds, contact, water, air, soil, agricultural tools, insects). Economic importance of virus. viral diseases in plants. Viroids and Prions.

Unit –IV: Plant Pathology

Classification of plant diseases and symptomology. Mechanism (s) of pathogenesis and resistance and disease control measures (physical, chemical and biological control). Case studies of economically important causative agents with special reference to crop plants. Plant-virus interaction with emphasis on-TMV & BYMV, Plant-bacterial interaction with emphasis on blight of paddy & citrus canker; Plant-fungus interaction with emphasis on-downy mildew of bajra, club root of crucifers, red rot of sugarcane, leaf spot and tikka diseases of groundnut. Beneficial interactions of mycorrhizae.

Practicals:

1. Gram staining of Bacteria
2. Demonstration of motility in Bacteria.
3. Determination of microbial counts by using Hemacytometer.
4. Morphological study of fungi belonging to Myxomycota, Zygomycotina, Ascomycotina, Basidiomycotina and Deuteromycotina
5. Observation of properties and fixatives of various viruses
6. Study of symptomology of locally available diseased specimens.
7. Isolation of fungi from soil: media preparation, dilution plate technique.

8. Study of Crustose and Foliose lichens
9. Mushroom cultivation

Suggested Readings:

1. Ainsworth G.C., E.K.Sparrow & A.S.Sussman, 1973.The Fungi-An advanced treatise. Academic Press.
2. Alexopoulos, C.J., Mims, C.W. and Blackwel, M. 1996. Introductory Mycology. John Wiley & Sons Inc.
3. Bilgrami, K.S. & H.C. Dube (1990) : A Text Book of Plant Pathology, Vikas publishing House Pvt., Ltd.,New Delhi, India.
4. Burnett, J.H. (1968) : Fundamentals of Mycology. Edward Arnold (Publishers) Ltd., London. 5.

Dube, H.C . (1992) : A Text Book of fungi, Bacteria & Virus, Vikas Publishing House (P) Ltd., New Delhi.

5. Mandahar, C.L. 1978. Introduction to Plant viruses. Chand & Co., Ltd., Delhi.
6. Mehrotra, R.S. and Aneja, K. R. 1998. An Introduction to Mycology. New Age International Press.
7. Mehrothra, R.S (1994) : Plant Pathology, Tata McGraw Hill Publishing Co., Ltd., New Delhi 9.
9. Pandey, B.P. (1999) : Plant pathology-Pathogens & Plant Diseases, S. Chand & Co., New Delhi-492 pp.,
8. Pelczar, M.J., E.C.S.Chan & N.R.Krieg. 1986. Microbiology. Tata McGraw Hill, New Delhi. 11.
11. Rangaswamy, G. and Mahadevan, A. 1999. Diseases of Crop Plants in India (4th Ed.) Prentice Hall of India Pvt. Ltd., New Delhi.
9. Sharma, P.D. 2000. Plant Pathology. Narosa Publishing House, India.
10. Singh, R.S. (2000) : Introduction to Principles of Plant pathology (3rd Edition), Oxford & IBH Publishers, New Delhi.
11. Sullia, S.B. and Shantharam, S. 2000. General Microbiology. Oxford & IBH Publ. , New Delhi.
12. Webster, J. (1999) : Introduction to Fungi (2nd edition), Cambridge University Press 16. R. Hall (2005). Plant Virology. Printice Hall

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY

**PAPER BOT1111- BIOLOGY AND DIVERSITY OF BACTERIA, FUNGI, VIRUSES
& PLANT PATHOLOGY**

Time: 3Hrs.

Max. Marks: 80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

1. Biofuel
2. Algal Blooms
3. Polytrichum Capsule
4. Conservation of Bryophytes
5. Telom theory
6. Heterosory and Seed habit
7. Process of fossilization
8. Pteridospermales

SECTION-II

4x15M=60 M

Answer the following Questions

9. Sailer features of Rhodophyta
Or
10. Sailer features of Chlorophyta
11. Write about Jungermanniales
Or
12. Diversity and evolution of Gametophyte in Bryophyta
13. Write about Steelar evolution in Pteridophyta
Or
14. write about Pteris
15. Write about Gingobiloba
Or
16. Brief description about Bennitiales

BOT 1121: BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTA, PTERIDOPHYTA & GYMANOSPERMS

UNIT – 1: ALGAE

General characters of algae -thallus diversity, pigmentation . Recent trends in classification of algae - a general account. Salient features and classification of Cyanophyta , Rhodophyta, Phaeophyta, Bacillariophyta and Chlorophyta. Economic importance of algae: Algae as food, biofertilizers; industrial products; biofuels; harmful algae-algal blooms.

UNIT II: BRYOPHYTES

General characters and classification of Marchantiophyta; Anthocerotophyta and Bryophyta. Salient features of the orders and representatives: Marchantiales (Marchantia), Jungermanniales (Porella), Anthoceratales (Anthoceros) and Polytrichales (Polytrichum). Diversity and evolution of gametophyte and sporophyte. Ecology and Conservation of bryophytes.

UNIT III: PTERIDOPHYTES

General characters and classification of pteridophytes. salient features of representatives: Psilotopsida (Psilotum), Lycopsidea (Lycopodium), Equisitopsida (Equisetum), Marratiopsida (Angiopteris) and Polypodopsida (Pteris). Origin and phylogeny of pteridophytes- telome theory , stelar theory. Heterospory and Seed habit.

UNIT IV: GYMNASPERMS AND PLANT FOSSILS

General characters and classification of divisions and salient features of representatives: Cycadophyta (Cycas), Pinophyta (Pinus), Ginkgophyta (Ginkgo) and Gnetophyta (Gnetum). Economic importance of gymnosperms. Principles of Paleobotany - process of fossilization; types of fossils. Salient features and evolutionary significance of fossil gymnosperms - Pteridospermales and Bennitiales.

PRACTICALS

1. Observation of representatives of all groups in the natural habitat.
2. Morphological study of representative members of all groups using whole mount preparations and sections.
3. Study of morphology and anatomy of vegetative structures of Algae, Bryophytes, Pteridophytes and Gymnosperms
4. Each student has to submit herbarium specimens and a report on field study.
5. Study of fossils from Pteridophytes and Gymnosperms.

SUGGESTED READINGS:

- Agashe S.N. 1995. *Paleobotany*. Oxford & IBH, NewDelhi
- Bernard Goffinet & Jonathan Shaw. 2008. *Bryophyte Biology*. 2nd ed. Cambridge University Press.
- Bhatnagar, S.P. & Alok Mitra. 1997. *Gymnosperms*. New Age Int. (P) Ltd.
- Charles C. Beck and Charles B. Beck. (Ed). 1988. *Origin and Evolution of Gymnosperms*. CUP.
- Chopra, R.N. & P.K. Kumar. 1988. *Biology of Bryophytes*. Wiley Eastern.
- Graham, J.E., Lee, W. Wilox & L.E. Graham. 2008. *Algae*. 2nd ed. Benjamin Cummings
- Sambamurthy AVSS. 2005. *A Text Book of Bryophytes, Pteridophytes, Gymnosperms and Paleobotany*. IK International Pvt. Ltd.
- Sporne, K.R. 1965. *Morphology of Gymnosperms*. HUP, London
- Sporne, K.R. 1976. *Morphology of Pteridophytes*. HUP, London
- Van den Hoek , Christian D. Mann & H.M. Jahns *et al.* 1995. *Algae, An introduction to phycology*. Cambridge University Press.
- Vashista, P.C. 2005. *Gymnosperms*. S.Chand & Co., New Delhi
- Vashista, P.C. 2005. *Pteridophyta*. Revised ed., By Sinha and Anil. S. Chand & Co, New Delhi.
- Vashishta, B.R., V.P.Singh & A.P. Sinha. 2012. *Botany for Degree Students: Algae*. 34th ed. S. Chand & Co, New Delhi.
- Vashishta, B.R., A.K. Sinha & Adarsh Kumar . 2011. *Botany for Degree Students Part III Bryophyta..* 3rd ed. S. Chand & Co, New Delhi

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY
PAPER BOT 1121- BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTA,
PTERIDOPHYTA &GYMANOSPERMS

Time: 3Hrs.

Max. Marks: 80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

1. Biofuel
2. Algal Blooms
3. Polytrichum Capsule
4. Conservation of Bryophytes
5. Telom theory
6. Heterosory and Seed habit
7. Processof fossilization
8. Pterdospermales

SECTION-II

4x15M=60 M

Answer the following Questions

9. Sailent features of Rhodophyta

Or

10. Sailent features of Chlorophyta

11. Write about Jungermanniales

Or

12. Diversity and evolution of Gametophyte in Bryophyta

13. Write about Steelar evolution in Pteridophyta

Or

14. write about Pteris

15. Write about Gingobiloba

Or

16. Brief description about Bennitiales

PAPER BOT 1131: PLANT TAXONOMY

UNIT – 1: ANGIOSPERMIC CLASSIFICATION AND PHYLOGENY

Plant taxonomy- scope and significance. History of plant classifications: Artificial, Natural and Phylogenetic classifications. Natural system- Bentham and Hooker's classification. Principles of phylogenetic classifications–data sources; Plesiomorphy, apomorphy; monophyly and polyphyly. Cladograms and Phylogenetic trees. Angiospermic Phylogeny Group classification (APG-III). Clades, Orders and Families. A Comprehensive account on origin, phylogeny and diversification of angiosperms.

UNIT –II: FLORISTIC STUDIES AND HERBARIUM METHODOLOGY

Plant explorations around the world – a general account. Floristic inventories in India – a general account. Botanical Survey of India - organisation and activities. Flora of Andhra Pradesh – a general account; endemic plants and threatened taxa. Herbarium methodology- methods of collection, processing and preservation of plant specimens. Significant herbaria of the world and India.

UNIT – III: PLANT IDENTIFICATION AND NOMENCLATURE

Process of identification- conventional and modern approaches; Preparation of taxonomic keys. Taxonomic literature- floras, journals and databases. International Code of Nomenclature(ICN)- Principles, Rules and Recommendations; taxonomic hierarchy-species, genera and families; typification , rule of priority; concept of names and author citation; effective and valid publication. Describing a new species.

UNIT – IV: STUDY OF SELECTED ANGIOSPERMIC CLADES-ORDERS

Salient features , distribution and diversity of the following groups (based on APG –III); ANITA Grade; Magnolids (Magnoliales- Annonaceae); Monocots (Asparagales- Orchidaceae); Commelinids (Poales- Poaceae); Fabids (Fabales- Fabaceae, Malphigiales- Euphorbiaceae); Malvids (Malvales- Malvaceae, Caryophyllales-Amaranthaceae); Lamids (Gentianales- Apocyanaceae, Solanales- Solanaceae, Lamiales- Lamiaceae); Campanulids (Asterales- Asteraceae).

PRACTICALS

1. Study of about 25 wild taxa representing different families and identification to species level
2. Study of flora of the college campus
3. As a part of Botanical Tour, student should observe and record the flora and vegetation types of the study area and submit a report at the time of practical examination

4. Part of practical, student should submit 50 herbarium specimens of common wild plant taxa
5. Construction of Taxonomic Keys
6. Nomenclatural exercise

SUGGESTED READINGS:

Angiosperm Phylogeny Group website. 2015. Consult [www.apgweb](http://www.apgweb.org).

Gamble & Fischer 1915-35. *Flora of Presidency of Madras*. 3 Vols. BSMS, Dehradun

Heywood, V.H., RK Burmmit, A. Culham, O. Seberg. 2007. *Flowering plant Families of the World*. Firefly books Ltd. New York.

Judd, W.S., Christopher, S. Campbell, Elizabeth A. Kellogg, Peter F. Stevens and Michael J. Donoghue. 2007. *Plant Systematics: A Phylogenetic Approach*, 3rd ed. Sinauer.

Lawrence, G.H.M. 1951. *Taxonomy of vascular plants*. McMillan, New York.

Naik, V.N. 1992. *Taxonomy of Angiosperms*. 2nd Edn. Tata Mc Graw Hill Publications.

Pullaiah, T. 2005. *Taxonomy of Angiosperms*. Regency publications, New Delhi.

Pullaiah, T. *et al.* 1997. *Flora of Andhra Pradesh*. 4 Vols. Scientific Publishers, Jodhpur

Radford, A.E. *et. al.* *Vascular plant systematic*. Harper & Row. New York.

Ravi Prasad Rao, B. 2014. *The Plant Directory*. Anusha Publishers, Hyderabad.

Simpson, Michael G. 2006. *Plant Systematics*. Elsevier & Academic Press.

Singh, Gurucharan. 2005. *Plant Systematics*. Oxford & IBH. New Delhi.

Sivarajan, V.V. 1991. *Introduction to Principles of Plant Taxonomy*. Oxford & IBH. New Delhi.

Model Question Paper
FIRST YEAR M.Sc. Botany- SEMESTER-I
PAPER PAPER BOT 1131: PLANT TAXONOMY

Time: 3 Hrs

Max. Marks:80

SECTION-I (Short Answer Type)

4 x 5M = 20 Marks

Answer any 4 of the following

1. Plesiomorphy & Apomorphy
2. Taxonomic Keys
3. Endemic Plants
4. Significant herbaria of the World&India
5. ANITA Grade
6. Typification
7. Spikelet in Poaceae

SECTION-II (Essay Type)

4x15M=60 Marks

Answer the following Questions

8. Describe the salient features of APG Classification and add a note on its merits and demerits
or
9. Explain briefly the current views on the Origin of Angiosperms.
10. Write a detailed account on the organization and activities of BSI
or
11. Write an account on Herbarium methodology.
12. Explain any 3 basic rules of ICBN.
or
13. Write an essay on Taxonomic keys.
14. Describe the Salient features of the family Orchidaceae.
or
15. Describe the Salient features of the family Asteraceae.

BOT1141 : PLANT PHYSIOLOGY

UNIT I: PLANT AND SOIL WATER RELATIONS

Thermodynamic concept of plant cell and water relations. Water Potential, Osmotic potential and Pressure potential. Dynamics of SPAC. Active and Passive absorption of Ions. Essential elements- functions and deficiency symptoms. Stomatal structural features; mechanism of stomatal movements and stomatal Index. Stomatal responses to environmental factors, antitranspirants and their importance in drought resistance.

UNIT II: PHOTOSYNTHESIS

Current knowledge on mechanism of photosynthesis- LHCs, photochemical reactions, electron transport in chloroplasts. photophosphorylation. Carbon fixation pathways- Reductive PPP and its regulation by light and metabolites; C4 pathway; CAM Pathway; C-3, C-4 Intermediates. Photosynthesis vs. Plant productivity. Photorespiration- Glycolate pathway, Significance of photorespiration.

UNIT III: RESPIRATION AND PLANT GROWTH REGULATORS

Significance of Plant Respiration; Glycolysis, TCA Cycle, ETS and ATP synthesis. Pentose Phosphate Pathway. Glyoxylate cycle, Alternate oxidase system. Biosynthesis and mechanism of action of plant growth regulators- Auxins, Gibberellins, Cytokinins, Brassinosteroids, Abscissic acid, Jasmonic acid and salicylic acid. Role of hormones in agriculture. Physiology of flowering- Kinetics of phytochrome; Photoperiodism

UNIT IV: STRESS pHYSIOLoGY: Concept of stress and strain; Kinds of stress; Abiotic stress-Water stress; Salt stress; Temperature stress; Heavy metal stress; Biotic stress factors-Stress avoidance and tolerance mechanisms; structural, physiological, biochemical and molecular responses of plants to environmental stress; Reclamation of saline soils and heavy metal contaminated soils.

PRACTICALS

1. Determination of total chlorophyll content and a/b ratio in leaves.
2. Extraction and Estimation of Chlorophyll pigments. (Arnan method).
3. Separation of chloroplast pigments into two or four groups. Record of their absorption spectra
4. Determination of cell permeability by using Beet Root tissues.
5. Determination of stomatal index and frequency in leaves
6. Determination of water potential of the tissue
7. Comparative anatomy of C3, C4 and CAM plants
8. Determination of Titrable acidity (TAN) in leaves of CAM plants

9. Determination of viability of different seed material.
10. Estimation of IAA by Solkowski reaction
11. Determination of membrane stability and chlorophyll stability index
12. Determination of membrane stability and chlorophyll stability index of stressed plants
8. Estimation of free Proline in stressed plants sample.

SUGGESTED READINGS

- Buchanan *et al.*, 2001. *Biochemistry and Molecular Biology of plants*.
- Delvin, R.M. 1969. *Plant Physiology*. Affiliated East West Newyork Ltd.
- Dennis, D.T., D.B. Layzell, D.D. Lefebvre & D. Turpin. 1997. *Plant Metabolism*. 2nd Ed. Addison WesleyPub Co. New York
- Govindjee, ed. 1982-83. *Photosynthesis*. Vol I & II. Academic Press Inc. New York.
- Hopkins, W. 1998. *Introduction to Plant Physiology*. ELBS & Longman, Essex., England.
- Kocchar and Gujral. 2012. *Comprehensive Plant Physiology*. Mac Milan Pub.
- Raghavendra, S. 1998. *Photosynthesis: A Comprehensive Treatise*. Cambridge University Press, Cambridge, UK
- Salisbury, F.B. and C. S.Ross. 1992. *Plant Physiology*. 4th Ed. Worsworth Publishing & Co. , Belmont , California.
- Taiz and E.Zeiger. 1998. *Plant Physiology*. 2nd Edition. Sinauer Associates Inc Publishers, Massachuessets, USA
- Thomas C. Moore. 1992. *Biochemistry and Physiology of Hormones*. Narosa .
- Wilmer, C.M. & M. Fricker.1996. *Stomata*. 2nd Ed, Chapman Hall.

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY
PAPER BOT1141 : PLANT PHYSIOLOGY

Time: 3Hrs.

Max. Marks: 80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

1. SPAC
2. Antitranspirants
3. Glycolate Path way
4. CAM Path way
5. ATP Synthesis in Respiration
6. Salicylic acid
7. Saline Stress
8. Reclamation of heavy metal contaminated soil

SECTION-II

4x15M=60 M

Answer the following Questions

- 9.Active and Passive absorbtion of ions
OR
10. Write about the mechanism of Stomatal movement

11. Write about PPP path way
OR
12. Write about intermediates of C-3 cycle and it significance
OR
13. Write about TCA Cycle
OR
14. Write about Mechanism of action of Auxins and Cytokinins
OR
15. Write about Temperature Stress
OR
16. Write about Biochemical and Molecular response of plant to environment.

SEMESTER –II

BOT 2111- CELLBIOLOGY AND PLANT DEVELOPMENT

UNIT- I: Cell Communication:

Over view of cell organelles:General principles: Cell surface receptors and Intracellular receptors; Forms of Intracellular signaling - Autocrine, Paracrine, Contact dependent, Synaptic and Endocrine signaling; Response of cell to signals; Cell surface receptors - Ion channel linked, G- protein linked and Enzyme linked receptors; Intracellular signaling proteins - Different types and their role; Second messengers; cAMP pathway and role of calcium; Cellular interactions:i) Microvilli, Tight junctions, Belt and Spot Desmosomes. ii) Gap junctions - Electrical coupling, the connexon. iii) Permeability to ions and small molecules. iv) Factor mediating cell-self recognition (aggregation factor), Cellular interaction and Cyclic AMP.

UNIT I1: Cell cycle

- **Overview of eukaryotic cell cycle;** Regulation of cell cycle by cell growth and extra cellular signals; Cell cycle check points; Regulation of cell cycle progression - Protein kinases; MPF; Cyclins and Cyclin dependent kinases.; Events of M Phase; Cell Death:i) Apoptosis - Definition, Morphological and Biochemical differences between Apoptosis and Necrosis; Mechanism (Intrinsic pathway and Extrinsic pathway), Inhibitors of Apoptosis and Significance. ii) Cancer Development and causes of Cancer; Properties of Cancer cells; Approaches to Cancer treatment.

UNIT I -Tissue types and Tissue systems in Plants:

Root growth and Development: Root apical meristem; Cell division, Cell expansion and elongation. Differentiation of root; vascular tissue, root hair and Lateral roots formation. Stem growth and development: organization of the shoot apex; cytological and molecular analysis of shoot apical meristems. Tissue differentiation in the shoot; xylem regeneration and Phloem differentiation.

UNIT II Leaf and flower development:

Development of leaf, History, Specialized cells and tissue differentiation. Development and Anatomy of flower, including transition to Flowering and reproductive shoot apex.

Practicals:

1. Preparation of Cytological slides for Mitosis using Root tips.
2. Preparation of Cytological slides for Meiosis-I using Flower buds; Chiasma Frequency.
3. Identification of different stages of Mitosis and Meiosis.
4. Study of tissues and Tissue systems.
5. Study of internal organization of different types of stems
- 6 of internal organization of roots.
7. Study of internal organization of plants showing anomalous secondary growth.

8. Microscopic examination of vertical sections of leaves such as *Polyalthia*, *Ficus*, *NeriumNymphaea*, maize and Wheat to understand the internal structure of leaf tissues and trichomes, glands etc. =
9. Study epidermal peels of leaves to study the development and structure of stomata and prepare stomatal index.
10. Wood maceration.
11. Preparation of permanent slides -5 slides to be submitted at the time of Examination.

Suggested Readings:

- 1.Cooper Geoffrey, M. - The Cell-A Molecular Approach, ASM Press, Washington.
 - 2.Sharma, A.K & A. Sharma. - Chromosome Techniques: Theory & Practice, Batter Worth.
 - 3.Albert's, A. et al. - Molecular Biology of the Cell, Garland Publishing House, New York.
 - 4.De Robertis, E.D.P. & E.M.F. DeRobertis. - Cell and Molecular Biology, Lippincott Williams & Wilkins, Bombay.
 - 5.Freifelder, D. - Molecular Biology, Narosa Publishing House, New Delhi.
 - 6.Gardener, E. J. & D. P. Snustad - Principles of Genetics, John Willey, New York .
 - 7.Powar, C.B. - Cell Biology.
 - 8.Sambamurthy, A.V.S.S. – Genetics, Narosa Publications, New Delhi
 - 9.Sinnot, E.W., L.C. Dunn & T. Dobzhansky - Principles of Genetics, V Edn, McGraw Hill,
-
- 1.Atwell, B.J. Kriedermann, P. E. and Jumbull, C.G.N. (Ed.) 1999. Plants in Action. Adaptation in Nature, performance in cultivation. MacMilan Education, Sydney, Australia.
 - 2.Burgess, J. 1985. An introduction to Plant Cell development. Cambridge Univ. Press, Cambridge.
 - 3.Fahn, A. 1982. Plant Anatomy (3rdEd.), Pergamon Press, Oxford.
 - 4.Fosket, D.E. 1994. Plant growth and Development. A molecular approach, Academic Press, San Diego, USA.
 - 5.Howell, S.H. 1998. Molecular Genetics of Plant Development, Cambridge Univ. Press, Cambridge.
 - 6.Jane, F.W. 1970. The structure of wood. Black, London.
 - 7.Lyndon, R.F. 1990. Plant Development. The Cellular Basis, Unnin Hyman, London.
 - 8.Murphy, T.M. and Thompson, W.F. 1988. Molecular Plant Development, Prentice Hall, New Jersey.
 - 9.Pullaih, T., Naidu, K. C., Lakshminarayana, K. & Hanumantha Rao, B. 2007. Plant Development. Regency Publications, New Delhi.
 - 10.Raghavan, V. 1999. Developmental Biology of Flowering Plants, Springer-Verlag, New York.
 11. Steeves, T.A. and Sussex, TM. 1989. Patterns in Plant Development (2ndEd.). Cambridge Univ Press, Cambridge.
 - 11.Waisel, Y., Esnel, A, and Kafkaki U. (Eds.). 1996. Plant Roots. The Hiden Hall (2nd Ed.), New York, USA.

PAPER 2121: MOLECULAR GENETICS AND TECHNIQUES IN BIOLOGY

UNIT I: INHERITANCE, RECOMBINATION AND MAPPING

Mendelian laws of inheritance- an overview. Linkage, Chromosome as a linkage unit, factors affecting linkage; Genetic recombination: types and molecular mechanism of recombination. Factors affecting recombination. Chromosomal mapping; Two factor and Three factor mapping, Mapping by recombinational frequencies. Coefficient of coincidence of double crosses, Interference –types and significance.

UNIT II: MUTATION AND POPULATION GENETICS

Modern concept of gene, Mutations–types. Chromosomal structural aberrations: deficiencies, duplications, translocations, inversions and their significance in evolution. Numerical changes in chromosomes: aneuploidy and euploidy, polyploidy and their significance in evolution; molecular mechanism of mutagenesis.

UNIT III: pH, MICROSCOPY, CENTIFUGATION AND CHROMATOGRAPHY

pH- Measurement of pH, biochemical buffers, Principles and applications of Microscopy- Light microscope, Phase contrast and Electron microscope. Fixation and staining methods. Centrifugation – basic principles of sedimentation, Types of centrifuges. Preparative ultracentrifugation- differential centrifugation, density gradient, analytical ultracentrifugation and applications. General principles, definitions and applications of chromatography. Paper chromatography, thin-layer chromatography, gas-liquid chromatography.

UNIT IV: ELECTROPHORESIS, SPECTROSCOPY AND RADIO ISOTOPE TECHNIQUES

Principles, definition and applications of SDS-PAGE, Agarose gel electrophoresis. Laws of light absorption, Instrumentation and applications of UV-Visible spectrophotometer. Radioisotope Techniques –types of isotopes, radioactive decay. Detection and measurement of radioactivity. Autoradiography, Isotopes used in biology.

PRACTICALS

1. Problems related to Genetics
2. Separation and identification of amino acids by paper chromatography
3. Separation and identification of sugars by TLC
4. Separation and identification of Lipids by TLC
5. Separation of amino acids by Ion –exchange chromatography
6. Separation of proteins by PAGE
7. Separation of Pigments by paper chromatography
8. Isolation and spectrophotometric characterization of plant pigments.

SUGGESTED READINGS

Alberts A *et al.* 1994. *Molecular Biology of cell*. Garland publ. New York.
Cantor, C.R. and P.R. Schimmel. *Biophysical Chemistry* by, W.H. Freeman & Co.
Copper Geoffrey, M. 2000. *The Cell - a Molecular approach*. 2nd Edn. ASM Press, Washington.

De Robertis EDP & EMF De Robertis . 2001. *Cell and Molecular biology*. Lippincott Williams & Wilkins.
Freifelder D.1990. *Molecular biology*. Narosa publication house, New Delhi.
Gardner E J & D P Snustad 1996. *Principles of Genetics*. John Willey, New York.
Glaser A. and M.P. Deutscher. 1995. *Introduction to Biophysical Methods for Protein and Nucleic Acid Research*. Academic Press.
John M. Wrigglesworth. 1983. *Biochemical research technique (A Practical Introduction)*
Strickberger MW 1996. *Genetics* III edn.McMillan,New York.
Cooper,T.G. *The tools of Biochemistry*. Wiley Eastern.
Vanholdem, K.E. and W.C. Johnson. 1988. *Principles of Physical Biochemistry*. Wilson & Walker.
1986. *Practical Biochemistry: Principles & Techniques*. Cambridge University Press.

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY
PAPER 2121 : MOLECULAR GENETICS AND TECHNIQUES IN BIOLOGY

Time: 3Hrs.

Max. Marks: 80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

Model Question Paper
FIRST YEAR M.Sc. Botany- SEMESTER-II
PAPER 202: MOLECULAR GENETICS AND TECHNIQUWA IN BIOLOGY

Time: 3 Hrs

Max. Marks:75

PART –A (Short Answer Type)

5 x 6M = 30 Marks

Answer any 5 of the following

1. Write about factores affecting linkage
2. Coefficient of coincidence
3. Two factor chromosome mapping
4. Write about Molecular mechanism of mutagenesis
5. Paper Chromatography
6. Spectrophotometer
7. SDS –PAGE

8. Types of Isotopes

PART –B (Essay Type)

3 X 15M = 45 Marks

Answer the following Questions

9. Write about molecular mechanism of recombination

Or

10. Write about linkage

11. Write about chromosomal structural aberrations with suitable examples.

Or

12. Write about Numerical changes in the Chromosomes

13. Write about brief description about Electron Microscope

or

14. Explain Gas-liquid Chromatography and their application

15. The Isotopes used in Biology

OR

16. Write about Spectrophotometry

PAPER 2131 : PLANT BIOCHEMISTRY

UNIT I: BIOENERGETICS

Energy transformation in living systems, Laws of thermodynamics, free energy and standard free energy changes, Phosphate group transfer and ATP, free energy from hydrolysis of ATP, High energy phosphates as currency of cell. Biological oxidation-reduction reactions and their half reactions.

UNIT II: ENZYMES

Nomenclature and classification- Isoenzymes, structure; Ribonuclease, Lysozyme, Chymotrypsin. Mode of action of enzymes; enzyme-substrate complex Inhibition: Competitive, Non competitive and Feed back inhibition. Regulation of enzyme activity. Enzyme Kinetics: Michaelis- Menten equation and Reversible reactions.

UNIT III: CARBOHYDRATES AND PROTEINS

Classification and properties of carbohydrates of Mono (Glucose, Galactose, Fructose), Oligo (Lactose, Maltose, Sucrose) and Polysaccharides: Homopolysaccharides (Starch, Glycogen, Cellulose and Heteropolysaccharides. Gluconeogenesis. Amino acids: Non standard protein and aminoacids, peptides structure and reactions. Proteins: Primary structure and its sequence determination, Secondary, Tertiary and Quarternary structural features of proteins (Ramachandran plot).

UNIT IV: LIPID METABOLISM

Chemical composition of plant lipids. α - Oxidation and β - Oxidation of fatty acids. Biosynthesis of fatty acids - malonyl CoA and long chain saturated and unsaturated fatty acids.

PRACTICALS

1. Estimation of proteins in plant samples by Biuret or Lowry's method
2. Estimation of Reducing sugars in plant samples by Nelson's method.
3. Determination of Amylase activity in germinating seeds
4. Estimation of Amino acids by Ninhydrin method
5. Determination of Catalase activity in germinating seeds
6. Reaction of amino acids and sugars
7. Aminoacid titrations
8. Iodine no and Sophonificatiob number
9. Estimation of Starch.

SUGGESTED READINGS

- Buchnan, Gruissen & Jones. 2001. *Biochemistry and Molecular Biology of Plants*.
Dennis, D.T., D.B. Layzell, D.D. Lefebrye & D. Turpin. 1997. *Plant Metabolism*. 2nd ed. Addison Wesley Pub. Co. New York.
- Dey and Horborne. 1998. *Plant Biochemistry*. Academic Press.
- Heldt, H.W. 1997. *Plant Biochemistry and Molecular Biology*. OUP.
- Horton, HR, MoranLA, Ochs RS *et al.*, 2001. *Principles of Biochemistry*, III edn. Prentice Hall.
- Lehninger, A.L. 2001. *Biochemistry*. Kalyani Publishers. Ludhiana.
- Mathews CK, Van Holde KE and Ahem KG. 2000. *Biochemistry* III edn. Sanfransico. Benjamin Cummings.
- Thomas C. Moore. 1992. *Biochemistry and Physiology of Plant Hormones*. II Eds. Narosa Publishers.
- Wilkins, M.B. (ed) 1987. *Advanced Plant Physiology*. ELBS & Longman. Essex., England.

Model Question Paper
FIRST YEAR M.Sc. Botany- SEMESTER-II
PAPER 2131: PLANT BIOCHEMISTRY

Time: 3 Hrs

Max. Marks:80

PART –A (Short Answer Type)

4 x 5M = 200 Marks

Answer any 5 of the following

- | | | | |
|---|---------------------------|---|-------------------------------------|
| 1 | Free energy changes | 2 | Bio Redox reactions |
| 3 | classification of enzymes | 4 | Feed back inhibition |
| 5 | Polysaccharides | 6 | Mechanism of enzyme action |
| 7 | Plant lipids | 8 | α - oxidation of fatty acids |

PART –B (Essay Type)

34X 15M = 60Marks

Answer the following Questions

9. Explain the laws of thermodynamics involved in biological systems.
OR
10. Write about Different levels of enzyme or protein structures
11. Briefly explain the classification of enzymes
(OR)
12. Derive Michaelis Menten equation
13. Define gluconeogenesis. Explain the steps involved in gluconeogenesis.
(OR)
14. Explain β -oxidation of fatty acids.
15. Write about Malonyl CoA
Or
16. Write about α -Oxidation

PAPER BOT2141: OPEN ELECTIVE –I: PLANTS AND HUMAN WELFARE

UNIT I : PLANTS AND ENVIRONMENTAL VALUES

Plants-Ecosystem services. Direct, Indirect and optional (future possibilities of usage) services. Plants role in soil protection and water conservation. Role of plants in climate change scenario-carbon credits. Plants in combating pollution- Phytoremediation. Exotic and invasive species.

UNIT II: PLANT RESOURCES

Brief account of the following plant Resources(examples limited to 10 under each category)-local,common and botanical names; morphology and utility Edible Resources- Cereals, Millets, Pulses, Spices and Condiments; Vegetables; Starch and Sugar Yielding Plants; Oil yielding plants. Dye yielding plants. Plants as sources of timber and biofuels. Transgenic plants. Herbal medicine.

UNIT III: MUSHROOM CULTIVATION

Introduction, history.Types of mushrooms. Mushrooms available in India- *Volvariella volvacea*, *Pleurotus citrinopileatus*,*Agaricus bisporus*, Mushroom Research Centres; Mushroom cultivation Procedure steps; Storage: Short term and Long term storage; Nutritional and medicinal value of mushrooms; Food Preparation: Types of food prepared from mushrooms; Cost-benefit ratio: Market in India and abroad, export value

UNIT IV: ORGANIC FARMING

Concept of Organic farming, history, objectives. Need of Organic farming in the present scenario. Types and methods of Organic farming. Advantages(benefits to environment and health benefits) and disadvantages of organic farming. Organic manure- types(green manure, vermicompost and vermiwash). Economic potential of Organic farming in India. Production and export of some certified organic products in India.

SUGGESTED READINGS:

- Alan beebay & anne- Maria Brennan. 2008. First Ecology. 3rd ed. Oxford University press.
- Cotton CM. 1996. Ethnobotany: Principles and Applications
- Cunningham, W.P. & M.A. Cunningham. 2007. Principles of Environmental Science- Inquiry and Applications. Tata Mc Graw Hill Publications. New Delhi.
- Hill, Albertt, F. 1952. A Text Book of useful plants and plant products. Tata Mc Graw Hill Publications. New Delhi.
- Kokate , C.K. AP. Purohit & SB .Gokhale. 2000. Pharmacognosy. Nirali Prakasan Publications.
- Rao, RaviPrasad B. 2005. Biodiversity. In Pullaiah.T. (ed) Taxonomy of Angiosperms. Regency Publications. New Delhi. Pp: 287-317.
- Sambamurthy, A.V.V. S. & N.S. Subbramanyam 2000. Economic Botany of Crop Plants. Asiatech Publishers Inc.

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN(A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY
PAPER BOT2114OPEN ELECTIVE –I: PLANTS AND HUMAN WELFARE

Time: 3Hrs.

Max. Marks:80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit with internal choice)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

1. Exotic species
2. Carbon credits
3. Spices and Condiments
4. Types of mushrooms
5. Types of food prepared from mushrooms
6. Concept of Organic farming
7. Vermicompost

SECTION-II

Answer all the questions

4x15M= 60M

8. Write an essay on role of plants in soil and water conservation.
OR
9. Write an essay on Phytoremediation
10. Cereals and millets.
OR
11. Transgenic Plants.
12. Write an essay on mushroom technology.
OR
13. Write a detailed account on any 2 mushrooms available in India.
14. Write a detailed account on Organic farming.
OR
15. Write about the types of Organic manure.



**K.V.R GOVERNMENT COLLEGE (A), (W),
REACCREDITED WITH 'A' GRADE BY NAAC, KURNOOL
– 518001**

**BOARD OF STUDIES MEET FOR
M.Sc 2nd YEAR CHEMISTRY: III & IV – SEMESTERS**

&

M.Sc I YEAR CHEMISTRY: EXAMINATION PATTERN

ON

8 – 08 – 2019

DEPARTMENT OF CHEMISTRY



DEPARTMENT OF CHEMISTRY

Board of Studies Meet on 8-08-2019

Minutes of Board of Studies meeting held in the department of Chemistry, KVR Govt. College for Women (A), Kurnool on 8 - 08 -2019 at 10:00 AM and resolved the following:

CONSTITUTION OF THE BOARD OF STUDIES OF PG CHEMISTRY

Sl.No.	Name & Designation	Acted as
1	Dr. B. Anusha, Lecturer InCharge, KVR Govt College (A) (W), Kurnool	Chairman <i>[Signature]</i> 8/8/19
2	K.V. Murali Krishna, Lecturer in Chemistry, KVR Govt College (A) (W), Kurnool	Member <i>[Signature]</i> 8/8/19
3	Smt J.Kalpana, Lecturer in Chemistry, KVR Govt College (A) (W), Kurnool	Member <i>[Signature]</i> 8/8/19
4	K.Aruna kumari, Lecturer in Chemistry (Contract), KVR Govt. College for Women(A), Kurnool	Member <i>[Signature]</i> 8/8/19
5	A.Sunitha, Lecturer in Chemistry (Contract), KVR Govt. College for Women(A), Kurnool	Member <i>[Signature]</i> 8/8/19
6	Prof M.E Rani, HOD of Department of Chemistry, Sri Rayalaseema University, Kurnool.	University Nominee <i>[Signature]</i> 8/8/19
7	Dr Y.Siva Chandra, Lecturer in Chemistry, Govt Degree college (A), Anantapur.	Subject Expert <i>[Signature]</i> 8/8/19
8	S.Anwar, Lecturer in Chemistry, Silver Jubilee Govt Degree College (A), Kurnool.	Subject Expert <i>[Signature]</i> 8/8/19
9	J.Sneha latha, Lecturer in Chemistry, Sankras College, Kurnool	Alumni <i>[Signature]</i> 8/8/19
10	I.Surendra Nath Reddy, Vice President, SRAAC , Kurnool	Industry Representative <i>[Signature]</i> 8/8/19
11	B. Mubeena, II MSc (Organic Chemistry)	Student Representative <i>[Signature]</i> 8/8/19

RESOLUTIONS

The members of BOS in Chemistry met on 8 - 08 - 2019 in the department of Chemistry, KVR Govt. Degree College for Women(A), Kurnool under the chairmanship of Dr B.Anusha, I/C of the Department of Chemistry, discussed the proposals on the curriculum for the II year PG course and passed the following resolutions.

The following resolutions are made and passed unanimously.

1. Resolved to approve the revised syllabus in Chemistry for I & II M.Sc., Semester-I to Semester-IV as decided by University nominee, subject experts and members of the Board of Studies (UG) Chemistry.
2. The revised syllabus will come into effect from the academic year 2019-20 for I & II M.Sc. Semester-I to Semester-IV.
3. Resolved to conduct the two practical examinations with a maximum of 200 Marks at the end of IVth semester and one Project each with a maximum of 100 Marks and three practicals at the end of II semester.
4. Resolved to approve the 75 - 25 marks Examination pattern for the II year students, with effect from this academic year 2019 - 20. It is decided to allot 25 Marks for the internal assessment which includes 20 Marks for the test, 5 Marks for student seminar/ viva. The Question Paper pattern for External Examination is as follows for III, IV Semester papers,

Section	Type	Number of questions given	Number of questions to be answered	Marks per question	Marks
A	Short Essay	8	5	5	25
B	Essay	4(Intern choice)	4	12.5	50
Total Marks					75

5. Resolved to approve the 80 - 20 marks Examination pattern for the I year students, with effect from this academic year 2019 - 20. It is decided to allot 20 Marks for the internal assessment which includes 15 Marks for the test, 5 Marks for student seminar/ viva for First students.

The Question Paper pattern for External Examination is as follows for I, II semesters,

Section	Type	Number of questions given	Number of questions to be answered	Marks per question	Marks
A	Short Essay	8	4	5	20
B	Essay	4(Intern choice)	4	15	60
Total Marks					80

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

(Effective from the batch admitted during the academic year 2019-20)

S.No	Paper Number	Title of Paper	No. Of Credits	Uni.Exam Duration(Hrs)	Total Marks	
					IA	SEE
1	CHEMOC/NP301: Paper I	Modern Organic Synthesis	4	3	25	75
2	CHEMOC/NP302: Paper II	Asymmetric Synthesis and Organic Photochemistry	4	3	25	75
3	CHEMOC/NP303: Paper III	Bio-Organic Chemistry	4	3	25	75

4	CHEMOC/NP304: Paper IV	Advanced Organic Spectroscopy	4	3	25	75
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IA : Internal Assessment = IAE (20) + SS (5)

SEE : Semester End Examination

IAE : Internal Assessment Examination

SS : Student Seminar

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

CHEM-OC/NP301: Paper I – Modern Organic Synthesis

UNIT –I : Organo Phosphorous and Organo Sulphur Compounds

UNIT –II : New synthetic reactions

UNIT –III : New techniques and concepts in organic synthesis:

UNIT –IV : Synthetic Strategies

UNIT -I: OrganoPhosphorousand Organo Sulphur Compounds 15 Hrs (1 Credit)

Properties of divalent sulphur and trivalent phosphorous derivatives, nucleophilic reactivities, hard and soft acids and bases, compounds containing phosphorous-oxygen bonds, the phosphoroyl group, molecules with hydrogen bonded to phosphoroyl group, Arbusev reactions, Perkov reactions, compounds containing sulphur-oxygen bonds, sulfoxides and sulfones-Pummerer rearrangements, sulfoxides as oxidizing agents, phosphorous ylides, Wittig's reactions and mechanism, the Emmons-Wadsworth reaction, reactions of sulphur ylides.

UNIT -II: New synthetic reactions 15 Hrs (1 Credit)

(i)Protecting Groups: (a) Protection of alcohols by ether, silyl ether and ester formation

(b) Protection of 1,2-diols by acetal, ketal and carbonate formation (c) Protection of amines by acetylation, benzoylation, benzyloxycarbonyl, t-butyloxycarbonyl, fmoc and triphenyl methyl groups, (d) Protection of carbonyls by acetal, ketal and thiol acetal (Umpolung) groups,

(e) Protection of carboxylic acids by ester and ortho ester (OBO) formation.

(ii)Baylis-Hillman reaction, RCM olefm metathesis,. Stork-enamine reaction and Umpolung use of dithio acetals

UNIT -III: New techniques and concepts in organic synthesis

15 Hrs (1 Credit)

Solid phase polypeptide synthesis, Solid phase oligonucleotide synthesis, Strategies in oligosaccharide synthesis, Kahneglycosidation, Combinatorial synthesis, Phase transfer catalysis, Tandem synthesis, Baldwin rules, Chiron approach in synthesis, Transformations using esterases

and lipases, Determination of absolute configuration (R/S) using Mosher's method and Felkin-Anh model. Use of protecting groups in organic synthesis: fmoc, t-BOC, TBDMS and THP.

UNIT -IV: Synthetic Strategies 15 Hrs (1 Credit)

Synthetic Strategies, Terminology: target, synthon, synthetic equivalent, functional group

interconversion (FGI), functional group addition, functional group elimination. Criteria for

selection of target. Linear and convergent synthesis. Retrosynthetic analysis and synthesis

involving chemoselectivity, regioselectivity, reversal of polarity and cyclizations. Strategic bond:

Criteria for disconnection of strategic bonds. Importance of the order of events in organic

synthesis. One group and two group C-X disconnections. One group C-C disconnections.

Alcohol and carbonyl compounds. Two group C-C disconnections; DielsAlder reaction, 1,3-

difunctionalised compounds, Control in carbonyl condensation, 1,5- difunctionalised

compounds, Michael addition and Robinson annulation, synthesis of (+) Disparlure by retro

synthetic approach.

Recommended Books:

1. Some modern methods of organic synthesis by W Carruthers
2. Guidebook to organic synthesis, by R K Meckie, D M Smith & R A Atken
3. Organic synthesis by O House
4. Organic synthesis by Michael B Smith
5. Reagents for organic synthesis, by Fieser&Fieser, Vol 1-11(1984)

6. Organic synthesis by Robert E Ireland
7. Organic Synthesis - The disconnection approach by S Warren
8. Organic Synthesis by C Willis and M Willis
9. Handbook of reagents for organic synthesis by Reich and Rigby, Vo I, IV
10. Problems on organic synthesis by Stuart Warren
11. Total synthesis of natural products: the Chiron approach by S.Hanessian
12. Organic chemistry Claydon and others 2005
13. Name Reactions by Jie Jack Li
14. Reagents in Organic synthesis by B.P.Mundy and others.
15. Tandem Organic Reactions by Tse-Lok Ho
16. Advanced Organic Chemistry-Reactions and Mechanism, 2nd Ed. By Bernard Miller and Rajendra Prasad (Pages 397-414)

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

CHEM-OC: 302: Paper II –Asymmetric Synthesis and Organic Photochemistry

UNIT –I : Asymmetric Synthesis-I

UNIT –II : Asymmetric Synthesis-II

UNIT –III : Organic Photochemistry - I

UNIT – IV : Organic Photochemistry -II

UNIT –I: Asymmetric Synthesis-I: 15 Hrs (1 Credit)

Introduction and terminology: Topocity in molecules Homotopic, stereoheterotopic (enantiotopic and diastereotopic) groups and faces- symmetry, substitution and addition criteria.Prochirality nomenclature: Pro-R, Pro-S,Re and Si. Selectivity in synthesis: Stereospecific reactions

(substrate stereoselectivity). Conditions Stereoselective reactions (product stereoselectivity):Enantioselectivity and diastereoselectivity.: Symmetry and transition state criteria, kinetic and thermodynamic control. Methods for inducing enantio and diastereoselectivity. Analytical methods: % Enantiomer excess, optical purity, % diastereomeric excess. Techniques for determination of enantioselectivity: Specific rotation, Chiral ¹H nmr, Chiral lanthanide shift reagents and Chiral HPLC.

UNIT -II: Asymmetric Synthesis-II: 15 Hrs (1 Credit)

- i) Substrate controlled asymmetric synthesis: Nucleophilic additions to chiral carbonyl compounds. 1,2-asymmetric induction, Cram's rule and Felkin-Anh model.
- ii) Chiral auxiliary controlled asymmetric synthesis: α -Alkylation of chiral enolates, azaenolates, 1, 4-Asymmetric induction and Prelog's rule. Use of chiral auxiliaries in Diels-Alder and Aldol reactions.
- iii) Chiral reagent controlled asymmetric synthesis: Asymmetric reductions using BINAL-H. Asymmetric hydroboration using IPC₂BH and IPCBH₂. Reductions with CBS reagent.

iv) Chiral catalyst controlled asymmetric synthesis: Sharpless, Jacobsen and Shi asymmetric epoxidations. Asymmetric hydrogenations using chiral Wilkinson biphosphine and Noyori catalysts, Enzyme mediated enantioselective synthesis:

UNIT–III: Organic Photochemistry – I

15 Hrs (1 Credit)

Organic photochemistry: Molecular orbitals, carbonyl chromophore–triplet states, Jablonski diagram, inter–system crossing. Energy transfer. Energies properties and reaction of singlet and triplet states of and transitions.

Photochemical reactions : (a) Photoreduction, mechanism, influence of temperature, solvent, nature of hydrogen donors, structure of substrates on the course of photo reduction, (b) F.B. reaction mechanism, stereochemistry, side reaction due to variations of the triplet energy of the carbonyl component and the nature of the olefin component.

UNIT – IV: Organic Photochemistry – II

15 Hrs (1 Credit)

Norrish cleavages, type I : Mechanism, acyclic cyclicdiones, influence of sensitizer, photo Fries rearrangement. Norrish type II cleavage : Mechanism and stereochemistry, type II reactions of esters : 1: 2 diketones, photo decarboxylation. Photochemistry of unsaturated ketones – Olefin photochemistry, cyclic olefins – Photochemistry – of conjugated dienes; electrocyclisations, influence of triplet energy of sensitizer, sensitized and unsensitized electrocyclisations. Electrocyclisations of dienes in crossed sense – Photochemistry of benzene derivatives – formation of derivatives of benzavalene, fluvene and Dewar benzene, cyclo addition of benzene to olefins and dienes – Decomposition of nitrites – Barton reaction. Di

- π methane rearrangement.

Recommended Books:

1. Stereochemistry of organic compounds — Principles & Applications by D Nasipuri
2. The third dimension in organic chemistry, by Alan Bassendale

3. Stereochemistry: Conformation & Mechanism by P S Kalsi
4. Stereochemistry of Carbon compounds by Ernest L Eliel
5. Stereoselectivity in organic synthesis by R S Ward.
6. Asymmetric synthesis by Nogradi
7. Asymmetric organic reactions by it) Morrison and HS Moschr

8. Stereo differentiating reactions by Izumi
9. Some modern methods of organic synthesis by W Carruthers
10. Guidebook to organic synthesis, by R K Meckie, D M Smith & R A Atken
11. Organic synthesis by Michael B Smith
12. Molecular Reactions and Photo chemistry by Depuy and Chapman
13. Photochemistry by C W S Wells
14. Organic Photochemistry by Turro
15. Molecular Photochemistry by Gilbert & Baggo
16. Organic Photochemistry by D Coyle

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

(CHEM-OC/NP303: Paper III – Bio-Organic Chemistry)

UNIT –I : Mechanism of Enzymic action

UNIT –II : Recombinant DNA and Fermentation technology

UNIT –III : Coenzymes

UNIT –IV : Amino acids and Proteins:

UNIT -I: Mechanism of Enzymic action 15 Hrs (1credit)

Transition state theory. Acid-Base catalysis. Co-valent catalysis— Binding modes of catalysis (i) Proximity effect (ii) Transition state stabilization (iii) Strain and Distortion. Examples of some typical enzyme mechanisms for (i) Triose phosphate isomerase (ii) α -chymotrypsin and serine protease (iii) Lysozyme (iv) Carboxy peptidase-A (v) Ribonuclease. Synthesis of α - amino acids and peptides. Transformations of lipases and esterases. C-C bond formation: asymmetric cyanohydrin formation and asymmetric aldol condensations using enzymes.

UNIT -II: Recombinant DNA and Fermentation technology 15 Hrs (1credit)

Introduction to genetic engineering. Recombinant DNA technology-restriction endonuclease, cloning, linkers, adaptors. Application of recombinant DNA technology in production of pharmaceuticals, diagnosis of diseases, insect control, improved biological detergents, gene therapy-examples. Principles of finger printing technology- Site directed mutagenesis. Fermentation technology: Introduction to

fermentation. Industrial fermentation. Advantages and limitations of fermentation. Production of drugs and drug intermediates from fermentation examples. Chiral hydroxy acids, vitamins, amino acids, β -lactam antibiotics. Precursor fermentation and microbial oxidation and reductions

UNIT -III: Coenzymes 15 Hrs (1credit)

Introduction. Cofactors- cosubstrates- prosthetic groups. Classification-Vitamin derived coenzymes and metabolite coenzymes. Structure and biological functions of coenzyme A, thiamine pyrophosphate (TPP), pyridoxal phosphate (PLP), oxidized and reduced forms of i)

nicotinamide adenosine dinucleotide / their phosphates (NAD⁺, NADH, NADP⁺, NADPH) ii) Flavin adenine dinucleotide FAD, FADH₂ and iii) Flavin mononucleotide (FMN, FMNH₂), lipoic acid, biotin, tetrahydrofolate. Adenosine triphosphate (ATP) and adenosine diphosphate (ADP), S-adenosyl methionine (SAM) and uridine di phospho sugars (UDP-sugars) Mechanism of reactions catalysed by the above coenzymes.

UNIT-IV:Amino acids and Proteins: (1credit)

Amino acids: Introduction - Classification of amino acids. General methods of preparations – Gabriel's phthalimide synthesis, Strecker's synthesis, Malonic ester synthesis Erlenmeyer azalactone synthesis.

Analysis of amino acids from protein hydrolysates. General properties and reactions of amino acids – isoelectric point.

PROTEINS: General nature of proteins – annealing, Biuret reaction, Ninhydrin test. Classification of proteins. Merrified solid phase peptide synthesis. Primary, secondary, tertiary and quaternary structure of proteins.

Recommended Books

1. Concepts in biotechnology by D. Balasubramanian & others
2. Principles of biochemistry by Horton & others.
3. Bioorganic chemistry - A chemical approach to enzyme action by Herman Dugas and Christopher Penney.
4. Chirotechnology by R.Sheldon
5. Organic synthesis in water. By Paul A. Grieco Blackie.
6. Burger's medicinal chemistry and drug discovery. by Manfred E. Wolf
7. Introduction to Medicinal chemistry. by Graham Patrick.

8. Introduction to drug design. by R.B.Silverman

9. Comprehensive medicinal chemistry. Vol 1-5 by Hanzsch.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

CHEM-OC: 304: Paper IV – Advanced Organic Spectroscopy

UNIT –I : ^{13}C NMR Spectroscopy
UNIT –II
UNIT –III : Multipulse techniques in NMR Spectroscopy
UNIT –IV : 2D NMR techniques
: Spectral Identification of Natural Products

UNIT –I : ^{13}C NMR Spectroscopy 15 Hrs (1credit)

CW and PFT techniques. Types of ^{13}C nmr spectra: undecoupled, proton- decoupled, single frequency off-resonance decoupled (SFORD) and selectively decoupled spectra, signal enhancement by Nuclear OVER HAUSER effect. ^{13}C chemical shifts, factors affecting the chemical shifts, chemical shifts of organic compounds. Calculation of chemical shifts of alkanes, alkenes and alkynes. Homonuclear (^{13}C , ^{13}C J) and heteronuclear (^{13}C , ^1H J and ^{13}C - ^2H J) coupling. Applications of ^{13}C -NMR spectroscopy: Structure determination, stereochemistry, reaction mechanisms and dynamic processes in organic molecules.

UNIT -II: Multipulsetechniques in NMR Spectroscopy 15 Hrs

Spin echo experiment, ^{13}C NMR spectral editing technique, Polarization Transfer and signal enhancement, principle and applications of SPT, APT, INEPT and DEPT methods, 1D-INADEQUATE, Application to Geraniol molecule.

UNIT -III: 2D NMR techniques**15 Hrs (1credit)**

2D-NMR techniques: Principles of 2-D NMR, Classification of 2D-experiments. 2D-J-resolved spectroscopy. Homonuclear and Heteronuclear 2D-J-resolved spectroscopy. Correlation spectroscopy (COSY) Homo COSY (^1H - ^1H COSY), TOCSY (Total Correlation Spectroscopy), Hetero COSY (^1H , ^{13}C COSY, HMQC), long range ^1H , ^{13}C COSY (HMBC), NOESY and 2D-INADEQUATE experiments and their applications.

UNIT -IV: Spectral Identification of Natural Products Chemistry and Conformational

Analysis

(1credit)

Spectral identification of natural products: Use of spectroscopic methods UV, IR, ^1H and ^{13}C -NMR, Mass spectra and 2D NMR in the structure elucidation of natural products. Illustration with suitable compounds like Isoflavone, Thymol (Terpenoid), Geraniol (Terpenoid), nerol(Terpenoid), , cis – jasmine, Camphor (Terpenoid).

References

1. Spectroscopic identification of organic compounds by RM Silverstein, G C Bassler and T B Morrill
2. Organic Spectroscopy by William Kemp
3. Spectroscopic methods in Organic chemistry by DH Williams and I Fleming
4. Modern NMR techniques for chemistry research by Andrew B Derome
5. NMR in chemistry - A multinuclear introduction by William Kemp
6. Spectroscopic identification of organic compounds by P S Kalsi
7. Introduction to organic spectroscopy by Pavia
8. Carbon-13 NMR for organic chemists by GC Levy and O L Nelson
9. Spectroscopy of organic compounds, RM Silverstein and others, 5th Ed, (John Wiley)
10. NMR Spectroscopy An Introduction to Principles, Applications and experimental methods, Joseph B. Lambert and Eugene P. Mazzola (Pearson Education Inc. Prentice – Hall).
11. A Complete Introduction to Modern NMR Spectroscopy, Roger S. Macomber, A (John Wiley & Sons, Inc.).
12. Modern Spectroscopy, M. Hollas (John Wiley)
13. Introduction to molecular Spectroscopy, G. M. Barrow (McGraw Hill)

14. Basic principles of Spectroscopy, R. Chang (McGraw Hill).

15. NMR Spectroscopy by Gunther.

16. NMR Spectroscopy by Attar-ur-Rahman

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SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester (2019-20)

CHEM-OC 301: Paper I – Modern Organic Synthesis

Time: 3 Hrs

Max. Marks: 75

PART-A

Answer any **FIVE** questions. Each question carries 5 Marks.

5 X 5 = 25M

1. Explain Wittig's reaction with mechanism.
2. Write short notes on Pummerer rearrangement.
3. Explain the various methods of protection of diols.
4. Explain the protection of Carbonyls by thioacetal (Umpolung) group
5. Briefly explain Phase Transfer Catalyst (PTC).
6. Explain the Chiron approach in synthesis.
7. Explain the terms (i) Function Group Interconversion (ii) Function Group Addition
8. Write about the Control in Carbonyl Condensation.

PART-B

Answer **ALL** questions. Each question carries 12 1/2 Marks.

4 X 12 1/2 = 50M

9. Write short notes on: (a) Arbusov reaction (b) Perkov reaction (c) Emmons-Wadsworth reaction

(Or)

Write the reactions of phosphorous and sulphur ylides

10. Explain the various methods of protection of the following

(a) Carboxylic acids (b) Amines

(Or)

Write short notes on: (a) Baylis-Hillman reaction (b) Umpolung reaction (c) Stork-enamine reaction

11. Explain (a) Kahne glycosidation (b) Tandem synthesis

(Or)

Write the determination of absolute configuration(R/S) using Mosher's method and Felkin-Anh model

12. Explain the Retrosynthetic analysis and synthesis involving Chemoselectivity.

(Or)

Write about one group C-C disconnections

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SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester (2019-20)

CHEM-OC 302: Paper II – Asymmetric Synthesis and Organic Photochemistry

Time: 3 Hrs

Max. Marks: 75

PART-A

Answer any FIVE questions. Each question carries 5 Marks.

5 X 5 = 25M

1. Explain about Di-Pie methane rearrangement reaction.
2. Write photochemistry of benzene derivatives.
3. Explain prochirality and nomenclature of pro-R, pro-S, Re and Si.
4. Write a note on % Enantiomer excess; % Enantioselectivity and %Diastereomeric excess, %Diastereoselectivity.
5. Explain Cram's rule and Felkin-Anh Model.
6. Explain sharpless epoxidation with Examples.
7. Write short notes on Photoreduction.
8. Discuss the photochemistry of conjugated dienes with examples.

PART-B

Answer **ALL** questions. Each question carries 12 1/2 Marks.

4 X 12 1/2 = 50M

9. Explain the Paterno-Buchii reaction with stereo chemical evidence.

(Or)

Explain the following

- a) Jablonski diagram
- b) Inter system crossing
- c) Energy Transfer reactions.

10. Explain product and substrate selectivity. Give some examples.

(Or)

Explain the following: (a) Symmetry and transition state criteria with suitable example

(b) Techniques for determination of enantioselectivity of Chiral ^1H NMR; Chiral lanthanide shift reagents

11. Write a note on: (a) Asymmetric aldol reaction.

(b) Chiral catalyst controlled Asymmetric Diels-Alder reaction.

(Or)

(a) Discuss Enzyme mediated asymmetric enantioselective synthesis with example.

12. Explain about Barton reaction.

(Or)

Explain Norrish-II cleavage with stereo chemical evidence.

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SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester (2019-20)

(CHEM-OC/NP303: Paper III – Bio-Organic Chemistry)

PART-A

Answer any **FIVE** questions. Each question carries 5 Marks.

5 X 5 = 25M

1. Explain about Acid-Base Catalysis.
2. Write short notes on i) proximity effect ii) Transition state stabilisation .
3. Explain Recombinant DNA Technology.
4. Write a note on principles of finger printing technology.
5. Write a note on cofactors and prosthetic groups.
6. Give the mechanism of reactions catalyzed by Adenosine Tri phosphate (ATP).
7. What are amino acids give their classification.
8. Write a note on Merrified solid phase peptide synthesis.

PART-B

Answer **ALL** questions. Each question carries 12 1/2 Marks.

4 X 12 1/2 = 50M

9. Explain Enzyme mechanism for Triose phosphate isomerase and Ribonuclease.

(or)

Write a note on asymmetric cyanohydrins and asymmetric aldol condensation using enzymes.

10. Write the applications of Recombinant DNA technology.

(or)

Explain Fermentation Technology with examples? What are the advantages and limitations of fermentation?

11. Give the structure and biological functions of Thiamine pyrophosphate (TTP)

(or)

Write the structure and mechanism of reactions catalysed by Lipoic and biotin.

12. Write a note on a) Gabriel Phthalimide synthesis b) Strecker's synthesis c) Erlenmeyer azalactone synthesis .

(or)

Write the structure of proteins and write about Isoelectric point.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

CHEM-OC: 304: Paper IV – Advanced Organic Spectroscopy

PART-A

Answer any **FIVE** questions. Each question carries 5 Marks.

5 X 5 = 25M

1. Explain Proton decoupling.
2. Explain NOE.
3. Explain DEPT.
4. What is echo experiment?
5. Explain COSY.
6. Explain principle of NMR.
7. Explain solvent effect on IR values.
8. Explain temperature effect on U.V. values.

PART-B

Answer **ALL** questions. Each question carries 12 1/2 Marks.

4 X 12 1/2 = 50M

9. (a) Explain homo and hetero nuclear coupling.

Or

(b) Explain SFORD, types of chemical shifts.

10. (a) Explain principle and applications of INEPT, SPT methods.

Or

(b) Explain spectral editing technique, polarization transfer and signal enhancement.

11. (a) Explain NOESY, long range ^1H , ^{13}C COSY.

Or

(b) Explain TOCSY, HOMO COSY.

12. (a) Give spectral data for Thymol.

Or

(b) Explain Spectral data for Camphor and nerol.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

THIRD SEMESTER LAB COURSE- PRACTICAL-III- (Total Marks 100)

(A) Organic Qualitative Mixture Analysis: Separation of two component mixtures by chemical methods and their identification by chemical reactions – Separation by using solvent ether, 5% aqueous sodium bicarbonate, 5% sodium hydroxide and dil hydrochloric acid, checking the purity of the two components by TLC, identification of the compounds by a systematic study of the physical characteristics (MP/BP), extra elements (Nitrogen, halogens and sulfur), Solubility, functional groups, preparation of crystalline derivatives and identification by referring to literature. A minimum of Ten mixtures should be separated and analyzed by these procedures.

(B) Multi step synthesis of Organic compounds

The exercises should illustrate the use of organic reagents and may involve purification of the products by chromatographic techniques.

1. Beckmann rearrangement: Benzanilide from Benzophenone
Benzophenone \rightarrow Benzophenone oxime \rightarrow Benzanilide
2. Benzilic acid rearrangement: Benzilic acid from benzoin
Benzoin \rightarrow Benzil \rightarrow Benzilic acid
3. P-Bromo Aniline from Aniline
Aniline \rightarrow Acetanilide \rightarrow P-Bromo Acetanilide \rightarrow P-Bromo Aniline
4. Synthesis of Paracetamol
5. Synthesis of Phenytoin

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

THIRD SEMESTER LAB COURSE- PRACTICAL-IV- (Total Marks 100)

ORGANIC QUANTITATIVE ESTIMATIONS

- i) Estimation of phenol.
- ii) Estimation of Glucose.
- iii) Estimation of Aniline.
- iv) Estimation of saponification value of oil or fat or an ester.
- v) Estimation of acid value of a fat or oil.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

IV Semester under CBCS

(Effective from the batch admitted during the academic year 2019-20)

S.No	Paper Number	Title of Paper	No. Of Credits	Uni.Exam Duration(Hrs)	Total Marks	
					IAE	SEE
1.	CHEM-OC: 401:Paper-I	Terpenoids, Alkaloids Steroids,and Flavonoids	4	3	25	75
2.	EL-CHEM : OC/NP: 402: Paper II	Drug & Medicinal Chemistry And Green Chemistry	4	3	25	75
3.	PROJECT	To be Selected	10	Dissertation	80	
				Viva-Voce	20	
				Total Marks for Project Work	100	

IA : Internal Assessment = IAE (20) + SS (5)

SEE : Semester End Examination

IAE : Internal Assessment Examination

SS : Student Seminar

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

IV Semester under CBCS

CHEM: OC: 401: PAPER-I- TERPENOIDS, STEROIDS, ALKALOIDS AND FLAVONOIDS

UNIT- I: TERPENOIDS

UNIT - II: ALKALOIDS

UNIT -III: STEROIDS

UNIT-IV: FLAVONOIDS&ISOFLAVONOIDS

UNIT: I: Terpenoids

15 hours (1 Credit)

Occurrence, Isolation general methods of structural determination isoprene rule special isoprene rule, structure determination and stereochemistry and synthesis of the following molecules: 1.Santonin 2. Farnesol 3.Zingiberene 4. Cadinene

UNIT II: Alkaloids

15 hours (1 Credit)

Occurrence, Isolation general methods of structure elucidation and physiological action, degradation, classification based on nitrogen heterocyclic ring, structure, role of alkaloids in plants stereochemistry, synthesis and bio synthesis are the following :

1. Nicotine
2. Morphine
3. Strychnine
- and 4.Reserpine

UNIT III : Steroids

15 hours (1 Credit)

Occurrence, Isolation general methods of structure elucidation and synthesis of cholesterol (total synthesis not expected) Androsterone, Testosterone , Estrone , Progesterone.

UNIT: IV: Flavonoids and Isoflavonoids**15 Hours (1 Credit)**

Occurrence nomenclature and general methods of structure determination, isolation and synthesis of 1. Apigenin, 2. Luteolin, 3. Kaempferol 4. Quercetin 5. Buten, 6.Daidzein. Biosynthesis of Flavonoids and Isoflavonoids: Acetate pathway and shikimic acid pathway.

References:

1. Comprehensive Organic Chemistry by D.R. Barton and W.D.Ollis.
2. Standard methods in plant analysis by Reach and Tracey.
3. Natural Products by Kalsi.
4. Text book of Organic Chemistry VOL II by I.L.Finar.
5. An Introduction to the Chemistry of terpenoids and Steroids by William Templeton.
6. Systematic identification of flavonoid Compounds by Markhan.&Mabry
7. Steroids by Fieser and Fieser.
8. Alkaloids by Manske.
9. Alkaloids by Bentley.
10. The Chemistry of terpenes by A.R.Pinder.

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL**Re-Accredited by NAAC with Grade "A"****CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)****SECOND YEAR M.Sc. CHEMISTRY****M.Sc. ORGANIC CHEMISTRY****IV Semester under CBCS****CHEM-OC: 402: Paper II – Drug & Medicinal Chemistry and Green Chemistry****UNIT -I: PRINCIPLES OF DRUG DESIGN AND DRUG DISCOVERY****UNIT -II: MEDICINAL CHEMISTRY****UNIT -III: GREEN CHEMISTRY – I**

UNIT -IV: GREEN CHEMISTRY – II

UNIT-I: Principles of Drug design and drug discovery 15 Hrs (1 Credit)

Introduction to drug discovery. Folklore drugs. Natural products as lead structures in drug discovery. Structure pruning technique in lead modification e.g. morphine. Serendipitous discovery of leads e.g. Penicillin and Librium. Drug targets and receptor theory. Nature of drugreceptor interactions. Pharmacodynamics and pharmacokinetics (ADME) of drugs. Agonists, antagonists and enzyme inhibitors. Discovery of lead structure from natural hormones and neurotransmitters. Existing drugs as leads (me too drugs). Principles of design of agonists (e.g. Salbutamol), antagonists e.g. cimitidine) and enzyme inhibitors (e.g. captopril). Principles of prodrug design. Molecular graphics based lead discovery. Introduction to drug patents and Clinical trials.

UNIT-II: Medicinal Chemistry 15 Hrs (1 Credit)

Introduction, sources of natural leads and their structural modification to semi synthetic/synthetic drugs.

- 1) Drugs acting on nervous system a) CNS: i) morphine alkaloids. Structural pruning technique – eg. Morphine. b) PNS: i) Cocaine, benzocaine, 2) Neuromuscular blocking agents: curare alkaloids, tubocurarine, 3) Anticancer drugs: i) Catharanthus alkaloids, vinblastine, ii) Taxol. 4) Antibiotics: i) β -Lactam antibiotics – penicillin, cephalosporins and their semi synthetic derivatives (amoxicillin, methicillin, cephalexin) 5) Cardiovascular drugs : i) lovastatin 6)

Antiasthma drugs : i) Ephedrine, isoprenaline and salbutamol. 7) Antiparasitic drugs: i) Artemisinin, artemether and artether. ii) Quinine, pamaquine,.

UNIT -III: Green Chemistry - I

Introduction. Principles, atom economy and scope. Introduction to alternative approaches. Solvent free reactions-principle, scope, utility of solvent free conditions, controlling solvent free reactions. Microwave activation-benefits, limitations, equipment, microwave effects- according to reaction medium and according to reaction mechanism. Solvent free microwave assisted organic synthesis: Introduction, solvent free techniques- Reactions on solid mineral supports, solid-liquid phase-transfer catalysts-Reactions without solvent support or catalyst.

UNIT -IV: Green Chemistry - II

Examples of reactions on solid supports, PTC, reactions without support or catalyst— deacetylation, deprotection, saponification of esters, alkylation of reactive methylene compounds, synthesis of nitriles from aldehydes, reductions. Microwave assisted reactions in water — Hoffmann elimination, hydrolysis, oxidation, saponification reactions. Microwave assisted reactions in organic solvents — Esterification reactions, Fries rearrangement, OrthoesterClaisen rearrangement, Diels- Alder reaction, decarboxylation. Ultrasound assisted reactions: Introduction, substitution addition, oxidation, reduction reactions.

References

1. Drug design By E.J. Arienes
2. Jenkin's quantitative pharmaceutical chemistry By Knevel and Dryden
3. Recent advances in Bioinformatics by I. A. Khan and A Khanum
4. Molecular modelling By Hans Dieter Holtje and Gerd Folkers
5. Molecular modelling By Leach
6. Bio Informatics by Rastogi
8. The Science and practice of Pharmacy – Vol I and Vol II by Remington
9. Burger's medicinal chemistry and drug discovery. By Manfred E. Wolf.
10. Introduction to Medicinal chemistry. By Patrick.
11. Introduction to drug design. By Silverman

12. Comprehensive medicinal chemistry. Vol 1-5 by Hanzsch.
13. Principles of medicinal chemistry. By William Foye
14. Biochemical approach to medicinal chemistry. By Thomas Nogrady.
15. New trends in green Chemistry by V.K.Ahluwalia

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY (OC)

IV Semester under CBCS

FOURTH SEMESTER LAB COURSE- PRACTICAL – V - (Total Marks 100)

Spectral Identification of Organic Compounds

Spectral Identification of Un-Known Organic Compounds by Interpretation of UV, IR, ^1H NMR, ^{13}C NMR and Mass Spectral Data

Note: A minimum of 30 representative examples should be studied

Recommended Books

1. A text-book of practical organic chemistry by A.I. Vogel, Vol. I and II.
2. Laboratory Manual of Organic Chemistry by B. B. Dey, M. V. Sitaraman Revised by T. R. Govindachari.
3. Unitized experiments in organic chemistry by R.Q. Brewster and others.
4. Practical Organic Chemistry by Mann and Saunders.
5. A textbook of practical organic chemistry by A.I. Vogel, Vol. I and II.
6. Laboratory Manual of Organic Chemistry by B. B. Dey, M. V. Sitaraman Revised by T.

R. Govindachari.

7. Unitized experiments in organic chemistry by R.Q. Brewster and others.

8. Practical Organic Chemistry by Mann and Saunders

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2018-19)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY (OC)

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1. Dr L.K.Ravindranath

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Anantapuramu

Cell: 9849000893

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

DEPARTMENT OF CHEMISTRY – PG

BOS JUSTIFICATION REPORT (2019 – 2020)

S.No	Paper & Title	Major additions/deletions	Justification
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1	304: Paper IV – Advanced Organic Spectroscopy	<p>The natural products</p> <ol style="list-style-type: none"> 1. chrysin 2,3-dihydroflavone , diadzein , Umbelliferone and Papaverine are deleted. 2. Isoflavone, Thymol, Geraniol, nerol , cis – jasmine, Camphor are added. 	<p>The introduced natural products have all spectra including 2D NMR. The changes are recommended by the BOS Committee with the main intention of making the chemistry syllabus student friendly.</p>
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KVR Govt College for Women, Kurnool
(Autonomous)

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(An Autonomous College in the Jurisdiction
of Rayachota University, Kurnool, Andhra Pradesh)
(2019 - 2021)

Minutes of the fourth Meeting of the Board
of Studies in M.A English held on 15.8.19
on Wednesday of August 2019 at 4 PM in the
Department of English, K.V.R. Govt College for women
Kurnool.

Present:

Dr. M. Farida Begum
In-charge of M.A. English
Asst. Prof. of English
KVR Govt (W) A
Kurnool

Chairperson

Prof. Y.S. Sarada
HOD of Dept of English
Padmarathi Mahila University
Tirupathi

University Nominee

Dr. Sunanna
In-charge of M.A English
Department of English
Sri Venkateswara Govt College (A)
Kurnool

Subject Expert

Dr. Syeda Jafara Qadri
In-charge of M.A. English
Samartha College
Kurnool

Subject Expert

22nd

- ⑤ Dr. P. Samarath
Faculty in English Educationist
Dept of English
Rayalaseema University
Kurnool
- ⑥ Kum. Janaki Alumna
- ⑦ Smt P. Subbarajamma Member
'16 of Dept of English (UG)
Lecturer in English
KUR G.C (W) A
Kurnool
- ⑧ Kum. Nandini Student Representative
3 yrs M.A. English
KUR G.C (W) A
Kurnool
- ⑨ Kum. Shreani Student Representative
3 yrs M.A. English
KUR G.C (W) A
Kurnool

Under the Guidance of University Nominee, the members of the Board of Studies of M.A. English discussed in detail the syllabus of Rajasthan University, evaluation, the scheme of instruction, University Paper Pattern and extension activities such as invited talks, Block Teaching, Peer Teaching, SET/NET coaching, Bridge course for 1 year's alone.

- ① It is unanimously proposed to retain the scheme of instruction and evaluation of I M.A. English & II M.A. English with the deletion of Project work in IV semester and instead.

Course : M.A. English
Semester : I, II
Papers : I - IV - I Sem
 I - II - II Sem

2.6 Communicative English

I Semester

II Semester

Theory = 80 M

Internal Assessment = 20 M

Assessment

Total = 100

Theory = 80 M

D.A. = 20 M

Total = 100

Internal Examination

1. Subjective / objective = 80 M

2. Seminar Presentation = 05 M + 3. Extra curricular = 05 M
20 M.

OBJECTIVES

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(7) It is unanimously resolved that the following shall be the objectives, syllabus & Question Paper pattern for the course w.e.f 2019-20 academic year and the same shall be in force till alternatives in the future BOS: objectives

1. It is resolved to conduct Bridge course for I M.A English students
2. It is resolved to continue Peer Teaching Block Teaching
3. It is resolved to follow Poojashree University with additions and deletions as per the local needs.
4. It is resolved to conduct student exchange Programme
5. It is resolved to conduct Block Teaching in Govt schools.
6. It is resolved to carry out English club with the incorporation of student centre activities
7. It is resolved to conduct field Trip.
8. It is resolved to follow 80 marks for Theory & 20 marks for Internal.
(80 Theory + 5 seminar presentation + 5 Extra curricular + 10 Semest Theory test = 100M)

S.No	Name and Designation	Acted as	Signature
①	Dr. M. Farida Begum Asst Prof. of English K. V. R. G. C. A Kurnool	Chairperson	H. Fine
②	Prof. Y. S. Sarada HOD Dept of English Padmarathi Mahila University Tirupathi	University Member	Y. S. Sarada 14/12/19
③	Dr. Sunkanna HOD & i/c of M.A English S. T. G. C. (A), Kurnool	Subject Expert	Dr. Sunkanna 14/12/19
④	Dr. Syeda Orfana Bader i/c of M.A English Osmania College (A) Kurnool	Subject Expert	Syeda Orfana 14/12/19
⑤	Dr. P. Saranathi Faculty in English Dept of English Rajalaxmi University Kurnool	Educational Member	P. Saranathi 14/12/19
⑥	Kam. Sarani	Alumna	R. Jankamma

20

Name & Designation	Acted as	Signature
① Smt. P. Subbarajamma 1/c of Dept of English (UG) Lecturer in English KVA Ge (w) A Kurnool	Member	P.S. Raju
② Kum. Mandini I yr M.A. English KVA Ge (w) A Kurnool	Student Representative	Mandini
③ Kum. Shivanii I yr M.A. English KVA Ge (w) A Kurnool	Student Representative	Shivanii

**K.V.R Govt
College For**

Women , KURNOOL

MA in English - Restructured Course
(Effective from 2019-2021 Batch)

First Semester

1. Poetry-I (100 marks)
2. Drama-I (100 marks)
3. Novel-I (100 marks)
4. Indian English Literature-I (100 marks)
5. Phonetics and Grammar (100 marks)

Second Semester

1. Poetry-II (100 marks)
2. Drama-II (100 marks)
3. Novel-II (100 marks)
4. Indian English Literature-II (100 marks)
5. History of the English language (100 marks)

K.V.R. Govt

College For

Women, Kur

nool MA in

English -

Restructured

Course

(Proposed syllabus for 2019-2021 Batch)

SEM

ESTER

-I

PAPER

1.1:

POETR

Y-I

UNIT-I

- | | |
|---------------|---|
| 1. Homer | The Iliad, Canto I |
| 2. John Donne | A Valediction Forbidding Mourning
The Sun Rising; Flea |

UNIT-II

- | | |
|-------------------|------------------------|
| 3. John Milton | Paradise Lost: Book-IX |
| 4. Alexander Pope | The Rape of the Lock |

UNIT-III

- | | |
|-----------------------|---------------------------------------|
| 5. William Wordsworth | Ode On the Intimations of Immortality |
| 6. S.T. Coleridge | Dejection an Ode |

UNIT-IV

- | | |
|-----------------|--|
| 7. P.B. Shelley | To A Skylark

Ode to the West Wind |
|-----------------|--|

8. John Keats

Ode to a Nightingale

Ode on a Grecian Urn

PAPER 1.2: DRAMA-I

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

1. Sophocles

Oedipus Rex

UNIT-II

2. Christopher Marlowe

Dr. Faustus

UNIT-III

3. William Shakespeare

Macbeth

4. William Shakespeare

As You Like It

UNIT-IV

5. William Congreve

The Way of the World

6. Oscar Wilde

The Importance of Being Earnest

PAPER 1.3: NOVEL-I

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

1. Henry Fielding

Joseph Andrews

UNIT-II

2. Jane Austen

Emma

3. Charles Dickens

A Tale of Two Cities

UNIT-III

4. George Eliot

Mill on the Floss

UNIT-IV

5. Thomas Hardy

Tess of the D'Urbervilles

6. Albert Camus

The Outsider (The Stranger)

PAPER 1.4: INDIAN ENGLISH LITERATURE-I

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

1. Rabindranath Tagore

Geetanjali: Song1 and Song 35

2. Nissim Ezekiel

Poet, Lover, Birdwatcher

Goodbye Party for Miss Pushpa T.S.

**UN
IT-
II**

3. A.K. Ramanujan

Love Poem for a Wife 1

Small Scale Reflections on a Great House

4. Kamala Das

An Introduction

My Grandmother's House

UNIT-III

5. Girish Karnad

Hayavadana

UNIT-IV

6. Dina Mehta

Brides are not for Burning

PAPER 1.5: PHONETICS AND GRAMMAR

UNIT-I

1. The Speech Mechanism
2. English Vowels
3. English Consonants

UNIT-II

3. Word Accent
4. Accent and Rhythm in Connected Speech
5. Phonological Environment: Assimilation, Elision, Juncture
6. Intonation

UNIT-III

Greenbaum and Randolph Quirk:

Varieties of English (Chapter1)

Some Major Concepts and Categories

(Chapter2) Verbs and Auxiliaries (Chapter3)

UNIT-IV

The following topics from *A Student's Grammar of the English Language* by Sidney

Greenbaum and Randolph Quirk:

The Semantics of the Verb Phrase

(Chapter4) Nouns and Determiners

(Chapter5)

The Simple Sentence (Chapter10)

Reference

1. A.C. Gimson

2. J. Sethi and P.V. Dhamija

3. Daniel Jones

An Introduction to the Pronunciation of English

A Course in Phonetics and Spoken English

English Pronouncing Dictionary (18th Edition) Ed.

Peter Roach, Jane Setter, and John Esling

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Restructured
Course
(proposed
syllabus for
2019-2021
Batch)**

SEMESTER-II PAPER

2.1: POETRY-II

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

- | | |
|--------------------|-----------------|
| 1. Alfred Tennyson | Ulysses |
| 2. Robert Browning | My Last Duchess |

UNIT-II

- | | |
|-------------------|---------------|
| 3. Matthew Arnold | Dover Beach |
| 4. G.M. Hopkins | The Windhover |

Pied Beauty

UNIT-III

- | | |
|---------------|----------------------|
| 5. W.B. Yeats | The Second Coming |
| | Sailing to Byzantium |
| 6. T.S. Eliot | The Waste Land |

UNIT-IV

- | | |
|------------------|---------------------|
| 7. W.H. Auden | The Unknown Citizen |
| 8. Philip Larkin | Church-Going |
| 9. Ted Hughes | Hawk Roosting |

PAPER 2.2: DRAMA-II

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

- | | |
|-----------------|-------------------|
| 1. Henrik Ibsen | A Doll's House |
| 2. J.M. Synge | Riders to the Sea |

UNIT-II

- | | |
|--------------|------------------|
| 3. G.B. Shaw | Arms and the Man |
|--------------|------------------|

UNIT-III

- | | |
|-------------------|--------------------|
| 4. Samuel Beckett | Waiting for Godot |
| 5. John Osborne | Look Back in Anger |

UNIT-IV

7. Anton Chekhov

The Cherry Archer

PAPER 2.3: NOVEL-II

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

1. D.H. Lawrence Sons and Lovers

UNIT-II

2. James Joyce A Portrait of the Artist as a Young Man
3. Hermann Hesse Siddhartha

UNIT-III

4. Virginia Woolf Mrs. Dalloway
5. Graham Greene The Power and the Glory

UNIT-IV

6. William Golding Lord of the Flies

PAPER 2.4: INDIAN ENGLISH LITERATURE- II

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

1. Mulk Raj Anand Untouchable

2. Raja Rao Kanthapura

UNIT-II

3. Bhavani Bhattacharya He who Rides a Tiger

4. R.K. Narayan The Guide

UNIT-III

5. Bharati Mukherjee Jasmine

6. Arundhati Roy The God of Small Things

UNIT-IV

7. Kiran Desai

The Inheritance of Loss

PAPER 2.5: History of the English language

UNIT-I

1. Grimm's Law and Verner's Law
2. Ablaut
3. Umlaut
4. The Great Vowel Shift

UNIT-II

3. Foreign Influences: Latin, French, Scandinavian
4. Makers of English: The Bible, Shakespeare

UNIT-III

5. Word Formation
6. Change of Meaning

UNIT-IV

7. The Rise of Standard English
- 8.. British English and American English

Reference

- | | |
|---|--|
| 1. H.C. Wyld | <i>A Short History of English</i> |
| 2. Albert C. Baugh | <i>A History of the English Language</i> |
| 3. Stuart Robertson and Frederic G. Cassidy | <i>The Development of Modern English</i> |

4. F.T. Wood

*An Outline History of the English
Language*

**KVR GOVERNMENT
COLLEGE
FOR
WOMEN
(AUTONOM
OUS)
KURNOOL**

M.A in English

Syllabus

with

Effect
from
2019-
2021
SEMES
TER-II

ELECTIVE

PAPER 2.6 : COMMUNICATIVE ENGLISH UNIT-I

:LISTENING SKILLS

1. Define Listening?

2. Types of Listening.

3. Barriers to

Listening.

4. Tips for Effective Listening.

UNIT-II : SPEAKING SKILLS

1. Jam
2. Convesation Skills
3. Group Disscussion
4. Interview Skills
5. Role Play
6. Vocabulary Building

UNIT-III : READING SKILLS

1. Define Reading

2. Kinds of

Reading.

3. Silent and Loud Reading.

4. Stages of Reading.

a. Pre-Reading

b. While

Reading c. Post-

Reading

UNIT-IV: WRITING SKILLS

1. Punctuation

2.Paragraph

Writing. 3.E-

Correspondence

JUSTIFICATION OF MAJOR CHANGES OR DELETIONS

S.no	Subject	Paper	Title of the Paper	Major Additions&Deletions	Justification
1.	M.A.English	1.1	Poetry-1	Tintern Abbey and The Rime of the Ancient Mariner are the lengthy poems and they are substituted with ode on the intimations of immortality and Dejection an ode	The earlier poems are lengthy and difficult. The poems added are also included in NET/SET Syllabus.
2.	M.A.English	1.4	Indian English Literature-I	The poem Obituary is substituted with the poem Small scale Reflections on a Great House .	To make the students grow nostalgic with the memories of childhood days in their respective Grandma's Houses.
3.	M.A.English	2.2	Drama-II	Pygmalion is replaced with Arms and the Man of G.B. Shaw	Pygmalion is included in in degree Advanced English .
				Harold Pinter's The Birthday Party is replaced with Anton Chekhov's The Cherry Orchard	To avoid absurd play as already 2 Absurd plays are in the syllabus. Anton Chekhov is a Russian Writer with pathos and heart touching themes.
4.	M.A.English	2.4	Indian English Literature-II	Midnight Children and The shadow line are deleted and He who rides a Tiger and The Inheritance of Loss are added.	This change is to introduce newwriters with newer themes.

JUSTIFICATION OF MAJOR CHANGES OR DELETIONS

5.	M.A.English	2.6	Elective Paper is titled Communicative English	Vocabulary Building& E-correspondance is added in the place of Resume and CV	To make the students face interviews confidently.

BOS సమావేశము

11

30/8/2019.

2019-20 విద్యా సంవత్సరానికి గాను పి.బి.రెండవ సంవత్సరము
 తెలుగు పాఠశాలలను వినియోగించుటకు గాను తేది 30-8-2019 వ
 తేదిన తెలుగు అధ్యయనకాని యందు 'బిర్ అఫ్ స్టడీ' సమావేశము
 నిర్వహించడమైంది. 1. పాఠశాలలను మార్చడమైంది. విశ్వవిద్యాలయము
 ప్రకారము ప్రకృత ప్రముఖ ఆమోదింపబడుచున్నది. క్రింది సభ్యుల ద్వారా
 పాఠశాలలను ఏకగ్రీవంగా ఆమోదింపబడుచున్నది.

Members of Board of Study

Sr.No	Category	Name & Designation	Cell No.	Signature
1.	Chair Person	Dr. V. Sri Devi · HOD · KVR GCW(A) KNW.	9849302546	V. Sridi
2.	University nomine	Prof. Narsimhulu · Principal · RU · KNW.		
3.	Subject Experts:	1. Dr. G. Gowri GDC · Guntur	9441537977	G. Gowri
		2. Dr. P. Vijaya Kumar HOD · Central University Anantapur.	9849302546	P. Vijaya
4.	Educationalist	Dr. M. Anwar Hussain HOD · Osmania College KURNOOL.	9290465517	M. Anwar
5.	Alumni	Dr. P. Vimala Devi Rtd · Telugu Lecturer KVR GCW(A) KNW	950503704	P. Vimala
6.	Members KVR GCW(A) KURNOOL.	1. Dr. M. Farnida Begum Lecturer in Telugu.	9550083202	M. Farnida
		2. V. Vindhya Vasini Devi Lecturer in Telugu.	8309986500	V. Vindhya
		3. Dr. V. Venkala Lakshamma Lecturer in Telugu.	7032354572	V. Venkala
7.	Students	1. D. Ruthamma · D. Ruthamma 2. Rajini · G. Rajini		D. Ruthamma G. Rajini
				Chairman

M.A. Telugu ద్వితీయ సంవత్సరము పాఠ్యాంశాలపై
 BOS సభ్యులు చర్చ జరిపి క్రింది పాఠ్యాంశాలను వేక'గ్రీవంగా
 ఆమోదించడ మొనరి.

M.A. Telugu ప్రథమ సంవత్సరము
 Paper - II సాంఘిక శాస్త్రమును సంబంధించిన ప్రశ్నోత్తర
 పాఠానికి ~~యూనిట్ 1~~ కాయలసమ వికల్ప విధానమును
 ప్రకారం 20+80 మార్కులను రూపొందించుకున్నాము.
 పరిధిలో సమీక్షించు లో ఆరవ పేపరు "అనువాద విధానాలు -
 ప్రశ్నోత్తరాలు" అనే పేపరును పెట్టుకున్నాము. &

రెండవ సమీక్షించు లోని "తెలుగు పత్రికా
 రంగం - రచనా విధానం" పే General Elective గా పేర్కొను
 చేసేకున్నాము. కాయలసమ వికల్ప విధానము ప్రకారం
 ప్రశ్నోత్తరము రూపొందించుకున్నాము.

III Semester మూడవ సమీక్షించు పాఠ్యాంశములలో
 20% సలబస్ ను మార్చడం జరిగినది.

Paper - I :- ~~యూనిట్ 1~~ సాంఘిక శాస్త్రం.

యూనిట్ 1 - RU syllabu.

" 2 - "

" 3 - రచయిత తేజో : సాహిత్య

సాంఘిక శాస్త్ర సిద్ధాంతాలు + పాఠ్యాంశ ప్రకృతి.

షెడ్యూల్ - ఆరిస్టోటెల్, ప్లాటో, లాంటినిస్, హెర్బెర్ట్

నాల్గవే పుస్తకమును జరిగినది.

4 - RU syllabu.

Paper - II :- ద్రావిడు భాషా విజ్ఞానం

యూనిట్ - 1 ద్రావిడు పద ప్రత్యయాల, వ్యాపి.

మిగిలినవి RU syllabu.

యూనిట్ - 2. RU syllabus లో సారం

ద్రావిడు భాషలలో తెలుగు స్థానం దేదనం
 పెట్టుకున్నాము

యూనిట్ - 3 - ద్రావిడు భాషలలో సంకీర్ణ విశ్లేషణం

దేదనంగా పెట్టుకున్నాము.

యూనిట్ - 4. ద్రావిడు భాషలలో ప్రత్యయాల.

దేదనంగా పేర్కొనుకున్నాము.

ఇవన్నీ ప్రత్యయ ప్రత్యయాల, తేమిశ్క

ప్రత్యేకంగా, విద్యార్థక ప్రత్యేకంగా, తీసుకోక ప్రత్యేకంగా
స్థానంలో పాఠ్యం చేసే విధానం.

Paper - III :- బాల వ్యాకరణం. 385 స్థానంలో తెలుగు
వ్యాకరణం - "భండస్" పాఠ్యం చేసే విధానం

కారణము :- బాల, ప్రాచీన వ్యాకరణం తెలుగు పాఠ్యం
చేసే విధానం. ఇ నాల్గవ యూనిట్ లోని ఆధునిక
భండస్ - లక్ష్యలక్షణాల - సమన్వయం క్షయం అలాగే నామం.

→ యతులలో తెలుగు యతి, నామ యతులలో, ధృతులలో
యతి, ద్విత్వ యతులను ఆధునికంగా పాఠ్యం చేసే విధానం.

Paper - IV - ఆధునిక తెలుగు కవిత్వం - వికాసం.

యూనిట్ - 1, 2, 3 లకు 10 పాఠ్యాంశాలపై పాఠ్యం
చేసే విధానం.

→ యూనిట్ 4 లోని స్వీకృత కవిత్వం - స్థానంలో
"నీలమేఘం" - పాఠ్యం చేసే విధానం.

Paper V - రాయలసీమ సాహిత్యం - ఏకాదశం

యూనిట్ 1, 2, 3 లకు 10 పాఠ్యాంశాలపై పాఠ్యం
చేసే విధానం

→ యూనిట్ 4 - ఏకాదశ సాహిత్యం స్థానంలో కరువుల బిల్లు
చరిత్రలు విజయలక్ష్మి - "సాతగాడు" పాఠ్యం చేసే విధానం

Paper - VI Option - 1. సాహిత్య వ్యాసం చరిత్ర

యూనిట్ - 1, 2, 3 లకు 10 పాఠ్యాంశాలపై పాఠ్యం
చేసే విధానం. 4 యూనిట్ స్థానంలో 'శిష్యులతో కథలు'

శిష్యులతో, కథలు కథలు - శిష్యులతో, సాత్రం చరిత్ర సాహిత్యం, పాఠ్యం
Option - 2 - తెలుగు నవల సాహిత్యం.

యూనిట్ - 1 స్థానంలో 'నవల కృషి మేకల్లు - క్రమంగా
చరిత్ర స్థానంలో 'నవల - అంజనం' నవలను పాఠ్యం చేసే

యూనిట్ - 2, 3, 4 లోని 10 పాఠ్యాంశాలపై పాఠ్యం చేసే
విధానం.

option - 3. తెలగు కథా సాహిత్యం "

యానిట్ - 1 RU పాఠ్యంకాలనే విశ్వాలు చేసుకున్నాము.
యానిట్ - 2 లో గురజాడ ఆస్ట్రాలియా - "వికా పేరివిలె" "

సానంలీ గురజాడ ఆస్ట్రాలియా - "దిద్దుబాటు" ఆనే
' కథానికను విశ్వాలు చేసుకున్నాము. మిగిలిన కథానికలను
RU ప్రకారం విశ్వాలు చేసుకున్నాము.

యానిట్ - 3 లో RU పాఠ్యంకాలనే విశ్వాలు చేసుకున్నాము.

యానిట్ - 4 లో "వివిధ మూర్తి - బగ న్నటకం" సానంలీ
ఉత్తయ్య సింహాసనం, బంబి నాథాయట

స్వామి - 603 సానంలీ బంబి నాథాయట స్వామి - సావ్యకుం
అనేక కథానికను విశ్వాలు చేసుకుని మిగిలిన కథానికలను
గాయలసిమ వికీ విస్తారం ప్రకారం విశ్వాలు చేసుకున్నాము.

IV Semester

నాలవ సెమిస్టర్.

Paper - I. సాహిత్య విమర్శ - తేజస్వీ.

యానిట్ - 1, 2 లలో RU పాఠ్యంకాలనే విశ్వాలు
చేసుకున్నాము. ఏ త.

యానిట్ - 3 లో కట్టమంచి రామలింగాశర్మ సానంలీ
'వల్లంపాటి వెంకట సుబ్బయ్య' విమర్శకున్ని విశ్వాలు చేసు
కున్నాము.

యానిట్ - 4 లో విమర్శ - ప్రతి విమర్శ - సర్కారు
అనుమతికాన్వీ సానంలీ 'కట్టమంచి రామలింగాశర్మ కవితా
తేజస్వీ విచారం" విశ్వాలు చేసుకున్నాము.

Paper - II. బాల వ్యాకరణం - అలంకారాలు కీర్తిక సానం
లో 'తెలగు వ్యాకరణం' - అలంకారాలు కీర్తికను విశ్వాలు
చేసుకున్నాము. బాల, ప్రాచీన వ్యాకరణ ప్రకరణాలను
విశ్వాలు చేసుకున్నాము.

యానిట్ - 1, 2, 3 లలో బాల వ్యాకరణ ప్రకరణాలలో
సాటు ప్రాచీన వ్యాకరణ ప్రకరణాలను విశ్వాలు చేసుకున్నాము.

యానిట్ - 4 లో కబాలంకారాలను దేవనాగరి విశ్వాలు
చేసుకున్నాము. అలంకారములలో ముఖ్యమైన
30 అలంకారాలను విశ్వాలు చేసుకుని మిగిలిన అలంకారాలను
అలంకరించాము.

Paper-III option-1 సంస్కృత ఇచ్చినాటకాలు - వ్యాకరణం - భంజనం

యానిట్-1 లో మూడవ భాగం - కిశాబ్దం వీయం -
జ్వలీయం వర్ణం-1-59 క్రితం " సూనం లో " కిశాబ్దం వీయం
ప్రథమం వర్ణం " ను వీక్ష్యం చేసుకున్నాము. ~~వి~~
యానిట్-2, 3, 4 లలో RV ప్రాజ్ఞాంకాలనే వీక్ష్యం
చేసుకున్నాము.

option-2 అధునిక తెలుగు నాటక సాహిత్యం.

యానిట్-1, 2, 4 లలో RV ప్రాజ్ఞాంకాలనే వీక్ష్యం చేసు
కున్నాము. యానిట్-3 లో డా॥ డి. విజయ భాస్కర్ -
మహాత్మా జ్యోతి బాప్కూలే " సూనం లో " కాళకురి నానాయక
రాజ్య - వర విక్రయం " వీక్ష్యం చేసుకున్నాము.

option-3 ప్రాచీన దాక్షిణాత్రీ సాహిత్యం - యుల
నాటక ఆధ్వర్యం.

యానిట్-1, 2, 4 లో RV ప్రాజ్ఞాంకాలనే వీక్ష్యం
చేసుకున్నాము. యానిట్ 3 - ప్రాచీన దాక్షిణాత్రీ సాహిత్యం
సంస్కృత ప్రణావం - పురాణాలిహసాలు - సంకేత కావ్యం
సూనం లో. ప్రాచీన దాక్షిణాత్రీ సాహిత్యం - దేశీ సాహిత్య ప్రక్రియలు
అనే అంశమును వీక్ష్యం చేసుకున్నాము.

నాటక సమితులు ప్రఖ్యాతములను విశ్లేషణలయము
ప్రకారము 70+30 మారులు వీక్ష్యం చేసుకున్నాము. 30
మారులు అంతరిత మారులు. 20 మారులు అంతరిత పరిక
5 మారులు సరిపాఠ, 5 మారులు సహ ప్రాజ్ఞాత్రీ క్రమాలకు
వీక్ష్యం చేసుకున్నాము.

Project- యానిట్ కు 200 మారులు,

~~వి~~ Viva కు 100 మారులు కేటాయింపబడినాయి. యానిట్ ను
విశ్లేషణలయము ప్రకారము మారులు వీక్ష్యం చేసుకున్నాము
విశ్లేషణ అనేక, అభిరుచి అనుగుణంగా అంశం ను వీక్ష్యం
చేసు కీవరానికి అగిన అవకాశము కలగచేసినాము. విశ్లేషణ
సంఖ్య ప్రకారము అధ్యయనము విశ్లేషణలయము ను చేసుకు
నాలని నిర్ణయించుకుంటున్నాము.

యానిట్ ను విశ్లేషణలయము ప్రకారము.

విశ్లేషణలయము వీక్ష్యం చేసుకుని 2017 అంశము మార్చడము

సభ్యుల పేర్లు :-

1. Prof. I. Dr. V. Sridevi - V. Sridevi

2. Prof. Narsimhulu.

3. Dr. G. Gowri - G. Gowri

4. Dr. P. Vijayakumar - P. Vijayakumar

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K.V.R GOVERNMENT COLLEGE FOR WOMEN (A), KURNOOL
DEPARTMENT OF CHEMISTRY
SYLLABUS FOR SEMESTER – II 60 Hrs (4h/w)
Effective from Academic year 2019-20
PAPER – II: INORGANIC, ORGANIC & PHYSICAL CHEMISTRY

INORGANIC CHEMISTRY

UNIT-I

1. Chemical Bonding

7 h

Valence bond theory- Limitations- hybridization- applications of VB theory to ClF_3 , $\text{Ni}(\text{CO})_4$ - Molecular orbital theory - LCAO method- construction of M.O. diagrams for homo-nuclear (N_2 , O_2) and hetero-nuclear diatomic molecules (CO and NO).

2. Surface chemistry

8 h

i) Colloidal State-Definition of colloidal state. Solids in liquids (sols), preparation, properties - kinetic, optical, electrical - purification-Stability of colloids, Hardy-Schulze rule and protective colloids- Gold number- significance. Liquids in liquids (emulsions)- definition types- preparation, properties and uses. Liquids in solids (gels) preparation and uses.

ii) Adsorption: Physisorption, chemisorptions- differences. Freundlich and Langmuir adsorption isotherms- Applications of adsorption.

ORGANIC CHEMISTRY

UNIT-II

Stereochemistry of carbon compounds

12 h

Molecular representations- Wedge, Fischer, Newman and Saw-Horse formulae.

Optical isomerism: Optical activity- wave nature of light, plane polarised light, optical rotation and specific rotation.

Chiral molecules- definition and criteria (Symmetry elements)- Definition of enantiomers and diastereomers – Explanation of optical isomerism with examples - Glyceraldehyde, Lactic acid, Alanine, Tartaric acid, 2,3-dibromopentane.

D,L and R,S configuration methods and E,Z- configuration with respect to alkenes.

UNIT - III

Benzene and its reactivity

10h

Structure of Benzene – Resonance Concept and MO concept- orbital picture of Benzene. Aromaticity -definition, Huckel's rule - application to Benzenoid (Benzene, Naphthalene) and Non - Benzenoid compounds (cyclopropenyl cation, cyclopentadienyl anion and tropylium cation)

Electrophilic substitution reactions-general mechanism- mechanism of nitration, Friedel Craft's alkylation and acylation. Orientation of aromatic substitution - Definition of ortho, para and meta directing groups. Ring activating and deactivating groups with examples (Electronic interpretation). Orientation of (i) Amino, methoxy and methyl groups (ii) Carboxy, nitro, nitrile, groups (iii) Halogens.

PHYSICAL CHEMISTRY

UNIT-IV

i) Gaseous state

6 h

Compressibility factor, deviation of real gases from ideal behaviour. van der Waal's equation of state. Andrew's isotherms of carbon dioxide,(P,V – curves) continuity of state. Critical phenomenon. Relationship between critical constants and vander Waal's constants. Law of corresponding states and reduced equation of states-Joule Thomson effect.

2.Liquid state

4 h

Structural differences between solids, liquids and gases. Liquid crystals (mesomorphic state). Classification of liquid crystals into Smectic, Nematic and cholestric. Differences between liquid crystals and solid/liquid. Application of liquid crystals.

UNIT-V

10 h

Solutions

Solutions of gases in liquids- Henry's law- limitations. Solutions of liquids in liquids- ideal solutions- Raoult's law- Non-ideal solutions. Positive and negative deviations from Raoult's law- VP-composition and boiling point –composition curves. Azeotropic mixtures-HCl-H₂O, ethanol-water systems. Partially miscible liquids-phenol-water, trimethylamine-water, nicotine-water systems. Effect of impurity on CST. Completely immiscible liquids- principle and theory of steam distillation- Nernst distribution law- applications.

List of Reference Books

1. Principles of physical chemistry by Prutton and Marron
2. Solid State Chemistry and its applications by Anthony R. West
3. Text book of physical chemistry by K L Kapoor
4. Text book of physical chemistry by S Glasstone
5. Stereochemistry of Organic compounds by E L Eliel
6. Advanced Organic Chemistry by F A Carey and R J Sundberg
7. Stereochemistry by P.S.Kalsi
8. Stereochemistry of Organic compounds by D. Nasipuri
9. Advanced physical chemistry by Bahl and Tuli
10. Advanced Inorganic Chemistry Vol-I by Satyaprakash, Tuli, Basu and Madan

LABORATORY COURSE -II

30 hrs (2 h / w)

Practical-II Analysis of Mixture Salt

(At the end of Semester-II)

Qualitative inorganic analysis

Analysis of mixture salt containing two anions and two cations (From two different groups) from the following:

Anions: Carbonate, sulphate, chloride, bromide, acetate, nitrate, borate.

Cations: Lead, copper, iron, aluminum, zinc, manganese, calcium, barium and ammonium.

K.V.R GOVERNMENT COLLEGE FOR WOMEN (A), KURNOOL
DEPARTMENT OF CHEMISTRY
SYLLABUS FOR SEMESTER – III 60 Hrs (4h/w)
Effective from Academic year 2019-20
PAPER – III: INORGANIC, ORGANIC & PHYSICAL CHEMISTRY

INORGANIC CHEMISTRY

UNIT – I

1. Chemistry of d-block elements(Transition Elements) 9 h

Characteristics of d-block elements with special reference to electronic configuration-variable oxidation states and stability of various oxidation states, colour, magnetic properties, catalytic properties and ability to form complexes.

2. Theories of bonding in metals 6 h

Metallic properties and its limitations- **Theories of bonding in metals**- Free electron theory-limitations, Valence bond theory - Explanation of thermal and electrical conductivity of metals-limitations, Band theory(MO Theory) formation of bands, explanation of conductors, semiconductors and insulators.

UNIT – II

3. Metal carbonyls

7 h

Definition -classification of metal carbonyls, structures and shapes of metal carbonyls of $V(CO)_6$, $Ni(CO)_4$, $Cr(CO)_6$, $Fe(CO)_5$, $Mn_2(CO)_{10}$, EAN rule- Application to Metal Carbonyls.

4. f-block elements(Inner Transition Elements)

8 h

Lanthanides – Position in the periodic table- electronic configurations, oxidation states, lanthanide contraction-cause and consequences of lanthanide contraction, magnetic properties.

Actinides - Position in the periodic table- electronic configuration, oxidation states, actinide contraction, comparison of lanthanides and actinides.

ORGANIC CHEMISTRY

UNIT – III

1. Halogen compounds

5 h

Nomenclature- classification of mono halogen compounds based on hybridization of carbon to which halogen atom is bonded.

Aliphatic nucleophilic substitution reactions- S_N1 and S_N2 – reactions- mechanisms with examples – Stereochemical aspects of S_N1 and S_N2 – reactions.

2. Hydroxy compounds

5 h

Nomenclature and classification of hydroxy compounds.

Alcohols: Preparation by hydroboration – Oxidation reaction, grignard synthesis of alcohols.

Phenols: Preparation from i) diazonium salt, ii) aryl sulphonates, iii) cumene. Physical properties- Hydrogen bonding (intermolecular and intramolecular). Effect of hydrogen bonding on boiling points and solubility in water.

Chemical properties:

- Dehydration of alcohols.
- Oxidation of alcohols by CrO_3 , $KMnO_4$.
- Special reactions of phenols: Bromination, Kolbe-Schmidt reaction, Reimer-Tiemann reaction, Fries rearrangement, azocoupling, Pinacol-Pinacolone rearrangement.

Identification of alcohols by oxidation with $KMnO_4$, Ceric ammonium nitrate, Luca's reagent and phenols by reaction with Neutral $FeCl_3$.

UNIT – IV

Carbonyl compounds

10 h

Nomenclature -structure of the carbonyl group. Synthesis of aldehydes and ketones from acid chlorides, from 1,3-dithianes, synthesis of ketones from nitriles and from carboxylic acids. Physical properties: Reactivity of carbonyl group in aldehydes and ketones.

Nucleophilic addition reactions with a) $NaHSO_3$, b) HCN , c) $RMgX$, d) ROH (Hemi acetal and acetal formation) Reactions with Ammonia derivatives a) NH_2OH , b) $PhNHNH_2$, c) 2,4 DNPH- Base catalysed reactions: a) Aldol condensation reaction, b) Benzoin condensation c) Perkin reaction d) Knoevenagel reaction. e) Cannizzaro's reaction, f) Haloform reaction, Baeyer-Villiger oxidation of ketones., Clemmensen reduction, Wolf-Kishner reduction, MPV reduction. Distinguishing tests of aldehydes from ketones.

PHYSICAL CHEMISTRY

UNIT-V

Dilute solutions

10h

Colligative properties – definition, Lowering of vapour pressure, , relative lowering of vapour pressure-Raoult's law- its relation to molecular weight of non-volatile solute. Elevation of boiling point and depression of freezing point. Derivation of relations between molecular weight and elevation in boiling point and depression in freezing point. Experimental methods of determination of elevation in boiling point and depression in freezing point. Osmosis, osmotic pressure, experimental determination-relation between molecular weight of non-volatile solute from osmotic pressure- Van't Hoff Theory of dilute solutions. Abnormal Colligative properties- Van't Hoff factor.

List of Reference Books

1. Selected topics in inorganic chemistry by W.D.Malik, G..D.Tuli,R.D.Madan
2. Inorganic Chemistry J E Huheey, E A Keiter and R L Keiter
3. A Text Book of Organic Chemistry by Bahl and Arun bahl
4. A Text Book of Organic chemistry by I L Finar Vol I
5. Organic chemistry by Bruice
6. Organic chemistry by Clayden
7. Advanced Inorganic chemistry by Gurudeep Raj
8. Basic Inorganic Chemistry by Cotton and Wilkinson
9. Concise Inorganic Chemistry by J.D.Lee

LABORATORY COURSE -III

30 hrs. (2 h / w)

Practical Paper-III Titrimetric analysis and Organic Functional Group Reactions (At the end of Semester-III)

Titrimetric analysis:**EDTA Titrations****25M**

1. Determination of Mg(II) using MgSO_4
2. Determination of Zn(II) using ZnSO_4

Organic Functional Group Reactions**25M**

3. Reactions of the following functional groups present in organic compounds

(at least four) Alcohols, Phenols, Aldehydes, Ketones, Carboxylic acids and Amides

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DEPARTMENT OF CHEMISTRY
SYLLABUS FOR SEMESTER – IV 60 Hrs (4h/w)
Effective from Academic year 2019-20
PAPER – IV: SPECTROSCOPY, ORGANIC & PHYSICAL CHEMISTRY

UNIT-I**6h****1) Spectrophotometry**

General features of absorption - Beer-Lambert's law and its limitations- Transmittance, Absorbance, and molar absorptivity- Single and double beam spectrophotometers- Application of Beer-Lamberts law for quantitative analysis of 1. Chromium in $\text{K}_2\text{Cr}_2\text{O}_7$

2. Manganese in Manganous sulphate

2. Electronic spectroscopy:**8h**

Interaction of electromagnetic radiation with molecules and types of molecular spectra. Energy levels of molecular orbitals (σ , π , n) - Selection rules for electronic spectra- Types of electronic transitions in molecules - effect of conjugation. Concept of chromophore and auxochrome.

UNIT-II

1. Infra red spectroscopy**8h**

Different Regions in Infrared radiations. Modes of vibrations in diatomic and polyatomic molecules- Characteristic absorption bands of various functional groups. Interpretation of spectra-Alkanes, Aromatic Hydrocarbons, alcohols, aldehydes, Ketones, and amines with one example each.

2. Proton magnetic resonance spectroscopy (¹H-NMR)**8h**

Principles of NMR, equivalent and non-equivalent protons- position of signals. Chemical shift, Scales of Chemical shift- Factors influencing chemical shift. Spin-spin coupling, definition-Explanation.coupling constants- significance. Applications of NMR to - ethyl bromide, ethanol, acetaldehyde, 1, 1, 2-tribromo ethane, ethyl acetate, toluene and acetophenone.

ORGANIC CHEMISTRY

UNIT-III**1. Carboxylic acids and derivatives****6 h**

Nomenclature- classification and structure of carboxylic acids- Methods of preparation by a) Hydrolysis of nitriles, amides b) Hydrolysis of esters by acids and bases with mechanism c) Carbonation of Grignard reagents. **Physical properties:** acidity- strength of acids with examples of trimethyl acetic acid and trichloroacetic acid. Relative differences in the acidities of aromatic and aliphatic acids. **Chemical properties:** Reactions involving H, OH and COOH groups- salt formation, anhydride formation, acid chloride formation, amide formation and esterification (mechanism).

2. Active methylene compounds**4 h**

Acetoacetic ester: Preparation by Claisen condensation, Acid hydrolysis and ketonic hydrolysis. Preparation of a) monocarboxylic acid. b) Dicarboxylic acids. c) Reaction with urea

Malonic ester: preparation from acetic acid. **Synthetic applications:** Preparation of a) monocarboxylic acids (propionic acid and n-butyric acid). b) Dicarboxylic acids (succinic acid and adipic acid) c) α,β -unsaturated carboxylic acids (crotonic acid). d) Reaction with urea.

PHYSICAL CHEMISTRY

UNIT-IV**Electrochemistry-I****7 h**

Specific conductance, equivalent conductance and Molar conductance- Variation of Specific conductance and equivalent conductance with dilution. Kohlrausch's law- Applications. Arrhenius theory of electrolytic dissociation- limitations. Ostwald's dilution law- limitations. Debye-Huckel-Onsagar's equation for strong electrolytes (elementary treatment only). Migration of ions, Definition of transport number, definition and experimental determination by Hittorfs method. Applications of conductivity measurements- conductometric titrations.

UNIT-V**Electrochemistry-II****7 h**

Reversible and irreversible cells-Types of reversible electrodes- metal ion electrodes-gas electrodes- H₂, Cl₂ Electrodes Single electrode potential- standard electrode potential, sign convention- reference electrodes- 1) SHE-construction, working, disadvantages. 2)

calomel electrode. EMF of cell and its measurement. Nernst Equation (for cationic and anionic electrodes). Potentiometric titrations.

2.Phase rule

6h

Explanation of the terms- phase, components and degrees of freedom. Gibbs phase rule. Phase equilibrium of one component system - water system. Phase equilibrium of two-component system-condensed phase rule- Pb-Ag system-concept of desilverisation of lead-NaCl-Water system- Freezing mixtures and importance.

List of Reference Books

1. Spectroscopy by William Kemp
2. Spectroscopy by Pavia
3. Organic Spectroscopy by J. R. Dyer
4. Modern Electrochemistry by J.O. M. Bockris and A.K.N.Reddy
5. Advanced Physical Chemistry by Atkins
6. Introduction to Electrochemistry by S. Glasstone
7. Elementary organic spectroscopy by Y.R. Sharma

LABORATORY COURSE – IV

Practical Paper - IV Titrimetric analysis and IR Spectral Analysis (at the end of semester IV)

30 hrs (2 h / W)

Physical Chemistry

25M

1. Determination of Fe (II) using KMnO_4 with oxalic acid as primary standard.
2. Determination of Cu (II) using $\text{Na}_2\text{S}_2\text{O}_3$ with $\text{K}_2\text{Cr}_2\text{O}_7$ as primary Standard.

IR Spectral Analysis

25 M

IR Spectral Analysis of the following functional groups with examples

- a) Hydroxyl group
- b) Carbonyl group
- c) Amino group
- d) Aromatic group

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FIRST YEAR B.Sc. CHEMISTRY

(w.e.f. 2019-2020)

QUESTION PAPER PATTERN

Time: 3 Hrs

Max. Marks : 60

PART-A

Answer any FIVE questions. Each question carries 4 marks.

5X4 = 30M.

The student should answer Five Questions out of eight questions that are given in the question paper. (At least one question should be given from Units I to V)

PART-B

Answer ALL questions. Each question carries 8 marks.

5X8 = 40 M

The student should answer ALL the FIVE Questions that are given in the question paper. (Equal weight age should be given to Units I to V)

MODEL PAPER

THREE YEAR B.Sc, DEGREE EXAMINATION

FIRST YEAR EXAMINATIONS

SEMESTER I

PAPER – I: INORGANIC, ORGANIC & PHYSICAL CHEMISTRY

Time: 3 hours

Maximum Marks: 60 M

SECTION- A

Answer any **FIVE** of the following questions

Each carries **FOUR** marks

4M X 5 = 20 Marks

1. Define the electron deficient molecules and draw the structure of Borazole and Diborane.

2. Classify the Oxides based on the oxygen content with one example to each?
3. Explain general properties of Pseudo halogens?
4. Define the Carbonium ion and explain the stability with no bond resonance?
5. Define the Markonikov's rule and explain the addition of 1- Propene with HBr?
6. Explain the acidity of the Acetylinic hydrogen with example?
7. What are crystal Defects? Explain Schottky and Frenkel defects?
8. Define lattice point and Unit Cell?

PART- B

Answer **ALL** the questions

8M X 5 = 40 Marks

9. (a) Write note on Preparation, Structure and Properties of Silicones.

(OR)

(b) Explain the Preparation and Properties of Hydroxylamine.

10. (a) Explain the classification of oxides based on Chemical behavior and Oxygen content?

(OR)

(b) How the following are prepared from the Methyl Magnesium bromide and methyl lithium

- 1) Formaldehyde 2) Acetaldehyde 3) Acetone 4) t- butyl alcohol?

11. (a) Describe different types of Organic Reactions with one example to each?.

(OR)

(b) Write notes on the following

- 1) Mesomeric effect 2) Hyper conjugation 3) Inductive effect

- 12.(a) Explain the addition of these reagents to alkenes with mechanism.

- 1) H₂O 2) HOX 3) H₂SO₄

(OR)

(b) Explain Baeyer's bond angle strain theory?

13. (a) How do you determine the Crystal structure by X-ray diffraction method?

(OR)

(b) Derive Braggs Equation?

MODEL PAPER
THREE YEAR B.Sc, DEGREE EXAMINATION
FIRST YEAR EXAMINATIONS
SEMESTER II
Paper –II: INORGANIC, ORGANIC & PHYSICAL CHEMISTRY

Time: 3 hours

Maximum Marks: 60

PART- A

Answer any **FIVE** of the following questions

Each carries **FIVE** marks

4M x 5 = 20 Marks

1. Draw the Molecular orbital diagrams of N₂ and O₂?
 2. Explain Freundlich adsorption isotherm?
-

3. Discuss D, L configuration and R, S configuration?
4. Draw the conformational structures of Cyclohexane.?
5. Define aromaticity and apply the Huckel's rule to benzene and naphthalene?
6. Explain Joule Thomson effect?
7. Write the Applications of Liquid Crystals as LCD Devices?
8. Explain Raoult's law?

PART- B

Answer **ALL** the questions

Each carries **EIGHT** marks

8 M x 5 = 40 Marks

9. (a) What is Bonding and Antibonding orbitals. Explain Molecular orbital Diagrams of CO, NO and O₂? Find their Magnetic Nature and bond order?
(OR)
(b) What is adsorption isotherm? Explain Langmuir adsorption isotherm?

10. Explain Enantiomers and Diastereomers with examples? Write any 3 methods of Resolution?
(OR)

Explain Molecular Representations – Wedge, Fischer, Newman and Saw-horse formulae?

11. (a) Describe the Molecular Orbital structure of Benzene?
(OR)
(b) Explain the orientation in benzene with respect to alkyl and nitro groups?
12. Derive Vanderwaals equation of state?

(OR)

Classification of Liquid Crystals into Smectic and Nematic and write the differences between Liquid crystals and solid/liquid?

13. What are Azeotropes? Explain with HCL-H₂O VP-Temperature curve?
(OR)

What is Critical solution Temperature? Explain about Phenol-Water system? What is effect of Impurity on CST?

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SECOND YEAR B.Sc. CHEMISTRY

(w.e.f. 2019-2020)

QUESTION PAPER PATTERN

Time: 3 Hrs

Max. Marks: 60

PART-A

Answer any FIVE questions. Each question carries 4 marks.

5X4 = 30M.

The student should answer Five Questions out of eight questions that are given in the question paper. (At least one question should be given from Units I to V)

PART-B

Answer ALL questions. Each question carries 8 marks.

5X8 = 40 M

The student should answer ALL the FIVE Questions that are given in the question paper. (Equal weight age should be given to Units I to V)

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SECOND YEAR B.Sc. CHEMISTRY

(w.e.f. 2019-2020)

MODEL QUESTION PAPER

II YEAR B.Sc. - III – SEMESTER - PAPER – III: INORGANIC, ORGANIC & PHYSICAL CHEMISTRY

Time: 3 Hrs

Max. Marks: 60

PART-A

Answer any FIVE questions. Each question carries 4 marks.

5X4=20M.

1. Write notes on the catalytic properties of d-block elements.
 2. Explain the magnetic properties of Lanthanides.
 3. Explain the classification of Metal Carbonyls.
-
-

4. Explain the acidic nature of Phenols.
5. Write notes on. (a) MPV reduction (b) Cannizzaro reaction
6. Explain the Esterification of Carboxylic acids
7. Derive the relation between lowering of Vapor pressure and molecular weight of a non volatile solute?
8. Explain Raoult's law?

PART-B

Answer ALL questions. Each question carries 8 marks.

5X8=40 M

9. (a) Write notes on
(1) Free electron theory of metals (2) Valence bond theory
(or)
(b) Write notes on
(1) Variable oxidation states (2) Ability to form Complexes
10. (a) What is Lanthanide Contraction? What are its causes and consequences?
(or)
(b) Explain the Structure of $Mn_2(CO)_{10}$ and $Fe_2(CO)_9$
11. (a) Explain the mechanism of SN^1 and SN^2 reactions in alkyl halides
(or)
(b) Write the mechanism of the following (1) Riemer-Tiemer reaction (2) Pinacol-pinacolone rearrangement
12. (a) Explain how the aldehydes react with following reagents
(1) HCN (2) $NaHSO_3$ (3) NH_2OH (4) 2, 4-DNPH.
(or)
(b) Explain the mechanism of
(1) Aldol Condensation (2) Benzoin condensation
13. (a) Define the Depression in Freezing point? Derive its relation to the molecular weight of a non volatile solute?

or

(b) Write about (i). experimental determination of Osmotic pressure, (ii). Theory of dilute solutions

THREE YEAR B.Sc, DEGREE EXAMINATION

SECOND YEAR EXAMINATIONS

SEMESTER IV

Paper –IV: SPECTROSCOPY AND PHYSICAL CHEMISTRY

Time: 3 hours

Maximum Marks: 60

PART- A

Answer any **FIVE** of the following questions

Each carries **FOUR** marks

5x4 = 20 Marks

1. Define Beer – Lambert's Law? Explain its application to the qualitative analysis of Chromium in Potassium dichromate?

2. Explain the concept of Chromophore and Auxochrome?
3. Describe the modes of vibrations in diatomic and polyatomic molecules when irradiated with IR radiation?
4. Describe the NMR spectrum of Ethanol?
5. Explain the preparation of Acetoacetic ester by Claisen condensation method.
6. Give the preparation of Acetic acid from Malonic ester.
7. Define and explain the Kohlrausch's law?
8. Explain the thermodynamic derivation of Gibb's phase rule?

PART- B

Answer **ALL** the questions

Each carries **EIGHT** marks

5x8 = 40 Marks

9. Describe the functioning of Single and Double beam Spectrophotometer?
(OR)

Write a note on (a). types of electronic transitions, (b). selection rules for electronic spectra?

10. Describe an IR spectrum? How are IR spectra interpreted?
(OR)

Write a note on (a). Chemical Shift, (b). Applications of NMR Spectroscopy?

- 11(a) Explain the preparation of Carboxylic acids by

(1) Hydrolysis of Nitriles (2) Carbonation of Grignard reagent
(or)

(b) How the following products are formed from Malonic ester?

(1) Succinic acid (2) Adipic acid.

12. Define Transport number? Describe its determination by Hittorf's method?

(OR)

Write a note on (a). Ostwald's dilution law, (b). Debye – Huckle – Onsagar equation?

13. Describe the phase diagram of Lead – Silver system?

(OR)

(b) Describe the phase diagram of NaCl – Water system?

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DEPARTMENT OF CHEMISTRY – UG

BOS JUSTIFICATION REPORT (2019 – 2020)

S.No	Paper & Title	Major additions/deletions	Justification
1	III - Inorganic, Organic & Physical Chemistry	Earlier syllabus for paper – III consisted of two components namely Inorganic and Organic Chemistry. From this academic year the syllabus for paper III is rearranged with three components namely Inorganic, Organic & Physical Chemistry. 1. The Chapters Carboxylic acid and derivatives and Active	The Chapters Carboxylic acids and Active methylene compounds are deleted so as to reduce the burden of Organic Chemistry and level of difficulty over the students. The chapter Dilute solution is added under Physical Chemistry part to compensate the deletion of above chapters of Organic Chemistry. The above changes are recommended by the BOS Committee with the main intention of making the

		<p>methylene compounds are deleted.</p> <p>2. The Chapter Dilute solution is added to the syllabus.</p>	chemistry syllabus student friendly.
2	IV - Spectroscopy, Organic & Physical Chemistry	<p>Earlier syllabus for paper – IV consisted of two components namely Spectroscopy and Physical Chemistry. From this academic year the syllabus for paper IV is rearranged with three components namely Spectroscopy, Organic & Physical Chemistry.</p> <p>1. The Chapter Dilute solution is deleted to the syllabus.</p> <p>2. The Chapters Carboxylic acid and derivatives and Active methylene compounds are added.</p>	<p>The Chapters Carboxylic acids and Active methylene compounds are added in Paper – IV so as to balance Organic Chemistry syllabus keeping average students in mind.</p> <p>The chapter Dilute solution is deleted under Physical Chemistry and added to Paper – III syllabus so as to balance the Physical Chemistry in between Paper – III & IV.</p> <p>The above changes are recommended by the BOS Committee with the main intention of making the chemistry syllabus student friendly.</p>

KVR Govt. College for Women
(AUTONOMOUS)
 Re-Accredited by NAAC with Grade "A"
KURNOOL



BOARD OF STUDIES MEETING

(Curriculum under CBCS)

w.e.f. 2019-2020



DEPARTMENT OF COMPUTER SCIENCE

&

APPLICATIONS

27-07-2019

II - B.Sc. (MPCS, MCDs), II B.Com (CA) & II BA AE

KVR Govt. College for Women (A)

Re-Accredited by NAAC with 'A' Grade, Kurnool.



DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

BOARD OF STUDIES

(w.e.f. 2019-20)

Minutes of Board Of Studies meeting held in the Department of Computer Science, KVR Govt. College for Women(A), Kurnool on 27-07-2019 at 10:00 AM and resolved the following:

CONSTITUTION OF THE BOARD OF STUDIES OF UG COMPUTER SCIENCE & APPLICATIONS

S.No.	Name & Designation	Acted as	Signature
1.	Smt. G. Girija Rani, Incharge of Dept. of Computer Science, KVR Govt. College for Women(A), Kurnool.	Chairperson	G. Girija Rani
2.	Dr.N.Geetanjali , Professor, BOS HOD Dept. of Computer Science & Technology, SKU, Anantapuram.	University Nominee	N. Geetanjali
3.	Dr . N.Uday Bhaskar, HOD, Govt.College(A), Anantapuram.	Subject Expert	N. Uday Bhaskar
4.	Dr . G.Ravi Kumar, Asst.Professor Dept. of Computer Science, Rayalaseema University,Kurnool	Subject Expert	G. Ravi Kumar
5.	Smt. N. Ramadevi , Associate Professor Computer Science Department,Santhiram Engineering College,Nandyal.	Educationalist	N. Ramadevi
6.	Sri K.Maheswara Reddy, Lecturer in Computer Science, KVR Govt. College for Women(A), Kurnool	Member	K. Maheswara Reddy
7.	Smt.G. Sunitha, Lecturer in Computer Science, KVR Govt. College for Women(A), Kurnool	Member	G. Sunitha
8.	Smt. D.Haveela Bala, Lecturer in Computer Applications, KVR Govt. College for Women(A), Kurnool	Member	D. Haveela Bala
9.	Kum. P.Anusha, Lecturer in Computer Science, KVR Govt. College for Women(A), Kurnool	Member	P. Anusha
10.	Smt.V.Arana Kumari, Lecturer in Computer Applications, KVR Govt. College for Women(A), Kurnool	Member	V. Arana Kumari
11.	Kum. S.Shahista Afreen, Lecturer in Computer Science, KVR Govt. College for Women(A), Kurnool	Member	S. Shahista Afreen
12.	Smt.T.Raghava Krishnaveni, Lecturer in Computer Science, KVR Govt. College for Women(A), Kurnool	Member	T. Raghava Krishnaveni

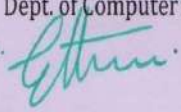
13.	Smt. B.Manju Bhargavi , Lecturer in Computer Science, St. Josephs Degree College, Kurnool.	Alumni	B. Manju Bhargavi
14.	K. Uma Maheswari, II B.Sc MCDs	Representative from students	K. Uma Maheswari
15.	A.Shanthi Priya, II BA AE	Representative from student	A. Shanthi priya

RESOLUTIONS

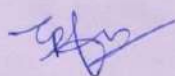
The members of BOS met on 27-07-2019, in the Department of Computer Science, KVR Govt. College for Women(A), Kurnool under the chairmanship of G. Girija Rani, I/C of the Department of Computer Science & Applications, discussed the proposals on the curriculum for the II year UG course syllabus, modification in III year question paper pattern and passed the following resolutions.

The following resolutions are made and passed unanimously.

1. Resolved to approve the revised syllabus in Computer Science & Applications for II B.Sc. (MPCs, MCDs), II B.Sc (MCDs) Data Science, II B.A Computer Applications (AE) & II B.Com Computer Applications Semester-III and Semester-IV as decided by the expert members and members of the Board of Studies (UG) Computer Science & Applications.
2. The revised syllabus will come into effect from the academic year 2019-20 for Semester III and Semester IV of II B.Sc. (MPCs, MCDs), II B.Sc (MCDs) Data Science, II B.A Computer Applications (AE) & for IV Semester of II B.Com Computer Applications.
3. Resolved to conduct the practical examinations at the end of Semester-III & IV for II B.Sc. (MPCs, MCDs), II B.Sc (MCDs) Data Science, II B.A Computer Applications (AE) & for IV Semester of II B.Com Computer Applications students for 50 marks in each paper.(Pass Marks:20)
4. In each Semester there will be one paper i.e. Core Course-III for Semester-III, Core Course -IV for Semester-IV. Each paper carries 60 Marks. (Pass Marks: 24) .
5. Seminar/Group discussion/Quiz is given the weightage of 5 Marks. Assignment is given the weightage of 5 Marks.Attendance is given the weightage of 5 Marks.Surprise Test is given the weightage of 5 Marks. Internal Assessment Examination will be for 20 Marks. There will be two Internal Assessment

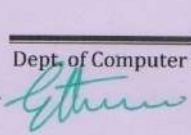
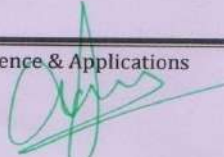
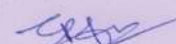
prof. N. 





Examinations in each semester. (Average of two to be taken). Total Internal Assessment Marks =40(Pass Marks:16)

6. The aggregate pass mark of both Internal and External should be 40 Marks (40%).
7. It is resolved that for all years the same pattern comes into effect from 2019-20.
8. There will be Foundation course paper for all II B.Sc/B.A/B.Com programs in semester –III for 50 Marks(Pass Marks:20)
9. Resolved to approve the syllabus (Core Course III & IV) for the academic year 2019-20 as prescribed in the proforma in **Annexure I to VI** and Foundation course for all II B.Sc/BA/B.Com programs as prescribed in the **Annexure- XXV**
10. Resolved to approve the list of practicals for Practical –III & IV for the academic year 2019-20 as prescribed in the proforma **Annexure-VII to IX**
11. Scheme of valuation for Practical –III & IV for the academic year 2019-20 is approved as prescribed in the proforma in **Annexure-X**.
12. Resolved to approve the Question paper pattern for II B.Sc. (M.P.Cs,M.C.Ds), II B.Sc (MCDs) Data Science, II B.A Computer Applications(AE) & II B.Com Computer Applications Semester-III and Semester-IV for the academic year 2019-20 as prescribed in the proformas in **Annexure-XI** and **Foundation Course** for all II B.Sc/BA/B.Com programs in **Annexure-XXVI**
13. Resolved to approve the Question paper pattern for internal assessment exam for II B.Sc. (MPCs, MCDs), II B.Sc (MCDs) Data Science, II B.A Computer Applications (AE) & II B.Com Computer Applications Semester-III and Semester-IV for the academic year 2019-20 as prescribed in the proforma in **Annexure-IX**
14. Resolved to approve the Model Question paper for II B.Sc. (M.P.Cs,M.C.Ds), II B.Sc (MCDs) Data Science, II B.A Computer Applications (AE) & II B.Com Computer Applications Semester-III and Semester-IV for the academic year 2019-20 as prescribed in the proformas in **Annexure-XIII** to **Annexure- XVIII** and Foundation Course for all II B.Sc/BA/B.Com programs in **Annexure-XXVII**.
15. Resolved to approve the pattern of Question paper & Model Question paper for III B.Sc. (M.P.Cs), III B.A Computer Applications (CA & CE) & III B.Com Computer Applications Semester-V and Semester-VI for the academic year 2019-20 as prescribed in the proformas in **Annexure-X** to **Annexure- XII**.

Prof. N.   

16. Justification report for the syllabus Core Course –III and Core Course -IV for the academic year 2019-20 as prescribed in the proforma **Annexure-XIX to XXIV**

 17. Resolved to approve the syllabus for Certificate Course, Scheme of valuation for the academic year 2019-20 as prescribed in the proforma in **Annexure XXVIII** for all B.Sc/BA/B.Com programs.

 18. Resolved to recommend the panel of examiners and paper setters as prescribed in the proforma in **Annexure-XXIX** from the academic year 2019-20.
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ANNEXURE – I
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
B.Sc. Three-Year Degree Course (Semester Wise)
Syllabus for II Year – III Semester
Part – II : COMPUTER SCIENCE

Paper-III: OBJECT ORIENTED PROGRAMMING USING JAVA

No. of hours per week: 04

Max Marks: 60

Unit-I

FUNDAMENTALS OF OBJECT – ORIENTED PROGRAMMING: Introduction, Object Oriented paradigm, Basic Concepts of OOP, Benefits of OOPS, Applications of OOP, Java Features: **OVERVIEW OF JAVA LANGUAGE:** Introduction, Simple Java program structure, Java tokens, Java Statements, Implementing a Java Program, Java Virtual Machine, Command line arguments. **CONSTANTS, VARIABLES & DATA TYPES:** Introduction, Constants, variables, Data Types, Declaration of Variables, Giving Value to Variables, Scope of variables, Symbolic Constants, Type casting, Getting Value of Variables, Standard Default values, **OPERATORS & EXPRESSIONS.**

Unit-II

DECISION MAKING & BRANCHING: Introduction, Decision making with if statement, Simple if statement, if-Else statement, Nesting of if- else statements, the else if ladder, Switch statement, the conditional operator. **LOOPING:** Introduction, The While statement, The do-while statement, The for statement, Jumps in loops.

CLASSES, OBJECTS & METHODS: Introduction, Defining a class, Adding variables, Adding methods, Creating objects, Accessing class members, Constructors, Method Overloading, Static members, Nesting of methods.

Unit-III

INHERITANCE: Extending a class, Overriding methods, Final variables and methods, Final classes, Abstract methods and classes.

ARRAYS, STRINGS: Arrays, One-dimensional arrays, Creating an Array, Two – dimensional arrays, Strings.

Unit –IV

INTERFACES: MULTIPLE INHERITANCE: Introduction, Defining interfaces, Extending Interfaces, implementing interfaces, Assessing interface variables.

PACKAGES: Introduction, Java API Packages, Using System Packages, Naming Conventions, Creating Packages, Accessing a Package, using a Package.

MULTITHREADED PROGRAMMING: Introduction, Creating Threads, Extending theThreads, Stopping and Blocking a Thread, Lifecycle of a Thread, Using Thread Methods, Thread Exceptions, Thread Priority, Synchronization, Implementing the ‘Runnable’ Interface.

Unit-V

MANAGING ERRORS AND EXCEPTIONS: Types of errors : Compile-time errors, Runtime Errors, Exceptions, Exception handling, Multiple Catch Statements, Using finally Statement. **APPLET PROGRAMMING:** local and remote applets, Applets and Applications, Building Applet code, Applet Life cycle: Initialization state, Running state, Idle or stopped state, Dead State, Display state.

REFERENCE BOOKS

1. E.Balaguruswamy, Programming with JAVA, A primer, 3e, TATA McGraw-Hill

ANNEXURE – II
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
B.Sc. Three-Year Degree Course (Semester Wise)
Syllabus for II Year – III Semester
Part – II: DATA SCIENCE

Paper-DS-III: DATA MINING AND DATA ANALYSIS

No. of hours per week: 04

Max Marks: 60

Unit-I

Data mining-KDD versus data mining, stages of the Data Mining Process- Task primitives, Data Mining Techniques-Data mining knowledge representation.

Unit-II

Data Mining query language – Integration of Data Mining System with a Data Warehouse – Issues, Data pre-processing – Data Cleaning.

Data transformation – Feature selection – Dimensionality reduction – Discretization and generating concept hierarchies- Mining frequent patterns association – correlation

Unit-III

Classification: Basic concepts, General Approach to solving a classification problem, Decision Tree Induction: Working of Decision Tree, building a decision tree, methods for expressing an attribute test conditions, measures for selecting the best split, Algorithm for decision tree induction. Bayesian Classification – Rule Based Classification – Classification by back propagation – Support Vector Machines – Associative Classification.

Unit-IV

Association Rules: Basic concepts, Market Basket Analysis: A motivating example- Frequent itemsets, closed itemsets and association rules- **Frequent itemset Mining Methods:** Apriori algorithm: Finding frequent itemsets by confined candidate generation- Generating association rules from frequent item sets- Improving the efficiency of apriori- A pattern: Growth approach for mining frequent itemsets.

Unit-V

Clustering techniques – Partitioning methods – K-means-Hierarchical Methods – Distance based agglomerative and divisible clustering – Density – Based Methods – Expectation maximization – Grid Based Methods – Model – Based Clustering – Methods – Constraint – Based Cluster Analysis – Outlier Analysis.

REFERENCE BOOKS

- 1.awei Hen Miceline kamber,"Data Mining :Concepts and Techniques",3rd Edition,Morgan Kaufmann Publishers,2011.
 2. Data Mining – Arun K. Pujari
 3. Web Data Mining and the Development of Knowledge-Based Decision Support Systems,G-Sreedhar
 4. Adelchi Azzalini ,Bruno Scapa,"Data Analysis and Data mining",2nd Edition,Oxford University Press Inc.,2012.
 - 5 .Alex Berson and Stephen J.Smith,"Data Warehousing ,Data Mining&OLAP",10th Edition, TataMcGraw Hill Edition,2007.
 - 6.G.K.Gupta,"Introduction to Data Mining with Case Studies",1st Edition ,Easter Economy Edition,PHI,2006.
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ANNEXURE - III
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
B.Sc. Three-Year Degree Course (Semester Wise)
Syllabus for II Year – IV Semester
Part – II: COMPUTER SCIENCE
Paper-IV: DATA STRUCTURES

No. of hours per week : 04

Max Marks :60

Unit-I

Concept of Abstract Data Types (ADTs) - Data Types, Data Structures, Storage Structures, and File Structures, Primitive and Non-primitive Data Structures, Linear and Non-linear Data Structures.

Linear Lists – ADT, Arrays-ADT Array and Linked representations, Pointers.

Linked Lists: Single Linked List, Double Linked List, Circular Linked List, applications

Unit-II

Stacks: Definition, ADT, Array and Linked representations, Implementations and Applications

Queues: Definition, ADT, Array and Linked representations, Circular Queues, Dequeues, Priority Queues, Implementations and Applications.

Unit-III

Trees: Binary Tree, Definition, Properties, ADT, Array and Linked representations, Implementations and Applications. Binary Search Trees (BST) – Definition, ADT, Operations and Implementations, BST Applications. Threaded Binary Trees, Heap trees.

Unit-IV

Graphs – Graph and its Representation, Graph Traversals, Connected Components, Basic Searching Techniques, Minimal Spanning Trees, Dijkstra's Algorithm, Prim's Algorithm.

Unit-V

Sorting and Searching: Selection, Insertion, Bubble, Merge, Quick, Heap sort, Sequential and Binary Searching.

REFERENCE BOOKS

1. D S Malik, Data Structures Using C++, Thomson, India Edition 2006.
 2. Sahni S, Data Structures, Algorithms and Applications in C++, McGraw-Hill, 2002.
 3. Samanta D, Classic Data Structures, Prentice-Hall of India, 2001.
 4. Heilman G I., Data Structures and Algorithms with Object-Oriented Programming, Tata McGraw-Hill. 2002. (Chapters I and 14).
 5. Tremblay P, and Sorenson P G, Introduction to Data Structures with Applications, Tata McGraw-Hill,
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ANNEXURE – IV
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
B.Sc. Three-Year Degree Course (Semester Wise)
Syllabus for II Year – IV Semester
Part – II: DATA SCIENCE

Paper-DS-I: MULTIVARIATE TECHNIQUE FOR DATA ANALYSIS

No. of hours per week: 04

Max Marks: 60

Unit-I : Introduction to Multivariate Analysis

Meaning of Multivariate Analysis, Measurements Scales – Metric measurement scales and Non- Metric measurement scales, classification of multivariate techniques (Dependence Techniques and Inter-dependence Techniques), Applications of Multivariate Techniques in different disciplines.

Unit-II : Factor Analysis

Factor Analysis: Meaning, objectives and Assumptions, Designing a factor analysis, Deriving factors and assessing overall factors, Interpreting the factors and validation of factor analysis.

Unit-III: Cluster Analysis

Cluster Analysis: Objectives and Assumptions, Research design in cluster analysis, Deriving clusters and assessing overall fit (Hierarchical Methods, Non Hierarchical Methods and Combinations), Interpretation of clusters and validation of profiling of the clusters.

Unit-IV: Regression Analysis

Regression Analysis: Objectives and Assumptions- A decision process for multiple regression analysis, Research design in multiple regression analysis, Interpreting the multiple regression and validation of multiple regression analysis.

Unit-V: Discriminate Analysis & Linear Programming

Discriminate Analysis: Concept, objective and applications, Procedure for conducting discriminate analysis, Stepwise discriminate analysis and Mahalanobis procedure. Logit model. Linear Programming problem – Formulation, graphical method, simplex method.

REFERENCE BOOKS

1. Joseph F Hair, William C Black et al, “Multivariate Data Analysis”, Pearson Education, 7th edition, 2013.
 2. T.W Anderson, “ An introduction to Multivariate Statistical Analysis, 3rd Edition”, Wiley 2003.
 3. Williamr Dillon, John Wiley & Sons, “Multivariate Analysis Methods and Applications”, Wiley, 1984.
 4. Naresh K Malhotra, Satyabhusan Dash, “Marketing Research Anapplied Orientation”, Pearson, 2011.
 5. Hamdy A Taha, “Operations Research”, Pearson, 2012.
-

ANNEXURE - V
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
B.A(AE) Three-Year Degree Course (Semester Wise)
Syllabus for II Year – III Semester
Part – II: COMPUTER APPLICATIONS
Paper III: GOOGLE WEB PRODUCTS

No. of hours per week: 03

Max Marks: 60

Unit-I : Basics of Web : The Internet and Web defined – Timeline of Internet History – Advantages and disadvantages of Internet, Browser– Text-based and Graphics-based Browsers – Web Terminology – Browser Components.

Unit-II : Browser Details: Miscellaneous Browser Details : Cookies, Disk Cache, Plug-ins, Helper Applications, Homepage, JavaScript and Java, Images, Messages and Bookmarks/Favorites – Lynx, Internet Explorer, Navigator, Firefox, Chrome Browsers, etc.

Unit-III : Web, Media and Geo : E-mail with Gmail : Create, Send/Receive, Search, Spam, Trash – Google Drive : Create, share and Delete – Google Search : Web, Image, Video, Books, Photos, News – Google You tube : Video search/download/upload – Google Maps : To View Map and Directions – Google Earth : Explore the world from the computer.

Unit-IV : Documents, Presentations and Spreadsheets : Google Docs : Open, Edit and Create Documents –Programs on Documents – Google Slides : Open, Edit and Create Presentations – Programs on Presentations -Google Sheets : Open, Edit and Create Spreadsheets –Programs on Spreadsheets.

Unit-V : Forms and Social media – Google Forms : Open, Edit and Create Forms for Surveys/Tests –Programs on Forms. What is Social Media-Classification of Social media-Global Usage-Criticism-Twitter-You tube-Blogs-Facebook- LinkedIn, virus and antivirus, configuring firewalls ,Internet of Things –Introduction ,Applications of Internet of things.

REFERENCE BOOKS/Websites :

1. In-line/On-line : Fundamentals of the Internet and the World Wide Web, 2/e – by Raymond Greenlaw and Ellen Hepp, Publishers : TMH
 2. Refer the URL : <https://www.google.co.in/intl/en/about/products>
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ANNEXURE – VI
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
B.A(AE)/B.Com Three-Year Degree Course (Semester Wise)
Syllabus for II Year – IV Semester
Part – II: COMPUTER APPLICATIONS
Paper-IV: OFFICE AUTOMATION TOOLS

No. of hours per week: 03

Max Marks: 60

Unit-I

MS-Excel: features of Ms-Excel, Parts of MS-Excel window, entering and editing data in worksheet, number formatting in excel, different cell references, how to enter and edit formula in excel, auto fill and custom fill, printing options. **Formatting options:** Different formatting options, change row height, formulae and functions.

Unit-II

Functions: Meaning and advantages of functions, different types of functions available in Excel. **Charts:** Different types of charts, Parts of chart, chart creation using wizard, chart operations, data maps, graphs, data sorting, filtering. Excel sub totals, scenarios, what-if analysis

Macro: Meaning and advantages of Macros, creation, editing and deletion of macros – Creating a macro, how to run, how to delete a macro.

Unit-III

MS Access: Creating a Simple Database and Tables: Features of Ms-Access, Creating a Database, Parts of Access. **Tables:** table creation using design view, table wizard, datasheet view, import table, link table. **Forms:** The Form Wizard, design view, columnar, tabular, data sheet, chart wizard.

Unit-IV

Finding, Sorting and Displaying Data: Queries and Dynasts, Creating and using select queries, Returning to the Query Design, Multi-level sorts, Finding incomplete matches, showing All records after a Query, saving queries - Crosstab Queries.

Unit V

Export Data: Exporting the data from other Applications(Excel,HTML) **Relational Databases:** Types of Relationships, Viewing Relationships, Creating and Deleting Relationships.

REFERENCE BOOKS

1. Ron Mansfield, Working in Microsoft Office, Tata McGraw Hill(2008)
 2. Ed Bott, Woody Leonhard, Using Microsoft Office 2007, Pearson Education(2007)
 3. Sanjay Saxena, Microsoft Office, 4. Microsoft Office, BPB Publications
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ANNEXURE – VII
KVR GOVT. COLLEGE FOR WOMEN(A), KURNOOL.
II B.Sc COMPUTER SCIENCE
(Revised syllabus w.e.f. 2019-20)
LIST OF PRACTICALS

OBJECT ORIENTED PROGRAMMING USING JAVA

List of lab programs

1. Write a program to define a class and object in Java
2. Write a program to illustrate method Overloading in Java.
3. Write a program to find largest of n number using conditional statements in Java.
4. Write a program to illustrate Looping Structures in Java.
5. Write a program to illustrate the usage of constructors in Java.
6. Write a program to perform matrix multiplication by using arrays in Java.
7. Write a program to sort an integer array in Java.
8. Write a program to perform various String Operations in Java.
9. Write a program to illustrate multi level inheritance in Java.
10. Write a program to illustrate interface in Java.
11. Write a program to create packages in Java.
12. Write a program to Create Multiple Threads in Java.
13. Write a program to assign priorities to threads in Java.
14. Write a program to implement Exception handling.
15. Write a program to draw the various polygons using applets.

DATA STRUCTURES

List of lab programs

1. Write a Program to implement the Linked List operations.
 2. Write a Program to implement the Stack operations using an array.
 3. Write Programs to implement the Queue operations using an array.
 4. Write Programs to implement the Stack operations using a single linked list.
 5. Write Programs to implement the Queue operations using a single linked list.
 6. Write a program for arithmetic expression evaluation using stack.
 7. Write a program to implement Queue using a double linked list.
 8. Write a program to search an item in a given list using Linear Search
 9. Write a program to search an item in a given list using Binary Search.
 10. Write a program for Bubble Sort.
 11. Write a program for Quick Sort.
 12. Write a program for Merge Sort.
 13. Write a program on Binary Search Tree operations(insertion, deletion and traversals)
 14. Write a program for Graph traversals using DFS.
 15. Write a program for Graph traversals using BFS.
-

ANNEXURE – VIII

KVR GOVT. COLLEGE FOR WOMEN(A), KURNOOL.

II B.Sc DATA SCIENCE

(Revised syllabus w.e.f. 2019-20)

LIST OF PRACTICALS

DATA MINING AND DATA ANALYSIS LAB

List of lab programs

1. Perform data processing tasks and Demonstrate performing association rule mining on data sets.
2. Demonstrate performing classification on Data sets.
3. Demonstrate performing clustering on Data sets.
4. Demonstrate performing Regression on Data sets.
5. Sample programs using Hospital Mangement System.

MULTIVARIATE TECHNIQUE FOR DATA ANALYSIS Using ‘R’ Lab

List of lab programs

1. Navigating the basic operating environment of ‘R’
2. Importing network data.
3. Creating and manipulating network objects.
4. Plotting Network Graphs.
5. Network Descriptive Statistics.
6. Hypothesis Testing.

KVR GOVT. COLLEGE FOR WOMEN(A), KURNOOL.
II B.A(AE)COMPUTER APPLICATIONS
(Revised syllabus w.e.f.2019-20)
LIST OF PRACTICALS

GOOGLE WEB PRODUCTS

List of lab programs

- 1) Procedure to creation of e-mail.
- 2) Procedure for storing the data in google drive and getting link .
- 3) Procedure to create a Biodata by using Google documents
- 4) Procedure to create a Brochure using google documents.
- 5) Procedure to create a General Presentation using Google slides
- 6) Procedure to create a Lesson Plan using Google slides
- 7) Procedure to calculate Monthly budget using Google Sheets
- 8) Procedure to calculate Attendance of the students using Google Sheets
- 9) Procedure for creating Job Application form using Google forms
- 10) Procedure for creating Course Evaluation report using Google forms.

LIST OF PRACTICALS

KVR GOVT. COLLEGE FOR WOMEN(A), KURNOOL.
II B.A(AE)/B.Com COMPUTER Applications
(Revised syllabus w.e.f.2019-20)

OFFICE AUTOMATION TOOLS

List of lab programs

MS-Excel

- 1) Write a program to create pay details of Employee.
- 2) Write a program to design charts in MS-Excel.
- 3) Write a program to perform filtering and Sorting Techniques.
- 4) Write a program to create Pivote Table in MS-Excel.
- 5) Write a program to collect the data of various college by using Vlookup and Hlookup.

MS-Access

- 6) Write a program to create table in MS-Access.
- 7) Write a program to create Form in MS-Access.
- 8) Write a program to create Querie in MS-Access.
- 9) Write a program to create Report in MS-Access.
- 10) Write a program to Export data from MS-Access to MS-Excel.

ANNEXURE – X

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
II B.Sc. COMPUTER SCIENCE

SCHEME OF VALUATION FOR PRACTICALS

Time: 3 hrs

Max. Marks: 50

- | | | |
|----|------------------------------------|----------|
| 1. | Viva-voce and execution of program | 40 marks |
| 2. | Practical Record | 10 marks |

K.V.R GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A".
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
II B.Sc(MPCs,MCDs)/B.A(AE)/B.Com COMPUTER APPLICATIONS
QUESTION PAPER PATTERN

Time: 3 Hours

Max. Marks: 60 M

PART – A

Answer any Five questions. Each question carries Four marks.

5 X 4 = 20 M

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

PART – B

Answer ALL questions. Each question carries Eight marks.

5 X 8 = 40 M

9. a)

OR

b)

10. a)

OR

b)

11. a)

OR

b)

12. a)

OR

b)

13. a)

OR

b)

Note: Each question must be given from each unit I to V

ANNEXURE - XII

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

INTERNAL ASSESSMENT EXAM PATTERN

- v) There will be two internal assessment examinations of each 20 marks. Average of two to be taken.
- vi) The Duration of exam will be for 1 hour.
- vii) The exam will be descriptive
 - a) Three Questions to be answered out of Four. Each Question carries 4 marks.
 - b) One Question to be answered out of Two. Each Question carries 8 marks.
- viii) Seminar/Group discussion/Quiz is given the weightage of 5 Marks. Assignment is given the weightage of 5 Marks. Attendance is given the weightage of 5 Marks. Surprise Test is given the weightage of 5 Marks. Internal Assessment Examination will be for 20 Marks. There will be two Internal Assessment Examinations in each semester. (Average of two to be taken). Total Internal Assessment Marks = 40 (Pass Marks: 16)
- ix) The above pattern stands for Semester-III and Semester-IV.

ANNEXURE – XIII

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

**II B.Sc. COMPUTER SCIENCE
THIRD SEMESTER**

CORE COURSE-III: OBJECT ORIENTED PROGRAMMING USING JAVA

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Explain about the structure of Java Programming.
2. What are the different data types in Java?
3. Explain jumping statements in java.
4. Explain different types of an Array.
5. Write different types of packages in API?
6. Explain different Run-time exceptions.
7. Write different types of applications in Applet?
8. How to write Applet code in HTML?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9.a) Explain about basic concepts of OOPs?

OR

b) Explain about Scope of variables in java.

10.a) Explain different types of Decision making statements with an example?

OR

b) Explain different types of looping statements with an example?

11.a) What is an inheritance? Explain different types of inheritances?

OR

b) What is a package? Explain how to create a package with an example.

12.a) Explain lifecycle of a thread with a neat diagram.

OR

b) Explain about Exception handling in java.

13.a) What is an Applet? Write Applications of an Applet?

OR

b) Explain Life cycle of an Applet.

ANNEXURE – XIV

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

II B.Sc. DATA SCIENCE

**THIRD SEMESTER
CORE COURSE-III: DATA MINING AND DATA ANALYSIS**

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. What is Data Mining? Explain about KDD versus Data Mining.
2. Explain about Data Mining Task Primitives?
3. Write a short note on Data Cleaning?
4. Explain General approach to solve a classification problem.
5. Write about model over fitting
 - i)Due to presence of noise ii)Due to lack of representation samples.
6. Explain support vector machines.
7. Explain about clustering Techniques.
8. Explain about outlier analysis.

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

- 9.a)Explain about stages of the data mining process.

OR

b)Write popular Data Mining Techniques?
- 10.a)Explain about Data transformation.

OR

b)Write about Mining frequent patterns association and correlation?
- 11.a) Explain about working with decision tree.

OR

b) Write an algorithm for decision tree induction?
- 12.a) Explain about bayesian classification.

OR

b) Explain classification back propagation.
- 13.a) Explain about K-Means clustering.

OR

b)Explain Grid based methods in clustering.

ANNEXURE - XV

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

II B.Sc. COMPUTER SCIENCE

FOURTH SEMESTER

CORE COURSE-IV: DATA STRUCTURES

PART – A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Explain about Linear and Non-linear data structures.
2. Write the differences between array and Linked list?
3. Write about ADT?
4. Explain about Circular Queue.
5. Write about Binary tree?
6. Write about Minimal spanning tree?
7. Write about Binary Search?
8. Write a short note on Bubble Sort?

PART – B

Answer ALL the questions. Each question carries Eight Marks

5 X 8 = 40 M

9.a) Explain about storage structures and file structures.

OR

b) Explain Primitive and Non-Primitive data structures.

10.a) What is a Linked List? Explain different types of linked list.

OR

b) What is a Stack? Explain about different operations on Stack.

11.a) What is Queue? Explain about different operations using queue.

OR

b) What is a Tree? Explain different tree traversal methods.

12.a) Explain about Graph Traversal techniques.

OR

b) Explain Dijkstra's Algorithm.

13.a) What is sorting? Explain about quick sort?

OR

b) Define Searching? Explain types of Searching.

ANNEXURE – XVI

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

II B.Sc. DATA SCIENCE

FOURTH SEMESTER

CORE COURSE-IV: MULTIVARIATE TECHNIQUE FOR DATA ANALYSIS

PART - AAnswer any **Five** questions. Each question carries **Four** Marks.

5 X 4 = 20 M

1. Define the meaning of Multivariate Analysis?
2. What are the differences between the objectives of data summarization and data reduction?
3. Explain about the validation of factor analysis.
4. What are the objectives of cluster analysis?
5. What are the applications of discriminate analysis?
6. Explain about the logit model.
7. Find Graphical Method of LPP:
 - a. Max $Z=3x_1+4x_2$ subject to constraints $x_1+x_2\leq 450$, $2x_1+x_2\leq 600$ and $x_1, x_2 \geq 0$.
8. Find Transportation problem using North West corner method in LPP:

	D1	D2	D3	D4	
S1	3	1	7	4	300
S2	2	6	5	9	400
S3	8	3	3	2	500
	250	350	400	200	

PART - BAnswer **ALL** the questions. Each question carries **Eight** Marks

5 X 8 = 40 M

- 9.a) Write about Measurements Scales?
OR
b) Explain about the classification of Multivariate Techniques.
 - 10.a) How to design Factor Analysis ? Explain it.
OR
b) Explain Deriving factors and Assessing overall factors.
 - 11.a) How does the researcher know whether to use Hierarchical or Non-Hierarchical cluster techniques?
OR
b) What is the difference between interpretations and the profiling of validation stages?
 - 12.a) Explain the Procedure for conducting discriminate analysis.
OR
b) Explain Stepwise discriminate analysis using Mahalanobis procedure.
-

13.a) Find Simplex Method in LPP:

Max: $Z=x_1+9x_2+ x_3$ subject to constraints $x_1+2x_2+3x_3\leq 9$,

$3x_1+2x_2+2x_3\leq 15$, and

$x_1, x_2, x_3 \geq 0$.

OR

b) Solve the Following Assignment problem

	I	II	III	IV	V	VI
A	9	22	58	11	19	27
B	43	78	72	50	63	48
C	41	28	91	37	45	33
D	74	42	27	49	39	32
E	36	11	57	22	25	18
F	3	56	53	31	17	28

ANNEXURE - XVII

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
II B.A.COMPUTER APPLICATIONS
THIRD SEMESTER
CORE COURSE III: GOOGLE WEB PRODUCTS

Time:3 Hrs

Max. Marks: 60 M

PART-A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. What is Internet? Write various advantages of an Internet?
2. Write about web terminologies?
3. What is Cookies? Explain types of Cookies?
4. Write about Google maps?
5. What is Google spreadsheet? How to create Spreadsheet?
6. How to create a survey using Google forms?
7. What is Virus and antivirus?
8. Write about configuring firewalls?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

- 9.a) Explain the Timeline of Internet History.
OR
b) What is Browser? Explain various types of browsers?
- 10.a) Write about miscellaneous browser details?
OR
b) Discuss the following i) Internet Explorer ii) Navigator
- 11.a) What is E-mail? Explain various options in E-mail.
OR
b) Explain about Google Earth.
- 12.a) Explain about Google docs.
OR
b) Define Google Slides? How to create a Google Slides.
- 13.a) What is Google form? How to make a graph on Google docs?
OR
b) What is Social Media? Explain classification of Social media.

ANNEXURE – XVIII

**MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
II B.A./B.Com COMPUTER APPLICATIONS
FOURTH SEMESTER
CORE COURSE IV: OFFICE AUTOMATION TOOLS**

Time:3Hrs

Max. Marks: 60 M

PART-A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. What is Microsoft Excel? Explain about its features.
 2. Explain Cell, Cell address and range.
-

3. Describe any four Mathematical functions available in MS-Excel?
4. What is formula? Explain how to use formulas in MS-Excel?
5. Explain about macros in spread sheet.
6. Write about form wizard in MS-Access?
7. Explain about Cross tab Queries.
8. Write about defining and redefining relationships?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9.a) Explain the parts of MS-Excel window with a neat diagram.

OR

b) Write about auto fill & custom fill in MS-Excel?

10.a) Write Mathematical and Statistical functions in MS-Excel?

OR

b) Explain the different types of Charts in MS-Excel.

11.a) Explain about what-if analysis in MS-Excel.

OR

b) Explain the different ways in creating the tables.

12.a) What are the steps for creation of data base in MS-Access and explain Query?

OR

b) What is Sorting? Explain about Multi level Sorting.

13.a) Explain the exporting of data from other Applications into MS-Access.

OR

b) What is a relationship? Create a relationship between two tables in MS-Access?

ANNEXURE –XIX

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

II B.Sc. COMPUTER SCIENCE

THIRD SEMESTER

(Revised syllabus w.e.f.2019-20)

Paper –III: OBJECT ORIENTED PROGRAMMING USING JAVA

JUSTIFICATION

Topics in the University Syllabus	Modifications in Autonomous

Unit I: Object Oriented Programming.	Topics Removed: Vectors, Wrapper Classes are the topics removed as these topics are not included in core Java.
Unit II: Java Language Fundamentals.	
Unit III: Exception Handling.	
Unit IV: Files and I/O Streams.	
Unit V: Database Handling Using JDBC	

ANNEXURE - XX

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

II B.Sc COMPUTER SCIENCE

FOURTH SEMESTER

(Revised syllabus w.e.f.2019-20)

Paper – IV: DATA STRUCTURES

JUSTIFICATION

Topics in the University Syllabus	Modifications in Autonomous
Unit I: Problem Solving	Topics Removed:

Unit II: List,Stacks and Queues	Mappings, Representations, Sparse Matrices, Sets – ADT, Operations are the topics removed as the syllabus is heavy to the students.
Unit III: Trees.	
Unit IV: Sorting	
Unit V: Graphs	

ANNEXURE – XXI

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

II B.Sc.(MCDs) COMPUTER SCIENCE

THIRD SEMESTER

(Revised syllabus w.e.f.2019-20)

Paper – DS-III: DATA MINING AND DATA ANALYSIS

JUSTIFICATION

Topics in the University Syllabus	Modifications in Autonomous
	Topics Removed:

Unit-I :Concept of Abstract Data Types (ADTs),Linear Lists ,Arrays	Model Over Fitting,Lazy Learners,Other Classification Methods are the topics removed
Unit-II : Stacks,Queues:	Topics Added:
Unit-III: Trees:	Instead of Model Over Fitting,Association Rules topic is added for the syllabus.
Unit-IV: Graphs	
Unit-V:Sorting and Searching:	

ANNEXURE – XXII

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

II B.Sc.(MCDs) COMPUTER SCIENCE

FOURTH SEMESTER

(Revised syllabus w.e.f.2019-20)

Paper – DS-IV: MULTIVARIATE TECHNIQUE FOR DATA ANALYSIS

JUSTIFICATION

Topics in the University Syllabus	Modifications in Autonomous
Unit-I : Introduction to Multivariate Analysis	

Unit-II : Factor Analysis	<p>Topics Removed:</p> <p>Integer Programming, Transportation and Assignment Problem are the topics removed as the syllabus is heavy to the students.</p> <p>Topics Added:</p> <p>Regression Analysis topic is added as this is not included in the syllabus.</p>
Unit-III: Cluster Analysis	
Unit-IV: Discriminate Analysis	
Unit-V: Linear Programming	

ANNEXURE - XXIII

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

**II B.A(AE) COMPUTER APPLICATIONS
THIRD SEMESTER**

(Revised syllabus w.e.f.2019-20)

Paper – III: GOOGLE WEB PRODUCTS

JUSTIFICATION

Topics in the University Syllabus	Modifications in Autonomous
Unit-I : Basics of Web	Topics Added:

Unit-II : Browser Details	Internet of Things –Introduction, Applications of Internet of things are the topics added as they are not included in the syllabus.
Unit-III : Web, Media and Geo	
Unit-IV : Documents,Presentations and Spreadsheets	
Unit-V : Forms and Social media	

ANNEXURE – XXIV

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

II B.A/B.Com. COMPUTER APPLICATIONS

FOURTH SEMESTER

(Revised syllabus w.e.f.2019-20)

Paper – IV: OFFICE AUTOMATION TOOLS

JUSTIFICATION

Topics in the University Syllabus	Modifications in Autonomous
Unit-I: MS-Excel: Unit-II: Functions –Charts-Macro	Topics Removed:

Unit-III: MS Access: Creating a Simple Database and Tables: Unit- IV: Finding, Sorting and Displaying Data Unit V: Export Data	
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ANNEXURE - XXV

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
INFORMATION & COMMUNICATION TECHNOLOGY –2 (ICT-2)
Internet Fundamentals and Web Tools
Third Semester for all B.Sc/ B.A/ B.Com
Max. Marks: 50

Unit-I

Fundamentals of Internet : Networking Concepts, Data Communication – Types of Networking, Internet and its Services, Internet Addressing – Internet Applications – Computer Viruses and its types – Browser –Types of Browsers.

Unit-II

Internet applications: Using Internet Explorer, Standard Internet Explorer Buttons, Entering a Web Site Address, Searching the Internet – Introduction to Social Networking: twitter,

tumblr, LinkedIn, facebook, flickr, skype, yelp, vimeo, yahoo!, google+, youtube, WhatsApp, etc.

Unit-III

E-mail :Definition of E-mail - Advantages and Disadvantages – User Ids, Passwords, Email Addresses, Domain Names, Mailers, Message Components, Message Composition, Mail Management.

Unit IV

WWW- Web Applications, Web Terminologies, Web Browsers, URL – Components of URL, Searching WWW – Search Engines and Examples

Unit-V

Basic HTML

Basic HTML-Web terminology-Structure of a HTML Document-HTML. Head and Body tags- Semantic and Syntactic tags- HR heading,Font,image and anchor tags_ Creation of Simple HTML Documents.

REFERENCE BOOKS

1. In-line/On-line : Fundamentals of the Internet and the World Wide Web, 2/e - by Raymond Greenlaw and Ellen Hepp, Publishers : TMH

ANNEXURE – XXVI

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

INFORMATION & COMMUNICATION TECHNOLOGY –2(ICT-2)

Internet Fundamentals and Web Tools

Third Semester for all B.Sc/ B.A / B.Com

Time: 2 Hrs

Max. Marks: 50 M

PART - A

Answer any Four questions. Each question carries Five Marks.

4 X 5 = 20 M

1.

- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

PART-B

Answer any **Two** questions. Each question carries **Fifteen** marks.

2 X 15 = 30 M

- 8.
- 9.
- 10.
- 11.

ANNEXURE - XXVII

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A" -[
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
INFORMATION & COMMUNICATION TECHNOLOGY –2(ICT-2)
Internet Fundamentals and Web Tools
Third Semester for all B.Sc/ B.A / B.Com

Time: 2 Hrs

Max. Marks: 50 M

PART - A

Answer any **Four** questions. Each question carries **Five** Marks.

4 X 5 = 20 M

1. What is a Network? Explain about different types of Networks?
 2. Explain about Internet Applications?
 3. What is a Browser? Explain about different types of browsers?
-
-

4. Write a short note on E-Mail?
5. Write about World Wide Web?
6. Define URL? Explain the components of URL?
7. Explain the Structure of an HTML document?

PART-B

Answer any Two questions. Each question carries Fifteen marks. **2 X 15 = 30 M**

8. What is Internet? Explain the different services of Internet?
9. What are social networking sites? Explain in brief the most popular social networking sites?
10. What are search engines? How do they work?
11. Explain about Semantic and Syntactic tags?

ANNEXURE – XXVIII

**KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
Department of Computer Science & Applications
CERTIFICATE COURSE
Syllabus**

PYTHON

MODULE 1

Introduction to PYTHON: History, Basics of PYTHON, similarities and differences between different programming languages, Installation.

MODULE 2

Basic Concepts: Interpreter – Program Execution – Statements– Numeric Types – Expressions, Variables, Casting, Operators, Datatypes.

MODULE 3

Control and Conditional Statements: Flow Controls – Different types of If statements, Different types of Loops structures, Arrays and classes.

MODULE 4

Functions and Inheritance: Functions -Sequences – Strings, Tuples, Lists and – Class Definition – Constructors – Inheritance – Overloading – Text & Binary Files – Reading and Writing.

MODULE 5

DATA WRANGLING: Combining and Merging Data Sets – Reshaping and Pivoting – Data Transformation – String Manipulation, Regular Expressions.

ANNEXURE – XXVIII

**KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
Department of Computer Science & Applications
CERTIFICATE COURSE**

Syllabus

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
CERTIFICATE COURSE
SCHEME OF VALUATION

Time: 3 hrs

Max. Marks: 50

1. Procedure of Two Programs. Each program 10 Marks-20 M
2. Execution of the Programs. Each program 10 Marks-20 M
3. Viva-voce -10 M



K.V.R GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A".
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
III B.Sc(MPCs)/B.A(AE)/B.Com(CA)
QUESTION PAPER PATTERN

Time: 3 Hrs

Max. Marks: 60 M

PART – A

Answer any Five questions. Each question carries Four marks.

5 X 4 = 20 M

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

PART – B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9. a)

OR

b)

10. a)

- b)
11. a) OR
b)
12. a) OR
b)
13. a) OR
b)

Note: Each question must be given from each unit I to V

MODEL QUESTION PAPER

**KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
III B.Sc. COMPUTER SCIENCE
FIFTH SEMESTER
CORE COURSE- VI: SOFTWARE ENGINEERING**

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Write about the characteristics of Software Engineering?
2. What is Software Estimation?
3. Explain Empirical Estimation Technique.
4. Explain Software Requirement Analysis.
5. What are the different types of Abstraction?
6. Explain User Interface Design.
7. Explain Software Reliability.
8. Write about Reverse Engineering?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

- 9.a) Explain Waterfall and RAD Process Models.

OR

- b) Explain Evolutionary Process Models.
-

10.a) Explain Requirements Engineering Process.

OR

b) Explain Analysis process and Model.

11.a) What is Modularization? Explain Cohesion and coupling.

OR

b) Write about Procedural Design?

12.a) Write about User Interface Design Process?

OR

b) Explain Human-Computer Interface Design.

13.a) Explain Black box Testing in Detail.

OR

b) Write about Case Tools?

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
III B.Sc. COMPUTER SCIENCE
FIFTH SEMESTER
CORE COURSE-V: DATA BASE MANAGEMENT SYSTEM

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Explain about the difference between Data and Information.
2. Explain objectives of DBMS.
3. Discuss database approach for Data Management.
4. Write a short note on DBMS vendors and their Products?
5. Describe Entity, Entity Type and Entity Set.
6. Write a short note on Data types in DBMS?
7. Explain the following Operators with example.
a)IN b)OR c)Between d)Like
8. Write a short note on cursors?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9. a) Explain about Database Architecture?

OR

b) What is Data Model? Explain different types of data models available in DBMS.

10.a)What is DBMS? Explain the various advantages and disadvantages in DBMS.

OR

b) What is Entity-Relationship Model? Explain different types of attributes in ERM.

11. a) Explain Codd's Relational Data Base Rules.

OR

b) Explain about Tuple relational calculus and Domain relational calculus.

12.a) Explain basic SQL commands?

OR

b) Explain DDL and DML with examples.

13.a) Explain the structure of PL/SQL?

OR

b) What is a Trigger? Discuss various types of triggers?

MODEL QUESTION PAPER

**KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.
Re-Accredited by NAAC with Grade "A"
CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)
THIRD YEAR - B.A(CA & CE) COMPUTER APPLICATIONS
FIFTH SEMESTER
CORE COURSE-VI: WEB TECHNOLOGIES**

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Explain the structure of HTML Program.
2. Explain LAN, MAN, WAN.
3. Explain different types of Lists in HTML.
4. Write about formatting blocks of information.
5. What is DHTML.
6. What is a Regular Expression.
7. Write about events in javascript.
8. What is Data Validation.

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9.a) What is a topology? Explain the different types of topologies with diagram.

OR

b) Explain i) Table Tag ii) Form Tag.

10.a) Write about cascading style sheets?

OR

b)What is a Layer? Explain different types of Layers?

11.a)Explain String manipulation functions & Mathematical functions in Javascript.

OR

b)Explain Arrays in Javascript?

12.a)Explain built-in objects in javascript.

OR

b)Explain about Exception Handling in Javascript?

13.a)Explain i)status bar ii)rollover buttons.

OR

b)Explain message and Confirmations in DHTML?

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

THIRD YEAR B.A/B.Com COMPUTER APPLICATIONS

FIFTH SEMESTER

CORE COURSE-V: DATABASE MANAGEMENT SYSTEM

Time: 3 Hours

Max. Marks:60 M

PART - A

Answer any FIVE questions. Each question carries Four marks.

5 X 4 = 20 M

1. Explain about the difference between Data and Information.
2. Explain objectives of DBMS.
3. Discuss database approach for Data Management.
4. Write a short note on DBMS vendors and their Products?
5. Describe Entity,Entity Type and Entity Set.
6. Write a short note on Data types in DBMS?
7. Explain the following Operators with example.
a)IN b)OR c)Between d)Like
8. Write a short note on cursors?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9. a)Explain about classification of DBMS.

OR

b)What is Data Model? Explain different types of data models available in DBMS.

10.a)What is DBMS? Explain the various advantages and disadvantages in DBMS.

OR

b) Explain about Database Architecture?

11. a) What is Entity-Relationship Model? Explain different types of attributes in ERM.

OR

b) Explain Codd's Relational Data Base Rules.

12.a) Explain basic SQL commands?

OR

b) Explain about set operators in SQL with an example.

13.a) Explain the structure of PL/SQL?

OR

b) What is a Trigger? Discuss various types of triggers?

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

III B.Sc. COMPUTER SCIENCE

SIXTH SEMESTER

PAPER- VII- Elective: WEB TECHNOLOGIES

Time: 3 Hrs

Max. Marks: 60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Explain basic structure of HTML document.
2. What is a hyperlink. Give example?
3. Explain font styles in CSS.
4. Explain Data types in Javascript.
5. What is Exception handling?
6. What is Data validation?
7. What is DTP?
8. What is DHTML? How it differs from HTML?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9.a) Explain different types of Lists with example.

OR

b) Explain Form with example.

10.a) Explain the different kinds of Cascading style sheets.

OR

b) Explain built in objects in javascript.

11.a) Explain about string handling functions in javascript.

OR

b) Explain about Exception Handling in Javascript.

12.a) Explain about different frames in DHTML.

OR

b) Define Rollover buttons with an example.

13.a) Explain messages & Confirmation in javascript.

OR

b) Explain Document Object Model.

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

III B.Sc. COMPUTER SCIENCE

SIXTH SEMESTER

CORE COURSE- VIII - Cluster-1: FOUNDATION OF DATA SCIENCES

Time: 3 Hrs

Max. Marks: 60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Explain the roles in a Data science project.
2. Write a short note on NoSQL?
3. Write about Sampling for modeling and validation?
4. Write about evaluating clustering models?
5. Write about Memorization methods?
6. Explain reading and getting data into R.
7. Explain about distributed file system.
8. Explain plot() function in R.

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9.a) Explain the various stages in a Data science Project.

OR

b) Explain various features of data.

10.a) Explain Mapping problems to Machine Learning.

OR

b) Explain about cluster analysis.

11.a) Explain Lists and Data frames in R?

OR

b) Explain Statistical models in R?

12.a) Explain various phases of map reduce algorithm.

OR

b) Explain common vector operations and their use.

13.a) Explain Documentation & Deployment in data science.

OR

b) Explain higher dimensional arrays and their use.

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

III B.Sc. COMPUTER SCIENCE

SIXTH SEMESTER

CORE COURSE- VIII - Cluster-2: BIG DATA TECHNOLOGIES

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. What is Big data? Discuss it in terms of volume and velocity?
2. Write about Big Data Analytics?
3. Write a short note on Moving Data in and out of Hadoop?
4. What is Data Serilization?
5. Discusses the following
 - a)NameNode b)Secondary NameNode c)DataNode
6. Write about YARN?
7. Write the difference between Apache pig and Map Reduce?
8. Write a short note on Zookeeper.

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9.a) What is Big data? Discuss it in terms of four dimensions, volume, velocity, variety and veracity.

OR

b) Explain working of following phase of Map reduce Algorithm.

i)Map Phase ii)Combiner Phase iii) Shuffle and Sort Phase iv) Reducer Phase

10.a) What is Big Data? Explain characteristics of Big Data.

OR

b)Explain about Hadoop EchoSystem.

11.a) Explain Hadoop architecture and its components with proper diagram.

OR

b) Write about Anatomy of file write and read in Hadoop.

Items	15-25	35-45	55-65	75-85	95-105
Frequency	5	8	15	6	9

OR

b) Find Deciles for Grouped data.

Weight	100-110	110-120	120-130	130-140	140-150
Frequency	5	8	15	6	9

11.a) Define Poisson distribution? Explain Moments of Poisson distribution.

OR

b) Explain Normal Distribution with an example.

12.a) Find rank correlation for following data

x	110	100	140	120	80	90	130
y	70	60	80	90	10	20	40

OR

b) Fit a Second degree parabola to the following data

X	1	2	3	4	5	6	7	8
Y	3	7	10	11	12	8	11	6

13.a) What is DOE? Explain about its fundamental concepts.

OR

b) What is ANOVA? Explain types of ANOVA.



MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

III BA(CA&CE) COMPUTER APPLICATIONS

SIXTH SEMESTER

PAPER- VII - Elective: PHP and My SQL

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. What is PHP? State its advantages.
2. Explain about data types in PHP.
3. Explain about Date and Time functions in PHP.
4. Explain about the sending mail on form submission.
5. What is the difference between session and cookie?
6. How can PHP and HTML interact?
7. Write a program for even or odd number?
8. Write a short note on creating menu?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9. a) Explain different types of operators in PHP.
OR
b) Define the functions and calling functions?
 10. a) Define an array? Explain how to create arrays with an examples?
OR
b) Explain formatting strings in PHP.
 11. a) Explain the Creating forms.
OR
b) Define cookie? Explain setting a cookie with PHP.
 12. a) How to include and validate files in PHP?
OR
b) Explain working with Directories.
 13. a) Explain the difference between MySQL and MySQLi functions.
-

OR

b) What are the steps require for the connecting to MySQL with PHP?

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

III BCom(CA) COMPUTER APPLICATIONS

SIXTH SEMESTER

CORE COURSE-VI: WEB TECHNOLOGIES

Time: 3 Hrs

Max. Marks: 60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Explain the structure of HTML Program.
2. Explain LAN, MAN, WAN.
3. Explain different types of Lists in HTML.
4. Write about formatting blocks of information.
5. What is DHTML.
6. What is a Regular Expression.
7. Write about events in javascript.
8. What is Data Validation.

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9.a) What is a topology? Explain the different types of topologies with diagram.

OR

b) Explain i) Table Tag ii) Form Tag.

10.a) Write about cascading style sheets.

OR

b) What is a Layer? Explain different types of Layers?

11.a) Explain String manipulation functions & Mathematical functions in Javascript.

OR

b) Explain Arrays in Javascript?

12.a) Explain built-in objects in javascript.

OR

b) Explain about Exception Handling in Javascript?

13.a) Explain i) status bar ii) rollover buttons.

OR

b) Explain message and Confirmations in DHTML?

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

III BA(CA&CE) COMPUTER APPLICATIONS

PAPER- VIII: Elective- 1: CLOUD COMPUTING

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. What are the components of cloud?
2. Explain the benefits of cloud.
3. What is traditional IT model?
4. Explain about benefits of SaaS.
5. What are IaaS service providers?
6. What are public clouds?
7. Explain about virtualization.
8. What are the features of Vmwave?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9.a) Explain about origins and characteristics of cloud computing.

OR

b) Explain about on-demand self-service and broad network access.

10.a) Explain about PaaS in detail.

OR

b) Explain about cloud delivery model.

11.a) Explain about community clouds and hybrid clouds.

OR

b) Explain about recent developments and benefits of IaaS.

12.a) Explain about cloud scenarios.

OR

b) Explain privacy concern and security levels of third party.

13.a) Explain the types of hardware virtualization.

OR

b) Explain about desktop virtualization.

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

III BA(CA&CE) COMPUTER APPLICATIONS

PAPER- VIII: Elective-2: e- Commerce

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Write a short note on Competitive advantages using e-Commerce?
2. Write about Business Strategy in e-Commerce?
3. Explain the characteristics of B2B.
4. Discuss the Managerial Issues in B2B e-Commerce.
5. Explain about Intranet Software.
6. Write about Extranet products and services in e-Commerce?
7. Write about Consumer and Seller Protection in EC?
8. Write about Internet Protocols?

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

- 9.a) What do you understand by e-Commerce? What are the advantages and disadvantages?
OR
b) Write about Supply Chain Management?
- 10.a) Explain different Business Models of e-Commerce.
OR
b) What is meant by EDI? Explain uses and limitations of EDI.
- 11.a) What is Internet? Explain the infrastructure of Internet.
OR
b) Describe the different Services of e-Commerce?
- 12.a) Discuss about Ethical and Other Public Policy Issues?
OR
b) Explain about Taxation and Encryption Policies.
- 13.a) Describe the infrastructure of e-Commerce?
OR
b) Explain about the future of e-Commerce.

MODEL QUESTION PAPER

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2019-20)

III BA(CA&CE) COMPUTER APPLICATIONS

PAPER- VIII: Elective-3 : UNIX

Time: 3 Hrs

Max. Marks:60 M

PART - A

Answer any Five questions. Each question carries Four Marks.

5 X 4 = 20 M

1. Write a short note on CPU Scheduling?
2. How to change password in Unix?
3. Explain online and offline communication in Unix.
4. Describe any six operations that can be performed using SED?
5. Write a short note on characteristics of vi Editor?
6. Write a short note on AWK?
7. How to construct a shell program in Unix?
8. Explain Booting system in Unix.

PART-B

Answer ALL the questions. Each question carries Eight marks.

5 X 8 = 40 M

9.a) Explain Features of Unix.

OR

b) Explain about File System Implementation in Unix.

10.a) Explain various commands available in Unix.

OR

b) Explain Login and Logout procedure in Unix.

11.a) Explain different File permission modes in Unix.

OR

b) How to sort files in Unix? Explain the procedure.

12.a) Discuss about vi Editors.

OR

b) Explain Line Editors Ex and Ed in Unix.

13.a) Explain about Shell Programming.

OR

b) Explain Backup and Restoring methods in Unix.

ANNEXURE - XXIX

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PANEL OF EXAMINERS & PAPER SETTERS

1	Dr N.Uday Bhaskar, HOD, Govt.College(A), Anantapuram Dist. Cell: 9885238374
2	Sunil Kumar, Lecturer in Computer Science, Govt. Degree College for Men Kurnool. Cell:
3	B.Raghavendra, HOD, Lecturer in Computer Science, Osmania DC (A), Kurnool. Cell:9581170970
4	S.Abdul Rahaman Khan, Lecturer in Computer Science, Osmania DC (A), Kurnool. Cell: 9989244285
5	S.Mahaboob Basha, Lecturer in Computer Science, Osmania DC (A), Kurnool. Cell: 8341881550
6	Pothu Raju, Lecturer in Computer Science, Silver Jubilee(A), Kurnool. Cell: 9966369484
7	Manoj Prabhakar Darsi, Lecturer in Computer Science, KTS GDC Rayadurgam, Ananthapuram. Cell: 9492441242
8	S.Kamalakar, Lecturer in Computer Science, Govt. Degree College for Men Kurnool. Cell: 9490484188
9	C.V.Satyanarayana, St.Joseph Degree College, Kurnool. Cell:9948156565
10	Vaishnavi, Lecturer in Computer Science, Osmania(W),Kurnool. Cell: 9966281886

K.V.R.Govt. COLLEGE FOR WOMEN (A), KURNOOL
(Under the Jurisdiction of Rayalaseema University)
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BOARD OF STUDIES MEETING
2019-20

Subject: BOTANY

5-8-2019

Members of the Board of studies in Botany discussed in detail the curriculum, scheme of instruction, evaluation and credits to be allotted, and passed the following resolutions applicable to the academic year 2019-20.

Resolution:1

It is unanimously resolved that there shall be nearly 20% change in syllabus and in evaluation. There shall be evaluated for 60 marks and 40 marks for internal evaluation.

Semester	Paper	Title of the paper	Contact hours /week	Max. marks: 100		
				Credits allotted	Internal assessment	Sem End Exam
III	III	Plant Taxonomy and Embryology	4	4	40	60
IV	IV	Plant physiology & Metabolism	4	4	40	60
III	Practical paper III	Plant Taxonomy, Embryology	2	-	-	50
IV	Practical Paper IV	Plant physiology & Metabolism	2	-	-	50



K.V.R. Govt. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

ACCREDITED BY NAAC WITH 'A' GRADE

DEPARTMENT OF BOTANY

2019-2020

MINUTES OF THE BOARD OF STUDIES MEETING

Board of Studies meeting was conducted in the department of Botany
On 5-08-2019 at 10.00 am with the following members.

S.No	Name	Designation and Address	Signature
MEMBERS FROM THE DEPARTMENT			
1	Dr.R.VINOLYA KUMARI	CHAIRMAN	
2	Dr.D.SWAPNA SREE	Member	
3	Dr.S.SUNITHA	Member	
4	Dr. J.VASUNDHARAMMA	Member	
UNIVERSITY NOMINEE			
5	PROF. R. BHARTH KUMAR	Prof. of Botany Rayalaseema University KURNOOL	
SUBJECT EXPERTS			
6	Sri. R. JOHN MARTIN	In charge Lecturer in Botany, Government Degree College, Anantapur	
7	Dr. SHALI SAHEB	Associate prof in Botany Osmani College Kurnool	
ALUMNAE			
8	Dr.S. SWARUPARANI	Prof of Botany, A.A.S.Degree College, Adoni	
INDUSTRIALIST			
9	SRI. G. APPA RAO	Senior Scientist Sri Rama Agri genetics (I) pvt. Ltd. Kurnool.	
STUDENT REPRESENTATIVES			
10	J.AMBICA	III BZC (TM)	
11	C.APOORVA	IIIBZC(EM)	

K.V.R. Govt. COLLEGE FOR WOMEN {AUTONOMOUS}, KURNOOL

II B.Sc – SEMESTER – III: BOTANY THEORY PAPER – III

(Paper – III: Plant Taxonomy and Embryology)

UNIT – I: INTRODUCTION TO PLANT TAXONOMY

(12hrs)

1. Fundamental components of taxonomy (identification, nomenclature, and classification)
2. Taxonomic resources: Herbarium – methodology and important herbaria in world (RBG, KEW) and India (BSI & Calcutta), Botanical gardens.
3. Botanical Nomenclature – Principles and rules of ICBN (ranks and names: Principle of priority, Binomial system; type method, author citation and valid publication)

UNIT – II: CLASSIFICATION

(12hrs)

1. Types of classification – Artificial, Natural and Phylogenetic.
2. Bentham & Hooker's system of classification – Merits and demerits.
3. Engler & Prantle's system of classification – Merits and limitations.

UNIT – III: Taxonomy of Angiosperms -I

(12hrs)

1. Systematic study and economic importance of the following families: Annonaceae, Rutaceae, caesalpinaceae, Cucurbitaceae, and Apiaceae.

UNIT-IV: TAXONOMY OF ANGIOSPERMS-II

(12hrs)

2. Systematic study and economic importance of the following families: Asteraceae, Asclepiadaceae, Lamiaceae, Euphorbiaceae & Poaceae.

UNIT –IV: EMBRYOLOGY - I

(12hrs)

1. Anther structure, Microsporogenesis and development of male gametophyte
2. Ovule structure and types: Megasporogenesis, development of Monosporic, Bisporic & Tetrasporic types (Peperomia, Drusa and Adoxa) of embryo sacs.
3. Fertilization (out line), Endosperm Types.
4. Development of Dicot and Monocot embryos, Polyembryony.

Suggested activity: Collection of locally available plants of medicinal importance, observing pollen grains in honey, Aero palynology-collection of pollen from air using glycerin strips in different seasons.

Books for Reference:

1. Porter, C.L. (): Taxonomy of flowering Plants, Eurasia Publishing House, New Delhi.
1. Lawrence, G.H.M. (1953): Taxonomy of Vascular Plants, Oxford & IBH Publishers, New Delhi, Calcutta.
3. Jefferey, C.(1968) : An Introduction to Plant Taxonomy J.A. Churchill, London.
4. Mathur, R.C.(1970) : Systematic Botany (Angiosperms) Agra Book Stores-

Lucknow, Ajmer, Allahabad, Delhi.

5. Maheswari, P. (1963) : Recent Advances in the Embryology of Angiosperms (Ed.,)
International Society of Plant Morphologists- University of Delhi.
6. Swamy. B.G.L. & Krishnamoorthy. K.V. (1980): From flower to fruit
Tata McGraw Hill Publishing Co., Ltd., New Delhi.
1. Maheswari, P. (1985): An Introduction to the Embryology of Angiosperms
Tata McGraw Hill Publishing Co., Ltd., New Delhi.
8. Bhojwani, S.S. & Bhatnagar, S.P. (2000) : The Embryology of Angiosperms (4th
Edition) Vikas Publishing House (P) Ltd., UBS Publisher's Distributors, New
Delhi.

KVR GOVT. COLLEGE FOR WOMEN(A), KURNOOL

II B.SC; SEMESTER-III; SUBJECT- BOTANY

PAPER III- PLANT TAXONOMY & EMBRYOLOGY

Model Question Paper

Time: 3 hours

Max. Marks: 60

***Draw neat labeled diagrams wherever necessary.**

SECTION-A

Answer any FIVE of the following questions.

5x4M = 20M

1. Botanical gardens
 2. Types of classifications
 3. Flower in Annonaceae
 4. Economic importance of Lamiaceae
-

5. Spikelet in Poaceae
6. Tapetum
7. Ruminant Endosperm
8. Types of Ovules

SECTION-B

Answer all the questions.

5x8M = 40M

- | | | | |
|--|-----|---|--|
| | 9 | A. Write about herbarium methodology
OR
B. Write an essay on ICBN | |
| | 10 | A. Write an essay on Bentham & Hookers system of classification
OR
B. Write an essay on Engler & Prantl system of classification | |
| | 11 | A. Describe the vegetative & floral characters of Rutaceae
OR
B. Describe the vegetative & floral characters of Cucurbitaceae | |
| | 12. | A. Describe the vegetative & floral characters of Asteraceae
OR
B. Describe the vegetative & floral characters of Asclepiadaceae | |
| | 13 | A. Write about microsporogenesis & development of male gametophyte
OR
B. Describe the development of dicot embryo | |

Internal marks 40 divided as follows:

Internal Assessment examination 20 MARKS 2. Seminar 5 Marks 3. Assignment, 5Marks, Attendance 5 Marks and Quik test 5 Marks.

II B.Sc BOTANY - SEMESTER-III

Paper-III: PRACTICAL

Plant Taxonomy and Embryology

Total hours of laboratory Exercises 30hrs @ 2 per week

Suggested Laboratory Exercises:

1. Systematic study of locally available plants belonging to the families prescribed in theory syllabus.
2. Demonstration of herbarium techniques.
3. Structure of pollen grains using whole mounts (*Hibiscus, Acacia, Grass*).
4. Demonstration of Pollen viability test using *in-vitro* germination (*Catharanthus*).
5. Study of ovule types and developmental stages of embryo sac using permanent slides /Photographs.
6. Structure of endosperm (nuclear and cellular); Developmental stages of dicot and monocot Embryos using permanent slides / Photographs

7. Isolation and mounting of embryo (using *Symopsis / Senna / Crotalaria*)
8. Field visits .
9. Study of local flora and submission of Field Note Book

K.V.R. Govt. COLLEGE FOR WOMEN {AUTONOMOUS}, KURNOOL

II B.Sc., BOTANY-SEMESTER- IV

PRACTICAL MODEL PAPER III PLANT TAXONOMY EMBRYOLOGY

Time:3 hours

Max.marks: 50

1. Describe the given Plant specimens (**A**) in technical terms. Draw neat labeled diagrams of twig with inflorescence. L.S. of flower, T.S of ovary and floral diagrams. Give floral formula and identify the family. (Description- vegetative- 3marks, floral- 6marks; diagrams-4marks, Identification 2mark)

15 marks
 2. Derive the given plant specimen **B** and **C** upto family level

2x5=10
 3. Identification of spotters –**DEF**

3 x 5 = 15
 4. Herbarium and Field notes

03 marks
 5. Record

07 marks
-

K.V.R. Govt. COLLEGE FOR WOMEN {AUTONOMOUS}, KURNOOL

III B.Sc., SEMESTER: V

Paper: IV – PLANT PHYSIOLOGY AND METABOLIS

Total hours of teaching 60hrs @ 4 hrs per week

UNIT – I: Plant – Water relations (12 hrs)

1. Physical properties of water, in relation to plant life.
2. Diffusion-imbibition and osmosis, concept & components of Water potential.
3. Absorption and transport of water and ascent of sap.
4. Transpiration –Definition, types of transpiration, structure and opening and closing
Mechanism of stomata and Anti transpirants

UNIT –II: Mineral nutrition & Enzymes (12hrs)

1. Mineral Nutrition: Essential elements (macro and micronutrients) and their role in plant metabolism, deficiency symptoms.
2. Mineral ion uptake (active and passive transport).
3. Enzymes: General characteristics, mechanism of enzyme action and factors regulating enzyme action.

UNIT –III: PHOTOSYNTHESIS (12 hrs)

1. Photosynthesis: Photosynthetic pigments, photosynthetic light reactions, photo-phosphorylation, carbon assimilation pathways: C₃, C₄, and CAM and their differences.
2. Photorespiration and its significance.
3. Translocation of organic solutes: mechanism of phloem transport, source-sink relationships.

UNIT – IV: PLANT METABOLISM (12 hrs)

1. Respiration: Glycolysis, anaerobic respiration, TCA cycle, electron transport system.
Mechanism of oxidative phosphorylation.
-

2. Nitrogen metabolism- biological nitrogen fixation in *Rhizobium*, outlines of protein Synthesis (transcription and translation).
- 3 Lipid Metabolism: Types of lipids, Beta-oxidation.

UNIT –V: GROWTH AND DEVELOPMENT

(12hrs)

1. Growth and development: definition, phases and kinetics of growth.
2. Physiological effects of phytohormones - Auxins, Gibberellins, Cytokinins, ABA, Ethylene and Brassinosteroids.
- 3 Physiology of flowering -photoperiodism, role of phytochrome in flowering; Vernalization.
4. Applications of growth regulators in Agriculture and Horticulture.

Suggested activity: Seminars, Quiz, Debate, Question and Answer sessions, observing animations of protein biosynthesis in you tube.

Books for Reference:

1. Steward. F.C (1964): Plants at Work (A summary of Plant Physiology) Addison-Wesley Publishing Co., Inc. Reading, Massachusetts, Palo alto, London.
2. Devlin, R.M. (1969) : Plant Physiology, Holt, Rinehart & Winston & Affiliated East West Press (P) Ltd., New Delhi .
3. Noggle, R.& Fritz (1989):Introductory Plant Physiology Prentice Hall of India.
4. Lawlor.D.W. (1989): Photosynthesis, metabolism, Control & Physiology ELBS/Longmans-London.
5. Mayer, Anderson & Bonning(1965): Introduction to Plant Physiology D.Van Nostrand . Publishing Co., N.Y.
6. Mukherjee, S. A.K. Ghosh(1998) Plant Physiology ,Tata McGraw Hill Publishers(P) Ltd., New Delhi.
7. Salisbury, F.B & C.W. Ross (1999): Plant Physiology CBS Publishers and Printers, New Delhi.
2. Plummer, D.(1989) Biochemistry–the Chemistry of life ,McGraw Hill Book Co., London, N.Y. New Delhi, Paris, Singapore, Tokyo.
9. Day, P.M.& Harborne, J.B. (Eds.,) (2000): Plant Biochemistry. . Harcourt Asia (P) Ltd., India & Academic Press, Singapore.

K.V.R. Govt. COLLEGE FOR WOMEN {AUTONOMOUS},KURNOOL

II B.Sc., SEMESTER: IV

Paper: IV– PLANT PHYSIOLOGY & METABOLISM

Model Question Paper

Max.marks: 75

Time:3 hours

Draw labeled diagrams wherever necessary

Section - A

Answer any FIVE of the following questions

5x4=20

1. Anti transpirants
2. Imbibition
3. Mechanism of enzyme action
4. Anaerobic respiration
5. Hill reaction
6. Photoperiodism
7. Brassinosteroids
8. Senescence

Section – B

Answer ALL of the following questions

5 x 8 = 40M

9. A..Write an essay on transpiration
OR
B.Write a brief discussion about Ascent of Sap
10. A. C4 cycle
OR
B.Write about translocation of organic solutes
11. A.Glycolysis
OR
B.β- Oxidation
12. A. write about protein synthesis
Or
B. Write about physiological effect of Auxins
13. A. Write about role of phytochrome in physiology
Or
B. Write about physiology of senescence and Ageing

Internal marks 40 divided as follows:

Internal Assessment examination 20 MARKS 2. Seminar 5 Marks 3. Assignment, 5Marks, Attendance 5 Marks and Quik test 5 Marks.

**II B. Sc BOTANY SEMESTRE- IV, Paper–IV: PRACTICAL SYLLABUS
PAPER-IV: Plant Physiology and Metabolism**

Total hours of laboratory Exercises 30 hrs @ 2 per week

Suggested Laboratory Exercises:

1. Osmosis – by potato osmoscope experiment
2. Determination of osmotic potential of plant cell sap by plasmolytic method using leaves of *Rhoeo* / *Tradescantia*.
3. Structure of stomata (dicot & monocot)
4. Determination of rate of transpiration using cobalt chloride method.
5. Demonstration of transpiration by Ganongs' photometer
6. Demonstration of ascent of sap/Transpiration pull.
6. Effect of Temperature on membrane permeability by colorimetric method.
7. Study of mineral deficiency symptoms using plant material/photographs.
8. Separation of chloroplast pigments using paper chromatography technique.
9. Rate of photosynthesis under varying CO_2 concentrations.
10. Effect of light intensity on oxygen evolution in photosynthesis using Wilmott' bubbler.

SKILL ENHANCEMENT COURSE
MUSHROOM CULTURE TECHNOLOGY
SEMESTER-IV; CREDITS-2
LECTURES:30

MARKS: External evaluation: 30M

Internal evaluation:20M

SYLLABUS

UNIT: I- Introduction**7hrs**

1. Introduction, history, Types of Mushrooms
2. Mushrooms available in India- *Volvariella volvacea*, *Pleurotus citrinopileatus*, *Agaricus bisporus*, Mushroom Research Centres
3. Cost-benefit ratio: Market in India and abroad, export value

UNIT: II- Cultivation Technology**15hrs**

1. Cultivation Technology: Infrastructure, substrates and materials
2. Process of cultivation- Medium sterilization, Preparation of spawn, multiplication; Mushroom bed preparation (paddy straw, sugar cane trash, maize straw, banana leaves), spawning and harvesting; Factors affecting mushroom bed preparation.
3. Composting technology in mushroom production.

UNIT: III- Storage & Utilization**8hrs**

1. Storage: Short term and Long term storage
2. Nutritional and medicinal value of mushrooms
3. Food Preparation: Types of food prepared from mushrooms

SKILL ENHANCEMENT COURSE
MUSHROOM CULTURE TECHNOLOGY
SEMESTER-IV

Time: 1Hr.

Max. Marks:30M

(Instruction to Q.P.Setters: Set **atleast ONE** question from each unit with internal choice)

MODEL QUESTION PAPER

Answer all the questions**3x10M= 30M**

1. Write an essay on mushrooms available in India
-

Or

2. a) Poisonous mushrooms b) Mushroom Research Centres

3. Write an essay on spawn production

Or

4. a) Materials used in mushroom cultivation b) Factors affecting Mushroom bed preparation

5. Write a detailed account on Mushroom storage

Or

6. a) Nutritional value of mushrooms b) Medicinal value of mushrooms

**II B. Sc – SEMESTER- IV, BOTANY PRACTICAL MODEL PAPER
PAPER- IV - Plant Physiology and Metabolism**

1. Perform the Experiments A & B. Give the aim, principle, procedure and observation. Tabulate the results if any. Draw labeled diagram. 2 x 15 = 30 marks

2. Give the protocol of the experiments C & D 2 x 5 = 10 marks

3. Record & Viva

10 marks

50 marks

DEPARTMENT OF BOTANY - BOARD OF STUDIES 2019-20
COURSE CONTENT STRUCTURE

Semester	Paper	Title of paper	Credits	Contact hrs per week	Maximum Marks: 100	
					Continuous Internal Evaluation	Sem End Examination
Semester I	Paper I	Microbial Diversity, Algae, Fungi and Lichens	4	4	40	60
Semester II	Paper II	Bryophyta, Pteridophyta, Gymnosperms and Plant Anatomy	4	4	40	60
Semester I	Practical Paper I		2	3	-	50
Semester II	Practical Paper II		2	3	-	50
III	III	Plant Taxonomy and Embryology	4	4	40	60
IV	IV	Plant physiology & Metabolism	4	4	40	60
IV	Skill Enhancement course	Mushroom culture technology	2	2	20	30
III	Practical paper III	Plant Taxonomy, Embryology	2	3	-	50
IV	Practical Paper IV	Plant physiology & Metabolism	2	3	-	50
V	Paper V	Cell Biology, Genetics &	4	3	40	60

		Plant breeding				
	Paper VI	Plant Ecology, Phytogeography & Biodiversity	4	3	40	60
VI	VII	Plant Tissue culture and Plant Biotechnology	4	3	40	60
	Practical V	Cell Biology, Genetics & Plant breeding	2	3	-	50
	Practical VI	Plant Ecology, Phytogeography & Biodiversity	2	3		50
	Practical VII	Plant Tissue culture and Plant Biotechnology	2	3		50
VI	VIII-A	Plant Diversity and Human welfare	4	3	40	60
	VIII-B	Ethno Botany and Medicinal Botany	4	3	40	60
	VIII-c	Pharmacognosy and Phytochemistry	4	3	- 40	60
	VIII- A	Practical	2	3	-	50
	VIII-B		2	3	-	50
	VIII-C		2	3	-	50

KVR Govt. College for Women
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 KURNOOL



BOARD OF STUDIES MEETING

2019-2020

DEPARTMENT OF ZOOLOGY

02 -08 -2019

II - B.Sc.

Semester-III- Cytology, Genetics and Evolution

Semester-IV-Embryology, Physiology and Ecology.

Minutes of Board Of Studies meeting held in the department of Zoology, KVR Govt. College for Women(A), Kurnool on at 11.00 AM on 02 -08 -2019 and resolved the following:

CONSTITUTION OF THE BOARD OF STUDIES

S.No.	Name & Designation	Acted as
1.	Smt P.Shajahan Begum Incharge of Dept. of Zoology, KVR Govt. College for Women(A), Kurnool	Chairman
2.	Prof.Loknath, Professor in Zoology Rayalaseema University, Kurnool.	University Nominee

3.	Dr.Md. Osman Ahmed, Associate Professor in Zoology, Osmaina College (Autonomous), Kurnool	Subject Expert
4.	Dr.G.Srinivas, Lecturer in Zoology. Silver jubilee Govt. College (A) Kurnool	Subject Expert
5.	Dr. K. Shyam Prasad, Dept.of Animal Husbandry, Collectorate Complex, Kurnool.	Subject Expert
6.	Dr.C.Obulapathi, lecturer in Zoology, KVR Govt. College for Women(A), Kurnool	Member
7.	Sri K.Chandramohan, Lecturer in Zoology, KVR Govt. College for Women(A), Kurnool.	Member
8.	Smt.B.Vedavathi ,Lecturer in Zoology, KVR Govt. College for Women(A), Kurnool	Member
9.	K.Tulsi , M.Sc, Zoology, S.V. University,Tirupathi.	Alumni
10.	C.Apoorva, III BZC (E.M) KVR Govt. College for Women(A), Kurnool	Representative from students
11.	K.Subhanbee, II BZC(E.M), KVR Govt. College for Women(A), Kurnool	Representative from students

RESOLUTIONS

The committee members of BOS in Zoology met on **02 -08 -2019** in the department of Zoology ,KVR Govt. Degree College for Women(A), Kurnool under the chairmanship of **Smt P.Shajahan Begum** I/C of the department of Zoology, discussed the proposals on the curriculum for the II year UG course and developed the following resolutions after thorough discussions..

The following resolutions are made and passed unanimously.

1. Resolved to approve the revised syllabus in Zoology for II year B.Sc., Semester-III- Cytology, Genetics, Evolution and Semester-IV-Embryology, Physiology, Ecology as decided by the expert members and members of the Board of Studies (UG) Zoology.
2. The revised syllabus will come into effect from the academic year **2019-2020** for II B.Sc. Semester-III and Semester-IV.
3. Resolved to conduct the practical examinations at the end of Semester-III, IV, for II B.Sc. students for 50 marks in each paper.
4. Semester- III, IV Each paper carries 60 Marks.
5. Internal Assessment Examination will be for 20 Marks. There will be two Internal Assessment Examinations in each semester. (Average of two to be taken).
6. Seminar, Attendance, extracurricular activities, are given the weightage of 5 Marks each. Assignment is given the weightage of 5 Marks. Total Internal Assessment Marks =40.

7. Resolved to approve the syllabus (Theory Paper - III, IV) for the academic year **2019-2020** as prescribed in the Proforma **Annexure -I & II.**
8. Resolved to approve the list of practicals for Practical – III & IV for the academic year **2019-2020** as prescribed in the proforma **Annexure - III.**
9. Practical scheme of valuation for Practical –III & IV for the academic year **2019-2020** in **Annexure-IV.**
10. Resolved to approve the Model Papers for II-B.Sc. Semester- III and Semester- IV for the academic year 2019-20 as as prescribed in the proformas per **Annexure-V** and **Annexure VI.**
11. Justification report for the syllabus Paper- III,IV(semester III, IV) for the academic year 2019-20 as prescribed in the Proforma in **Annexure VII.**
12. Resolved to recommend the panel of examiners and paper setters as in **Annexure –VIII** from the academic year 2019-20.
13. Resolved to change the paper evaluation pattern for V and VI Semesters (Internal Assessment Marks =40M, External Assessment Marks=60M).Model Model Papers for III-B.Sc. as in **Annexure –IX.**
14. Resolved to approve the syllabus of certificate course on Ornamental fishes as in **Annexure –X.**

**KVR GOVT COLLEGE (W), KURNOOL (Autonomous)
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B.SC. SECOND YEAR SYLLABUS 2019-20**

**ZOOLOGY SYLLABUS FOR III SEMESTER
ZOOLOGY - PAPER - III
CYTOLOGY, GENETICS AND EVOLUTION**

Unit - I

1. Cytology - I

- 1.1 Definition, history, prokaryotic and eukaryotic cells.
- 1.2 Electron microscopic structure of eukaryotic cell.
- 1.3 Plasma membrane –Different models of plasma membrane.

Unit – II

2. Cell organelles

- 2.1 Structure and functions of Endoplasmic Reticulum
- 2.2 Structure and functions of Golgi apparatus
- 2.3 Structure and functions of Lysosomes
- 2.4 Structure and functions of Ribosomes
- 2.5 Structure and functions of Mitochondria
- 2.6. Chromatin - Structure and significance, Chromosomes - Structure, types, functions

Unit - III

3.1 Genetics – I

- 3.1.1 Structure of DNA (Watson &Crick model)
- 3.1.2 Replication of DN
- 3.1.3 Types of RNA.

Unit - IV

4.1 Genetics – II

- 4.1.1 Mendel's work on transmission on traits
- 4.1.2 Sex determination
- 4.1.3 Sex linked inheritance
- 4.1.4 Sex limited genes, Sex influenced genes
- 4.1.5 Human karyotyping

Unit - V

5.1 Evolution

- 5.1.1 Origin of life
- 5.1.2 Lamarckism, Darwinism, Neo – Darwinism, Hardy-Weinberg Equilibrium.
- 5.1.3 Variations, isolating mechanisms, natural selection
- 5.1.4 Types of natural selection (directional, stabilizing, disruptive)
- 5.1.5 Artificial selection and forces of evolution
- 5.1.6 Speciation (Allopatric and Sympatric)

ZOOLOGY SYLLABUS FOR IV SEMESTER

ZOOLOGY - PAPER - IV

EMBRYOLOGY, PHYSIOLOGY AND ECOLOGY

Unit - I

1.1 Embryology

- 1.1.1 Gametogenesis
- 1.1.2 Fertilization
- 1.1.3 Types of eggs
- 1.1.4 Types of cleavages
- 1.2 Formation and functions of Foetal membrane in chick embryo
- 1.3 Development, types and functions of Placenta in mammals

Unit - II

2.1 Physiology - I

- 2.1.1 Elementary study of process of digestion
- 2.1.2 Absorption of digested food
- 2.1.3 Respiration - Pulmonary ventilation, transport of oxygen and carbon-dioxide
- 2.1.4 Circulation - Structure and functioning of heart, Cardiac cycle
- 2.1.5 Excretion - Structure of nephron, urine formation, counter current mechanism

Unit - III

3.1 Physiology - II

- 3.1.1 Nerve impulse transmission - Resting membrane potential, origin and propagation of action potentials along myelinated and non-myelinated nerve fibers
 - 3.1.2 Muscle contraction - Ultra structure of muscle fibre, molecular and chemical basis of muscle contraction
 - 3.1.3 Endocrine glands - Structure, secretions and the functions (of hormones) of pituitary, thyroid, parathyroid, adrenal glands and pancreas
-

3.1.4 Hormonal control of reproduction in a mammal

Unit - IV

4.1 Ecology - I

4.1.1 Meaning and scope of Ecology

4.1.2 Ecosystem – abiotic and biotic factors

4.1.3 Nutrient cycles - Nitrogen, carbon and phosphorus

4.1.4 Components of Ecosystem (Example:lake), food chains and food web, energy flow in ecosystem

Unit - V

5.1 Ecology - II

5.1.1 Habitat and ecological niche

5.1.2 Community interactions - Mutualism, commensalism, parasitism, competition, predation

5.1.3. Population studies

5.2 Zoogeography

5.2.1 Zoogeographical regions

5.2.2 Study of physical and faunal peculiarities of Oriental, Australian and Ethiopian regions

5.2.3. Biodiversity in India, Threatened species in India .

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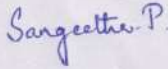
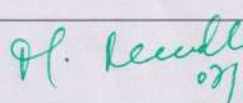

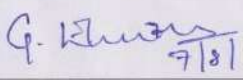
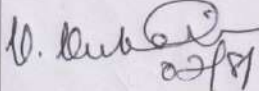
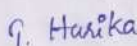
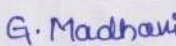
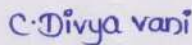
Board of Studies Meeting

Department of Biotechnology

(w.e.f. 2019-20)

Minutes of Board of Studies meeting held in the Department of Biotechnology , KVR Govt. College for Women(A), Kurnool on 07-08-2019 at 10:30 AM and resolved the following:

CONSTITUTION OF THE BOARD OF STUDIES OF BIOTECHNOLOGY ON 07-08-2019

S.No	Name and Designation	Acted as	Signature
1.	Smt.G.Indravathi, Incharge - Dept. of Biotechnology KVR Govt. College for Women(A), Kurnool	Chairman	
2.	Smt.P.Sangeetha Lecturer in Biotechnology KVR Govt. College for Women(A), Kurnool	Member	
3.	Dr.M.Brahmanandam, Department of Biochemistry University of Hyderabad, Hyderabad	University Nominee	 07/08/19
4.	Dr. A. Vimala Rodhe Lecturer in Microbiology, Silver Jubilee College, Kurnool	Subject Expert	
5.	Dr.G. Ebenezer, Lecturer in Biotechnology. Govt Degree College (M) , Kurnool.	Subject Expert	 7/8/19
6.	Dr. Venkateshwarlu, Director, Pushpanjali Agri Input Technologies, Kurnool	Representative from Industry	 07/08/2019
7.	Kum.T.Harika M.Sc. Biotechnology Rayalaseema University	Alumni	
8.	Kum.G.Madhavi , III BSc Biotechnology, KVR GCW (A), KNL.	Student Representative	
9.	Kum.C. Divya Vani, III BSc Biotechnology KVR GCW (A), KNL	Student Representative	

RESOLUTIONS

The BOS members of Biotechnology met on 07-08-2019 in the Department of Biotechnology, KVR Govt. Degree College for Women(A), Kurnool under the chairmanship of Smt.G.Indravathi I/C of the Department of Biotechnology, discussed the proposals on the curriculum for the II year UG course and passed the following resolutions.

The following resolutions are made and passed unanimously.

1. Resolved to approve the revised syllabus in Biotechnology for II B.Sc., (Semester-III and Semester-IV) as decided by the Expert members and members of the Board of Studies (UG) Biotechnology.
2. The revised syllabus will come into effect from the academic year 2019-20 for II B.Sc., (Semester-III and Semester-IV)
3. In II year there will be one paper for each Semester i.e., Paper-III for Semester-III and Paper-IV for Semester-IV . Each paper carries 60 Marks.
4. For II year, Internal Assessment Examination will be for 20 Marks. There will be two Internal Assessment Examinations in each semester and the total Internal Assessment Marks will be 40 M. Average of the two internal assessments will be taken.
5. Resolved to approve the syllabus (Theory Papers III & IV) for the academic year 2019-20 as prescribed in the proforma **Annexure –I , III.**
6. Resolved to approve the list of practicals for II year for the academic year 2019-20 which will be held at the end of every semester as prescribed in the proforma **Annexure – II , IV.**
7. Resolved to approve the syllabus of skill enhancement course on mushroom cultivation.

8. Scheme of evaluation for 50 marks project work in Paper VIII A3- Bioethics, Biosafety, IPR and Genetic Counselling is ratified. It is as follows :

S.No.	Project	Marks Alloted
1.	Project Report	30M
	a. Abstract	5M
	b. Case Study 1	5M
	c. Case study 1 Conclusion	5M
	d. Case Study 2	5M
	e. Case study 2 Conclusion	5M
	f. Conclusion of the project	5M
2.	Power point presentation	10M
3.	Viva	10M
	Total	50M

9. Resolved to approve the Blue print and Model Papers for II-B.Sc. (Semester-III and Semester-IV) for the academic year 2019-20 as prescribed in the proformas of **Annexure- V,VI,VII,VIII & IX.**
10. Justification report for the syllabus Semester- III and IV for the academic year 2019-20 are as prescribed in the proforma in **Annexure X.**
11. It is resolved to include Bioinformatics & Biostatistics and Bioprocess Engineering as separate papers in final year.
12. It is resolved to change Paper-IV title Immunology to Immunology and Vaccinology.

A. U. S. S. S.
G. Harika
C. Divya varsi
G. Madhavi

H. S. S. S. S.
Sangeetha P.

KVR Govt. Degree College for Women(A), Kurnool					
Department of Biotechnology					
Major Changes in II year Syllabus 2019-2020					
S.No	Semester	Paper	Title of the Paper	Major Additions/Deletions	Justification
1	Sem-III	Paper - III	Biophysical Techniques	Microscopy -Deleted Electrophoresis -Added Tracer technique - Added	1. Microscopy related topics were removed as it is included in I year syllabus. 2. Biophysical techniques and Immunology paper were separated as individual papers to give complete knowledge on each paper. 3. The topics related to Immunology in III semester were replaced by topics of Biophysical techniques of IV Semester.
2	Sem-IV	Paper -IV	Immunology and Vaccinology	Electrophoresis - Deleted Tracer technique - Deleted Transplantation Immunology -Added Cancer and Immune system Added	1. Biophysical techniques and Immunology paper were separated as individual papers to give complete knowledge on each paper. 2. The topics related to Biophysical techniques in IV semester were replaced by topics of Immunology in III Semester. 3. As Syllabus in IV semester includes only Immunology and comprises only Four units which is not according to APSCHE model paper, two new units are included. 4. Transplantation Immunology is included as a new unit to make the students aware of new techniques like skin grafting and organ transplantation. 5. Cancer and Immune system is included as another unit to create awareness on cancer biology.

A. U. S. S. S.
G. Anurag
W. Subash
T. Harika

H. Beenukku
S. S. S.
Sangeetha . P.

C. Divya Vani
G. Madhavi

ANNEXURE - I

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Paper III - BIOPHYSICAL TECHNIQUES

UNIT I- Centrifugation :

Basic principles, concept of RCF, types of centrifuges (clinical, high speed and ultra centrifuges).

Preparative centrifugation: Differential and density gradient centrifugation, applications (Isolation of cell components).

Analytical centrifugation: Sedimentation coefficient, determination of molecular weight by sedimentation velocity and sedimentation equilibrium methods.

UNIT II - Spectrophotometry:

Concept of electromagnetic radiation, spectrum of light, absorption of electromagnetic radiations, Concept of chromophores and auxochrome in absorption of electromagnetic radiations.

Absorption spectrum and its uses, Beer's law-derivation and deviations, extinction coefficient. Difference between spectrophotometer and colorimeter.

Principles and applications of UV and visible spectrophotometry.

Spectrofluorimetry: Principle, instrumentation and applications.

Absorption & emission flame photometry: Principle, instrumentation and application.

Principles & applications of IR, NMR and Mass spectrometry

UNIT III - Chromatography:

Partition principle, partition coefficient, Brief account of paper chromatography, thin layer chromatography and column chromatography.

Gel filtration Chromatography and its applications,

Ion-exchange chromatography: Principle & applications,

Affinity chromatography :Principle & applications,

Gas chromatography (GC) and High Pressure Liquid chromatography (HPLC).

UNIT IV - Electrophoresis :

Basic Principle, Migration of ions in electric field, Factors affecting electrophoretic mobility.

SDS-PAGE electrophoresis: Applications (determination of molecular weight of protein, molecular biology applications).

Isoelectric focusing & Pulsed-field gel electrophoresis- Principle & applications.

UNIT V - Isotopic tracer technique and applications of radioisotopes

Radioactive & stable isotopes, rate of radioactive decay. Units of radioactivity.

Measurement of radioactivity: Ionization chambers, proportional counters,

Geiger-Muller counter (basic principle, instrumentation and technique).

Principles of tracer technique, advantages and limitations, applications of isotopes in biotechnology (distribution studies, metabolic studies, isotope dilution technique, metabolic studies, clinical applications, autoradiography).

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SECOND YEAR BIOTECHNOLOGY
SEMESTER III : PRACTICAL PAPER – III

Biophysical techniques

1. UV Absorption spectrum of Nucleic Acids
2. Spectrophotometric analysis of DNA denaturation.
3. Determination of purity of DNA.
4. Paper chromatography of amino acids/ sugars.
5. Cellular fractionation and separation of cell organelles using centrifuge.
6. TLC of amino acids/ sugars.
7. Gel electrophoresis of Nucleic acids.
8. SDS-PAGE.

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

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(w. e. f. 2019-2020)**

DEPARTMENT OF BIOTECHNOLOGY

SECOND YEAR – IV SEMESTER SYLLABUS

Paper IV – IMMUNOLOGY AND VACCINOLOGY

Module I – Immunology :

Overview of Immune system: Organs and cells of immune system. Immunity- Innate immune mechanism, Acquired immune mechanism, Humoral and Cell mediated Immune system, ADCC).
.Antigen, Antigenicity(factors affecting antigenicity), Epitopes, Haptens.

ModuleII : Antibodies :

Antibody structure and classes, Antibody diversity, Genes of antibodies. Cytokines and brief idea of MHC, Main pathways of complement system.

Module III- Hypersensitivity :

Hypersensitivity and Vaccination:Generalfeatures of hypersensitivity, various types of hypersensitivity, Immediate and Delayed type hypersensitivity .

Vaccination: Discovery ,principles, significance.

Concept of autoimmunity.

Module IV - Immunological Techniques :

Antigen- antibody reactions: Precipitation ,agglutination , complement fixation, immune diffusion, ELISA. Hybridomatechnology: Monoclonal antibodies and their applications in immuno diagnosis.

Module V – Transplantation and Cancer Immunology :

Transplantation antigens, Tissue typing, Skin Grafting, Graft Rejection, Mechanism involved in Graft rejection, Clinical manifestations of Graft rejection Clinical Transplantation- Kidney, Bone marrow, Heart transplantation.

Oncogenes and Cancer Induction- Function of Cancer Associated genes, Regulation of Programmed Cell Death, Tumor Antigens- Tumor specific antigens, Tumor Associated Antigens,Cancer Immunotherapy- Cytokine therapy, Monoclonal antibodies.

ANNEXURE - IV

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL
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SECOND YEAR BIOTECHNOLOGY

(w.e.f. 2019-2020)

SEMESTER IV : PRACTICAL PAPER – IV

IMMUNOLOGY AND VACCINOLOGY

1. Antigen– antibody reaction– determination of Blood group
 2. Pregnancy test
 3. Widaltest
 4. Ouchterlonyimmune diffusion
 5. Radial immunodiffusion
 6. Differential Count
 7. RBC Count
 8. WBC Count
 9. Estimation of haemoglobin by Sahli's method
 10. VDRL Test
-

RESOLUTIONS

The members of BOS in Bio-Chemistry met on 17/8/2019 in the department of Bio-Chemistry, KVR Govt. Degree College for Women(A), Kurnool under the chairmanship of B.Dhanasree, I/C of the Department of Bio-Chemistry, discussed the proposals on the curriculum for the UG course and passed the following resolutions.

The following resolutions are made and passed unanimously.

1. Resolved to approve the three years (1st, 2nd and 3rd years) Bio-Chemistry revised syllabus and Model papers, Certificate course in Bioinformatics, Health & Nutrition and Skill enhancement course MLT
2. Resolved to approve the revised syllabus in Bio-Chemistry for II B.Sc., Semester-III and Semester-IV as decided by University nominee, subject experts and members of the Board of Studies Bio-Chemistry.
3. The revised syllabus will come into effect from the academic year 2019-20 for II B.Sc. Semester-III and Semester-IV.
4. Resolved to conduct the practical examinations with a maximum of 50 Marks at the end of Semester-III and Semester-IV
5. Resolved to approve the 60 – 40 marks Examination pattern for the I year and II year students, and IIIrd year students with effect from this academic year 2019-20. It is decided to allot 40 Marks for the Internal assessment which includes 20 Marks for the test, 5 Marks for assignment, 5 Marks for student activity (seminar, debate, group discussion, ppt , VIVA), 5 Marks for Surprise MQA test and 5 Marks for the student attendance.



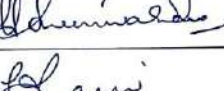
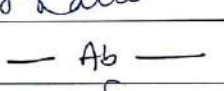
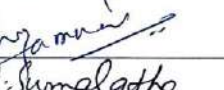
The Question Paper pattern for External Examination is as follows,

Section	Type	Number of questioned to be answered	Number of questions given	Marks per question	Marks
I	Short Essay	5	8	4	20
II	Essay	5	5	8	40
Total Marks					60

Contd..


Dept. of Biochemistry, KVR GCW (autonomous), Kurnool

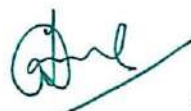

6. Resolved to authorize the Chairman of Board of Studies to make any alterations either in syllabus or pattern in accordance with the instructions from APSCHE, University and CCE.

S.NO	NAME	DESIGNATION	SIGNATURE
1.	Mrs. Dhanasree Basipogu M.Sc, M.Phli, M.Sc, (Ph.D)	Chairman	
2.	Prof. Chitta Suresh Kumar	University Nominee	
3.	Dr. C.S.Sreenivasa Rao M.Sc, M.Phli, Ph.D	Subject Expert	
4.	Smt.S.Shoba Rani M.Sc, B.Ed	Subject Expert	
5.	Dr. A. Padma Vijaya sree MBBS, MD	Educationalist/ Industry Nominee	— Ab —
6.	Dr. S.Nizamuddin Basha M.Sc, Ph.D	Educationalist/ Industry Nominee	
7.	Sumalatha	Student Nominee	B. Sumalatha
8.	Y. Rizwana	Student Representative	Rizwana
9.	B. Janaki	Student Representative	Janaki

Justification Report

MAJOR CHANGES IN SYLLABI

S.No.	Subject	Paper	Title of the Paper	Major additions/deletions	Justification
1.	Biochemistry	3rd Semester Paper- 3301	Enzymology and Bioenergetics	<ul style="list-style-type: none">• Assay of Beta amylase from sweet potatoes• Determination of optimum temperature and pH for amylase• Effect of Substrate concentration of amylase activity• Ultra structure of chloroplast	<p>Students need to have knowledge on practical Enzymology.</p> <p>Need to have an idea to learn photosynthesis in detailed</p>
2.	Biochemistry	4 th Semester Paper- 4301	INTERMEDIARY METABOLISM	Disorders of carbohydrate metabolism and Lipid metabolism removed	As these topics are not required in exam point of view as these units are having excess syllabus and they can be studied as additional inputs

Chairman - 
University Director - 

K.V.R. GOVT. DEGREE COLLEGE (W), KURNOOL.

DEPARTMENT OF BIOCHEMISTRY

CERTIFICATE COURSE: "BASIC ASPECTS IN BIOINFORMATICS"

→ SYLLUBUS:

UNIT 1:

Description of biological database, sequence analysis – protein sequence and structure: *protein sequence, secondary structure, backbone conformation, super-condarstructure, tertiary protein structure, folds, domains, quaternary structure*. Similarity between protein sequences - concepts and tools. Similarity between protein structures - concepts and tools. Relationship between protein sequence and structure . protein structure Prediction

UNIT 2:

Computer training:

Sequence databases (*NCBI, Genebank, SwissProt*)

Sequence similarity searches with *Blast*

Sequence alignment and Multiple Sequence Alingment

Viewing protein 3D structures with Rasmol or RasTop

Protein structural databases (*Pdb, Dali, Cath*)

Secondary structure prediction (*PDBSUM*)

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K.V.R. GOVT. DEGREE COLLEGE (W), KURNOOL.

DEPARTMENT OF BIOCHEMISTRY

SKILL ENHANCEMENT COURSE: "MEDICAL LAB TECHNICIAN"

DURATION: 15 Days WEEK (3 hours/day) -- 2014 September 1st to September 20th

SYLLUBUS:

- a) Collection of blood. - Universal precautions - Methods of collection, venous puncture, finger puncture and vacutainer methods, materials required, procedures, precautions, uses of the sample and advantages of each method.
- b) Preparation of anti coagulants Double oxalate, sodium citrate, EDTA, Heparin, action of each preparation, uses, disadvantages, quantity required.
- c) RBC, WBC count: Methods [Micro dilution and bulk dilution], materials required, diluting fluids, preparation, procedures, advantages of each method, precautions, formula for calculation and clinical significance.
- d) Platelet count: Morphology and functions of platelet, diluting fluids, procedure, formula for calculation and clinical significance.
- e) Reticulocyte Count: Methods [dry & wet] staining, diluting fluids, normal Morphology and values, clinical significance.
- f) Hemoglobin Estimation: Materials, procedure of Tallquist, Sahli's, Alkali, Haldane, Cyan meth hemoglobin and Specific Gravity [S.G] method, advantages and disadvantages and clinical significance.
- g) Estimation of PCV Macro & Micro methods, procedure of filling the tube, centrifuging and reading, values advantages of each method – normal values and clinical significance. -Estimation of Erythrocyte indices calculation and importance MCV, MCH, MCHC, RDW, color index.
- h) ESR- methods used, procedure, stages, factors affecting and clinical significance.

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K.V.R. GOVT. DEGREE COLLEGE (W), KURNOOL.

DEPARTMENT OF BIOCHEMISTRY

CERTIFICATE COURSE: HEALTH & NUTRITION

Syllabus

(Duration: 45 Hrs)

- 1) Basic concepts of health, food and nutrition. Understanding relationship between food, nutrition and health.
- 2) Nutrients: Functions and dietary sources of carbohydrates, fats, proteins.
- 3) Vitamins: Functions, dietary sources and deficiency diseases of water soluble and fat soluble vitamins.
- 4) Minerals: Functions, dietary sources and deficiency diseases of calcium, iron and iodine.
- 5) Food groups and concept of balanced diet. Calorific values of different foods. Determination of calorific values of various foods.
- 6) Basal metabolic rate (BMR) and factors affecting it.
- 7) Physiological changes, recommended dietary allowances and healthy food choices for pregnant woman and lactating mother.
- 8) Growth and development, recommended dietary allowances and healthy food choices for infants and children.
- 9) Nutritional problems and their implications: Under nutrition-Protein energy malnutrition, kwashiorkor and marasmus.
- 10) Nutritional anemia's-types, causes, symptoms, treatments and preventions.
- 11) Over nutrition: Obesity, coronary heart diseases
- 12) Etiology, clinical features, diagnosis and nutritional management of diabetes
- 13) Etiology, clinical features, diagnosis and nutritional management of food allergy and food intolerance.
- 14) Role of nutrition in fitness. Importance of physical activity, diet and exercise for weight management.
- 15) Social health problems: Smoking, Alcoholism, Drug addiction.

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Revised Syllabus

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM

SECOND YEAR B.Sc. BIOCHEMISTRY 2019-20

THIRD SEMESTER

Theory : BCT-301 Enzymology and Bioenergetics

Unit - I : Bioenergetics

1. Energy transformations in the living system
2. Free energy, Enthalpy and Entropy concepts.
3. Exergonic and endergonic reactions.
4. High energy compounds.
5. Phosphate group transfer potential.
6. Substrate level phosphorylation.

Unit – II: Biological Oxidations

1. Redox reactions. Redox couplers. Reduction potential ,Standard reduction potential of some biochemically important half reactions.
2. Ultrastructure of mitochondria, Electron transport chain and carriers involved.
3. Oxidative phosphorylation, theories of oxidative phosphorylation- Mitchell's chemiosmotic theory. $F_0 F_1$ - ATPase, Inhibitors of respiratory chain and oxidative phosphorylation, uncouplers.
4. Ultrastructure of chloroplast
5. Cyclic and non-cyclic photophosphorylation.

Unit - III : Introduction to Enzymology

1. Introduction to biocatalysis, differences between chemical and biological catalysis.
2. Nomenclature and classification of enzymes.
3. Definition of holo-enzyme, apo-enzyme, coenzyme, cofactor, Fundamentals of enzyme assay, enzyme units.
4. Methods of Enzyme purification
5. Enzyme specificity. Active site.
6. Principles of energy of activation, transition state.
7. Interaction between enzyme and substrate- lock and key, induced fit models.

Unit III: Influence of Physical factors and Inhibitors on Enzyme activity.

12 hours

1. Factors affecting the catalysis- substrate concentration, pH, temperature, Time, Enzyme concentration and Product concentration
2. Michaelis - Menten equation for single substrate reaction, significance of K_M and V_{max} .
3. Enzyme inhibition- irreversible and reversible, types of reversible inhibitions- competitive and non-competitive.

Unit – IV: Enzyme Kinetics and Enzyme action

1. Rate of a Reaction Outline of mechanism of enzyme action- acid-base catalysis, covalent catalysis, electrostatic catalysis, and metal ion catalysis
2. Regulation of enzyme activity- allosterism and cooperativity, ATCase as an allosteric enzyme, covalent modulation- covalent phosphorylation of phosphorylase.
3. Zymogen activation- activation of trypsinogen and chymotrypsinogen.
4. Isozymes (LDH) and Multienzyme complexes (PDH). Ribozyme.

5. Disorders of nucleotide metabolism- Gout, Lesch- Nyhan syndrome.
6. Biosynthesis of heme
7. Degradation of heme

Unit- V: Nitrogen Fixation

12 hours

1. Nitrogen cycle,
2. Non-biological and biological nitrogen fixation,
3. Nitrogenase system.
4. Utilization of nitrate ion, Ammonia incorporation into organic compounds.
5. Synthesis of glutamine and regulatory mechanism of glutamine synthase.

References

1. Lehninger's Principles of Biochemistry – Nelson.D.L. and Cox.M.M., Freeman & Co.
2. Biochemistry – Berg.J.M., Tymoczko.J.L. and Stryer.L., Freeman & Co.
3. Biochemistry – Voet.D and Voet., J.G., John Wiley & Sons .
4. Textbook of Biochemistry – West.E.S., Todd.W.R., Mason.H.S. and. Bruggen, J.T.V., Oxford & IBH Publishers.
5. Principles of Biochemistry: General Aspects-Smith, E. L., Hill, R.L. Lehman, I. R. Lefkowitz, R.J. Handler, P., and White, A. McGraw-Hill
6. Outlines of Biochemistry – Conn.E.E., Stumpf.P.K., Bruening, G and Doi.R.H., John Wiley & Sons .
7. Harper's Illustrated Biochemistry – Murray, R.K., Granner.D.K. & Rodwell,V.W., McGraw- Hill 8. Biochemistry-Lippincott's Illustrated Reviews. Champe, P.C. and Harvey, R. A. Lippincott
8. Fundamentals of Biochemistry –Jain, J.L., Jain, S., Jain, N. S. Chand & Co.
9. Biochemistry – Satyanarayana. U and Chakrapani. U, Books & Allied Pvt. Ltd.
10. Biochemistry – Rama Rao. A and Ratna Kumari. D, Kalyani Publishers.
11. Biochemistry- The Molecular Basis of Life – McKee. T and McKee, J. R, McGraw-Hill.

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Revised Syllabus

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM

SECOND YEAR B.Sc. BIOCHEMISTRY 2019-20

FOURTH SEMESTER

THEORY: BCT- 401 INTERMEDIARY METABOLISM

Unit-I : Amino acid Metabolism

1. General reactions of amino acid metabolism- transamination, decarboxylation and deamination
2. Urea cycle and regulation
3. Catabolism of carbon skeleton of amino acids- glycogenic and ketogenic amino acids.
4. Metabolism of glycine, serine, aspartic acid, methionine, phenylalanine and leucine.
5. Biosynthesis of creatine.
6. Inborn errors of aromatic amino acids
7. Inborn errors of branched chain amino acid metabolism.

Unit- II : Carbohydrate Metabolism

1. Concept of anabolism and catabolism.
2. Glycolytic pathway, energy yield. Fate of pyruvate- formation of lactate and ethanol, Pasteur effect.
3. Citric acid cycle, regulation, energy yield, amphipathic role. Anaplerotic reactions.
4. Glycogenolysis and glycogenesis.
5. Pentose phosphate pathway.
6. Gluconeogenesis.
7. Photosynthesis- Light and Dark reactions, Calvin cycle and C4 Pathway, CAM Pathway

Unit- III: Lipid Metabolism

1. Catabolism of fatty acids (β - oxidation) with even and odd number of carbon atoms
2. Ketogenesis
3. *de novo* synthesis of fatty acids
4. Elongation of fatty acids in mitochondria and microsomes
5. Biosynthesis and degradation of triacylglycerol
6. Biosynthesis of lecithin.
7. Biosynthesis of cholesterol.

Unit- IV : Nucleic acid Metabolism

1. Biosynthesis of purine and pyrimidine nucleotides, *de novo* and salvage pathways.
2. Regulation of purine and pyrimidine nucleotides
3. Catabolism of purines and pyrimidines.
4. Biosynthesis of deoxyribonucleotides- ribonucleotide reductase and thymidylate synthase and their significance.

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References:

1. Lehninger's Principles of Biochemistry – Nelson.D.L. and Cox.M.M., Freeman & Co.
2. Biochemistry – Berg.J.M., Tymoczko.J.L. and Stryer.L., Freeman & Co.
3. Biochemistry – Voet.D and Voet., J.G., John Wiley & Sons
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6. Harper's Illustrated Biochemistry – Murray, R.K., Granner.D.K. & Rodwell,V.W., McGraw-Hill
7. Biochemistry-Lippincott's Illustrated Reviews. Champe, P.C. and Harvey, R. A. Lippincott
8. Fundamentals of Biochemistry –Jain, J.L., Jain, S., Jain, N. S. Chand & Co.
9. Biochemistry – Satyanarayana. U and Chakrapani. U, Books & Allied Pvt. Ltd.
10. Fundamentals of Enzymology – Price.N.C. and Stevens.L., Oxford University Press.
11. Understanding Enzymes – Palmer.T., Ellis Harwood.
12. Enzymes – Biochemistry, Biotechnology, Clinical Chemistry – Palmer.T., Affiliated East-West Press


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Practical – BCP-301: Enzymology

List of Experiments:

45 hrs

(3 periods/week)

1. Assay of salivary α -amylase
2. Assay of α -amylase from sweet potatoes
3. Assay of urease
4. Assay of catalase
5. Assay of phosphatase
6. Determination of optimum temperature and pH for amylase
7. Determination of optimum pH for phosphatase
8. Effect of Substrate concentration of amylase activity

Practical – BCP-401: Quantitative Analysis

45 hrs

List of Experiments:

(3 periods/week)

1. Estimation of amino acid by Ninhydrin method.
2. Estimation of protein by Biuret method.
3. Estimation of protein by Lowry method.
4. Estimation of glucose by DNS method.
5. Estimation of glucose by Benedict's titrimetric method.
6. Estimation of total carbohydrates by Anthrone method.

References

1. Experimental Biochemistry-A student companion-Beedu Sashidhar Rao and VijayDeshpande.
2. Laboratory Manual in Biochemistry- Jayaraman, J. Wiley Eastern
3. Enzyme Assays- A practical Approach: Eisenthal, R and Dawson, M.L., IRL Press.
4. Biochemical Methods- Sadasivam, S and Manickyam, A. New Age International Publishers.

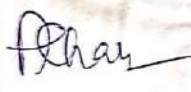
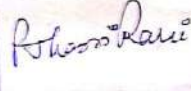

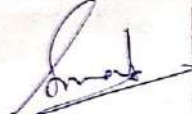
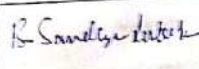
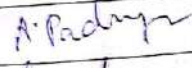
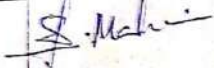

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14 BOS Meeting 2019-20

14-08-2019

The board of Studies in Home science met on 14-08-2019 in the Department of Home science. discussed and approved the syllabus for III & IV Semesters theory and practical papers Prepared based on the basis of UGC Common core model syllabus and S.V university and other autonomous colleges syllabus for II BSc Home science for the Academic year 2019-20.

S. No.	Category	Name and Designation	Chairperson/ Member	Signature
I	Head	Dr. Arati Chakra, Asst. Professor, Dept. of Home Science, KVR GCW(A), Kurnool	chairperson	
II	Faculty	1. Mrs. P. Jhansi Rani, Contract Faculty, Dept. of Home Science, KVR GCW(A), Kurnool	member	
		2. Mrs. B. Rajitha Devi, Contract Faculty, Dept. of Home Science, KVR GCW(A), Kurnool	member	
III	One expert nominated by Vice Chancellor	Dr. (Mrs) A. Sumana, Associate professor, Dept. of Food & Nutritional Sciences, Sri Satya Sai Institute of Higher Learning (Deemed to be University), Anantapur	member	
IV	Two subject experts from other colleges	1. Mrs. K. Lavanya, Asst professor, Dept. of Home Science, ASD Govt. College for women (A), Kakinada	member	—
		2. Mrs. B. Sandhya Lakshmi, Lecturer in Home Science, Osmania college for women(A), Kurnool	member	
V	Expert from Industry	Mrs. A. Padmaja, Founder and Chairperson, KIFT, Kurnool	member	
VI	Student Alumni	Mrs. Maheswari, Clinical Dietitian, Kurnool	member	

**SYLLABUS FOR
THE III & IV
SEMESTER
2019-20
Module-
HSC.301FOOD
SCIENCE**

Theory - 4 lec / week

External- 60 marks

Practical - 3 hrs/week

Internal- 40 marks

Learning Outcome

- To study various food groups with respect to composition, nutritive value, selection, processing and their role in cookery.
- To study the methods of food preparation and ways to improve the nutritional quality.

Theory

Unit-I Food- Definitions, concepts and functions of food

- ICMR food group classification
- Factors affecting food selection

Unit-II Food Preparation- Objectives of cooking, Classification of cooking methods

- Moist heat and dry heat and combination methods- advantages & disadvantages
- Microwave cooking- Practical hints to use
- Effect of cooking on food and nutrients.
- Minimizing the loss of nutrients while processing/cooking

Unit-III Study of Foods from Plant Origin

- Cereals and millets-structure, composition and nutritive value of rice and wheat, parboiling of rice, malting, important products, and role in cookery.
- Pulses and legumes: composition and nutritive value, germination, fermentation, natural toxins present in pulses, lathyrism, factors affecting the cooking of pulses
- Nuts and oils seeds: nutritive value, use in cookery- groundnut, coconut, gingili seeds, soybean etc., and their role in cookery.

Unit-IV Study of Foods from Plant Origin

- Vegetables and fruits: classification, nutritive value, pigments, ripening changes, browning reaction (enzymatic and non-enzymatic).
- Spices and condiments- medicinal value and their role in cookery
- Beverages: classification and function- tea, coffee and cocoa flavoring substance & types

Unit-V Study of foods from

Animal origin:

- Milk and Milk products: composition, nutritive value, types of milk & importance of curd as probiotic
- Eggs: Structure, composition, nutritive value, quality and role of egg in cookery
- Meat and poultry: postmortem changes in meat.
- Fish: Composition and nutritive value.

PRACTICAL

1. Standardization of weights and measures of various food items.
2. Food preparation and understanding the cooking procedure for different types of food-Cereals, Pulses, Milk, Egg, Fish and Meat, and Vegetable cookery
3. Preparation of Resource File

REFERENCES

1. Srilakshmi, B. (2010). Food Science, 5th Edition. New Age International Ltd.
 2. Swminathan, M. Hand Book of Food and Nutrition the BPP Co.Ltd
-

HSC 302. HOUSING FOR BETTER LIVING

Theory - 4 lec / week

External- 60 marks

Practical - 3 hrs/week

Internal- 40 marks

Learning Outcome

- To study various types of houses, housing needs in different stages of family lifecycle
- To understand the ergonomics in planning for family living space

THEORY

Unit-I Introduction to House

- Importance of Housing
- Types of houses
- Functions of a house

Unit II Housing needs in different stages of family lifecycle and economic levels.

- Housing choice - Ownership Versus Renting -Advantages and Disadvantages
- Selection of site

Unit-III Planning of housing

- Principles of Planning and importance of planning space
- Orientation – importance, definitions –Aspect, Prospect, Privacy, Grouping, Roominess, Flexibility, Circulation, Sanitation, Light, Ventilation, Stuffiness, Cleanliness
- Factors to be considered while planning different rooms and ways to attain Good Orientation in Residential Building

Unit-IV Ergonomics in

Planning for family living space

- Designing Service Space – Planning for efficient Kitchen, Kitchen layout
- Planning for efficient work centers and storage areas in the kitchen, bathroom, laundry and other areas of the house.
- Practical considerations of Water supply, Electricity, Plumbing, and drainage facilities

Unit-V Housing Finance

- Financial agency – HDFC, LIC and other banks
- State and Central Housing Scheme- HUDCO
- Prevention of accidents and safety measures in the home.

PRACTICALS:

1. Learning to read House plan – Identification of Symbols
2. Site plan, Floor plan, Elevation, Perspective view, Land scape plan
3. Drawing house plan for different income groups
4. Drawing different types of Kitchen plan
5. Storage and cupboard design.
6. Preparation of Resource

REFERENCES

1. Julius Panero and Martin Zelink, (1979), Human Dimensions and Interior Space
 2. Home furnishing by Rett
 3. Home management by Gross and Crandle
 4. Textbook of Home science- Premlata Mullick
-

Modules HSC 303 TEXTILE FIBERS TO FABRIC

Theory - 4 lec / week

External- 60 marks

Practical - 3 hrs/week

Internal- 40 marks

Learning Outcome

- To study various fibers, manufacturing process, properties and uses
- To learn the methods of yarn construction

THEORY

Unit 1. Introduction to Textiles & Clothing -Importance of study of Textiles to the consumer

- Classification of Textile fibers – natural and manmade; staple and filament.
General properties of cellulose, protein, synthetic and mineral fibers
- Primary and secondary properties of fibers.

Unit 2. A brief study of production, properties, use and care of fibers

- Natural vegetable fibers - cotton, linen and minor cellulose fibers.
- Natural protein fibers – silk and wool.

Unit 3. Brief study of production, properties use and care of

- Manmade fibers - nylon, polyester and acrylic fibers.
- Regenerated cellulose fibers – viscose rayon, cupra ammonium rayon and acetate rayon.
- Mineral fibers - asbestos, fiber glass and metallic fibers

Unit 4. Yarn Construction – Spinning – mechanical and chemical spinning processes.

- Classification of yarns- simple, novelty and textured yarns
- Mixtures and blends – meaning, uses and problems.

Unit 5. Equipment and supplies used in garment construction- measuring and drafting,

marking, sewing and finishing equipment.

- Sewing machine and its care- parts of sewing machine, defects, causes and adjustments of sewing machine
 - Care and upkeep of the sewing machine
-

PRACTICALS

1. Sewing machine description, use, care and simple repairs
2. Sewing kit, sewing equipment, measuring tools, marking tools and tools used during construction.
3. Field visit to any tailoring centre.
4. Basic stitches- temporary, permanent and neatening stitches.
5. Seam and seam finishes.
6. Neckline finishes – bias facing, binding and peter pan collar.
7. Plackets and Sleeves
8. Fullness – disposal of fullness, darts, gathers, pleats, tucks and flare
9. Fasteners – Hook and eye, press button, button and button hole
10. Decorative Stitches – Hand embroidery stitches.
11. Textiles chemistry – Identification of textile fibers by microscopic examination and burning test.

REFERENCES:

1. Corbman Textiles- Fiber to Fabric.McGraw Hill.
 2. Clothing and Textiles by Sushma Gupta.
 3. Garment Fabrication and design, Premlatha mullick, Kalyani Publisher.
-

Module HSC.401.FOOD PRESERVATION & PROTECTION

Theory - 4 lec / week

External- 60 marks

Practical - 3 hrs/week

Internal- 40 marks

Learning Outcome

- To know about food spoilage, methods of preservation, adulteration
- To study about food additives and food laws and standard

Theory

Unit I Food Spoilage: classification of food based on perishability

- Causes and Factors affecting food spoilage- micro-organisms, enzymes, air, light, physical damage, temperature, time, insects, rodents, parasites etc.
- Basic guidelines for food storage
- Food Sanitation and hygiene at household level

Unit II Food Preservation-Need, advantages and principles of food preservation

- Methods of food preservation.
- Preservation by low temperature: Refrigeration and freezing
- Use of high temperature: Blanching, Pasteurization, sterilization, and canning.
- Use of Preservatives- types, use of salt, sugar, spices, oil and chemicals
- Drying, Dehydration and Irradiation.

Unit III Food Adulteration: Definition and PFA Act

- Food Adulterants- Classification- Intentional, incidental and metallic contamination their harmful effects
- Adulteration found in common food items and simple test for detection.

Unit IV Food Additives: definition and classification

- Functions of intentional additives.
 - Coding of food additives
 - Generally Recognized as safe (GRAS) food
-

Unit V Food Laws and Standards

- Agencies involved food quality control- National and International.
- Harmonization of food laws and Food safety and standard act 2006- salient feature
- Functions of FSSAI
- Codex Alimentarius commission and HACCP
- Food packaging and labeling: Importance, classification and material used.

PRACTICAL

- Survey and listing of various types of preserved product available in the market
- Study of food additives common additives found in foods
- Simple test for identification of adulteration in common food items.
- Preparation of various preserved products- jams, pickles, squashes, sauce etc.

REFERENCES

1. B. Srilakshmi, Food Science, New age International (P) Limited, New Delhi.
2. Dr. M. Swminathan Hand Book of Food and Nutrition the Bangalore printing and Publishing Co.Ltd.
3. VijayaKhader, Text Book on Food storage and Preservation.



HSC.402 INTERIOR DECORATION

Theory - 4 lec / week

External- 60 marks

Practical - 3 hrs/week

Internal- 40 marks

Learning Outcome

- To understand the elements and principles of design
- To learn about flower and furniture arrangement

THEORY

Unit I: Interior Decoration

- Meaning, objectives of Interior decoration.
- Design – Definition, types of design – structural and decorative designs.

Unit II Elements of art/design – Line, Form, Texture, Colour, Space, Light

- Principles of art/design – Harmony, proportion, Balance, Emphasis and Rhythm
- Application of elements and principles of design in improving the appearance of home.

Unit III: Colour –Prang colour system – Primary, Secondary and tertiary colours.

- Dimensions and characteristics of colour
- Colour schemes and their use in interior decoration; colour schemes --planning of colour schemes for different areas in the house.

Unit IV: Flower Arrangement – Elements and principles of art in flower arrangement.

- Types of flower arrangement – line, mass, line & mass, miniature etc.
 - Styles in flower arrangement – traditional, oriental (Japanese) and modern.
 - Materials and equipment used in flower arrangement.
 - Points to be considered while selecting, storing and making flower arrangements.
-

Unit V: Furniture Arrangement

- Selection of furniture and considerations in arranging the furniture.
- Furniture arrangement in different rooms.

PRACTICAL

1. Interior Design- Types of Design. Decorative, conventional, Geometric abstract - Drawing/ painting/ clippings from magazines.
2. Colour- value chart, prang colour chart, six standard colours, Colour scheme
3. Different types of flowers arrangement.
4. Preparation of resource file.

REFERENCES

1. Household equipment- Louise Jenison.
 2. Equipment in the Home- Florence Ehrenkranz.
 3. The house, its plan and Use- Tessie Agan MS.
 4. PremlataMullick (2012) “ Textbook of Home Science ”, Kalyani
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HSC.403 CLOTHING CONSTRUCTION

Theory - 4 lec / week

External- 60 marks

Practical - 3 hrs/week

Internal- 40 marks

Learning Outcome

- To understand various methods of fabric construction
- To learn about garment making and embellishment

THEORY

Unit I: Fabric construction – Introduction, different methods of fabric construction.

- Weaving – parts of the loom, steps in weaving process
- Types of weaves – Basic and decorative weaves

Unit II: Other methods of fabric construction – Knitting – types of knitting, Felting, Bonding, Braiding, Knotting and Netting etc.

Unit III: Selection of clothing for family

- Factors affecting the selection of clothing
- Clothing for different age groups – adults, infants, preschool child, school going child, adolescents and aged

Unit IV: Garment Construction

- Recording of body measurements – Importance and care to be taken while taking the
-

body measurements.

- Methods of developing patterns – Drafting, Pattern making and Draping – their advantages and disadvantages.

Unit V:

- Preparation of fabric for cutting; Pattern laying and cutting; Characteristics of a well finished garment.

PRACTICALS

1. Taking body measurements.
2. Preparation of fabric for garment construction- straightening, shrinking, and pressing.
3. Drafting and construction of the following garments
4. Baby frock (5-6 years), Saree petticoat (4 gore or 6 gore) and Apron.
5. Field visit to textile mill.
6. Field visit to Garment manufacturing unit.

REFERENCES:

1. Textbook of Clothing, textile and laundry, Sushma Gupta & Neeru Garg, Kalyani Publishers
 2. Element of Fashion and Apparel Design, Sumati, G.J., New age International publishers
 3. ShobenAumstrong 'Pattern cutting and making up'
 4. Introduction to Fashion Technology by Pooja Khurana, Fire well Media
-

K.V.R. Government College for Women (A), Kurnool
Model question Paper

External Theory Examination, 2019-20
III Semester, II BSc. Home Science HSC
301: FOOD SCIENCE

Time: 3 hours

Maximum marks: 60

Section A

I. Answer any five of the following questions. (5x4= 20 marks)

1. Write the functions of food
2. Classify the vegetables and write their nutritive value.
3. What are the natural toxins present in pulses?
4. Explain the nutritional value of fish
5. Write about various types of beverages
6. Explain the advantages of Pressure cooking
7. Describe the importance of functional food
8. Write about various pigments present in fruits and vegetables

Section B

II. Answer the following questions (EitherOr Type) (5 x 8= 40marks)

9. a. Write the classification of foods and explain about basic five groups.
OR
b. Explain the factors affecting food selection
 10. a. Classify different methods of cooking and write about moist heat cooking methods.
OR
b. Write the advantages and precautions to be taken in Microwave cooking
 11. a. Draw the structure composition and nutritive value of Cereals
OR
-

b. Write the composition and nutritive value of Pulses

12. a. Write about various types of milk and milk products available in the market.

OR

b. Explain the composition and nutritive value of Egg.

13. a. Explain various ways of improving nutrition quality of food

OR

b. Write the medicinal value of various Spices and condiments.

K.V.R. Government College for Women (A)
Model question Paper

External Theory Examination, 2019-20
III Semester, II BSc. Home Science

HSC 302: HOUSING FOR BETTER LIVING

Time: 3 hours

Maximum marks: 60

Section A

I. Answer any FIVE of the following questions. (5x4 = 20marks)

1. Write the importance of Home
2. What are the types of soils.
3. Define Sanitation and write about sanitation?
4. Explain storage area in bedroom
5. Write the advantages of own house
6. What are the safety measures in kitchen
7. Discuss about Orientation
8. Write about types of loans

Section B

II. Answer the following questions (5x 8 = 40 marks)

1. a. Define home and write the functions of home.
OR
b. Discuss in detail the types of houses
 2. a. write the requirements for purchasing a land for building a home.
OR
b. Explain the principles of planning a home
-

3. a. Write about kitchen

OR

b. Draw a house plan for low income group

12. a. Write the advantages of rented house.

OR

b. Write about disadvantages of own house.

13. a. Write about HDFC

OR

b. what are the measures to be taken for prevention of accidents.

K.V.R. Government College for Women (A)
Model Question Paper

External Theory Examination, 2019-20
III Semester, II B.Sc. Home Science HSC
303: TEXTILE FIBERS

Time: 3 hours

Maximum marks: 60

Section A

I. Answer any FIVE of the following questions. (5x4 = 20marks)

1. Write the common properties of Vegetable fibers.
2. Write about the primary properties?
3. Write the process of Retting.
4. Write about Sericulture.
5. Compare Woolens with worsteds.
6. Regeneration and spinning of Acetate Rayon.
7. Write about Mohair fiber?
8. Write about upkeep of sewing machine ?

Section B

II. Answer the following questions (5x 8 = 40marks)

9. a. Write the classification of Textile fibers.

OR

- b. Write the manufacture and uses of cotton.

10. a. Write the properties of silk.

OR

- b. Write about the manufacture of Wool.

11. a. Explain manufacture and properties of Nylon.

OR

- b. Write any one mineral fiber in detail.

12. a. What are Yarns? Explain classification of Yarns.
-

OR

b. What are mixtures and blends?

13. a. Write about manufacture and uses of viscose rayon. OR

b. Write the description & parts of sewing machine.

Model Question Paper

**K.V.R. Government College for Women (A)
External Theory Examination, 2019-20 II
B. Sc. (Home Science) - IV Semester**

HSC 401: FOOD PRESERVATION & PROTECTION

Part -A

Time: 3 hours

Maximum marks: 60

Section A

I. Answer any FIVE of the following questions. (5x 4 = 20 marks)

1. Classify the foods according to their shelf life.
2. Write the need and importance of food preservation.
3. Enlist various functions of food packaging.
4. Write about sterilization and pasteurization.
5. Write about Prevention of Food Adulteration act
6. Describe the preservation process by low temperature.
7. Explain various low temperature preservation methods.
8. Explain methods of canning.

PART B

II. Answer the following questions (5 x 8 = 40marks)

9. a. Explain the principles of Food Preservation

Or

- b. Describe the factors responsible for food spoilage

10. a. List out various methods of preservation and write about preservation by high temperature.

Or

- b. Write about adulterants found in common food items and their harmful effects on
-

our health

11. a. Write about food sanitation and hygiene at household level

Or

b. Explain the general principles in the use of food additive

12. a. Write about various preservatives used in food preservation

Or

b. Explain about toxic effects of metallic contamination on our health

13. a. Discuss the role and responsibilities of FSSAI

Or

b. Explain the regulations on labeling.

K.V.R. Government College for Women (A)
Model question Paper

External Theory Examination, 2019-20
IV Semester, II BSc. Home Science HSC
402: INTERIOR DECORATION

Time: 3 hours

Maximum marks: 60

Section A

I. Answer any FIVE of the following questions. (5x4 = 20 marks)

1. Write the importance of Interior decoration?
2. What are the types of design.?
3. What are the dimensions of colour?
4. Explain materials used in flower arrangements?
5. Write the importance of furniture?
6. Describe Ikebana arrangement?
7. Write about Harmony?
8. Enumerate the application of elements in home?

Section B

II. Answer the following questions (5x 8 = 40 marks)

9. a. Define Rhythm? What are the ways of creating rhythm in a room?.

OR

- b. What are the objectives of interior decoration?

10. a Discuss contrasting colours schemes?.

OR

- b. Write the characteristics of the colour ?

11. a. What are the different types of flower arrangement?

OR

- b. Write about the equipment required for flower arrangement?
-

12. a. Discuss the arrangement of furniture in children room?.

OR

b. What are the considerations for arranging furniture ?.

13. a. Discuss the elements of art?

OR

b. Explain the importance of art principles in interior decoration?



K.V.R.G.C. (W). KURNOOL. (AUTONOMOUS) II B.Sc.

Home Science. IV SEMESTER

Model Paper

External Theory Examination 2019-20

403. Clothing Construction

Time: 3 Hours

Max. Marks: 60

PART-A

I. Answer any Five of the following questions

5x4=20Marks

1. What is weaving? Explain Weaving process.
2. Write about Braiding and Netting.
3. Write about Twill weave with diagram.
4. Write about selection of clothing for school going children?
5. Write about the draping.
6. Write about Knotting.
7. What are the differences between woven and knitted fabric?
8. What are the advantages of drafting?

PART -B

II. Answer the following questions

5x8=40 Marks

9. Describe the parts of a loom with the help of a diagram.

OR

Explain decorative weaves with diagram.

10. Define Knitting and write different types of Knitting.

OR

Write about felting and different types of felt.

11. Explain the factors affecting the selection of clothing.

OR

Write about the clothing for adolescents.

12. Write about importance and care to be taken while taking body measurements.

OR

What are the advantages of pattern making?

13. Write about the ways of preparing a material for cutting.

OR

What are the characteristics of well finished garment?

**K.V.R.GOVERNMENT COLLEGE FOR WOMEN (A),
KURNOOL.**

DEPARTMENT OF COMMERCE

M.COM (Prof)



**P.G.BOARD OF STUDIES MEETING ON
16-08-2019**



DEPARTMENT OF COMMERCE

K.V.R.GOVERNMENT COLLEGE FOR WOMEN (A), KURNOOL.

M.COM COURSE STRUCTURE

FIRST SEMESTER

Code	Title of the Paper	PPW	Credits	Exam Hours	Semester End Exam	IA	Total
101	Managerial Economics	05	04	03	80	20	100
102	Accounting for Service Organizations	05	04	03	80	20	100
103	Management and Organizational Behaviour	05	04	03	80	20	100
104	Entrepreneurship and Small Business Management	05	04	03	80	20	100
105	Quantitative Techniques for Business Decisions	05	04	03	80	20	100

SECOND SEMESTER

Code	Title of the Paper	PPW	Credits	Exam Hours	Semester End Exam	IA	Total
201	Business Environment & Government Policy	05	04	03	80	20	100
202	Human Resource Management	05	04	03	80	20	100
203	Financial Management	05	04	03	80	20	100
204	Marketing Management	05	04	03	80	20	100
205	Accounting for Managerial Decisions	05	04	03	80	20	100

THIRD SEMESTER

Code	Title of the Paper	PPW	Credits	Exam Hours	Semester End Exam	IA	Total
301	Strategic Management	05	04	03	80	20	100
302	Advance cost and Management Accounting	05	04	03	80	20	100
303	Security Analysis and Portfolio Management	05	04	03	80	20	100
304	Financial Institutions and Markets	05	04	03	80	20	100
305	E-Commerce	05	04	03	80	20	100

FOURTH SEMESTER

Code	Title of the Paper	PPW	Credits	Exam Hours	Semester End Exam	IA	Total
401	Business Research Methods	05	04	03	80	20	100
402	International Business	05	04	03	80	20	100
403	Financial Services	05	04	03	80	20	100
404	International Financial management	05	04	03	80	20	100
405	Goods & Service Tax (GST)	05	04	03	80	20	100
406	Project work Viva voce Project Report		04	25 Marks 75 Marks			100

Note:-

1. Each Paper there will be Semester Examination for Eighty Marks (80) and Twenty Marks (20) for Internal.
2. Total Credits of M.Com Course;

For 20 Papers (Each Paper 4 Credits) & Project Work 4 Credits = 84Credits



17
Dt: 16/08/19.

The Board of studies meeting for
om for the academic year 2019-20 at
00 am with the BOS members and has
ken the following resolutions in the
partment of Commerce.

It is resolved to frame the syllabus for I & II semester papers of M. Com (Prof) with required modifications to the syllabus prescribed by the Rayalaseema University for the academic year 2019-20.

It is resolved to replace the Vth unit in the paper Quantitative Techniques with statistical quality control.

It is resolved to replace III, IV and V units in the paper Organizational Behavior with dynamics of Individual behavior, dynamics of group behavior and organizational Dynamics.

It is resolved to reframe the Unit names and content of the units in the paper Entrepreneurship and Small Business Management.


It is resolved to follow the evaluation system consisting of internal evaluation and external evaluation. Internal Evaluation is done for 20 marks which includes written examination for 15 marks. Two internal examinations will be conducted and average will be taken. The internal question paper consists of Two sections A and B. Section A consists of three questions in which two are to be answered each carrying 3 marks. Section B consists of one question with internal choice Carrying 9 marks. 5 marks are for seminar Presentation.

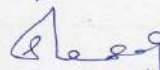
External Evaluation is for 80 marks. The question paper consists of section A and B. Section A consists of 8 questions in which 5 are to be answered each carrying 4 marks. Section B consists of 5 Questions with internal choice from each unit carrying 12 marks.

It is resolved to have "Personal Financial Planning" as open elective paper.


Signatures of BOS Committee members

1. D. V. SHOBHA RANI
2. Prof. A. V. RAMANA
3. Dr. S. SIVA REDDY
4. Sri. N. V. KRISHNAIAH

 16/8/19

 16/8/19

 16/8/2019

 29.8.19

SEMESTER –I

MANAGERIAL ECONOMICS

Internal Marks: 20
External Marks: 80

No. of Hours per Week: 5

Exam Duration: 3Hrs

Objective: To equip the student with the Knowledge of economic concepts, theories, Fundamentals for decision making under environmental constraints

UNIT –I: - Introduction to Managerial Economics

Managerial Economics – Concepts -Nature and scope – Significance of Managerial Economics– Characteristics of Managerial Economics – Objectives of the Firm - Role and Responsibility of managerial Economist; Fundamental economic Concepts: incremental principle, opportunity cost principle, Discounting principle and Equi-Marginal principle

UNIT-II: - Demand and supply Analysis

Concept – Determinants of Demand –types of Demand – Law of Demand; Elasticity of Demand- Meaning, importance and types of elasticity- Price, income and cross elasticity of Demand-Demand forecasting –Methods for Durables ; Supply: - Law of supply - Determinants of Supply.

UNIT –III: - Cost Analysis

Cost concepts –Cost classification – Cost Determinants – Cost-output relationships in short run and long run; Cost control and Cost reduction

UNIT-IV: - Production Analysis

Meaning of Production function- Laws of Production: – Law of marginal utility - Law of returns to scale and Law of variable proportions – Production function with One, two and all variable input factors – Cobb Douglas Production function.

UNIT-V: - Price and Profit Analysis

Perfect competition ,Price determination under different market situation -Monopolistic competition, Monopoly, Price discrimination and Oligopoly –Pricing strategies; Pricing Methods - Product Line Pricing - Transfer Pricing - Pricing by Retailers- Export Pricing - Dual Pricing - Administered Pricing; Nature of Profit – Kinds of profit –Theories of profit

Reference Books:

1. Joel Dean. Managerial Economics, Prentice Hall Ltd., India
 2. Gupta, G.S.: Managerial Economics, Tata McGraw Hill Publishing Company Ltd.
 3. D. Savatore, Managerial Economics , McGraw Hill , New Delhi
 4. Dwivedi, D.N.: Managerial Economics, Vikas Publishing House Pvt. Ltd., 2003
 5. Petersen and Lewis : Managerial Economics, 4/e, Pearson/PHI, 2002.
 6. Managerial Economics, Ahuja. H.L, S. Chand, New Delhi
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ACCOUNTING FOR SERVICE ORGANIZATIONS

Internal Marks: 20

No. of Hours per Week: 5

Exam Duration: 3Hrs

External Marks: 80

Objective: To enable to maintain the accounting records of service and government Organizations.

UNIT –I: ACCOUNTS OF ELECTRICITY COMPANIES : Introduction-Double Accounting System-differences between Single Account System and Double Account System- Advantages and limitations of Double Account System-preparation of Revenue Accounts- Net Revenue Accounts- Capital Account and General Balance Sheet under Double Account System- Replacement of Assets-Accounts of Electricity Companies – Final Accounts of Electricity Companies (Theory and problems)

UNIT-II: BRANCH ACCOUNTS: Meaning, Definition- Advantages and Limitations of Branch Accounts Dependent branches-Stock and debtor system-Independent branches (Foreign branches excluded) (Theory and Problems)

UNIT –III: ACCOUNTS OF BANKING COMPANIES:

Books and registers maintained-slip system of posting- rebate on bills discounted- Non-Performing assets-legal provisions relating to Profit and Loss account and Balance sheet – final accounts with adjustments. (Theory& Problems)

UNIT-IV: LIFE AND GENERAL INSURANCE ACCOUNTING: Introduction- formats-revenue account-net revenue account- balance sheet-valuation of balance sheet-net surplus- general insurance- preparation of final accounts with special reference to Life, Fire & Marine insurance; Insurance Claims-meaning –loss of stock and assets- average clause- treatment of abnormal loss- loss of profit (Theory & Problems)

UNIT-V: GOVERNMENT ACCOUNTING :Accounts For Government Organization ; preparation and presentation of final accounts; forms and contents of statement of profit and loss account; forms and contents of balance sheet. (Theory Only)

Reference Books:

1. SP Jain and KL Narang, Advanced Accountancy, Kalyani Publishers
 2. Advanced Accountancy-M.A.Arulanandam&K.S.Raman-Himalaya Publishing House-Delhi
 3. Advanced Accountancy R.L.Gupta and M. Radhaswamy -Sultan Chand sons, New Delhi
 4. Accounting Standards and Corporate accounting practices-T.P. Ghosh Taxmann Allied
 5. Advanced Accounts-M.C. Shukla,T.S.Grewal-S. Chand&Company Ltd, New Delhi-110055
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MANAGEMENT AND ORGANIZATION BEHAVIOUR

Internal Marks: 20
External Marks: 80

No. of Hours per Week: 5

Exam Duration: 3Hrs

Objective: To familiarize the students with the concepts and dimensions of Organization Theory.

Unit : I – Introduction to Management : Definition- Scientific Management approach-Human Relations approach- System Approach-Contingency Approach. Introduction to Organizational Behaviour - Fundamental Concepts of Organizational Behaviour-Evaluation of Organizational Behavior -Organizational Behavior as an Interdisciplinary Subject- challenges of Organizational Behavior in 21st century.

Unit : II Managerial Functions: Planning -concept, significance, types; Organizing -concept, principles, theories, types of organizations, authority, responsibility, power, delegation. Decentralization; Staffing; Directing; Coordinating; Control -nature, process, and techniques.

Unit : III Dynamics of Individual Behavior – Personality: Definition-Determinants- types of personality-theories of personality-perception: Definition-perceptual process-factors influencing perception-perceptual blocks-honing perceptual skills- work motivation-Concept and Importance-theories of Motivation-Maslow's need hierarchy theory –Hergberg's two factor theory –Mc Clellands Achievement theory- Vroom's Expectancy theory-work stress- Meaning –causes and consequences – strategies and techniques to manage stress

Unit : IV Dynamics of Group Behavior: work group meaning- characteristics-reasons for forming into groups- stages of group development-group dynamics-group cohesiveness :determinants of group cohesiveness-leadership:concept and meaning –theories of leadership- trait theory-behavior theory-contingency theory-Fielders contingency theory- Reddin's 3D model-Blake and Mouton's Managerial Grid-Harsey and Blanchard's Leadership life cycle theory-conflict Management: Definition- Causes and Consequences- Conflict management styles

Unit : V Organizational Dynamics: Communication- Meaning - Factors influencing organizational communication-Barriers to Effective communication-Organizational change-Behavioural reactions to change- planned change- Approaches to manage organizational change- Organizational Effectiveness: Indicators of Effectiveness- Approaches to achieve organizational effectiveness

Reference Books:

1. Robins P.Stephen and Judge: Organizational Behavior, 12/e PHI, New De1hi;
 2. Greenberg and Baron: Behaviour in Organisation;
 3. Daft: Organisation Theory and Design, Thomson;
 4. Fred Luthans: Organizational Behavior, Me Graw Hill, New Delhi;
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ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT

Internal Marks: 20
External Marks: 80

No. of Hours per Week: 5

Exam Duration: 3Hrs

Objective: To create understanding of the concept of entrepreneurship and process of Management of small business.

Unit I: Introduction to Entrepreneurship

Evolution and concept of Entrepreneurship – Entrepreneurial functions and tasks; characteristics of successful entrepreneurs and different types of entrepreneurs- Women Entrepreneurship- Problems and Challenges of Women Entrepreneurship.

Unit II: Small Business Entrepreneurship - Infrastructure in India

Small business Enterprises –Role and Significance of Small business Enterprises in India-Policy Initiatives for the promotion of small business enterprises-Features of MSME Act 2006 – Entrepreneurship Development Programme - Institutional Support by DIC, SFC and SIDBI.

Unit III: Framework for Small Business Management

Concept, definition, and framework of Small Business, Project Identification and Selection, Project Formulation, and Project Appraisal - Registration and Licensing; application for registration and organizational structure of a small business.

Unit IV: Management of Small Scale Enterprise

Fundamentals of Management, Working Capital Management, Inventory Management, Production and Operations Management, Marketing Management, HRM, and TQM for Small Scale Enterprises.

Unit V: Problems of Small Business Units

Teething problems in setting small units; location, technology, marketing, recoveries, labour, and planning, international business ecommerce, franchising etc; problem of sickness; modernization; mergers and takeovers; and future potential and need for small units.

Reference Books:

1. Dr. S. S. Khanka , Entrepreneurial Development, S. Chand Publishing, New Delhi.
2. Vasant Desai, Small-Scale Enterprises And Entrepreneurship Ecosystem – Himalaya Publishing House, Mumbai
3. Baumbach C.M. & Mancuso, J.R., Entrepreneurship and Venture Management, Taraporevala, Bombay.
4. Khanka S.S., Entrepreneurial Development, S. Chand & Company, New Delhi, 2001
5. Desai, V., Management of a Small Scale Industry, 3rd ed., Himalaya Publishing House, Bombay.
6. Taub, R.P. & Taub D.L., Entrepreneurship in India's Small Scale Industries, Manohar, New Delhi, 1989.
7. Tewari, V.K., Philip J. & Pandey, A.N., Small Industry Success and Failure Concept Publishing Company, New

QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS

Internal Marks: 30

No. of Hours per Week: 5

Exam Duration: 3Hrs

External Marks: 70

Objective: To make the students familiar with business research concepts and statistical tools and their applications in business decision making.

UNIT-I Introduction to Business Research- Meaning, Scope, Role of Business Research, Objectives of Business Research, Ethics of Research, Types of Business Research, Scientific Method, Stages of Research Process.

Data Collection: Methods and Forms- Primary Data, Sources, Merits & Demerits of Primary Data; Secondary data, Sources Merits & Demerits, Questionnaire Construction, Questionnaire Types- Questionnaire vs Schedule-precautions in construction of Questionnaire.

UNIT: II Probability and Theoretical distribution- Meaning and Definition of Probability- Types of Events – Theorems of Probability- Addition & Multiplication Theorem of Probability (simple Problems). Meaning of Probability Distribution – Binomial –Poisson- Normal distributions (Theory & Problems)

Unit -III: Test of Significance- Meaning and Definition of Hypothesis – Formulation of Hypothesis – Procedure of testing of Hypothesis –t-Test –F-Test, Chi-square and Z test (Theory & Problems)

UNIT-IV: Linear programming: Introduction-Assumptions-Advantages-Formulation of problems-Graphical method- Simplex method-Maxima and Minimum problems

UNIT-V: Statistical Quality Control: Meaning, Objectives and Role of Statistical Quality Control Procedure of Constructing Quality controls Charts- Mean and Range control Charts for Variables C-charts and p-charts control for Attributes (Theory and Problems)

Reference Books:

1. C.R. Kothari, Research Methodology: Methods and Techniques, New Age International
2. C.R. Reddy, Quantitative Methods for Management Decision, Himalaya Publishing House, Mumbai,.
3. Richard I. Levin and David S. Rubin, Statistics for Management, Prentice Hall of India, Private Limited, New Delhi.
4. Hood R.P Statistics for Business and Economics, Sultan Chand & Sons, New Delhi.
5. Gupta S.P., and Gupta M.P., Business Statistics, Prentice Hall, New Delhi

BUSINESS ENVIRONMENT & GOVERNMENT POLICY

Internal Marks: 20

No. of Hours per Week: 5

Exam Duration: 3Hrs

External Marks: 80

Objective: The objective of the course is to familiarize the students with business environment and government policy of the country.

UNIT - I: INTRODUCTION

Business environment: micro-environment - macro environment – environmental scanning.

Policy environment: Industrial Policy - Industrial Policy Resolution 1956 – New Industrial Policy 1991 – Fiscal policy – Monetary policy.

UNIT - II: LIBERALIZATION AND GLOBALIZATION

New economic policy: economic reforms - liberalization.

Globalization: meaning - stages - factors facilitating and impeding globalization in India - consequences of globalization for India.

UNIT - III: PUBLIC SECTOR AND PRIVATIZATION

Public sector: changing role of public sector - relevance of public sector – public Sector reforms.

Privatization: concepts – nature – objectives – forms - regulatory framework with reference to insurance, power and telecom sectors.

UNIT - IV: FOREIGN DIRECT INVESTMENT

Foreign direct investment: policy - trends - problems - consequences – FEMA- objectives - provisions - multinational corporations - entry strategies - role - growth – problems - consequences.

Mergers and Acquisitions: reasons - trends - advantages and disadvantages - competition law.

UNIT - V: WTO AND TRADE POLICY

WTO agreements - Agreement on Agriculture (AOA) - Multi-fibre Agreement (MFA) - Trade Related Intellectual Property Rights (TRIPS) - Trade Related Investment Measures (TRIMS) - Barriers to trade.

Trade policy changes consequent to WTO - Recent EXIM policy - Consequences of WTO for India.

Reference Books

1. Francis Cherunilam: Global Economy and Business Environment – Himalaya
2. Francis Cherunilam: Business Environment - Text and Cases - Himalaya
3. S.K.Misra&V.K.Puri: Economic Environment of Business - Himalaya
4. Prof. Laxmi Narain: Globalization – Liberalization and Privatization of Public enterprises – Sultan Chand & Co.
5. S.K.Misra&V.K.Puri: Indian Economy - Himalaya

HUMAN RESOURCE MANAGEMENT

Internal Marks: 20

No. of Hours per Week: 5

Exam Duration: 3Hrs

External Marks: 80

Objective: The objective of the course is to equip the student with the concepts and skills necessary to manage Human Resources

UNIT-I Introduction

Human resource management – concepts - significance – objectives – scope – functions – changing role of Human Resource Manager. Need for studying HRM – Emerging trends in HRM – Human Resource Development (HRD) concept – scope – objectives, - HRD techniques.

UNIT-II Human Resource Planning

HRP concept – nature - importance – factors affecting HRM – requisites for successful HRP – Job analysis – methods - purposes – Job description – Job specification - Job evaluation – process and methods of Job evaluation - Job design approaches and process of Job design - factors affecting Job design.

UNIT-III Recruitment Selection Training and Development

Recruitment – source of recruitment – factors governing recruitments, and recruitment process. Selection - process – interview - Training methods - evaluating training effectiveness - career planning and career development - career programme - advantages and limitations of career development.

UNIT-IV Appraising and Managing performance

Performance appraisal system - concept - appraisal methods –challenges of performance appraisal - possible errors in the appraisal process – planning for performance improvement –trends in appraisal system

UNIT-V Human Resource Maintenance

Wage and salary administration – principles - regulation of wages – trends in wage and salary administration – Monetary and Non- Monetary incentives to motivate the employees
Grievance - causes – Procedure – collective bargaining - Types essential conditions of collective bargaining.

Reference Books:

1. Bohlander: Human Resource Management, Thomson
2. David A.DeCenzo and Stephen P.Robins: Personnel/ Human Resource Management, PHI
3. BiswajeetPattanayak: Human Resource Management, PHI
4. Srinivas K. R: Human Resource Management in Practice, PHI.
5. Mathis: Human Resource Management, 10e Thomson
6. Sadri, Jayasree, Ajgaonkar: Geometry of HR, Himalaya
7. Subba Rao P: Personnel and Human Resource Management, Himalaya.
8. VSP Rao:, Human Resource Management, Vikas

FINANCIAL MANAGEMENT

Internal Marks: 20

No. of Hours per Week: 5

Exam Duration: 3Hrs

External Marks: 80

Objective: To provide a comprehensive understanding of financial Management and their application.

UNIT-I: - Introduction to Financial Management

Meaning –Scope – Finance function- Financial Decisions- Objectives of financial Management- Role of Financial Manager (Theory) **Time value of money:-**Concept - Rationale of time preference for money- Future Value- Present Value (Theory & Problems)

UNIT-II: -- (a) Financial Decisions

Cost of Capital: Meaning and Definition of Cost - Measurement of Specific Cost - Various Sources of Capital - Measurement of Weighted Average Cost of Capital.

Concepts of leverage –Meaning – Types- Degree of operating leverage, Degree of financial leverage and Degree of Combined leverage;

(b) Capital structure:-Meaning -determinate of capital structure – Optimum Capital Structure- Capital Structure theories: Net Income Approach –Net Operating Income Approach –M.M. Hypothesis – Traditional view.

UNIT-III: Investment Decisions

(a) Capital Budgeting: Meaning- Important- process-kinds of capital Budgeting Decisions- Techniques of capital Budgeting:- Traditional Techniques: Pay Back period —Accounting Rate of Return – Discounted Techniques - Improved Payback Period- Net Present Value – Internal Rate of return and Profitability Index- Capital Rationing (Theory & Problems)

(b) Risk Analysis in Capital Budgeting Decision: Sources and Perspective of Risk – Methods: Risk Adjusted Cut-Off Rate- Certainty Equivalent Method- Sensitivity Techniques- Standard Deviation Method-Co-efficient of Variation Method and Decision Tree Analysis

UNIT-IV: - Dividend Decisions

Dividend Policy: - Concept - Types of Dividends -Determinants of Dividend Policy – Forms of Dividing

Dividend Theories:-Relevance Theories- Walter’s model –Gorden’s model - Irrelevance Theory - MM Hypothesis (Theory & Problems)

UNIT-V: - Working Capital Management

Concept of working Capital – determinants of working capital –optimum level of current assets – estimating working capital requirement.(Theory only)

References Books:

1. Pandey I.M. Financial Management, Vikas Publishing House Limited.
2. Khan, M.Y. and Jain, P.K. Financial Management, Tata McGraw Hill
3. Chandra prasanna: Financial Management, Tata Mc- Graw Hill
4. Hampton. Johni. Financial Decisions-Making: prentice Hill India (p)

MARKETING MANAGEMENT

Internal Marks: 20
External Marks: 80

No. of Hours per Week: 5

Exam Duration: 3Hrs

Objective: The objective of the course is to equip the student with various aspects relating

Marketing Management

Unit – I Introduction: Concept of Marketing - Nature and scope- Evaluation- approaches to the study of marketing- Importance - Role of marketing in Indian economy- 4Ps of marketing- Marketing environment- Market segmentation – Concept – Need- Bases for market segmentation.

Unit – II Product and Price Management: Concept of product- Classification –Product item- Product line and product mix decisions- New product development – Concept - Factors contributing to new product development - Stages of new product development - Product Life Cycle (PLC) conditions and strategies in different phases- Reasons for the failure- Branding - Packaging and labeling - Pricing –Concept- Objectives -factors influencing pricing- Pricing policies- strategies and methods.

Unit – III Place Management: Concept - Marketing Channels - Nature and significance- Role of middle men in marketing channels - Factors influencing channel selection - Channel levels – Whole sellers and retailers- Concept – Functions – Emerging trends in retailing- Formats of retail stores– Online marketing

Unit – IV. Promotion Management :Concept of promotions and communications, Process of marketing communications - Sales promotion – Significance of sales promotion -Objectives - Planning sales promotion programmes- Personal selling – Nature and steps in personal selling - Theories of personal selling – Advertising –Concept- Advertising agencies- Advertising media- Institutional frame work of advertising- Advertising decisions.

Unit – V Marketing services – Meaning – Factors influencing marketing services classification service marketing model – Marketing Social responsibility – Business and society legal issues facing marketing management – Ethics in marketing.

Reference books:

1. Philip Kotler, Principles of Marketing, PHI.
2. Rama swamy&Namakumari, Marketing Management.
3. Rajan Saxena, Marketing Management.
4. Dr. R.L.Varshney and Dr. S.L. Gupta, Marketing management Text and cases, Sulthan Chand & sons.
5. Arun Kumar, N. Meenakshi, Marketing Management, Vikas Publications.
6. Jain, Marketing planning and strategy

ACCOUNTING FOR MANAGERIAL DECISIONS

Internal Marks: 20
External Marks: 80

No. of Hours per Week: 5

Exam Duration: 3Hrs

Objective: To understand concepts of Managerial Accounting, the practical application for managerial decision-making and how to develop the skills to analyse the Financial statements.

Unit- I: Introduction: Nature and scope of financial accounting, cost accounting and management accounting; Management accounting and managerial decisions; role and responsibilities of management accountant in a modern organisation.

Responsibility accounting; Responsibility centre, cost centre, profit centre and investment Centre; Problem in transfer pricing; objective and determinants of responsibility centre.

UNIT- II Analysis of Financial Statements: Horizontal and Vertical Analysis Ratio Analysis; Cash Flow Analysis. Funds Flow Analysis

UNIT- III Budgeting and Budgeting Control: definition of budget; Essentials of budgeting, types of budgets-functional masters etc., Fixed and flexible budgetary control; Zero based budgeting – performance budgeting.

UNIT- IV Marginal Costing and Break-even Analysis: Concept of marginal cost; Marginal costing and absorption costing; Marginal costing versus direct costing; cost-volume-profit analysis; Break-even analysis; Assumptions and practical applications of break-even analysis; decisions regarding sales-mix make or buy decision and discontinuation of a product line etc.

UNIT- V Standard Costing and Variance Analysis: standard costing as a control technique; setting of standards and their revision; Variance analysis -meaning and importance kinds of variance and their uses –material, labour and overhead variance; Disposal of variances; Relevance of variance budgeting to budgeting and standard costing

Reference Books:

1. R.K.Sharma&Sashik Gupta accounting for managerial decisions, kalyani publishers, Newdelhi
2. S.N. Maheswari, Management Accounts, Sultan Chand & Sons, New Delhi
3. R.K.Sharma&Sashik Gupta Management accounting kalyani publishers, Newdelhi
4. Antony, Robert, Management accounting, Taraporewala Mumbai.
5. Horngren, C.T., Gary L. Sundem and Williarn O Stration Introduction Management Accounting, Prentice Hall, Delhi.
6. Pandey I.M., Management Accounting, Vani publication, Delhi.
7. Welsh Glern, A.RonaldW.Hilton and Pual N. Garden., Budgeting: Pro-Planning and Control, Prentice Hall, Delhi.

**K.V.R.Govt. COLLEGE FOR WOMEN (A),
KURNOOL**

(Under the Jurisdiction of Rayalaseema University)

Accredited with "A" Grade by NAAC



BOARD OF STUDIES MEETING

2019-20

Subject: M.Sc BOTANY

7-8-2019

K.V.R. Govt. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

ACCREDITED BY NAAC WITH 'A' GRADE,

Established in 1958 under G.O.Ms.No.197 Edn. Dt.27-01-1958

DEPARTMENT OF BOTANY

CURRICULUM(CBCS)- M.Sc (Botany)



(syllabus W.e.f Academis Year 2019-20)

SEMESTER -1

S.NO	PAPER CODE	TITLE OF THE PAPER	NO OF CREDITS	SEMESTER END EXAM DURATION	TOTAL MARKS	
					IAE	SEE
THEORY						
1	1111	BIOLOGY AND DIVERSITY OF BACTERIA, FUNGI, VIRUSES & PLANT PATHOLOGY	4	3	20	80
2	1121	BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTA AND PTERIDOPHYTA AND GYMNOSPERMS	4	3	20	80
3	1131	PLANT TAXONOMY	4	3	20	80
4	1141	PLANT PHYSIOLOGY	4	3	20	80
PRACTICALS						
1	1111 & 1121	BIOLOGY AND DIVERSITY OF BACTERIA, FUNGI, VIRUSES & PLANT PATHOLOGY & BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTA AND PTERIDOPHYTA AND GYMNOSPERMS	4	3		100
2	1131 & 1141	PLANT TAXONOMY & PLANT PHYSIOLOGY	4	3		100

Total credits: 24

SEMESTER -II

S.NO	PAPER CODE	TITLE OF THE PAPER	NO OF CREDITS	SEMESTER END EXAM DURATION	TOTAL MARKS	
					IAE	SEE
THEORY						
1	2111	CELL BIOLOGY AND PLANT	4	3	20	80

		DEVELOPMENT				
2	2121	MOLECULAR GENECTICS AND TECHNIQUES IN BIOLOGY	4	3	20	80
3	2131	PLANT BIOCHEMISTRY	4	3	20	80
4	2141	OPEN ELECTIVE- PLANT AND HUMAN WELFARE	4	3	20	80
PRACTICALS						
1	2111& 2121	CELLBIOLOGY AND PLANT DEVELOPMENT & MOLECULAR GENECTICS AND TECHNIQUES IN BIOLOGY	4	3		100
2	2131	PLANT BIOCHEMISTRY	2	3		50

Total credits : 22

RESOLUTIONS

The members of BOS in Botany met on 7-08-2019 in the Department of Botany, KVR Govt. Degree College for Women(A), Kurnool under the chairmanship of **Dr.R. Vinolya Kumari** Incharge of M.Sc. Botany Course, discussed the proposals on the curriculum for the I year PG Botanty course and passed the following resolutions applicable to the academic year 2019-20.

- Resolved to follow the Rayalaseema university revised syllabus in Botany for I M.Sc., Semester-I and Semester-II as decided by the expert members and members of the Board of Studies (PG) Botany.
- It is unanimously resolved that there is 20% change in theory syllabus for First year M.Sc., The question paper pattern for theory shall have two sections . Section - A for 20 marks and Section - B for 40 marks. IAE: Internal assessment marks -20Marks(Internal examination 15, Seminar5) and extracurricular activity : NSS,YOUTHRED CROSS,NCC.
- The BOS chairman is authorized to give the panel of Internal and external examiners to the controller of Examination
- Resolved to approve the new syllabus in Botany for I M.Sc., Semester-I and Semester-II
- The new syllabus will come into effect from the academic year 2019-20 for I M.Sc. Semester-I and Semester-II.

- Resolved to conduct the practical examinations at the end of Semester-II for I M.Sc. students.
9. In each Semester there will be four papers i.e. four Core papers for Semester-I, for Semester-II There are three paper and one open Elective paper These Semester End Examinations will be for 80 Marks .
10. Internal Assessment Examination will be for 20 Marks.
There will be two Internal Assessment Examinations in each semester.
(Average of two to be taken).

Seminar/Assignment/Project is given the weight age of 5 Marks.

Total Internal Assessment Marks =15 + 5 = 20 Marks

11. Model Question Paper for Semester End Examination :

- iv) The Semester End Examination Question Paper consists of
Part A with four questions to be answered out of eight questions of five marks each (4x 5 = 20) and

Part B with four questions of internal choice carrying 15 marks each (4 x 15 = 60)
- v) Duration is 3 Hours
- vi) Maximum marks are 80 and Minimum Passing marks are 30.

12. Model question paper for IAE.

- x) Internal Assessment Examination will be for 20 marks.
- xi) One big question and one short answers
- xii) Duration of Internal Assessment Examination is 45 minutes.
- xiii) The above pattern stands for Semester-I and Semester-II.

13. Practical Examination:-

- i) There will be **one** Practical Examination at the end of Semester-II.
 - ii) Maximum marks for Practical Examination is 100.
 - iii) Minimum passing marks for Practicals are 20.
 - iv) Duration of Practical Examination is 3 hours.
 - v) There will be no Internal Assessment Examination in Practical Examination.
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Scheme of valuation for each subject paper Practical Examination:

Practical-I

vi)	Major Experiment	20 Marks
vii)	Minor Experiment	10 Marks
viii)	Spotters	10 Marks
ix)	Record	05 Marks
x)	Viva	05 Marks
	Total =	50 Marks

14. Resolved to approve the syllabus (Theory Semesters I, II) as prescribed below

15. Resolved to approve the Model Papers for I-M.Sc. Semester-I and Semester-II as per

16. Resolved to follow the CBCS Semester pattern with a total of 96 Credits for 2400 marks. In each semester :

- Four instructional hours per week has been given four Credits for Theory and
 - Three instructional hours per week considered as two credits for Practicals.
 - Each open Elective has been given four credits
 - Dissertation of Project work in last semester along with Viva and Seminar has been given four credits.
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K.V.R. Govt. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

ACCREDITED BY NAAC WITH 'A' GRADE

PG DEPARTMENT OF BOTANY

2019-2020

MINUTES OF THE BOARD OF STUDIES MEETING

Board of Studies meeting was conducted in the department of Botany
On 7-08-2019 at 10.00 am with the following members.

S.NO	Name	Designation and Address	Signature
MEMBERS FROM THE DEPARTMENT			
1	Dr.R.VINOLYA KUMARI	CHAIRMAN	
2	Dr.S.SUNITHA	Member	
3	Dr. Y.RAGUNATH REDDY	Member	
4	Dr. R.VENKATA RATHNAM	Member	
5	Dr. BINDU PRASUNA	MEMBER	
UNIVERSITY NOMINEE			
6	PROF. C.SUDHAKAR	Prof. of Botany Sri Krishna Devaraya University Anathapure	
SUBJECT EXPERTS			
7	Dr. A. M. REDDY	Assistant Professor in Botany Yogivemana University Kadapa	
8	Dr. G. S.RANGANAYAKULU	Assistant Professor in Rayalaseema University Kurnool	
ALUMNAE			
9	Dr. M. SUSEELAMMA	SML Govt Degree College Yemmiganor, Kurnool	
INDUSTRIALIST			
10	SRI. R.VINOD KUMAR	The Area Manager National Seed Corporation Kurnool	
STUDENT REPRESENTATIVES			
11	CH.LIKITHA	M.Sc	
12	P. KRISHNA VENI	M.Sc	

K.V.R. Govt. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

ACCREDITED BY NAAC WITH 'A' GRADE,

DEPARTMENT OF BOTANY



SEMESTER -1

BOT1111- BIOLOGY AND DIVERSITY OF BACTERIA, FUNGI, VIRUSES & PLANT PATHOLOGY

Unit-I: Bacteria and Phytoplasma

General account; classification, ultrastructure, cell wall of bacteria, nutrition, reproduction: fission and genetic recombination (transformation, transduction and conjugation), economic importance (useful and harmful aspects), symbiotic and asymbiotic nitrogen fixation by bacteria. Phytoplasma; general characteristics and economic importance.

Unit- II: Fungi

General characteristics of fungi, cell wall composition, nutrition: (Saprobic, biotrophic, symbiotic); reproduction: (vegetative, asexual, sexual), heterothallism, Heterokaryosis; Para sexuality, recent trends in classification and Ainsworth's classification of fungi. economic importance of fungi (in industry, as medicine and food, biocontrol agents). Lichens: structure and reproduction, mycorrhizae. Mushroom cultivation methods

Unit-III: Viruses

General characters, virus genetic material, ultrastructure of virions, isolation and purification of viruses; chemical nature, replication and transmission of viruses (by grafting, seeds, contact, water, air, soil, agricultural tools, insects). Economic importance of virus. viral diseases in plants. Viroids and Prions.

Unit –IV: Plant Pathology

Classification of plant diseases and symptomology. Mechanism (s) of pathogenesis and resistance and disease control measures (physical, chemical and biological control). Case studies of economically important causative agents with special reference to crop plants. Plant-virus interaction with emphasis on-TMV & BYMV, Plant-bacterial interaction with emphasis on blight of paddy & citrus canker; Plant-fungus interaction with emphasis on-downy mildew of bajra, club root of crucifers, red rot of sugarcane, leaf spot and tikka diseases of groundnut. Beneficial interactions of mycorrhizae.

Practicals:

1. Gram staining of Bacteria
 2. Demonstration of motility in Bacteria.
 3. Determination of microbial counts by using Hemacytometer.
 4. Morphological study of fungi belonging to Myxomycota, Zygomycotina, Ascomycotina, Basidiomycotina and Deuteromycotina
 5. Observation of properties and fixatives of various viruses
 6. Study of symptomology of locally available diseased specimens.
 7. Isolation of fungi from soil: media preparation, dilution plate technique.
-

8. Study of Crustose and Foliose lichens
9. Mushroom cultivation

Suggested Readings:

1. Ainsworth G.C., E.K.Sparrow & A.S.Sussman, 1973.The Fungi-An advanced treatise. Academic Press.
2. Alexopoulos, C.J., Mims, C.W. and Blackwel, M. 1996. Introductory Mycology. John Wiley & Sons Inc.
3. Bilgrami, K.S. & H.C. Dube (1990) : A Text Book of Plant Pathology, Vikas publishing House Pvt., Ltd.,New Delhi, India.
4. Burnett, J.H. (1968) : Fundamentals of Mycology. Edward Arnold (Publishers) Ltd., London. 5.

Dube, H.C . (1992) : A Text Book of fungi, Bacteria & Virus, Vikas Publishing House (P) Ltd., New Delhi.

5. Mandahar, C.L. 1978. Introduction to Plant viruses. Chand & Co., Ltd., Delhi.
6. Mehrotra, R.S. and Aneja, K. R. 1998. An Introduction to Mycology. New Age International Press.
7. Mehrothra, R.S (1994) : Plant Pathology, Tata McGraw Hill Publishing Co., Ltd., New Delhi 9.
9. Pandey, B.P. (1999) : Plant pathology-Pathogens & Plant Diseases, S. Chand & Co., New Delhi-492 pp.,
8. Pelczar, M.J., E.C.S.Chan & N.R.Krieg. 1986. Microbiology. Tata McGraw Hill, New Delhi. 11.
11. Rangaswamy, G. and Mahadevan, A. 1999. Diseases of Crop Plants in India (4th Ed.) Prentice Hall of India Pvt. Ltd., New Delhi.
9. Sharma, P.D. 2000. Plant Pathology. Narosa Publishing House, India.
10. Singh, R.S. (2000) : Introduction to Principles of Plant pathology (3rd Edition), Oxford & IBH Publishers, New Delhi.
11. Sullia, S.B. and Shantharam, S. 2000. General Microbiology. Oxford & IBH Publ. , New Delhi.
12. Webster, J. (1999) : Introduction to Fungi (2nd edition), Cambridge University Press 16. R. Hall (2005). Plant Virology. Printice Hall

KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY

**PAPER BOT1111- BIOLOGY AND DIVERSITY OF BACTERIA, FUNGI, VIRUSES
& PLANT PATHOLOGY**

Time: 3Hrs.

Max. Marks: 80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

1. Biofuel
2. Algal Blooms
3. Polytrichum Capsule
4. Conservation of Bryophytes
5. Telom theory
6. Heterosory and Seed habit
7. Process of fossilization
8. Pteridospermales

SECTION-II

4x15M=60 M

Answer the following Questions

9. Sailer features of Rhodophyta
Or
 10. Sailer features of Chlorophyta
 11. Write about Jungermanniales
Or
 12. Diversity and evolution of Gametophyte in Bryophyta
 13. Write about Steelar evolution in Pteridophyta
Or
 14. write about Pteris
 15. Write about Gingobiloba
Or
 16. Brief description about Bennitiales
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BOT 1121: BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTA, PTERIDOPHYTA & GYMANOSPERMS

UNIT – 1: ALGAE

General characters of algae -thallus diversity, pigmentation . Recent trends in classification of algae - a general account. Salient features and classification of Cyanophyta , Rhodophyta, Phaeophyta, Bacillariophyta and Chlorophyta. Economic importance of algae: Algae as food, biofertilizers; industrial products; biofuels; harmful algae-algal blooms.

UNIT II: BRYOPHYTES

General characters and classification of Marchantiophyta; Anthocerotophyta and Bryophyta. Salient features of the orders and representatives: Marchantiales (Marchantia), Jungermanniales (Porella), Anthoceratales (Anthoceros) and Polytrichales (Polytrichum). Diversity and evolution of gametophyte and sporophyte. Ecology and Conservation of bryophytes.

UNIT III: PTERIDOPHYTES

General characters and classification of pteridophytes. salient features of representatives: Psilotopsida (Psilotum), Lycopsidea (Lycopodium), Equisetopsida (Equisetum), Marratiopsida (Angiopteris) and Polypodopsida (Pteris). Origin and phylogeny of pteridophytes- telome theory , stelar theory. Heterospory and Seed habit.

UNIT IV: GYMNASPERMS AND PLANT FOSSILS

General characters and classification of divisions and salient features of representatives: Cycadophyta (Cycas), Pinophyta (Pinus), Ginkgophyta (Ginkgo) and Gnetophyta (Gnetum). Economic importance of gymnosperms. Principles of Paleobotany - process of fossilization; types of fossils. Salient features and evolutionary significance of fossil gymnosperms - Pteridospermales and Bennitiales.

PRACTICALS

1. Observation of representatives of all groups in the natural habitat.
 2. Morphological study of representative members of all groups using whole mount preparations and sections.
 3. Study of morphology and anatomy of vegetative structures of Algae, Bryophytes, Pteridophytes and Gymnosperms
 4. Each student has to submit herbarium specimens and a report on field study.
 5. Study of fossils from Pteridophytes and Gymnosperms.
-

SUGGESTED READINGS:

- Agashe S.N. 1995. *Paleobotany*. Oxford & IBH, NewDelhi
- Bernard Goffinet & Jonathan Shaw. 2008. *Bryophyte Biology*. 2nd ed. Cambridge University Press.
- Bhatnagar, S.P. & Alok Mitra. 1997. *Gymnosperms*. New Age Int. (P) Ltd.
- Charles C. Beck and Charles B. Beck. (Ed). 1988. *Origin and Evolution of Gymnosperms*. CUP.
- Chopra, R.N. & P.K. Kumar. 1988. *Biology of Bryophytes*. Wiley Eastern.
- Graham, J.E., Lee, W. Wilox & L.E. Graham. 2008. *Algae*. 2nd ed. Benjamin Cummings
- Sambamurthy AVSS. 2005. *A Text Book of Bryophytes, Pteridophytes, Gymnosperms and Paleobotany*. IK International Pvt. Ltd.
- Sporne, K.R. 1965. *Morphology of Gymnosperms*. HUP, London
- Sporne, K.R. 1976. *Morphology of Pteridophytes*. HUP, London
- Van den Hoek , Christian D. Mann & H.M. Jahns *et al.* 1995. *Algae, An introduction to phycology*. Cambridge University Press.
- Vashista, P.C. 2005. *Gymnosperms*. S.Chand & Co., New Delhi
- Vashista, P.C. 2005. *Pteridophyta*. Revised ed., By Sinha and Anil. S. Chand & Co, New Delhi.
- Vashishta, B.R., V.P.Singh & A.P. Sinha. 2012. *Botany for Degree Students: Algae*. 34th ed. S. Chand & Co, New Delhi.
- Vashishta, B.R., A.K. Sinha & Adarsh Kumar . 2011. *Botany for Degree Students Part III Bryophyta..* 3rd ed. S. Chand & Co, New Delhi
-

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY
PAPER BOT 1121- BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTA,
PTERIDOPHYTA &GYMANOSPERMS

Time: 3Hrs.

Max. Marks: 80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

1. Biofuel
2. Algal Blooms
3. Polytrichum Capsule
4. Conservation of Bryophytes
5. Telom theory
6. Heterosory and Seed habit
7. Processof fossilization
8. Pterdospermales

SECTION-II

4x15M=60 M

Answer the following Questions

9. Sailent features of Rhodophyta

Or

10. Sailent features of Chlorophyta

11. Write about Jungermanniales

Or

12. Diversity and evolution of Gametophyte in Bryophyta

13. Write about Steelar evolution in Pteridophyta

Or

14. write about Pteris

15. Write about Gingobiloba

Or

16. Brief description about Bennitiales

PAPER BOT 1131: PLANT TAXONOMY

UNIT – 1: ANGIOSPERMIC CLASSIFICATION AND PHYLOGENY

Plant taxonomy- scope and significance. History of plant classifications: Artificial, Natural and Phylogenetic classifications. Natural system- Bentham and Hooker's classification. Principles of phylogenetic classifications–data sources; Plesiomorphy, apomorphy; monophyly and polyphyly. Cladograms and Phylogenetic trees. Angiospermic Phylogeny Group classification (APG-III). Clades, Orders and Families. A Comprehensive account on origin, phylogeny and diversification of angiosperms.

UNIT –II: FLORISTIC STUDIES AND HERBARIUM METHODOLOGY

Plant explorations around the world – a general account. Floristic inventories in India – a general account. Botanical Survey of India - organisation and activities. Flora of Andhra Pradesh – a general account; endemic plants and threatened taxa. Herbarium methodology- methods of collection, processing and preservation of plant specimens. Significant herbaria of the world and India.

UNIT – III: PLANT IDENTIFICATION AND NOMENCLATURE

Process of identification- conventional and modern approaches; Preparation of taxonomic keys. Taxonomic literature- floras, journals and databases. International Code of Nomenclature(ICN)- Principles, Rules and Recommendations; taxonomic hierarchy-species, genera and families; typification , rule of priority; concept of names and author citation; effective and valid publication. Describing a new species.

UNIT – IV: STUDY OF SELECTED ANGIOSPERMIC CLADES-ORDERS

Salient features , distribution and diversity of the following groups (based on APG –III); ANITA Grade; Magnolids (Magnoliales- Annonaceae); Monocots (Asparagales- Orchidaceae); Commelinids (Poales- Poaceae); Fabids (Fabales- Fabaceae, Malphigiales- Euphorbiaceae); Malvids (Malvales- Malvaceae, Caryophyllales-Amaranthaceae); Lamids (Gentianales- Apocyanaceae, Solanales- Solanaceae, Lamiales- Lamiaceae); Campanulids (Asterales- Asteraceae).

PRACTICALS

1. Study of about 25 wild taxa representing different families and identification to species level
 2. Study of flora of the college campus
 3. As a part of Botanical Tour, student should observe and record the flora and vegetation types of the study area and submit a report at the time of practical examination
-

4. Part of practical, student should submit 50 herbarium specimens of common wild plant taxa
5. Construction of Taxonomic Keys
6. Nomenclatural exercise

SUGGESTED READINGS:

Angiosperm Phylogeny Group website. 2015. Consult www.apgweb.

Gamble & Fischer 1915-35. *Flora of Presidency of Madras*. 3 Vols. BSMS, Dehradun

Heywood, V.H., RK Burmmit, A. Culham, O. Seberg. 2007. *Flowering plant Families of the World*. Firefly books Ltd. New York.

Judd, W.S., Christopher, S. Campbell, Elizabeth A. Kellogg, Peter F. Stevens and Michael J. Donoghue. 2007. *Plant Systematics: A Phylogenetic Approach*, 3rd ed. Sinauer.

Lawrence, G.H.M. 1951. *Taxonomy of vascular plants*. McMillan, New York.

Naik, V.N. 1992. *Taxonomy of Angiosperms*. 2nd Edn. Tata Mc Graw Hill Publications.

Pullaiah, T. 2005. *Taxonomy of Angiosperms*. Regency publications, New Delhi.

Pullaiah, T. *et al.* 1997. *Flora of Andhra Pradesh*. 4 Vols. Scientific Publishers, Jodhpur

Radford, A.E. *et. al.* *Vascular plant systematic*. Harper & Row. New York.

Ravi Prasad Rao, B. 2014. *The Plant Directory*. Anusha Publishers, Hyderabad.

Simpson, Michael G. 2006. *Plant Systematics*. Elsevier & Academic Press.

Singh, Gurucharan. 2005. *Plant Systematics*. Oxford & IBH. New Delhi.

Sivarajan, V.V. 1991. *Introduction to Principles of Plant Taxonomy*. Oxford & IBH. New Delhi.

Model Question Paper
FIRST YEAR M.Sc. Botany- SEMESTER-I
PAPER PAPER BOT 1131: PLANT TAXONOMY

Time: 3 Hrs

Max. Marks:80

SECTION-I (Short Answer Type)

4 x 5M = 20 Marks

Answer any 4 of the following

6. Plesiomorphy & Apomorphy
7. Taxonomic Keys
8. Endemic Plants
9. Significant herbaria of the World&India
10. ANITA Grade

6. Typification
7. Spikelet in Poaceae

SECTION-II (Essay Type)

4x15M=60 Marks

Answer the following Questions

8. Describe the salient features of APG Classification and add a note on its merits and demerits
or
 9. Explain briefly the current views on the Origin of Angiosperms.
 17. Write a detailed account on the organization and activities of BSI
or
 16. Write an account on Herbarium methodology.
 17. Explain any 3 basic rules of ICBN.
or
 18. Write an essay on Taxonomic keys.
 19. Describe the Salient features of the family Orchidaceae.
or
 20. Describe the Salient features of the family Asteraceae.
-

BOT1141 : PLANT PHYSIOLOGY

UNIT I: PLANT AND SOIL WATER RELATIONS

Thermodynamic concept of plant cell and water relations. Water Potential, Osmotic potential and Pressure potential. Dynamics of SPAC. Active and Passive absorption of Ions. Essential elements- functions and deficiency symptoms. Stomatal structural features; mechanism of stomatal movements and stomatal Index. Stomatal responses to environmental factors, antitranspirants and their importance in drought resistance.

UNIT II: PHOTOSYNTHESIS

Current knowledge on mechanism of photosynthesis- LHCs, photochemical reactions, electron transport in chloroplasts. photophosphorylation. Carbon fixation pathways- Reductive PPP and its regulation by light and metabolites; C4 pathway; CAM Pathway; C-3, C-4 Intermediates. Photosynthesis vs. Plant productivity. Photorespiration- Glycolate pathway, Significance of photorespiration.

UNIT III: RESPIRATION AND PLANT GROWTH REGULATORS

Significance of Plant Respiration; Glycolysis, TCA Cycle, ETS and ATP synthesis. Pentose Phosphate Pathway. Glyoxylate cycle, Alternate oxidase system. Biosynthesis and mechanism of action of plant growth regulators- Auxins, Gibberellins, Cytokinins, Brassinosteroids, Abscissic acid, Jasmonic acid and salicylic acid. Role of hormones in agriculture. Physiology of flowering- Kinetics of phytochrome; Photoperiodism

UNIT IV: STRESS pHYSIOLOGY: Concept of stress and strain; Kinds of stress; Abiotic stress-Water stress; Salt stress; Temperature stress; Heavy metal stress; Biotic stress factors-Stress avoidance and tolerance mechanisms; structural, physiological, biochemical and molecular responses of plants to environmental stress; Reclamation of saline soils and heavy metal contaminated soils.

PRACTICALS

1. Determination of total chlorophyll content and a/b ratio in leaves.
 2. Extraction and Estimation of Chlorophyll pigments. (Arnan method).
 3. Separation of chloroplast pigments into two or four groups. Record of their absorption spectra
 4. Determination of cell permeability by using Beet Root tissues.
 5. Determination of stomatal index and frequency in leaves
 6. Determination of water potential of the tissue
 7. Comparative anatomy of C3, C4 and CAM plants
 8. Determination of Titrable acidity (TAN) in leaves of CAM plants
-

9. Determination of viability of different seed material.
 10. Estimation of IAA by Solkowski reaction
 11. Determination of membrane stability and chlorophyll stability index
 12. Determination of membrane stability and chlorophyll stability index of stressed plants
8. Estimation of free Proline in stressed plants sample.

SUGGESTED READINGS

- Buchanan *et al.*, 2001. *Biochemistry and Molecular Biology of plants*.
- Delvin, R.M. 1969. *Plant Physiology*. Affiliated East West Newyork Ltd.
- Dennis, D.T., D.B. Layzell, D.D. Lefebvre & D. Turpin. 1997. *Plant Metabolism*. 2nd Ed. Addison Wesley Pub Co. New York
- Govindjee, ed. 1982-83. *Photosynthesis*. Vol I & II. Academic Press Inc. New York.
- Hopkins, W. 1998. *Introduction to Plant Physiology*. ELBS & Longman, Essex., England.
- Kocchar and Gujral. 2012. *Comprehensive Plant Physiology*. Mac Milan Pub.
- Raghavendra, S. 1998. *Photosynthesis: A Comprehensive Treatise*. Cambridge University Press, Cambridge, UK
- Salisbury, F.B. and C. S.Ross. 1992. *Plant Physiology*. 4th Ed. Worsworth Publishing & Co. , Belmont , California.
- Taiz and E.Zeiger. 1998. *Plant Physiology*. 2nd Edition. Sinauer Associates Inc Publishers, Massachusetts, USA
- Thomas C. Moore. 1992. *Biochemistry and Physiology of Hormones*. Narosa .
- Wilmer, C.M. & M. Fricker. 1996. *Stomata*. 2nd Ed, Chapman Hall.

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY
PAPER BOT1141 : PLANT PHYSIOLOGY

Time: 3Hrs.

Max. Marks: 80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

1. SPAC
2. Antitranspirants
3. Glycolate Path way
4. CAM Path way
5. ATP Synthesis in Respiration
6. Salicylic acid
7. Saline Stress
8. Reclamation of heavy metal contaminated soil

SECTION-II

4x15M=60 M

Answer the following Questions

- 9.Active and Passive absorbtion of ions
OR
 10. Write about the mechanism of Stomatal movement

 18. Write about PPP path way
OR
 19. Write about intermediates of C-3 cycle and it significance
OR
 20. Write about TCA Cycle
OR
 21. Write about Mechanism of action of Auxins and Cytokinins
OR
 22. Write about Temperature Stress
OR
 23. Write about Biochemical and Molecular response of plant to environment.
-

SEMESTER –II

BOT 2111- CELLBIOLOGY AND PLANT DEVELOPMENT

UNIT- I: Cell Communication:

Over view of cell organelles:General principles: Cell surface receptors and Intracellular receptors; Forms of Intracellular signaling - Autocrine, Paracrine, Contact dependent, Synaptic and Endocrine signaling; Response of cell to signals; Cell surface receptors - Ion channel linked, G- protein linked and Enzyme linked receptors; Intracellular signaling proteins - Different types and their role; Second messengers; cAMP pathway and role of calcium; Cellular interactions:i) Microvilli, Tight junctions, Belt and Spot Desmosomes. ii) Gap junctions - Electrical coupling, the connexon. iii) Permeability to ions and small molecules. iv) Factor mediating cell-self recognition (aggregation factor), Cellular interaction and Cyclic AMP.

UNIT I1: Cell cycle

- **Overview of eukaryotic cell cycle;** Regulation of cell cycle by cell growth and extra cellular signals; Cell cycle check points; Regulation of cell cycle progression - Protein kinases; MPF; Cyclins and Cyclin dependent kinases.; Events of M Phase; Cell Death:i) Apoptosis - Definition, Morphological and Biochemical differences between Apoptosis and Necrosis; Mechanism (Intrinsic pathway and Extrinsic pathway), Inhibitors of Apoptosis and Significance. ii) Cancer Development and causes of Cancer; Properties of Cancer cells; Approaches to Cancer treatment.

UNIT I -Tissue types and Tissue systems in Plants:

Root growth and Development: Root apical meristem; Cell division, Cell expansion and elongation. Differentiation of root; vascular tissue, root hair and Lateral roots formation. Stem growth and development: organization of the shoot apex; cytological and molecular analysis of shoot apical meristems. Tissue differentiation in the shoot; xylem regeneration and Phloem differentiation.

UNIT II Leaf and flower development:

Development of leaf, History, Specialized cells and tissue differentiation. Development and Anatomy of flower, including transition to Flowering and reproductive shoot apex.

Practicals:

1. Preparation of Cytological slides for Mitosis using Root tips.
 2. Preparation of Cytological slides for Meiosis-I using Flower buds; Chiasma Frequency.
 3. Identification of different stages of Mitosis and Meiosis.
 4. Study of tissues and Tissue systems.
 5. Study of internal organization of different types of stems
 - 6 of internal organization of roots.
 7. Study of internal organization of plants showing anomalous secondary growth.
-

8. Microscopic examination of vertical sections of leaves such as *Polyalthia*, *Ficus*, *NeriumNymphaea*, maize and Wheat to understand the internal structure of leaf tissues and trichomes, glands etc. =
9. Study epidermal peels of leaves to study the development and structure of stomata and prepare stomatal index.
10. Wood maceration.
11. Preparation of permanent slides -5 slides to be submitted at the time of Examination.

Suggested Readings:

- 1.Cooper Geoffrey, M. - The Cell-A Molecular Approach, ASM Press, Washington.
 - 2.Sharma, A.K & A. Sharma. - Chromosome Techniques: Theory & Practice, Batter Worth.
 - 3.Albert's, A. et al. - Molecular Biology of the Cell, Garland Publishing House, New York.
 - 4.De Robertis, E.D.P. & E.M.F. DeRobertis. - Cell and Molecular Biology, Lippincott Williams & Wilkins, Bombay.
 - 5.Freifelder, D. - Molecular Biology, Narosa Publishing House, New Delhi.
 - 6.Gardener, E. J. & D. P. Snustad - Principles of Genetics, John Willey, New York .
 - 7.Powar, C.B. - Cell Biology.
 - 8.Sambamurthy, A.V.S.S. – Genetics, Narosa Publications, New Delhi
 - 9.Sinnot, E.W., L.C. Dunn & T. Dobzhansky - Principles of Genetics, V Edn, McGraw Hill,
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- 1.Atwell, B.J. Kriedermann, P. E. and Jumbull, C.G.N. (Ed.) 1999. Plants in Action. Adaptation in Nature, performance in cultivation. MacMilan Education, Sydney, Australia.
 - 2.Burgess, J. 1985. An introduction to Plant Cell development. Cambridge Univ. Press, Cambridge.
 - 3.Fahn, A. 1982. Plant Anatomy (3rdEd.), Pergamon Press, Oxford.
 - 4.Fosket, D.E. 1994. Plant growth and Development. A molecular approach, Academic Press, San Diego, USA.
 - 5.Howell, S.H. 1998. Molecular Genetics of Plant Development, Cambridge Univ. Press, Cambridge.
 - 6.Jane, F.W. 1970. The structure of wood. Black, London.
 - 7.Lyndon, R.F. 1990. Plant Development. The Cellular Basis, Unnin Hyman, London.
 - 8.Murphy, T.M. and Thompson, W.F. 1988. Molecular Plant Development, Prentice Hall, New Jersey.
 - 9.Pullaih, T., Naidu, K. C., Lakshminarayana, K. & Hanumantha Rao, B. 2007. Plant Development. Regency Publications, New Delhi.
 - 10.Raghavan, V. 1999. Developmental Biology of Flowering Plants, Springer-Verlag, New York.
 11. Steeves, T.A. and Sussex, TM. 1989. Patterns in Plant Development (2ndEd.). Cambridge Univ Press, Cambridge.
 - 11.Waisel, Y., Esnel, A, and Kafkaki U. (Eds.). 1996. Plant Roots. The Hiden Hall (2nd Ed.), New York, USA.
-

PAPER 2121: MOLECULAR GENETICS AND TECHNIQUES IN BIOLOGY

UNIT I: INHERITANCE, RECOMBINATION AND MAPPING

Mendelian laws of inheritance- an overview. Linkage, Chromosome as a linkage unit, factors affecting linkage; Genetic recombination: types and molecular mechanism of recombination. Factors affecting recombination. Chromosomal mapping; Two factor and Three factor mapping, Mapping by recombinational frequencies. Coefficient of coincidence of double crosses, Interference –types and significance.

UNIT II: MUTATION AND POPULATION GENETICS

Modern concept of gene, Mutations–types. Chromosomal structural aberrations: deficiencies, duplications, translocations, inversions and their significance in evolution. Numerical changes in chromosomes: aneuploidy and euploidy, polyploidy and their significance in evolution; molecular mechanism of mutagenesis.

UNIT III: pH, MICROSCOPY, CENTIFUGATION AND CHROMATOGRAPHY

pH- Measurement of pH, biochemical buffers, Principles and applications of Microscopy- Light microscope, Phase contrast and Electron microscope. Fixation and staining methods. Centrifugation – basic principles of sedimentation, Types of centrifuges. Preparative ultracentrifugation- differential centrifugation, density gradient, analytical ultracentrifugation and applications. General principles, definitions and applications of chromatography. Paper chromatography, thin-layer chromatography, gas-liquid chromatography.

UNIT IV: ELECTROPHORESIS, SPECTROSCOPY AND RADIO ISOTOPE TECHNIQUES

Principles, definition and applications of SDS-PAGE, Agarose gel electrophoresis. Laws of light absorption, Instrumentation and applications of UV-Visible spectrophotometer. Radioisotope Techniques –types of isotopes, radioactive decay. Detection and measurement of radioactivity. Autoradiography, Isotopes used in biology.

PRACTICALS

1. Problems related to Genetics
2. Separation and identification of amino acids by paper chromatography
3. Separation and identification of sugars by TLC
4. Separation and identification of Lipids by TLC
5. Separation of amino acids by Ion –exchange chromatography
6. Separation of proteins by PAGE
7. Separation of Pigments by paper chromatography
8. Isolation and spectrophotometric characterization of plant pigments.

SUGGESTED READINGS

Alberts A *et al.* 1994. *Molecular Biology of cell*. Garland publ. New York.
Cantor, C.R. and P.R. Schimmel. *Biophysical Chemistry* by, W.H. Freeman & Co.
Copper Geoffrey, M. 2000. *The Cell - a Molecular approach*. 2nd Edn. ASM Press, Washington.

De Robertis EDP & EMF De Robertis . 2001. *Cell and Molecular biology*. Lippincott Williams & Wilkins.
Freifelder D.1990. *Molecular biology*. Narosa publication house, New Delhi.
Gardner E J & D P Snustad 1996. *Principles of Genetics*. John Willey, New York.
Glaser A. and M.P. Deutscher. 1995. *Introduction to Biophysical Methods for Protein and Nucleic Acid Research*. Academic Press.
John M. Wrigglesworth. 1983. *Biochemical research technique (A Practical Introduction)*
Strickberger MW 1996. *Genetics* III edn.McMillan,New York.
Cooper,T.G. *The tools of Biochemistry*. Wiley Eastern.
Vanholdem, K.E. and W.C. Johnson. 1988. *Principles of Physical Biochemistry*. Wilson & Walker.
1986. *Practical Biochemistry: Principles & Techniques*. Cambridge University Press.

MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN (A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY
PAPER 2121 : MOLECULAR GENETICS AND TECHNIQUES IN BIOLOGY

Time: 3Hrs.

Max. Marks: 80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

Model Question Paper
FIRST YEAR M.Sc. Botany- SEMESTER-II
PAPER 202: MOLECULAR GENETICS AND TECHNIQUWA IN BIOLOGY

Time: 3 Hrs

Max. Marks:75

PART –A (Short Answer Type)

5 x 6M = 30 Marks

Answer any 5 of the following

9. Write about fafactores affecting linkage
 10. Coefficient of coincidence
 11. Two factor chromosome mapping
 12. Write about Molecular mechanism of mutagenesis
 13. Paper Chromatography
 14. Spectrophotometer
 15. SDS –PAGE
-

16.Types of Isotopes

PART –B (Essay Type)

3 X 15M = 45 Marks

Answer the following Questions

9. Write about molecular mechanism of recombination

Or

10. Write about linkage

11. Write about chromosomal structural aberrations with suitable examples.

Or

12. write about Numerical changes in the Chromosomes

13. Write about brief description about Electron Microscope

or

14. Explain Gas-liquid Chromatography and their application

15. The Isotopes used in Biology

OR

16. Write about Spectrophotometry

PAPER 2131 : PLANT BIOCHEMISTRY

UNIT I: BIOENERGETICS

Energy transformation in living systems, Laws of thermodynamics, free energy and standard free energy changes, Phosphate group transfer and ATP, free energy from hydrolysis of ATP, High energy phosphates as currency of cell. Biological oxidation-reduction reactions and their half reactions.

UNIT II: ENZYMES

Nomenclature and classification- Isoenzymes, structure; Ribonuclease, Lysozyme, Chymotrypsin. Mode of action of enzymes; enzyme-substrate complex Inhibition: Competitive, Non competitive and Feed back inhibition. Regulation of enzyme activity. Enzyme Kinetics: Michaelis- Menten equation and Reversible reactions.

UNIT III: CARBOHYDRATES AND PROTEINS

Classification and properties of carbohydrates of Mono (Glucose, Galactose, Fructose), Oligo (Lactose, Maltose, Sucrose) and Polysaccharides: Homopolysaccharides (Starch, Glycogen, Cellulose and Heteropolysaccharides. Gluconeogenesis. Amino acids: Non standard protein and aminoacids, peptides structure and reactions. Proteins: Primary structure and its sequence determination, Secondary, Tertiary and Quarternary structural features of proteins (Ramachandran plot).

UNIT IV: LIPID METABOLISM

Chemical composition of plant lipids. α - Oxidation and β - Oxidation of fatty acids. Biosynthesis of fatty acids - malonyl CoA and long chain saturated and unsaturated fatty acids.

PRACTICALS

1. Estimation of proteins in plant samples by Biuret or Lowry's method
2. Estimation of Reducing sugars in plant samples by Nelson's method.
3. Determination of Amylase activity in germinating seeds
4. Estimation of Amino acids by Ninhydrin method
5. Determination of Catalase activity in germinating seeds
6. Reaction of amino acids and sugars
7. Aminoacid titrations
8. Iodine no and Sophonificatiob number
9. Estimation of Starch.

SUGGESTED READINGS

- Buchnan, Gruissen & Jones. 2001. *Biochemistry and Molecular Biology of Plants*.
Dennis, D.T., D.B. Layzell, D.D. Lefebrye & D. Turpin. 1997. *Plant Metabolism*. 2nd ed. Addison Wesley Pub. Co. New York.
- Dey and Horborne. 1998. *Plant Biochemistry*. Academic Press.
- Heldt, H.W. 1997. *Plant Biochemistry and Molecular Biology*. OUP.
- Horton, HR, MoranLA, Ochs RS *et al.*, 2001. *Principles of Biochemistry*, III edn. Prentice Hall.
- Lehninger, A.L. 2001. *Biochemistry*. Kalyani Publishers. Ludhiana.
- Mathews CK, Van Holde KE and Ahem KG. 2000. *Biochemistry* III edn. Sanfransico. Benjamin Cummings.
- Thomas C. Moore. 1992. *Biochemistry and Physiology of Plant Hormones*. II Eds. Narosa Publishers.
- Wilkins, M.B. (ed) 1987. *Advanced Plant Physiology*. ELBS & Longman. Essex., England.
-

Model Question Paper
FIRST YEAR M.Sc. Botany- SEMESTER-II
PAPER 2131: PLANT BIOCHEMISTRY

Time: 3 Hrs

Max. Marks:80

PART –A (Short Answer Type)

4 x 5M = 200 Marks

Answer any 5 of the following

- | | | | |
|---|---------------------------|---|-------------------------------------|
| 1 | Free energy changes | 2 | Bio Redox reactions |
| 3 | classification of enzymes | 4 | Feed back inhibition |
| 5 | Polysaccharides | 6 | Mechanism of enzyme action |
| 7 | Plant lipids | 8 | α - oxidation of fatty acids |

PART –B (Essay Type)

34X 15M = 60Marks

Answer the following Questions

9. Explain the laws of thermodynamics involved in biological systems.
OR
10. Write about Different levels of enzyme or protein structures
11. Briefly explain the classification of enzymes
(OR)
12. Derive Michaelis Menten equation
13. Define gluconeogenesis. Explain the steps involved in gluconeogenesis.
(OR)
14. Explain β -oxidation of fatty acids.
15. Write about Malonyl CoA
Or
16. Write about α -Oxidation

PAPER BOT2141: OPEN ELECTIVE –I: PLANTS AND HUMAN WELFARE

UNIT I : PLANTS AND ENVIRONMENTAL VALUES

Plants-Ecosystem services. Direct, Indirect and optional (future possibilities of usage) services. Plants role in soil protection and water conservation. Role of plants in climate change scenario-carbon credits. Plants in combating pollution- Phytoremediation. Exotic and invasive species.

UNIT II: PLANT RESOURCES

Brief account of the following plant Resources(examples limited to 10 under each category)- local,common and botanical names; morphology and utility Edible Resources- Cereals, Millets, Pulses, Spices and Condiments; Vegetables; Starch and Sugar Yielding Plants; Oil yielding plants. Dye yielding plants. Plants as sources of timber and biofuels. Transgenic plants. Herbal medicine.

UNIT III: MUSHROOM CULTIVATION

Introduction, history.Types of mushrooms. Mushrooms available in India- *Volvariella volvacea*, *Pleurotus citrinopileatus*,*Agaricus bisporus*, Mushroom Research Centres; Mushroom cultivation Procedure steps; Storage: Short term and Long term storage; Nutritional and medicinal value of mushrooms; Food Preparation: Types of food prepared from mushrooms; Cost-benefit ratio: Market in India and abroad, export value

UNIT IV: ORGANIC FARMING

Concept of Organic farming, history, objectives. Need of Organic farming in the present scenario. Types and methods of Organic farming. Advantages(benefits to environment and health benefits) and disadvantages of organic farming. Organic manure- types(green manure, vermicompost and vermiwash). Economic potential of Organic farming in India. Production and export of some certified organic products in India.

SUGGESTED READINGS:

- Alan beebay & anne- Maria Brennan. 2008. First Ecology. 3rd ed. Oxford University press.
- Cotton CM. 1996. Ethnobotany: Principles and Applications
- Cunningham, W.P. & M.A. Cunningham. 2007. Principles of Environmental Science- Inquiry and Applications. Tata Mc Graw Hill Publications. New Delhi.
- Hill, Albertt, F. 1952. A Text Book of useful plants and plant products. Tata Mc Graw Hill Publications. New Delhi.
- Kokate , C.K. AP. Purohit & SB .Gokhale. 2000. Pharmacognosy. Nirali Prakasan Publications.
- Rao, RaviPrasad B. 2005. Biodiversity. In Pullaiah.T. (ed) Taxonomy of Angiosperms. Regency Publications. New Delhi. Pp: 287-317.
- Sambamurthy, A.V.V. S. & N.S. Subbramanyam 2000. Economic Botany of Crop Plants. Asiatech Publishers Inc.
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MODEL QUESTION PAPER
KVR GOVT. COLLEGE FOR WOMEN(A), KURNOOL
SEMESTER-II END EXAMINATIONS
M.SC- BOTANY
PAPER BOT2114OPEN ELECTIVE –I: PLANTS AND HUMAN WELFARE

Time: 3Hrs.

Max. Marks:80M

(Instruction to Q.P.Setters: Set **atleast TWO** question from each unit with internal choice)

SECTION-I

Answer any FOUR the questions

4x5M= 20M

7. Exotic species
8. Carbon credits
9. Spices and Condiments
10. Types of mushrooms
11. Types of food prepared from mushrooms
12. Concept of Organic farming
13. Vermicompost

SECTION-II

Answer all the questions

4x15M= 60M

14. Write an essay on role of plants in soil and water conservation.
OR
 15. Write an essay on Phytoremediation
 16. Cereals and millets.
OR
 17. Transgenic Plants.
 18. Write an essay on mushroom technology.
OR
 19. Write a detailed account on any 2 mushrooms available in India.
 20. Write a detailed account on Organic farming.
OR
 21. Write about the types of Organic manure.
-



**K.V.R GOVERNMENT COLLEGE (A), (W),
REACCREDITED WITH 'A' GRADE BY NAAC, KURNOOL
– 518001**

**BOARD OF STUDIES MEET FOR
M.Sc 2nd YEAR CHEMISTRY: III & IV – SEMESTERS
&**

M.Sc I YEAR CHEMISTRY: EXAMINATION PATTERN

ON

8 – 08 – 2019

DEPARTMENT OF CHEMISTRY





DEPARTMENT OF CHEMISTRY

Board of Studies Meet on 8-08-2019

Minutes of Board of Studies meeting held in the department of Chemistry, KVR Govt. College for Women (A), Kurnool on 8 - 08 -2019 at 10:00 AM and resolved the following:

CONSTITUTION OF THE BOARD OF STUDIES OF PG CHEMISTRY

Sl.No.	Name & Designation	Acted as
1	Dr. B. Anusha, Lecturer InCharge, KVR Govt College (A) (W), Kurnool	Chairman <i>[Signature]</i> 8/8/19
2	K.V. Murali Krishna, Lecturer in Chemistry, KVR Govt College (A) (W), Kurnool	Member <i>[Signature]</i> 8/8/19
3	Smt J.Kalpana, Lecturer in Chemistry, KVR Govt College (A) (W), Kurnool	Member <i>[Signature]</i> 8/8/19
4	K.Aruna kumari, Lecturer in Chemistry (Contract), KVR Govt. College for Women(A), Kurnool	Member <i>[Signature]</i> 8/8/19
5	A.Sunitha, Lecturer in Chemistry (Contract), KVR Govt. College for Women(A), Kurnool	Member <i>[Signature]</i> 8/8/19
6	Prof M.E Rani, HOD of Department of Chemistry, Sri Rayalaseema University, Kurnool.	University Nominee <i>[Signature]</i> 8/8/19
7	Dr Y.Siva Chandra, Lecturer in Chemistry, Govt Degree college (A), Anantapur.	Subject Expert <i>[Signature]</i> 8/8/19
8	S.Anwar, Lecturer in Chemistry, Silver Jubilee Govt Degree College (A), Kurnool.	Subject Expert <i>[Signature]</i> 8/8/19
9	J.Sneha latha, Lecturer in Chemistry, Sankras College, Kurnool	Alumni <i>[Signature]</i> 8/8/19
10	I.Surendra Nath Reddy, Vice President, SRAAC , Kurnool	Industry Representative <i>[Signature]</i> 8/8/19
11	B. Mubeena, II MSc (Organic Chemistry)	Student Representative <i>[Signature]</i> 8/8/19

RESOLUTIONS

The members of BOS in Chemistry met on 8 - 08 - 2019 in the department of Chemistry, KVR Govt. Degree College for Women(A), Kurnool under the chairmanship of Dr B.Anusha, I/C of the Department of Chemistry, discussed the proposals on the curriculum for the II year PG course and passed the following resolutions.

The following resolutions are made and passed unanimously.

1. Resolved to approve the revised syllabus in Chemistry for I & II M.Sc., Semester-I to Semester-IV as decided by University nominee, subject experts and members of the Board of Studies (UG) Chemistry.
2. The revised syllabus will come into effect from the academic year 2019-20 for I & II M.Sc. Semester-I to Semester-IV.
3. Resolved to conduct the two practical examinations with a maximum of 200 Marks at the end of IVth semester and one Project each with a maximum of 100 Marks and three practicals at the end of II semester.
4. Resolved to approve the 75 - 25 marks Examination pattern for the II year students, with effect from this academic year 2019 - 20. It is decided to allot 25 Marks for the internal assessment which includes 20 Marks for the test, 5 Marks for student seminar/ viva. The Question Paper pattern for External Examination is as follows for III, IV Semester papers,

Section	Type	Number of questions given	Number of questions to be answered	Marks per question	Marks
A	Short Essay	8	5	5	25
B	Essay	4(Intern choice)	4	12.5	50
Total Marks					75

5. Resolved to approve the 80 - 20 marks Examination pattern for the I year students, with effect from this academic year 2019 - 20. It is decided to allot 20 Marks for the internal assessment which includes 15 Marks for the test, 5 Marks for student seminar/ viva for First students.

The Question Paper pattern for External Examination is as follows for I, II semesters,

Section	Type	Number of questions given	Number of questions to be answered	Marks per question	Marks
A	Short Essay	8	4	5	20
B	Essay	4(Intern choice)	4	15	60
Total Marks					80

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

(Effective from the batch admitted during the academic year 2019-20)

S.No	Paper Number	Title of Paper	No. Of Credits	Uni.Exam Duration(Hrs)	Total Marks	
					IA	SEE
1	CHEMOC/NP301: Paper I	Modern Organic Synthesis	4	3	25	75
2	CHEMOC/NP302: Paper II	Asymmetric Synthesis and Organic Photochemistry	4	3	25	75
3	CHEMOC/NP303: Paper III	Bio-Organic Chemistry	4	3	25	75

4	CHEMOC/NP304: Paper IV	Advanced Organic Spectroscopy	4	3	25	75
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IA : Internal Assessment = IAE (20) + SS (5)

SEE : Semester End Examination

IAE : Internal Assessment Examination

SS : Student Seminar

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

CHEM-OC/NP301: Paper I – Modern Organic Synthesis

UNIT –I : Organo Phosphorous and Organo Sulphur Compounds

UNIT –II : New synthetic reactions

UNIT –III : New techniques and concepts in organic synthesis:

UNIT –IV : Synthetic Strategies

UNIT -I: OrganoPhosphorousand Organo Sulphur Compounds 15 Hrs (1 Credit)

Properties of divalent sulphur and trivalent phosphorous derivatives, nucleophilic reactivities, hard and soft acids and bases, compounds containing phosphorous-oxygen bonds, the phosphoroyl group, molecules with hydrogen bonded to phosphoroyl group, Arbusev reactions, Perkov reactions, compounds containing sulphur-oxygen bonds, sulfoxides and sulfones-Pummerer rearrangements, sulfoxides as oxidizing agents, phosphorous ylides, Wittig's reactions and mechanism, the Emmons-Wadsworth reaction, reactions of sulphur ylides.

UNIT -II: New synthetic reactions 15 Hrs (1 Credit)

(i)Protecting Groups: (a) Protection of alcohols by ether, silyl ether and ester formation

(c) Protection of 1,2-diols by acetal, ketal and carbonate formation (c) Protection of amines by acetylation, benzylation, benzyloxycarbonyl, t-butyloxycarbonyl, fmoc and triphenyl methyl groups, (d) Protection of carbonyls by acetal, ketal and thiol acetal (Umpolung) groups,

(f) Protection of carboxylic acids by ester and ortho ester (OBO) formation.

(ii)Baylis-Hillman reaction, RCM olefm metathesis,. Stork-enamine reaction and Umpolung use of dithio acetals

UNIT -III: New techniques and concepts in organic synthesis

15 Hrs (1 Credit)

Solid phase polypeptide synthesis, Solid phase oligonucleotide synthesis, Strategies in oligosaccharide synthesis, Kuhn-Roth glycosylation, Combinatorial synthesis, Phase transfer catalysis, Tandem synthesis, Baldwin rules, Chiron approach in synthesis, Transformations using esterases

and lipases, Determination of absolute configuration (R/S) using Mosher's method and Felkin-Anh model. Use of protecting groups in organic synthesis: fmoc, t-BOC, TBDMS and THP.

UNIT -IV: Synthetic Strategies 15 Hrs (1 Credit)

Synthetic Strategies, Terminology: target, synthon, synthetic equivalent, functional group

interconversion (FGI), functional group addition, functional group elimination. Criteria for

selection of target. Linear and convergent synthesis. Retrosynthetic analysis and synthesis

involving chemoselectivity, regioselectivity, reversal of polarity and cyclizations. Strategic bond:

Criteria for disconnection of strategic bonds. Importance of the order of events in organic

synthesis. One group and two group C-X disconnections. One group C-C disconnections.

Alcohol and carbonyl compounds. Two group C-C disconnections; DielsAlder reaction, 1,3-

difunctionalised compounds, Control in carbonyl condensation, 1,5- difunctionalised

compounds, Michael addition and Robinson annulation, synthesis of (+) Disparlure by retro

synthetic approach.

Recommended Books:

17. Some modern methods of organic synthesis by W Carruthers
 18. Guidebook to organic synthesis, by R K Meckie, D M Smith & R A Atken
 19. Organic synthesis by O House
 20. Organic synthesis by Michael B Smith
 21. Reagents for organic synthesis, by Fieser&Fieser, Vol 1-11(1984)
-

22. Organic synthesis by Robert E Ireland
 23. Organic Synthesis - The disconnection approach by S Warren
 24. Organic Synthesis by C Willis and M Willis
 25. Handbook of reagents for organic synthesis by Reich and Rigby, Vo I, IV
 26. Problems on organic synthesis by Stuart Warren
 27. Total synthesis of natural products: the Chiron approach by S.Hanessian
 28. Organic chemistry Claydon and others 2005
 29. Name Reactions by Jie Jack Li
 30. Reagents in Organic synthesis by B.P.Mundy and others.
 31. Tandem Organic Reactions by Tse-Lok Ho
 32. Advanced Organic Chemistry-Reactions and Mechanism, 2nd Ed. By Bernard Miller and Rajendra Prasad (Pages 397-414)
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KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

CHEM-OC: 302: Paper II –Asymmetric Synthesis and Organic Photochemistry

UNIT –I : Asymmetric Synthesis-I

UNIT –II : Asymmetric Synthesis-II

UNIT –III : Organic Photochemistry - I

UNIT – IV : Organic Photochemistry -II

UNIT –I: Asymmetric Synthesis-I: 15 Hrs (1 Credit)

Introduction and terminology: Topocity in molecules Homotopic, stereoheterotopic (enantiotopic and diastereotopic) groups and faces- symmetry, substitution and addition criteria.Prochirality nomenclature: Pro-R, Pro-S,Re and Si. Selectivity in synthesis: Stereospecific reactions

(substrate stereoselectivity). Conditions Stereoselective reactions (product stereoselectivity):Enantioselectivity and diastereoselectivity.: Symmetry and transition state criteria, kinetic and thermodynamic control. Methods for inducing enantio and diastereoselectivity. Analytical methods: % Enantiomer excess, optical purity, % diastereomeric excess. Techniques for determination of enantioselectivity: Specific rotation, Chiral ¹H nmr, Chiral lanthanide shift reagents and Chiral HPLC.

UNIT -II: Asymmetric Synthesis-II: 15 Hrs (1 Credit)

i) Substrate controlled asymmetric synthesis: Nucleophilic additions to chiral carbonyl compounds. 1,2-asymmetric induction, Cram's rule and Felkin-Anh model.

iv) Chiral auxiliary controlled asymmetric synthesis: α -Alkylation of chiral enolates, azaenolates, 1, 4-Asymmetric induction and Prelog's rule. Use of chiral auxiliaries in Diels-Alder and Aldol reactions.

v) Chiral reagent controlled asymmetric synthesis: Asymmetric reductions using BINAL-H. Asymmetric hydroboration using IPC_2BH and IPC_2BH_2 . Reductions with CBS reagent.

v) Chiral catalyst controlled asymmetric synthesis: Sharpless, Jacobsen and Shi asymmetric epoxidations. Asymmetric hydrogenations using chiral Wilkinson biphosphine and Noyori catalysts, Enzyme mediated enantioselective synthesis:

UNIT–III: Organic Photochemistry – I

15 Hrs (1 Credit)

Organic photochemistry: Molecular orbitals, carbonyl chromophore–triplet states, Jablonski diagram, inter–system crossing. Energy transfer. Energies properties and reaction of singlet and triplet states of and transitions.

Photochemical reactions : (a) Photoreduction, mechanism, influence of temperature, solvent, nature of hydrogen donors, structure of substrates on the course of photo reduction, (b) F.B. reaction mechanism, stereochemistry, side reaction due to variations of the triplet energy of the carbonyl component and the nature of the olefin component.

UNIT – IV: Organic Photochemistry – II

15 Hrs (1 Credit)

Norrish cleavages, type I : Mechanism, acyclic cyclicdiones, influence of sensitizer, photo Fries rearrangement. Norrish type II cleavage : Mechanism and stereochemistry, type II reactions of esters : 1: 2 diketones, photo decarboxylation. Photochemistry of unsaturated ketones – Olefin photochemistry, cyclic olefins – Photochemistry – of conjugated dienes; electrocyclisations, influence of triplet energy of sensitizer, sensitized and unsensitized electrocyclisations. Electrocyclisations of dienes in crossed sense – Photochemistry of benzene derivatives – formation of derivatives of benzavalene, fluvene and Dewar benzene, cyclo addition of benzene to olefins and dienes – Decomposition of nitrites – Barton reaction. Di
- π methane rearrangement.

Recommended Books:

8. Stereochemistry of organic compounds — Principles & Applications by D Nasipuri
 9. The third dimension in organic chemistry, by Alan Bassendale
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10. Stereochemistry: Conformation & Mechanism by P S Kalsi
11. Stereochemistry of Carbon compounds by Ernest L Eliel
12. Stereoselectivity in organic synthesis by R S Ward.
13. Asymmetric synthesis by Nogradi
14. Asymmetric organic reactions by it) Morrison and HS Moschr



17. Stereo differentiating reactions by Izumi
 18. Some modern methods of organic synthesis by W Carruthers
 19. Guidebook to organic synthesis, by R K Meckie, D M Smith & R A Atken
 20. Organic synthesis by Michael B Smith
 21. Molecular Reactions and Photo chemistry by Depuy and Chapman
 22. Photochemistry by C W S Wells
 23. Organic Photochemistry by Turro
 24. Molecular Photochemistry by Gilbert & Baggo
 25. Organic Photochemistry by D Coyle
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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

(CHEM-OC/NP303: Paper III – Bio-Organic Chemistry)

UNIT –I : Mechanism of Enzymic action

UNIT –II : Recombinant DNA and Fermentation technology

UNIT –III : Coenzymes

UNIT –IV : Amino acids and Proteins:

UNIT -I: Mechanism of Enzymic action 15 Hrs (1credit)

Transition state theory. Acid-Base catalysis. Co-valent catalysis— Binding modes of catalysis (i) Proximity effect (ii) Transition state stabilization (iii) Strain and Distortion. Examples of some typical enzyme mechanisms for (i) Triose phosphate isomerase (ii) α -chymotrypsin and serine protease (iii) Lysozyme (iv) Carboxy peptidase-A (v) Ribonuclease. Synthesis of α - amino acids and peptides. Transformations of lipases and esterases. C-C bond formation: asymmetric cyanohydrin formation and asymmetric aldol condensations using enzymes.

UNIT -II: Recombinant DNA and Fermentation technology 15 Hrs (1credit)

Introduction to genetic engineering. Recombinant DNA technology-restriction endonuclease, cloning, linkers, adaptors. Application of recombinant DNA technology in production of pharmaceuticals, diagnosis of diseases, insect control, improved biological detergents, gene therapy-examples. Principles of finger printing technology- Site directed mutagenesis. Fermentation technology: Introduction to

fermentation. Industrial fermentation. Advantages and limitations of fermentation. Production of drugs and drug intermediates from fermentation examples. Chiral hydroxy acids, vitamins, amino acids, β -lactam antibiotics. Precursor fermentation and microbial oxidation and reductions

UNIT -III: Coenzymes 15 Hrs (1credit)

Introduction. Cofactors- cosubstrates- prosthetic groups. Classification-Vitamin derived coenzymes and metabolite coenzymes. Structure and biological functions of coenzyme A, thiamine pyrophosphate (TPP), pyridoxal phosphate (PLP), oxidized and reduced forms of i)



nicotinamide adenosine dinucleotide / their phosphates (NAD⁺, NADH, NADP⁺, NADPH) ii) Flavin adenine dinucleotide FAD, FADH₂ and iii) Flavin mononucleotide (FMN, FMNH₂), lipoic acid, biotin, tetrahydrofolate. Adenosine triphosphate (ATP) and adenosine diphosphate (ADP), S-adenosyl methionine (SAM) and uridine di phospho sugars (UDP-sugars) Mechanism of reactions catalysed by the above coenzymes.

UNIT-IV:Amino acids and Proteins: (1credit)

Amino acids: Introduction - Classification of amino acids. General methods of preparations – Gabriel's phthalimide synthesis, Strecker's synthesis, Malonic ester synthesis Erlenmeyer azalactone synthesis.

Analysis of amino acids from protein hydrolysates. General properties and reactions of amino acids – isoelectric point.

PROTEINS: General nature of proteins – annealing, Biuret reaction, Ninhydrin test. Classification of proteins. Merrified solid phase peptide synthesis. Primary, secondary, tertiary and quaternary structure of proteins.

Recommended Books

10. Concepts in biotechnology by D. Balasubramanian & others
 11. Principles of biochemistry by Horton & others.
 12. Bioorganic chemistry - A chemical approach to enzyme action by Herman Dugas and Christopher Penney.
 13. Chirotechnology by R.Sheldon
 14. Organic synthesis in water. By Paul A. Grieco Blackie.
 15. Burger's medicinal chemistry and drug discovery. by Manfred E. Wolf
 16. Introduction to Medicinal chemistry. by Graham Patrick.
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17. Introduction to drug design. by R.B.Silverman

18. Comprehensive medicinal chemistry. Vol 1-5 by Hanzsch.



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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

CHEM-OC: 304: Paper IV – Advanced Organic Spectroscopy

UNIT –I : ^{13}C NMR Spectroscopy
UNIT –II
UNIT –III : Multipulse techniques in NMR Spectroscopy
UNIT –IV : 2D NMR techniques
: Spectral Identification of Natural Products

UNIT –I : ^{13}C NMR Spectroscopy 15 Hrs (1credit)

CW and PFT techniques. Types of ^{13}C nmr spectra: undecoupled, proton- decoupled, single frequency off-resonance decoupled (SFORD) and selectively decoupled spectra, signal enhancement by Nuclear OVER HAUSER effect. ^{13}C chemical shifts, factors affecting the chemical shifts, chemical shifts of organic compounds. Calculation of chemical shifts of alkanes, alkenes and alkynes. Homonuclear (^{13}C , ^{13}C J) and heteronuclear (^{13}C , ^1H J and ^{13}C - ^2H J) coupling. Applications of ^{13}C -NMR spectroscopy: Structure determination, stereochemistry, reaction mechanisms and dynamic processes in organic molecules.

UNIT -II: Multipulsetechniques in NMR Spectroscopy 15 Hrs

Spin echo experiment, ^{13}C NMR spectral editing technique, Polarization Transfer and signal enhancement, principle and applications of SPT, APT, INEPT and DEPT methods, 1D-INADEQUATE, Application to Geraniol molecule.

UNIT -III: 2D NMR techniques

15 Hrs (1credit)

2D-NMR techniques: Principles of 2-D NMR, Classification of 2D-experiments. 2D-J-resolved spectroscopy. Homonuclear and Heteronuclear 2D-J-resolved spectroscopy. Correlation spectroscopy (COSY) Homo COSY (^1H - ^1H COSY), TOCSY (Total Correlation Spectroscopy), Hetero COSY (^1H , ^{13}C COSY, HMQC), long range ^1H , ^{13}C COSY (HMBC), NOESY and 2D-INADEQUATE experiments and their applications.

UNIT -IV: Spectral Identification of Natural Products Chemistry and Conformational

Analysis

(1credit)

Spectral identification of natural products: Use of spectroscopic methods UV, IR, ^1H and ^{13}C -NMR, Mass spectra and 2D NMR in the structure elucidation of natural products. Illustration with suitable compounds like Isoflavone, Thymol (Terpenoid), Geraniol (Terpenoid), nerol(Terpenoid), , cis – jasmine, Camphor (Terpenoid).

References

17. Spectroscopic identification of organic compounds by RM Silverstein, G C Bassler and T B Morrill
 18. Organic Spectroscopy by William Kemp
 19. Spectroscopic methods in Organic chemistry by DH Williams and I Fleming
 20. Modern NMR techniques for chemistry research by Andrew B Derome
 21. NMR in chemistry - A multinuclear introduction by William Kemp
 22. Spectroscopic identification of organic compounds by P S Kalsi
 23. Introduction to organic spectroscopy by Pavia
 24. Carbon-13 NMR for organic chemists by GC Levy and O L Nelson
 25. Spectroscopy of organic compounds, RM Silverstein and others, 5th Ed, (John Wiley)
 26. NMR Spectroscopy An Introduction to Principles, Applications and experimental methods, Joseph B. Lambert and Eugene P. Mazzola (Pearson Education Inc. Prentice – Hall).
 27. A Complete Introduction to Modern NMR Spectroscopy, Roger S. Macomber, A (John Wiley & Sons, Inc.).
 28. Modern Spectroscopy, M. Hollas (John Wiley)
-

29. Introduction to molecular Spectroscopy, G. M. Barrow (McGraw Hill)

30. Basic principles of Spectroscopy, R. Chang (McGraw Hill).

31. NMR Spectroscopy by Gunther.

32. NMR Spectroscopy by Attar-ur-Rahman

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SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester (2019-20)

CHEM-OC 301: Paper I – Modern Organic Synthesis

Time: 3 Hrs

Max. Marks: 75

PART-A

Answer any **FIVE** questions. Each question carries 5 Marks.

5 X 5 = 25M

1. Explain Wittig's reaction with mechanism.
2. Write short notes on Pummerer rearrangement.
3. Explain the various methods of protection of diols.
4. Explain the protection of Carbonyls by thioacetal (Umpolung) group
5. Briefly explain Phase Transfer Catalyst (PTC).
6. Explain the Chiron approach in synthesis.
7. Explain the terms (i) Function Group Interconversion (ii) Function Group Addition
8. Write about the Control in Carbonyl Condensation.

PART-B

Answer **ALL** questions. Each question carries 12 1/2 Marks.

4 X 12 1/2 = 50M

9. Write short notes on: (a) Arbusov reaction (b) Perkov reaction (c) Emmons-Wadsworth reaction

(Or)

Write the reactions of phosphorous and sulphur ylides

10. Explain the various methods of protection of the following

(a) Carboxylic acids (b) Amines

(Or)

Write short notes on: (a) Baylis-Hillman reaction (b) Umpolung reaction (c) Stork-enamine reaction

11. Explain (a) Kahne glycosidation (b) Tandem synthesis

(Or)

Write the determination of absolute configuration(R/S) using Mosher's method and Felkin-Anh model

12. Explain the Retrosynthetic analysis and synthesis involving Chemoselectivity.

(Or)

Write about one group C-C disconnections

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SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester (2019-20)

CHEM-OC 302: Paper II – Asymmetric Synthesis and Organic Photochemistry

Time: 3 Hrs

Max. Marks: 75

PART-A

Answer any FIVE questions. Each question carries 5 Marks.

5 X 5 = 25M

1. Explain about Di-Pie methane rearrangement reaction.
2. Write photochemistry of benzene derivatives.
3. Explain prochirality and nomenclature of pro-R, pro-S, Re and Si.
4. Write a note on % Enantiomer excess; % Enantioselectivity and %Diastereomeric excess, %Diastereoselectivity.
5. Explain Cram's rule and Felkin-Anh Model.
6. Explain sharpless epoxidation with Examples.
7. Write short notes on Photoreduction.
8. Discuss the photochemistry of conjugated dienes with examples.

PART-B

Answer **ALL** questions. Each question carries 12 1/2 Marks.

4 X 12 1/2 = 50M

9. Explain the Paterno-Buchii reaction with stereo chemical evidence.

(Or)

Explain the following

- a) Jablonski diagram
- b) Inter system crossing
- c) Energy Transfer reactions.

10. Explain product and substrate selectivity. Give some examples.

(Or)

Explain the following: (a) Symmetry and transition state criteria with suitable example

(b) Techniques for determination of enantioselectivity of Chiral ^1H NMR; Chiral lanthanide shift reagents

11. Write a note on: (a) Asymmetric aldol reaction.

(b) Chiral catalyst controlled Asymmetric Diels-Alder reaction.

(Or)

(a) Discuss Enzyme mediated asymmetric enantioselective synthesis with example.

12. Explain about Barton reaction.

(Or)

Explain Norrish-II cleavage with stereo chemical evidence.

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SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester (2019-20)

(CHEM-OC/NP303: Paper III – Bio-Organic Chemistry)

PART-A

Answer any **FIVE** questions. Each question carries 5 Marks.

5 X 5 = 25M

1. Explain about Acid-Base Catalysis.
 2. Write short notes on i) proximity effect ii) Transition state stabilisation .
 3. Explain Recombinant DNA Technology.
 4. Write a note on principles of finger printing technology.
 5. Write a note on cofactors and prosthetic groups.
 6. Give the mechanism of reactions catalyzed by Adenosine Tri phosphate (ATP).
 7. What are amino acids give their classification.
 8. Write a note on Merrified solid phase peptide synthesis.
-

PART-B

Answer **ALL** questions. Each question carries 12 1/2 Marks.

4 X 12 1/2 = 50M

9. Explain Enzyme mechanism for Triose phosphate isomerase and Ribonuclease.

(or)

Write a note on asymmetric cyanohydrins and asymmetric aldol condensation using enzymes.

10. Write the applications of Recombinant DNA technology.

(or)

Explain Fermentation Technology with examples? What are the advantages and limitations of fermentation?

11. Give the structure and biological functions of Thiamine pyrophosphate (TTP)

(or)

Write the structure and mechanism of reactions catalysed by Lipoic and biotin.

12. Write a note on a) Gabriel Phthalimide synthesis b) Strecker's synthesis c) Erlenmeyer azalactone synthesis .

(or)

Write the structure of proteins and write about Isoelectric point.

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SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

CHEM-OC: 304: Paper IV – Advanced Organic Spectroscopy

PART-A

Answer any **FIVE** questions. Each question carries 5 Marks.

5 X 5 = 25M

1. Explain Proton decoupling.
2. Explain NOE.
3. Explain DEPT.
4. What is echo experiment?
5. Explain COSY.
6. Explain principle of NMR.
7. Explain solvent effect on IR values.
8. Explain temperature effect on U.V. values.

PART-B

Answer **ALL** questions. Each question carries 12 1/2 Marks.

4 X 12 1/2 = 50M

9. (a) Explain homo and hetero nuclear coupling.

Or

(b) Explain SFORD, types of chemical shifts.

10. (a) Explain principle and applications of INEPT, SPT methods.

Or

(b) Explain spectral editing technique, polarization transfer and signal enhancement.

11. (a) Explain NOESY, long range ^1H , ^{13}C COSY.

Or

(b) Explain TOCSY, HOMO COSY.

12. (a) Give spectral data for Thymol.

Or

(b) Explain Spectral data for Camphor and nerol.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

THIRD SEMESTER LAB COURSE- PRACTICAL-III- (Total Marks 100)

(C) Organic Qualitative Mixture Analysis: Separation of two component mixtures by chemical methods and their identification by chemical reactions – Separation by using solvent ether, 5% aqueous sodium bicarbonate, 5% sodium hydroxide and dil hydrochloric acid, checking the purity of the two components by TLC, identification of the compounds by a systematic study of the physical characteristics (MP/BP), extra elements (Nitrogen, halogens and sulfur), Solubility, functional groups, preparation of crystalline derivatives and identification by referring to literature. A minimum of Ten mixtures should be separated and analyzed by these procedures.

(D) Multi step synthesis of Organic compounds

The exercises should illustrate the use of organic reagents and may involve purification of the products by chromatographic techniques.

6. Beckmann rearrangement: Benzanilide from Benzophenone
Benzophenone \rightarrow Benzophenone oxime \rightarrow Benzanilide
 7. Benzilic acid rearrangement: Benzilic acid from benzoin
Benzoin \rightarrow Benzil \rightarrow Benzilic acid
 8. P-Bromo Aniline from Aniline
Aniline \rightarrow Acetanilide \rightarrow P-Bromo Acetanilide \rightarrow P-Bromo Aniline
 9. Synthesis of Paracetamol
 10. Synthesis of Phenytoin
-
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SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

III Semester under CBCS

THIRD SEMESTER LAB COURSE- PRACTICAL-IV- (Total Marks 100)

ORGANIC QUANTITATIVE ESTIMATIONS

- vi) Estimation of phenol.
 - vii) Estimation of Glucose.
 - viii) Estimation of Aniline.
 - ix) Estimation of saponification value of oil or fat or an ester.
 - x) Estimation of acid value of a fat or oil.
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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

IV Semester under CBCS

(Effective from the batch admitted during the academic year 2019-20)

S.No	Paper Number	Title of Paper	No. Of Credits	Uni.Exam Duration(Hrs)	Total Marks	
					IAE	SEE
1.	CHEM-OC: 401:Paper-I	Terpenoids, Alkaloids Steroids,and Flavonoids	4	3	25	75
2.	EL-CHEM : OC/NP: 402: Paper II	Drug & Medicinal Chemistry And Green Chemistry	4	3	25	75
3.	PROJECT	To be Selected	10	Dissertation	80	
				Viva-Voce	20	
				Total Marks for Project Work	100	

IA : Internal Assessment = IAE (20) + SS (5)

SEE : Semester End Examination

IAE : Internal Assessment Examination

SS : Student Seminar



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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

IV Semester under CBCS

CHEM: OC: 401: PAPER-I- TERPENOIDS, STEROIDS, ALKALOIDS AND FLAVONOIDS

UNIT- I: TERPENOIDS

UNIT - II: ALKALOIDS

UNIT -III: STEROIDS

UNIT-IV: FLAVONOIDS&ISOFLAVONOIDS

UNIT: I: Terpenoids

15 hours (1 Credit)

Occurrence, Isolation general methods of structural determination isoprene rule special isoprene rule, structure determination and stereochemistry and synthesis of the following molecules: 1.Santonin 2. Farnesol 3.Zingiberene 4. Cadinene

UNIT II: Alkaloids

15 hours (1 Credit)

Occurrence, Isolation general methods of structure elucidation and physiological action, degradation, classification based on nitrogen heterocyclic ring, structure, role of alkaloids in plants stereochemistry, synthesis and bio synthesis are the following :

2. Nicotine 2. Morphine 3. Strychnine and 4.Reserpine

UNIT III : Steroids

15 hours (1 Credit)

Occurrence, Isolation general methods of structure elucidation and synthesis of cholesterol (total synthesis not expected) Androsterone, Testosterone , Estrone , Progesterone.

UNIT: IV: Flavonoids and Isoflavonoids**15 Hours (1 Credit)**

Occurrence nomenclature and general methods of structure determination, isolation and synthesis of 1. Apigenin, 2. Luteolin, 3. Kaempferol 4. Quercetin 5. Buten, 6.Daidzein. Biosynthesis of Flavonoids and Isoflavonoids: Acetate pathway and shikimic acid pathway.

References:

11. Comprehensive Organic Chemistry by D.R. Barton and W.D.Ollis.
12. Standard methods in plant analysis by Reach and Tracey.
13. Natural Products by Kalsi.
14. Text book of Organic Chemistry VOL II by I.L.Finar.
15. An Introduction to the Chemistry of terpenoids and Steroids by William Templeton.
16. Systematic identification of flavonoid Compounds by Markhan.&Mabry
17. Steroids by Fieser and Fieser.
18. Alkaloids by Manske.
19. Alkaloids by Bentley.
20. The Chemistry of terpenes by A.R.Pinder.

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY

IV Semester under CBCS

CHEM-OC: 402: Paper II – Drug & Medicinal Chemistry and Green Chemistry

UNIT -I: PRINCIPLES OF DRUG DESIGN AND DRUG DISCOVERY

UNIT -II: MEDICINAL CHEMISTRY

UNIT -III: GREEN CHEMISTRY – I

UNIT -IV: GREEN CHEMISTRY – II

UNIT-I: Principles of Drug design and drug discovery 15 Hrs (1 Credit)

Introduction to drug discovery. Folklore drugs. Natural products as lead structures in drug discovery. Structure pruning technique in lead modification e.g. morphine. Serendipitous discovery of leads e.g. Penicillin and Librium. Drug targets and receptor theory. Nature of drug-receptor interactions. Pharmacodynamics and pharmacokinetics (ADME) of drugs. Agonists, antagonists and enzyme inhibitors. Discovery of lead structure from natural hormones and neurotransmitters. Existing drugs as leads (me too drugs). Principles of design of agonists (e.g. Salbutamol), antagonists e.g. cimetidine) and enzyme inhibitors (e.g. captopril). Principles of prodrug design. Molecular graphics based lead discovery. Introduction to drug patents and Clinical trials.

UNIT-II: Medicinal Chemistry 15 Hrs (1 Credit)

Introduction, sources of natural leads and their structural modification to semi synthetic/synthetic drugs.

- 1) Drugs acting on nervous system a) CNS: i) morphine alkaloids. Structural pruning technique – eg. Morphine. b) PNS: i) Cocaine, benzocaine, 2) Neuromuscular blocking agents: curare alkaloids, tubocurarine, 3) Anticancer drugs: i) Catharanthus alkaloids, vinblastine, ii) Taxol. 4) Antibiotics: i) β -Lactam antibiotics – penicillin, cephalosporins and their semi synthetic derivatives (amoxicillin, methicillin, cephalexin) 5) Cardiovascular drugs : i) lovastatin 6)

Antiasthma drugs : i) Ephedrine, isoprenaline and salbutamol. 7) Antiparasitic drugs: i) Artemisinin, artemether and artether. ii) Quinine, pamaquine,.

UNIT -III: Green Chemistry - I

Introduction. Principles, atom economy and scope. Introduction to alternative approaches. Solvent free reactions-principle, scope, utility of solvent free conditions, controlling solvent free reactions. Microwave activation-benefits, limitations, equipment, microwave effects- according to reaction medium and according to reaction mechanism. Solvent free microwave assisted organic synthesis: Introduction, solvent free techniques- Reactions on solid mineral supports, solid-liquid phase-transfer catalysts-Reactions without solvent support or catalyst.

UNIT -IV: Green Chemistry - II

Examples of reactions on solid supports, PTC, reactions without support or catalyst— deacetylation, deprotection, saponification of esters, alkylation of reactive methylene compounds, synthesis of nitriles from aldehydes, reductions. Microwave assisted reactions in water — Hoffmann elimination, hydrolysis, oxidation, saponification reactions. Microwave assisted reactions in organic solvents — Esterification reactions, Fries rearrangement, OrthoesterClaisen rearrangement, Diels- Alder reaction, decarboxylation. Ultrasound assisted reactions: Introduction, substitution addition, oxidation, reduction reactions.

References

7. Drug design By E.J. Arienes
 8. Jenkin's quantitative pharmaceutical chemistry By Knevel and Dryden
 9. Recent advances in Bioinformatics by I. A. Khan and A Khanum
 10. Molecular modelling By Hans Dieter Holtje and Gerd Folkers
 11. Molecular modelling By Leach
 12. Bio Informatics by Rastogi
 16. The Science and practice of Pharmacy – Vol I and Vol II by Remington
 17. Burger's medicinal chemistry and drug discovery. By Manfred E. Wolf.
-

18. Introduction to Medicinal chemistry. By Patrick.
19. Introduction to drug design. By Silverman
20. Comprehensive medicinal chemistry. Vol 1-5 by Hanzsch.
21. Principles of medicinal chemistry. By William Foye
22. Biochemical approach to medicinal chemistry. By Thomas Nogrady.
23. New trends in green Chemistry by V.K.Ahluwalia

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

CHOICE BASED CREDIT SYSTEM (w.e.f. 2015-16)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY (OC)

IV Semester under CBCS

FOURTH SEMESTER LAB COURSE- PRACTICAL – V - (Total Marks 100)

Spectral Identification of Organic Compounds

Spectral Identification of Un-Known Organic Compounds by Interpretation of UV, IR, ^1H NMR, ^{13}C NMR and Mass Spectral Data

Note: A minimum of 30 representative examples should be studied

Recommended Books

9. A text-book of practical organic chemistry by A.I. Vogel, Vol. I and II.
 10. Laboratory Manual of Organic Chemistry by B. B. Dey, M. V. Sitaraman Revised by T. R. Govindachari.
 11. Unitized experiments in organic chemistry by R.Q. Brewster and others.
-

12. Practical Organic Chemistry by Mann and Saunders.
13. A textbook of practical organic chemistry by A.I. Vogel, Vol. I and II.

14. Laboratory Manual of Organic Chemistry by B. B. Dey, M. V. Sitaraman Revised by T.

R. Govindachari.

15. Unitized experiments in organic chemistry by R.Q. Brewster and others.

16. Practical Organic Chemistry by Mann and Saunders

KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

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CHOICE BASED CREDIT SYSTEM (w.e.f. 2018-19)

SECOND YEAR M.Sc. CHEMISTRY

M.Sc. ORGANIC CHEMISTRY (OC)

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KVR GOVT. COLLEGE FOR WOMEN (AUTONOMOUS), KURNOOL

Re-Accredited by NAAC with Grade "A"

DEPARTMENT OF CHEMISTRY – PG

BOS JUSTIFICATION REPORT (2019 – 2020)

S.No	Paper & Title	Major additions/deletions	Justification
1	304: Paper IV – Advanced Organic Spectroscopy	The natural products 1. chrysin 2,3-dihydroflavone , diadzein , Umbelliferone and Papaverine are deleted. 2. Isoflavone, Thymol, Geraniol, nerol, , cis – jasmine, Camphor are added.	The introduced natural products have all spectra including 2D NMR. The changes are recommended by the BOS Committee with the main intention of making the chemistry syllabus student friendly.

KVR Govt College for Women, Kurnool
(Autonomous)

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(An Autonomous College in the Jurisdiction
of Rayachota University, Kurnool, Andhra Pradesh)
(2019 - 2021)

Minutes of the fourth Meeting of the Board
of Studies in M.A English held on 15.8.19
on Wednesday of August 2019 at 4 PM in the
Department of English, K.V.R. Govt College for women
Kurnool.

Present:

Dr. M. Farida Begum

In-charge of M.A. English

Asst. Prof. of English

K.V.R. Govt (W) 'A'

Kurnool

Chairperson

Prof. Y.S. Sarada

HOD of Dept of English

Padmarathi Mahila University

Tirupathi

University Nominee

Dr. SunKanna

In-charge of M.A. English

Department of English

Sri Venkateswara Govt College (A)

Kurnool

Subject Expert

Dr. Syeda Jafara Qadri

In-charge of M.A. English

CCManta College

Kurnool

Subject Expert

22nd

- ⑤ Dr. P. Samarath
Faculty in English Educationist
Dept of English
Rayalaseema University
Kurnool
- ⑥ Kum. Janaki Alumna
- ⑦ Smt P. Subbarajamma Member
'16 of Dept of English (UG)
Lecturer in English
KUR G.C (W) A
Kurnool
- ⑧ Kum. Nandini Student Representative
3 yr M.A. English
KUR G.C (W) A
Kurnool
- ⑨ Kum. Shreani Student Representative
3 yr M.A. English
KUR G.C (W) A
Kurnool

Under the Guidance of University Nominee, the members of the Board of Studies of M.A. English discussed in detail the syllabus of Rajasthana University, evaluation, the scheme of Instruction, University Paper Pattern and extension activities such as invited talks, Block Teaching, Peer Teaching, SET/NET coaching, Bridge course for 1 year's alone.

- ① It is unanimously proposed to retain the scheme of instruction and evaluation of I M.A. English & II M.A. English with the deletion of Project work in IV semester and instead.

Course : M.A. English
Semester : I, II
Papers : I - IV - I Sem
 I - II - II Sem

2.6 Communicative English

I Semester

II Semester

Theory = 80 M

Internal / Assessment = 20 M

Total = 100

Theory = 80 M

D.A. = 20 M

Total = 100

Internal Examination

1. Subjective / Objective = 80 M

2. Seminar Presentation = 05 M + 3. Extra curricular = 05 M
20 M.

OBJECTIVES

24

(7) It is unanimously resolved that the following shall be the objectives, syllabus & Question Paper pattern for the course w.e.f 2019-20 academic year and the same shall be in force till alternatives in the future BOS: objectives

1. It is resolved to conduct Bridge course for I M.A English students
2. It is resolved to continue Peer Teaching Block Teaching
3. It is resolved to follow Rajabasa University with additions and deletions as per the local needs.
4. It is resolved to conduct student exchange Programme
5. It is resolved to conduct Block Teaching in Govt schools.
6. It is resolved to carry out English club with the incorporation of student centre activities
7. It is resolved to conduct field Trip.
8. It is resolved to follow 80 marks for Theory & 20 marks for Internal.
(80 Theory + 5 seminar presentation + 5 Extra credits + 10 Semest Theory test = 100M)

S.No	Name and Designation	Acted as	Signature
①	Dr. M. Farida Begum Asst Prof. of English K. V. R. G. C. A Kurnool	Chairperson	H. Fine
②	Prof. Y. S. Sarada HOD Dept of English Padmarathi Mahila University Tirupathi	University Member	Y. S. Sarada 14/8/19
③	Dr. Sunkanna HOD & i/c of M.A English S.T.G.C (A), Kurnool	Subject Expert	Dr. Sunkanna 14/8/19
④	Dr. Syeda Orfana Bader i/c of M.A English Osmania College (A) Kurnool	Subject Expert	Syeda Orfana 14/8/19
⑤	Dr. P. Saranathi Faculty in English Dept of English Rajalaxmi University Kurnool	Educational Member	P. Saranathi 14/8/19
⑥	Kam. Janki	Alumna	R. Jankamma

Name & Designation	Acted as	Signature
① Smt. P. Subbarajamma 1/c of Dept of English (UG) Lecturer in English KVA Ge (w) A Kurnool	Member	P.S. Raju
② Kum. Mandini 2 nd yr M.A. English KVA Ge (w) A Kurnool	Student Representative	Mandini
③ Kum. Shivanii 2 nd yr M.A. English KVA Ge (w) A Kurnool	Student Representative	Shivanii

K.V.R Govt College For Women , KURNOOL

**MA in English - Restructured Course
(Effective from 2019-2021 Batch)**

First Semester

6. Poetry-I (100 marks)
7. Drama-I (100 marks)
8. Novel-I (100 marks)
9. Indian English Literature-I (100 marks)
10. Phonetics and Grammar (100 marks)

Second Semester

6. Poetry-II (100 marks)
 7. Drama-II (100 marks)
 8. Novel-II (100 marks)
 9. Indian English Literature-II (100 marks)
 10. History of the English language (100 marks)
-

K.V.R. Govt

College For

Women, Kur

nool MA in

English -

Restructured

Course

(Proposed syllabus for 2019-2021 Batch)

SEM

ESTER

-I

PAPER

1.1:

POETR

Y-I

UNIT-I

9. Homer The Iliad, Canto I
10. John Donne A Valediction
 Forbidding Mourning
 The Sun Rising; Flea

UNIT-II

11. John Milton Paradise Lost: Book-IX
12. Alexander Pope The Rape of the Lock

UNIT-III

13. William Wordsworth Ode On the Intimations of
 Immortality
14. S.T. Coleridge Dejection an Ode
-

UNIT-IV

15. P.B. Shelley To A Skylark

Ode to the West Wind

16. John Keats Ode to a

Nightingale Ode on a

Grecian Urn

PAPER 1.2: DRAMA-I

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

7. Sophocles

Oedipus Rex

UNIT-II

8. Christopher Marlowe

Dr. Faustus

UNIT-III

9. William Shakespeare

Macbeth

10. William Shakespeare As You Like It

UNIT-IV

11. William Congreve The Way of the World

12. Oscar Wilde The Importance of Being Earnest



PAPER 1.3: NOVEL-I

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

7. Henry Fielding

Joseph Andrews

UNIT-II

8. Jane Austen

Emma

9. Charles Dickens

A Tale of Two Cities

UNIT-III

10. George Eliot Mill on the Floss

UNIT-IV

11. Thomas Hardy Tess of the D'Urbervilles

12. Albert Camus The Outsider (The Stranger)



PAPER 1.4: INDIAN ENGLISH LITERATURE-I

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

7. Rabindranath Tagore

Geetanjali: Song1 and Song 35

8. Nissim Ezekiel

II

**UN
IT-**

Poet, Lover,
Birdwatcher

Goodbye Party for Miss Pushpa T.S.

9. A.K. Ramanujan

Love Poem for a Wife 1

Small Scale Reflections on a Great House

10.

Kamala Das An Introduction

My Grandmother's House

UNIT-III

11.

Girish Karnad Hayavadana

UNIT-IV

12.

Dina Mehta Brides are not for Burning

PAPER 1.5: PHONETICS AND GRAMMAR

UNIT-I

1. The Speech Mechanism
2. English Vowels
3. English Consonants

UNIT-II

7. Word Accent
 8. Accent and Rhythm in Connected Speech
 9. Phonological Environment: Assimilation, Elision, Juncture
 10. Intonation
-

UNIT-III

The following topics from *A Student's Grammar of the English Language* by Sidney

Greenbaum and Randolph Quirk:

Varieties of English (Chapter1)

Some Major Concepts and Categories

(Chapter2) Verbs and Auxiliaries (Chapter3)

UNIT-IV

The following topics from *A Student's Grammar of the English Language* by Sidney

Greenbaum and Randolph Quirk:

The Semantics of the Verb Phrase

(Chapter4) Nouns and Determiners

(Chapter5)

The Simple Sentence (Chapter10)

Reference

4. A.C. Gimson

An Introduction to the Pronunciation of English

5. J. Sethi and P.V. Dhamija

A Course in Phonetics and Spoken English

6. Daniel Jones

English Pronouncing Dictionary (18th Edition) Ed.
Peter Roach, Jane Setter, and John Esling



**K.V.R. Govt
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English -
Restructured
Course
(proposed
syllabus for
2019-2021
Batch)**

SEMESTER-II PAPER

2.1: POETRY-II

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

10. Alfred Tennyson Ulysses
11. Robert Browning My Last Duchess

UNIT-II

12. Matthew Arnold Dover Beach
13. G.M. Hopkins The Windhover
- Pied Beauty

UNIT-III

14. W.B. Yeats The
Second Coming
Sailing to Byzantium
15. T.S. Eliot The Waste Land

UNIT-IV

16. W.H. Auden The Unknown Citizen
-

17. Philip Larkin Church-Going

18. Ted Hughes Hawk Roosting

PAPER 2.2: DRAMA-II

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

6. Henrik Ibsen

A Doll's House

7. J.M. Synge

Riders to the Sea

UNIT-II

8. G.B. Shaw

Arms and the Man

UNIT-III

9. Samuel Beckett

Waiting for Godot

10.

John Osborne

Look Back in Anger

UNIT-IV

7. Anton Chekhov

The Cherry Archer



PAPER 2.3: NOVEL-II

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

7. D.H. Lawrence Sons and Lovers

UNIT-II

8. James Joyce A Portrait of the Artist as a Young Man

9. Hermann Hesse Siddhartha

UNIT-III

10. Virginia Woolf Mrs. Dalloway

11. Graham Greene The Power and the Glory

UNIT-IV

12. William Golding Lord of the Flies

PAPER 2.4: INDIAN ENGLISH LITERATURE- II

Background Study: Literary History-Genres-Movements-Ideas-Trends-Concepts

UNIT-I

8. Mulk Raj Anand Untouchable

9. Raja Rao Kanthapura

UNIT-II

10. Bhavani Bhattacharya He who Rides a Tiger

11. R.K. Narayan The Guide

UNIT-III

12. Bharati Mukherjee Jasmine

13. Arundhati Roy The God of Small Things

UNIT-IV

14. Kiran Desai The Inheritance of Loss



PAPER 2.5:

History of the

English language

UNIT-I

5. Grimm's Law and Verner's Law
6. Ablaut
7. Umlaut
8. The Great Vowel Shift

UNIT-II

8. Foreign Influences: Latin, French, Scandinavian
9. Makers of English: The Bible, Shakespeare

UNIT-III

10. Word Formation
11. Change of Meaning

UNIT-IV

12. The Rise of Standard English
 - 8.. British English and American English
-

Reference

5. H.C. Wyld

A Short History of English

6. Albert C. Baugh

A History of the English Language

7. Stuart Robertson and Frederic G. Cassidy

The Development of Modern English

8. F.T. Wood

An Outline History of the English

Language

**KVR GOVERNMENT
COLLEGE FOR
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(AUTONOMOUS)
KURNOOL**

M.A in English

**Syllabus with Effect from
2019-2021 SEMESTER-II**



**ELECTIVE
:LISTENING SKILLS**

PAPER 2.6 : COMMUNICATIVE ENGLISH UNIT-I

1. Define Listening?
2. Types of Listening.
3. Barriers to
Listening.
5. Tips for Effective Listening.

UNIT-II : SPEAKING SKILLS

1. Jam
2. Conversation Skills
3. Group Discussion
4. Interview Skills
5. Role Play
6. Vocabulary Building

UNIT-III : READING SKILLS

1. Define Reading
2. Kinds of
Reading.
3. Silent and Loud Reading.
4. Stages of Reading.
 - a. Pre-Reading
 - b. While
Reading
 - c. Post-
Reading

UNIT-IV: WRITING SKILLS

1. Punctuation
 2. Paragraph
Writing.
 3. E-
Correspondence
-

JUSTIFICATION OF MAJOR CHANGES OR DELETIONS

S.no	Subject	Paper	Title of the Paper	Major Additions&Deletions	Justification
1.	M.A.English	1.1	Poetry-1	Tintern Abbey and The Rime of the Ancient Mariner are the lengthy poems and they are substituted with ode on the intimations of immortality and Dejection an ode.	The earlier poems are lengthy and difficult. The poems added are also included in NET/SET Syllabus.
2.	M.A.English	1.4	Indian English Literature-I	The poem Obituary is substituted with the poem Small scale Reflections on a Great House.	To make the students grow nostalgic with the memories of childhood days in their respective Grandma's Houses.
3.	M.A.English	2.2	Drama-II	Pygmalion is replaced with Arms and the Man of G.B. Shaw	Pygmalion is included in in degree Advanced English.
				Harold Pinter's The Birthday Party is replaced with Anton Chekhov's The Cherry Orchard	To avoid absurd play as already 2 Absurd plays are in the syllabus. Anton Chekhov is a Russian Writer with pathos and heart touching themes.
4.	M.A.English	2.4	Indian English Literature-II	Midnight Children and The shadow line are deleted and He who rides a Tiger and The Inheritance of Loss are added.	This change is to introduce newwriters with newer themes.

JUSTIFICATION OF MAJOR CHANGES OR DELETIONS

5.	M.A. English	2.6	Elective Paper is titled Communicative English	Vocabulary Building & E- correspondance is added in the place of Resume and CV	To make the students face interviews confidently.

M.A. Telugu ద్వితీయ సంవత్సరము పాఠ్యాంశాలపై
 B.O.S సభ్యులు చర్చి బరిపి క్రంది పాఠ్యాంశాలను వీక్షిస్తూ
 ఆమోదింపడ మొనరి.

M.A. Telugu ప్రథమ సంవత్సరము
 Paper-I సాంస్కృతికాశ్రయము సంబంధించిన ప్రశ్నపత్ర
 మంలలో యాంశం గాయలసమ విక్షిప్తాంశాలయము
 ప్రకారం 20+80 మారులను రూపొందించుకున్నాము.
 మందిరి సమిష్టములలో ఆరవ పేజరు "అనువాద విధానాలు -
 ప్రశ్నాపత్రాలు" అనే పేరును పెట్టుకున్నాము.

రెండవ సమిష్టములలో "తెలుగు పత్రికా
 రంగం - రచనా విధానం" "General" Elective గా వర్ణనలు
 చేసేకున్నాము. గాయలసమ విక్షిప్తాంశాలయము ప్రకారం
 ప్రశ్న పత్రము రూపొందించుకున్నాము.

III Semester మూడవ సమిష్టము పాఠ్యాంశములలో
 20% నిలబడను మార్కులను బరిపి.

Paper-I :- ~~యాంశం~~ సాంస్కృతికాశ్రయము.

యాంశం 1 - R.O syllabus.

" 2 - "

" 3 - రచయిత తేజో : సావంతి

సాంస్కృతికాశ్రయ సిద్ధాంతాలు + పాఠ్యాంశ ప్రశ్న పత్రం.
 మైత్రీ - అరిస్టోటెల్, విగనె, లాంగ్విన్, హెల్డెన్
 హెల్డెన్ పట్టుకొవడం బరిపి.

4 - R.O. syllabus "

Paper-II :- ద్రావిడ భాషా విజ్ఞానం

యాంశం-1 ద్రావిడ పద ప్రత్యయ, వ్యాపి.

మిగిలినవి R.O syllabus.

యాంశం-2. R.O syllabus లో సాంశం

ద్రావిడ భాషలలో తెలుగు స్థానం దేవనాగరి
 పెట్టుకున్నాము

యాంశం-3- ద్రావిడ భాషలలో సంకీర్ణ విజ్ఞానం
 దేవనాగరి పెట్టుకున్నాము.

యాంశం-4. ద్రావిడ భాషలలో ప్రత్యయాల.

దేవనాగరి వర్ణాలు చేపట్టుకున్నాము.

ఇవన్నీ ప్రత్యయ ప్రత్యయాల, తేమక

ప్రత్యేయాలు, విద్యార్థక ప్రత్యేయాలు, తేమశక్ ప్రత్యేయాలు
 సానంలి వీర్పలు చేసకు న్నాము.

Paper - III :- బాల వ్యాకరణం. కీ 85 సానంలి తేలుగు
 వ్యాకరణం - భందస్సు " వీర్పలు చేసకు న్నాము
 కరణము :- బాల, ప్రాచీన వ్యాకరణం తేలుగు వీర్పలు
 చేసకు న్నాము. ఇ న్నాల్ల వ యూనిట్ లిని అడుగక
 భందస్సు - లక్ష్యలకకాలు - సమన్వయం క్షుణ్ణి అలగింపి నాము.

→ యతులలి తెంపయతి, నామయగింపయతి, పుతయగ
 యతి, ద్విత్వీయతులను తెదనంగా వీర్పలు చేసకు న్నాము.

Paper - IV - అడుగక తేలుగు కవిత్వం - వికాసం.
 యూనిట్ - 1, 2, 3 లలి RU పాఠ్యంకాలనీ వీర్పలు
 చేసకు న్నాము.

→ యూనిట్ 4 లిని స్వీవద కవిత్వం - సానంలి
 "వీరిసేయూలు" - వీర్పలు చేసకు న్నాము.

Paper V - రాయలసేమ సాహిత్యం - పరిచయం
 యూనిట్ 1, 2, 3 లలి RU పాఠ్యంకాలనీ వీర్పలు
 చేసకు న్నాము

→ యూనిట్ 4 - దరవ సాహిత్యం సానంలి కరుల్లుల లల్లు
 చకిలం విలయలక్ష్మి - "పాలెగాడు" వీర్పలు చేసకు న్నాము

Paper - VI Option - 1. సరస్వతీ వాక్యం చరిత్ర
 యూనిట్ - 1, 2, 3 లలి RU పాఠ్యంకాలనీ వీర్పలు
 చేసకు న్నాము. 4 యూనిట్ సానంలి "వీర్పేవదీక కావ్యం
 కీక సాహిత్యం, క్రుంగం కావ్యం - నీర్పావ్యం, సూత్ర చరణం సానంలి, పులంక
 Option - 2 - తేలుగు నవల సాహిత్యం. వీర్పలుచేసె

యూనిట్ - 1 సానంలిని వరహరి కృషిమకల్ప - క్రుంగం
 చరిత్ర సానంలి "నవీన - అంపకయ్య" నవలను వీర్పలుచేసె
 యూనిట్ - 2, 3, 4 లలి RU పాఠ్యంకాలనీ వీర్పలుచేసె
 చేసకు న్నాము.

option - 3. తెలుగు కథా సాహిత్యం

యానిట్ - 1 RU పాఠ్యంకోసం పాఠ్యం చేసుకున్నాము.
యానిట్ - 2 లో గురజాడ ఆస్మకావ్య - "వివాహవిధి"

సావంత్రి గురజాడ ఆస్మకావ్య - "దిద్దుబాటు" అనే
కథానికను పాఠ్యం చేసుకున్నాము. మిగిలిన కథానికలను
RU ప్రకారం పాఠ్యం చేసుకున్నాము.

యానిట్ - 3 లో RU పాఠ్యంకాలనీ పాఠ్యం చేసుకున్నాము.

యానిట్ - 4 లో "వివిధ మూర్తి - బృహద్రథం" సావంత్రి
ఉత్తయ్య సంహాసనం, బండ్రి నారాయణ

స్వామి - 603 సావంత్రి బండ్రి నారాయణ స్వామి - సావంత్రి
అనేకథానికను పాఠ్యం చేసుకుని మిగిలిన కథానికలను
గాయలసీమ వికీర్ణాచార్యులయవల ప్రకారం పాఠ్యం చేసుకున్నాము.

IV Semester

నాలువ సెమిస్టర్

Paper - I. సాహిత్య విమర్శ - ఆత్మీయం.

యానిట్ - 1, 2 లలో RU పాఠ్యంకాలనీ పాఠ్యం
చేసుకున్నాము. ఉ. త.

యానిట్ - 3 లో కట్టమంచి రామలింగారెడ్డి సావంత్రి
'వల్లంపాటి వెంకట సుబ్బయ్య' విమర్శపై పాఠ్యం చేసు
కున్నాము.

యానిట్ - 4 లో విమర్శ - ప్రతి విమర్శ - సరేకాం
అనుమలరావు సావంత్రి 'కట్టమంచి రామలింగారెడ్డి కవిత్వ
ఆత్మీయ చారిత్రం' పాఠ్యం చేసుకున్నాము.

Paper - II. బాలవ్యాకరణం - అలంకారాలు కీర్తిక సావం
లో తెలుగు వ్యాకరణం - అలంకారాలు కీర్తికను పాఠ్యం
చేసుకున్నాము. బాల, ప్రాచీన వ్యాకరణ ప్రకరణాలను
పాఠ్యం చేసుకున్నాము.

యానిట్ - 1, 2, 3 లలో బాల వ్యాకరణ ప్రకరణాలలో
సావంత్రి ప్రాచీన వ్యాకరణ ప్రకరణాలను పాఠ్యం చేసుకున్నాము.

యానిట్ - 4 లో కబాలంకారాలను ఉదాహరణ పాఠ్యం
చేసుకున్నాము. అలంకారములలో ముఖ్యమైన
30 అలంకారాలను పాఠ్యం చేసుకుని మిగిలిన అలంకారాలను
అధ్యయనం చేసాము.

Paper-III options - సంస్కృత ఇచ్చినాడు కాలు - వ్యాకరణం - భంధన
 యూనిట్ - 1 లో మహాకవి భారవి - కిరాటార్థం నీయం -
 ణ్విలేయం వర్ణం - 1-59 క్రితం " సూనం లో " కిరాటార్థం నీయం
 ప్రథమం సర్వం " ను విశ్వాలు చేసుకున్నాము. ~~వి~~
 యూనిట్ - 2, 3, 4 లలో RV ప్రాజ్ఞాంశాలనే విశ్వాలు
 చేసుకున్నాము.

option - 2 ఆధునిక తెలుగు నాటక సాహిత్యం
 యూనిట్ - 1, 2, 4 లలో RV ప్రాజ్ఞాంశాలనే విశ్వాలు చేసు
 కున్నాము. యూనిట్ - 3 లో డా॥ డి. విజయ భాస్కర్ -
 మహాత్మా శ్రీతి బాప్టామె " సూనం లో " కాళకురి వాఠాయకు
 రాధ - వర విక్రయం " విశ్వాలు చేసుకున్నాము.

option - 3 ప్రాచీన దాక్షిణాత్య సాహిత్యం - మేల
నాటక ఆధ్యయనం
 యూనిట్ - 1, 2, 4 లో RV ప్రాజ్ఞాంశాలనే విశ్వాలు
 చేసుకున్నాము. యూనిట్ 3 - ప్రాచీన దాక్షిణాత్య సాహిత్యం
 సంస్కృత ప్రణావం - పురాణాలిహాసాలు - సంక్షిప్త కావ్యాలు "
 సూనం లో " ప్రాచీన దాక్షిణాత్య సాహిత్యం - డి॥ సాహిత్య ప్రక్రియలు "
 'తేనే అంకమును విశ్వాలు చేసుకున్నాము.

నాలుగు సెమిస్టరు ప్రశ్న పత్రమును విశ్లేషణ చేయవలసిందిగా
 ప్రత్యేకము 70+30 మార్కులలో విశ్వాలు చేసుకున్నాము. 30
 మార్కులు అంతర్గత మార్కులు. 20 మార్కులు అంతర్గత పరీక్ష
 5 మార్కులు సెమినార్, 5 మార్కులు సహ ప్రాజ్ఞాత్మిక ప్రవాలకు
 విశ్వాలు చేసుకున్నాము.

Project- work కు 200 మార్కులు, 9
~~వి~~ Viva కు 100 మార్కులు కేటాయింబావలసిందిగా. రాయలసీమ
 విశ్వవిద్యాలయము ప్రత్యేకము మార్కులు విశ్వాలు చేసుకున్నాము
 ఆ విద్యార్థి ఆసక్తి, అభిరుచి ఉండుటగా అంకంను విశ్వాలు
 చేసు కీవరానికి అగిన అవకాశము కలగచేసినాము. విద్యార్థిను
 సంక్షిప్త ప్రత్యేకము అధ్యాపకులు విద్యార్థినులను ఏమారుచేసుకొ
 నాలని నిర్ణయించుకుంటున్నామని.

రాయలసీమ విశ్వవిద్యాలయము ప్రత్యేకము.
 విద్యార్థులను విశ్వాలుచేసుకొని రాష్ట్ర అంశాలను మార్కులను

సభ్యుల పేర్లకావాలి :-

1. Dr. V. Sridevi - V. Sridevi

2. Prof. Narsimhulu.

3. Dr. G. Gowri - G. Gowri

4. Dr. P. Vijayakumar - P. Vijayakumar

5. Dr. M. Anwar Hussain - M. Anwar Hussain

6. P. Vimala Devi - P. Vimala Devi

7. Dr. M. Farnida Begum - M. Farnida Begum

8. V. Vinodhvasini Devi - V. Vinodhvasini Devi

9. Dr. M. Venkata Lakshmi - M. Venkata Lakshmi

10. Dr. G. Keshavulu

Students

1. D. Ruttamma

2. G. Rajini

M.A. Telugu ద్వితీయ సంవత్సరము పాఠ్యాంశాలపై
BOS సభ్యులు చర్చి బరిపి క్రంది పాఠ్యాంశాలను వీక్షిస్తూ
అమోదింపడ మొనరి.

M.A. Telugu ప్రథమ సంవత్సరము
Paper-I సాంస్కృతికాశ్రయము సంబంధించిన ప్రశ్నపత్ర
మంలలో యాంశం గాయలసమ విక్షిప్తాంశాలయము
ప్రకారం 20+80 మారులను రూపొందించుకున్నాము.
పందిరి సమిష్టరులీ ఆరవ పేపరు "అనువాద విధానాలు -
షష్ఠాంశాలు" అనే పేరును పెట్టుకున్నాము.

రెండవ సమిష్టరులీని తెలుగు పత్రికా
రంగం - రచనా విధానం "The General Elective గా మార్చడం
చేసేకున్నాము. గాయలసమ విక్షిప్తాంశాలయము ప్రకారం
ప్రశ్న పత్రము రూపొందించుకున్నాము.

III Semester మూడువ సమిష్టరు పాఠ్యాంశములలో
20% నిలబడను మార్కులను బరిపి.

Paper-I :- ~~యాంశం~~ సాంస్కృతికాశ్రయము.

యాంశం 1 - RU syllabus.

" 2 - "

" 3 - రచయిత తేజో : సావంతి

సాంస్కృతికాశ్రయ సిద్ధాంతాలు + పాఠ్యాంశ ప్రకృతి.
షష్ఠి - అరిష్టాంశాలు, విశేష, అంశీకన,
వార్యశాస్త్ర పట్టుకొవడం బరిపి.

4 - RU syllabus.

Paper-II :- ద్రావిడ భాషా విశాసం

యాంశం-1 ద్రావిడ పద ప్రత్యయ, వ్యాపి.

మిగిలినవి RU syllabus.

యాంశం-2. RU syllabus లో సేలం

ద్రావిడ భాషలీ తెలుగు క్కాసం దేవనా
పట్టుకున్నాము

యాంశం-3 - ద్రావిడ భాషలీ సంధి నిర్మాణం
దేవనాగా పట్టుకున్నాము.

యాంశం-4. ద్రావిడ భాషలీ ప్రత్యయాల.

దేవనాగా మార్చడం చేసేకున్నాము.

ఇవన్నీ ప్రత్యయ ప్రత్యయాల, తేమక

ప్రత్యేయాలు, విద్యార్థక ప్రత్యేయాలు, తేమశక్ ప్రత్యేయాలు
 సానంలి వీర్పలు చేసకు న్నాము.

Paper - III :- బాల వ్యాకరణం. 385 సానంలి తేలుగు
 వ్యాకరణం - భందస్సు " వీర్పలు చేసకు న్నాము
 కరణము :- బాల, ప్రాచీన వ్యాకరణం తేలుగు వీర్పలు
 చేసకు న్నాము. ఇ న్నాల్ల వ యూనిట్ లిని అధునిక
 భందస్సు - లక్ష్యలకకాలు - సమన్వయం క్షుణ్ణి అలగింపి నాము.

→ యతులలి తెంపయతి, నామయశుండుయతి, పుతేయన
 యతి, ద్విత్వేయతులను తెదనంగా వీర్పలు చేసకు న్నాము.

Paper - IV - అధునిక తెలుగు కవిత్వం - వికాసం.
 యూనిట్ - 1, 2, 3 లలి RU పాఠ్యంకాలసి వీర్పలు
 చేసకు న్నాము.

→ యూనిట్ 4 లిని స్వీవదు కవిత్వం - సానంలి
 "వీరిసేయూలు" - వీర్పలు చేసకు న్నాము.

Paper V - రాయలసీమ సాహిత్యం - పరిచయం
 యూనిట్ 1, 2, 3 లలి RU పాఠ్యంకాలసి వీర్పలు
 చేసకు న్నాము

→ యూనిట్ 4 - దుచన సాహిత్యం సానంలి కరుల్లుల బల్ల
 చకిలం విలయలక్ష్మి - "పాతగాడు" వీర్పలు చేసకు న్నాము

Paper - VI Option - 1. సరస్వతీ వాక్యం చరిత్ర
 యూనిట్ - 1, 2, 3 లలి RU పాఠ్యంకాలసి వీర్పలు
 చేసకు న్నాము. 4 యూనిట్ సానంలి "వీర్పేవదేక కావ్యం
 కితక సాహిత్యం, కృంగార కావ్యం - నీర్పావ్యం, సూత్ర చనల సాహిత్యం, పులంక
 Option - 2 - తెలుగు నవల సాహిత్యం. వీర్పలుచేసె

యూనిట్ - 1 సానంలిని వరహరి కృషిమకల్ప - క్రుంగరం
 చరిత్ర సానంలి "నవీన - అంపకయ్య" నవలను వీర్పలుచేసె
 యూనిట్ - 2, 3, 4 లలి RU పాఠ్యంకాలసి వీర్పలుచేసె
 చేసకు న్నాము.

option - 3. తెలుగు కథా సాహిత్యం

యానిట్ - 1 RU పాఠ్యంకోసం పాఠ్యం చేసుకున్నాము.
యానిట్ - 2 లో గురజాడ ఆస్మకావ్య - "వివాహవిధి"

సావంత్రి గురజాడ ఆస్మకావ్య - "దిద్దుబాటు" కేసి
కథానికను పాఠ్యం చేసుకున్నాము. మిగిలిన కథానికలను
RU ప్రకారం పాఠ్యం చేసుకున్నాము.

యానిట్ - 3 లో RU పాఠ్యంకాలనీ పాఠ్యం చేసుకున్నాము.

యానిట్ - 4 లో "వివిధ మూర్తి - బుగ్గనాటకం" సావంత్రి
ఉత్తయ్య సంహారం, బండ్రి నాథాయటి

స్వామి - 603 సావంత్రి బండ్రి నాథాయటి స్వామి - సావంత్రి
అనీకథానికను పాఠ్యం చేసుకుని మిగిలిన కథానికలను
గాయలసీమ వికీ విస్తారాలయము ప్రకారం పాఠ్యం చేసుకున్నాము.

IV Semester

నాలువ సెమిస్టర్

Paper - I. సాహిత్య విమర్శ - తేజస్వినీ

యానిట్ - 1, 2 లలో RU పాఠ్యంకాలనీ పాఠ్యం
చేసుకున్నాము. ఉ. త.

యానిట్ - 3 లో కట్టమంచి రామలింగారెడ్డి సావంత్రి
'వల్లంపాటి వెంకట సుబ్బయ్య' విమర్శను పాఠ్యం చేసు
కున్నాము.

యానిట్ - 4 లో విమర్శ - ప్రతి విమర్శ - సరీకాంబ
అనుమలరావు సావంత్రి 'కట్టమంచి రామలింగారెడ్డి కవితా
తేజస్వినీ' పాఠ్యం చేసుకున్నాము.

Paper - II. బాలవ్యాకరణం - అలంకారాలు కీర్తిక సావం
లో తెలుగు వ్యాకరణం - అలంకారాలు కీర్తికను పాఠ్యం
చేసుకున్నాము. బాల, ప్రాచీన వ్యాకరణ ప్రకరణాలను
పాఠ్యం చేసుకున్నాము.

యానిట్ - 1, 2, 3 లలో బాల వ్యాకరణ ప్రకరణాలలో
సావంత్రి ప్రాచీన వ్యాకరణ ప్రకరణాలను పాఠ్యం చేసుకున్నాము.

యానిట్ - 4 లో కబాలంకారాలను దేవనాగరి పాఠ్యం
చేసుకున్నాము. అలంకారములలో ముఖ్యమైన
30 అలంకారాలను పాఠ్యం చేసుకుని మిగిలిన అలంకారాలను
అలంకారములు.

Paper - III option - సంస్కృత ఇచ్చినాడు కాదు - వ్యాకరణం - భంధన
 యూనిట్ - 1 లో మహాకవి భారవి - కిరాటార్థం నీయం -
 ష్టిలేయం వర్ణం - 1-59 క్రితం " సూనం లో " కిరాటార్థం నీయం
 ప్రథమం సర్వం " ను విశ్వాదు చేసుకున్నాము. ~~వి~~
 యూనిట్ - 2, 3, 4 లలో RV ప్రాజ్ఞాంశాలనే విశ్వాదు
 చేసుకున్నాము.

option - 2 ఆధునిక తెలుగు నాటక సాహిత్యం
 యూనిట్ - 1, 2, 4 లలో RV ప్రాజ్ఞాంశాలనే విశ్వాదు చేసు
 కున్నాము. యూనిట్ - 3 లో డా॥ డి. విజయ భాస్కర్ -
 మహాత్మా జ్వీతి బాప్సా చే " సూనం లో " కాళకురి వాతాయుకు
 రాధ్య - "వర విక్రయం" విశ్వాదు చేసుకున్నాము.

option - 3 ప్రాచీన దాక్షిణాత్య సాహిత్యం - తేల
నాటక ఆధునికం
 యూనిట్ - 1, 2, 4 లో RV ప్రాజ్ఞాంశాలనే విశ్వాదు
 చేసుకున్నాము. యూనిట్ 3 - ప్రాచీన దాక్షిణాత్య సాహిత్యం
 సంస్కృత ప్రణావం - పురాణాని హాసాలు - సంక్షిప్త కావ్యాలు "
 సూనం లో " ప్రాచీన దాక్షిణాత్య సాహిత్యం - డి 9 సాహిత్య ప్రక్రియలు "
 'తేనే ఆంకవయం విశ్వాదు చేసుకున్నాము.

నాలుగవ విభాగం ప్రశ్నోత్తరమును విశ్లేషణ చేయవలసిందిగా
 ప్రశ్నార్థం 70+30 మార్కులలో విశ్వాదు చేసుకున్నాము. 30
 మార్కులు అంతర్గత మార్కులు. 20 మార్కులు అంతర్గత పరీక్ష
 5 మార్కులు సెమినార్, 5 మార్కులు సహ ప్రాజ్ఞాత్మక ప్రాజెక్టులకు
 విశ్వాదు చేసుకున్నాము.

Project - work కు 200 మార్కులు, 9
~~వి~~ Viva కు 100 మార్కులు కేటాయింబడినాయి. రాయలసీమ
 విశ్లేషణ చేయవలసిందిగా ప్రశ్నార్థం మార్కులు విశ్వాదు చేసుకున్నాము
 ఆ విద్యార్థి ఆసక్తి, అభిరుచి ఉపయోగంగా ఆంకంను విశ్వాదు
 చేసు కీవరానికి అగిన అవకాశం కలగజేసినాము. విద్యార్థిను
 సంక్షిప్త ప్రశ్నార్థం ప్రాజెక్టులు విద్యార్థినులను ఏమారు చేసుకున్నా
 నాలుగవ విభాగం విశ్లేషణ చేయవలసిందిగా ప్రశ్నార్థం మార్కులు

రాయలసీమ విశ్లేషణ చేయవలసిందిగా ప్రశ్నార్థం మార్కులు
 విద్యార్థినులను విశ్వాదు చేసుకున్నాము. ప్రాజెక్టులను విద్యార్థినులను

సభ్యుల పేర్లకావాలి :-

1. Dr. V. Sridevi - V. Sridevi

2. Prof. Narsimhulu.

3. Dr. G. Gowri - G. Gowri

4. Dr. P. Vijayakumar - P. Vijayakumar

5. Dr. M. Anwar Hussain - M. Anwar Hussain

6. P. Vimala Devi - P. Vimala Devi

7. Dr. M. Farnida Begum - M. Farnida Begum

8. V. Vinodhvasini Devi - V. Vinodhvasini Devi

9. Dr. M. Venkata Lakshmi - M. Venkata Lakshmi

10. Dr. G. Keshavulu

Students

1. D. Ruttamma

2. G. Rajini

M.A. ECONOMICS

Board of Studies Meeting

Department of Economics

Held on 10-7-2019

Composition of Board of Studies:

1) Dr. K. VEERACHARI	ILC of the Department	Chairman
2) Prof. T. V. Seethaiyah	University Nominee	Member
3) Prof. H. D. Banaiyah	Subject Expert	Member
4) Dr. P. Sreenivasanadu	Subject Expert	Member
5) Dr. N. Parvathi	Alumni	Member
6) A. Vijetha	Student	Member
7) P. Mahalakshmi	Student	Member
8) M. Devamani	Student	Member

Agenda of the Meeting:-

- i) Syllabus for the IIIrd and IVth semesters of MA Economics
Final year for the Academic year 2019-2020.
- ii) Question Paper Pattern for Internal and External Exams.
- iii) Question Paper setters
- iv) Panel of Examiners
- v) Suggestion of Text books / Reference books

Board of Studies of Department of Economics met on 10-7-2019 at 10-30 A.M under the chairmanship of Dr. K. Veerachari Reader in Economics discussed and finalised the draft of Syllabus for IIIrd and IVth semesters of M.A. Economics (Final year)

The Syllabus is prepared mainly on the basis of Rayalaseema University, Kurnool and also the Syllabus framed by some other Autonomous colleges taken into consideration to implement the Academic Activities from the Academic year 2019-2020.

Resolutions:-

- i) It is resolved to introduce the following Papers for Semester III and Semester IV.

Semester III Papers.

Environmental Economics - Paper I

- Paper-II : International Trade and Finance
 Paper-III : Economics of Growth and Development
 Paper-IV : Agricultural Economics
 Paper-V : Industrial Economics.

Semester IV Papers.

- Paper-I : Environmental Planning and Sustainable Development
 Paper-III : Economics of ~~Growth~~ and Development and Planning
 Paper-II : ~~International Trade and Finance~~ Demography
 Paper-IV : Agricultural Marketing and Finance ^{Andhra Pradesh Economy}
 Paper-V : ^{Financial Markets and Institutions.} Industrial Economics. for the Academic year 2019-2020

- 2) It is resolved to allot 6 teaching hours per paper per week
 3) It is resolved to follow the Pattern of Exam as follows

Internal Examinations : 30 Marks for II year M.A. Economics
 Semester End Examination : 70 marks "

In each Semester two Internal Examinations will be conducted for 15 Marks Average of two Internal Exams + Attendance + Seminar + viva $15 + 5 + 5 + 5 = 30$ Marks.

Semester End Examination

Time: 3 hours Max. Marks: 70

Part A $5 \times 6 = 30$ Marks

Answer any Five of the following Question. Each Question Carries 6 Marks

Part - B : $4 \times 10 = 40$ Marks

Answer any four of the following questions. Each question Carries 10 Marks

- 4) It is resolved to authorise to include changes by the chairman to prepare
- i) Model Question Paper
 - ii) Panel of Question Paper setters
 - iii) Panel of Examiners.

The chairman is authorized to incorporate the changes addition in the Syllabus as Directed by the Members of the BOS for the final approval of the Academic Council.

It is resolved to follow the Pattern Examination as follows for I year M.A. Economics.

It is resolved that the Panel of Question Paper setters as follows:

- 1) Prof. H. JayaRaju SKU Anantapur.
- 2) Dr. K. Rewathi CESS Hyderabad
- 3) Dr. K. Krishna Reddy Dr BRAOU Hyderabad
- 4) Prof. B. Krishna Reddy HCU Hyd
- 5) Prof. D. Krishna Murthy SVU Tirupathi
- 6) Prof. B. Suresh Lal K.U. Warangal
- 7) Prof. Swarna Rani K.U. Warangal
- 8) Prof. K. Mohan Reddy K.U. Warangal
- 9) Dr. M. Anitha YUU Kadapa
- 10) Dr. B. Devarma Y.V.U. Kadapa

6) It is resolved that the Panel of Examiners is as follows:

- 1) Prof. R. Sanjeevarao R.U. KURNOOL
- 2) Prof. N. T. K. Naik R.U. KURNOOL.
- 3) Prof. T. V. Seshasairah R.U. KURNOOL
- 4) Dr. N. Sreedhar R.U. KURNOOL.
- 5) Prof. G. Venkatnaidu S.K.U. Anantapur
- 6) Prof. Ramappa S.K.U. Anantapur
- 7) Prof. Siva Shankaraiyah S.K.U. Anantapur
- 8) Prof. M. D. Bawaiah S.K.U. Anantapur.
- 9) Dr. Ganesh Naik YVU Kadapa.
- 10) Prof. Sudharshan Reddy YV.U. Kadapa

M.A. Economics Board of Studies is held on 7-2019 at 10-30 A.M in the Department of Economics K.V.R. Govt College for women (A) Kurnool. The following members have attended.

1) Dr. K. VEERACHARI

K. Veerachari
10/7/19.

2) Prof T. Venkata Seshasairah

T. Venkata Seshasairah

3) Prof. M. D. Bawaiah.

M. D. Bawaiah

4) P. Sreenivasa Naidu

P. Sreenivasa Naidu
10/07/2019

5) Dr. N. Parvathi.

10.7.19

KVR Govt. College for Women(A), Kurnool
DEPARTMENT OF ECONOMICS
M.A. ECONOMICS: SEMESTER – III
PAPER – I: ENVIRONMENTAL ECONOMICS

Objectives of the Course: This course will introduce environment economics to obtain knowledge about environment, ecology, drought, pollution issues related to the environment economics. We will discuss the positive and normative aspects of environmental economics, techniques that are used to value the environment, and approaches such as regulation and incentive-based programs that are used to control pollution.

MODULE-I: ENVIRONMENT, ECOLOGY AND ECONOMY

Ecology – Definition of the terms: Environment; Ecology and Ecosystem, Systems approach to ecology-Population growth and human ecology – Ecological balance.

MODULE-II: ENVIRONMENTAL DEGRADATION

Problems of resource allocation – Economics of Exhaustible and non-exhaustible resources – Theory of Natural Resource Development – Implication of ecological imbalances – Optimal rate depletion – Impact of Environmental Degradation on Economic Growth.

MODULE-III : DROUGHTS AND ECOLOGICAL IMBALANCES

Sources of ecological imbalances – Effects of droughts on resources base – Impact on soil conservation, Agriculture and allied activities, Forest conservation, Fisheries development, Depletion of common property resources and their impact on agriculture development.

MODULE-IV: ENVIRONMENTAL POLLUTION

Sources and causes of pollution – Various types of pollution – Urbanization and environmental pollution – Welfare economic foundations of pollution – Pareto optimality and Externalities –Policies for pollution control – Legal system and Environmental Education- Fiscal tools, legal system, Pollution taxes & Subsidies- Pollution control in India.

Reference Books

1. Charles, D. Kostad, Environmental Economics, Oxford University, New York, Press 2000.
2. Nick Hanley, Jonson, F. Shogren and Benwhite, Environmental Economics in Theory and Practice, Mc Millan Publications, 1997.
3. Karpagam, M., Environmental Economics, Sterling Publishers Pvt. Ltd., New Delhi, 1999.
4. Rabindra, N. Bhattacharya (ed), Environmental Economics, Oxford University Press, New Delhi.
5. Steve baker (ed.), Environmental Economics, Dominant Publishers and Distributors, New Dehli, 2003
6. Lester R. Brown, Eco-Economy, Orient Longman Pvt. Ltd., India , 2002.
7. S.K. Shukla, P.R. Srivastava, Environmental resources conservation, Ajay Verma, Commonwealth Publishers, Ansari Road, New Delhi, 1992.8. R.K. Sapru, Environmental management in India, Vol. 1, Ashish Publishing House, New Delhi.
9. I. Satya Sundaram, Rural Development in India: Some Facts.
10. I.C. Dingra, India economy (Environment and Policy)
11. M. Lakshmi Narasaiah, Bio-diversity and environment, Discovery Publishing House, New Delhi, 2004.

M. D. Banarjee

K. V. Venkatesh

K. Venkatesh

KVR Govt. College for Women(A), Kurnool
DEPARTMENT OF ECONOMICS
M.A. ECONOMICS
SEMESTER - III :: PAPER -II
ECONOMICS OF GROWTH MODELS

Objectives of the Course: *The aim of this paper is to facilitate students to have a broad idea about the concept of economic growth and development, focused on the theories of growth models and different approaches to economic development.*

MODULE-I: ECONOMIC GROWTH AND DEVELOPMENT

Meaning of Economics Growth and Development; Factors affecting Economic Growth; Common Characteristics of Developing Nations; Measuring of Economic Growth and Development – Physical Quality of Life Index (PQLI); Human Development Index (HDI); Sustainable Development.

MODULE-II: THEORIES OF DEVELOPMENT

Adam Smith, Ricardo, Karl Marx - Schumpeter and Innovations, Role of Credit; Rostow's stages of Economic Growth.

MODULE-III: GROWTH MODELS

The Harrod – Domar Growth Model; The New-classical Growth Models of R.M. Solow and J.E. Meade; Cambridge Growth Models of Kaldor and Joan Robinson; The Pasinetti Model of Growth

MODULE-IV: APPROACHES TO DEVELOPMENT

Partial Theories of Development – The Theory Big push; Leibenstein's Critical Minimum Effort Thesis; The Theory of Balanced Growth; The strategy of unbalanced Growth; Nelson's Low Level Equilibrium Trap; Theories of Social and Technological Dualism.

Reference Books:

1. Adelman, Irma, Theories of Economic Growth and Development, California: Stanford University Press, Stanford
2. Chakravarthi, S., Alternative Approaches to the Theory of Economic Growth, New Delhi: Oxford University Press
3. Higgins, B., Economic Development, Principles, Problems and Policies Allahabad; Central Book Depot.
4. Jhingran, M.L. Economics of Development and Planning, New Delhi: Vrinda Publishing House, Ltd.
5. Kindleberger, C.P., Economic Development, New York: McGraw Hill.
6. Kurihara, Kenneth K. The Keynesian Theory of Economic Development, London: George Allen and Unwin Ltd.
7. Meier, G.M., Leading Issues in Economic Development, New Delhi: Oxford University Press,
8. Misra & Puri, Economics of Development and Planning, Mumbai, Himalaya Publishing House.
9. Thirilwal, A.P., Growth and Development. U.K.: Macmillan.
10. Todaro, M.P. Economic Development in the third World, Hyderabad: Orient Longman Ltd.
11. United Nations, Human Development Reports, New York: United Nations.

M. D. Basu
Ramesh

Abhishek

K. Venkatesh

KVR Govt. College for Women(A), Kurnool
DEPARTMENT OF ECONOMICS
M.A. ECONOMICS: SEMESTER –III
PAPER – III: AGRICULTURAL ECONOMICS

Objectives of the course:

To understand the basic issues relating to the importance of agriculture and its importance in economic development and employment generation, different issues relating to problems of agriculture in India and the need for transforming agriculture sector with latest technology, resources management, institutional support, agrarian reforms, land tenure system and reforms in the regional and national level. Recent issues in marketing prices after emergence of WTO.

MODULE – I: AGRICULTURE AND ECONOMIC DEVELOPMENT

Role of agriculture and Economic Development, Traditional and Modern Agriculture, Characteristics of Indian Agriculture; Interdependence between Agriculture and Industry; Resource Management in Agriculture. Importance of Allied Activities in Development of Rural Economics, Development of Agro – Based Industries, Rural Infrastructure.

MODULE – II: AGRICULTURAL PRODUCTION FARM MANAGEMENT

Production Functions, Agricultural Production in India, Causes for low Productivity in Indian Agriculture; Factors Influencing Agricultural Productivity in India. Farm Size Relationship between size and Productivity. Impact of the Green Revolution on Indian Agriculture. Risk and uncertainty in Agriculture; Farm Planning, Budgeting

MODULE – III: AGRICULTURAL FINANCE

Meaning and Scope of Agricultural Finance; Importance of Agricultural Finance, and Sources of Rural Credit, Institutional finances for agricultural development–commercial banks; regional rural banks; Role of NABARD–Co-operatives, movements; Primary credit societies; central co-operative Banks; State Co-operative Banks; Land development Banks; Non-Institutional Finance for Agricultural Development; Micro Finance.

MODULE – IV: AGRICULTURE MARKETING & PRICES

Significance of Agricultural Marketing; Need for Efficient Marketing System; Structure and types of Agricultural Marketing; Problems of Agricultural Marketing; Government Policy to improve Indian Agricultural Marketing. Need and Objectives of Agricultural Price Policy; Fluctuations in Agricultural prices, Price Stabilisation; Agricultural price Determination, and Agricultural Price Policy, Types of Prices – Remunerative Prices, Administered, Controlled and Minimum support prices. Agricultural Exports & Imports in India.

REFERENCE BOOKS:

1. R.K. Lekhi; Agricultural Economics, Kalyani Publishers, New Delhi
2. Sadhu Singh – Fundamentals of Agricultural Economics
3. B.P. Tyagi – Agricultural Economics and Rural Development
4. K. Bharadwaj – Production conditions in Indian Agriculture
5. Brahmananda PR & VR Panchamukhi(Eds) – The Development process of the Indian Economy.
6. Ghatak, Sand Ingerscent – Agriculture and Economic Development.
7. Ruddar Datt & K.P.M. Sundharam, S.Chand & Company Ltd., New Delhi- Indian Economy.
8. R.G. Desai: Agricultural Economics, Himalaya Publishers, New Delhi.
9. R.N.Soni: Leading Issues in Agricultural Economics, Visal Publishing Co., Jalandhar.

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KVR Govt. College for Women(A), Kurnool
DEPARTMENT OF ECONOMICS
M.A. ECONOMICS : SEMESTER :III
PAPER-V: INDUSTRIAL ECONOMICS

Objectives of the course: The main objective of this paper is to make students understand the importance of industrialisation in economic development, problems of industrialisation, market structure market conduct, rationalisation and productivity.

MODULE--I: INDUSTRIALISATION AND ECONOMIC DEVELOPMENT

Meaning of Industrialisation: Industrialisation and Economic Growth - Objectives and Strategies of industrialization in developing countries.

MODULE--II:INDUSTRIAL ORGANISATION AND THEORIES OF INDUSTRIAL LOCATION

Organisational Forms: Types of organisational forms - The Choice of organizational form - Objectives of Organisational Forms. Size of the Firm: Measures of size - Factors determining the Optimum size of the Firm. Industrial Location: Factor Influencing Industrial Location -Theories of Industrial Location: Alfred Weber, Sargeant Florence, August Losch, Walter Isard - Melvin Greenhunt

MODULE--III:INVESTMENT DECISIONS

Nature and Types of Investment Decisions - Time Preparation-Profile of Project -Project Evaluation/Appraisal - Cost-Benefit Analysis - Different Rates of Return Methods - Pay Back Method - Accounting Rate of Return Method - Net Present Value Method and Internal Rate of Return Method - Break-Even Analysis.

MODULE--IV:INDUSTRIAL MANAGEMENT AND RATIONALISATION

Industrial Productivity: Measurement of Productivity - Tools of Productivity - Factors influencing Industrial Productivity - Productivity movement in India - National Productivity Council. Rationalisation: Aspects of Rationalisation - Objectives of Rationalisation - Benefits of Rationalisation. Rationalisation of industries in India.

Reference Books:

1. Ahluwalia, I.J. ,Industrial Growth in India, Oxford University Press, New Delhi.
2. Barthwal, R.R. , Industrial Economics, Wiley Eastern Ltd., New Delhi.
3. Cherunilam, F Industrial Economics: Indian perspective , Himalaya Publishing House, Mumbai.
4. Desai, B. , Industrial economy in India, Himalaya Publishing House, Mumbai.
5. Divine, P.J. and R.M. Jones et.al , An Introduction to Industrial economics, George Allen and Unwin Ltd., London.
6. Government of India, economic Survey (Annual).
7. Hay, D. and D.J. Morris , Industrial Economics: Theory and Evidence, Oxford University Press, New Delhi.
8. Kuchhal, S.C. , Industrial Economy of India ,Chaitanya Publishing House, Alahabad.
9. Reserve Bank of India, Report on Currency and Finance (Annual)

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W. S. Banerjee

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DEPARTMENT OF ECONOMICS
M.A. ECONOMICS
SEMESTER - IV: : PAPER-III
ECONOMICS OF DEVELOPMENT & PLANNING

Objectives of the Course: *The aim of this paper is to facilitate students to have a broad idea on various features of Economics of Growth and Development. The course provides knowledge to the students on Economic Growth and Development with a strong focus on different sectors. The course is divided into four modules, introducing to the students on sectoral aspects and policies, planning to economic development.*

MODULE-I: SECTORAL ASPECTS, TRADE AND ECONOMIC DEVELOPMENT

Agriculture and Economic Development; Role of Industrialization in developing Nations - Technology and Economic Development; Foreign Trade and Economic Development.

MODULE-II: MACRO ECONOMIC POLICIES AND DEVELOPMENT

Foreign investment and Foreign Aid-Importance and Components of Foreign investment and Foreign Aid - Importance and Components of Foreign Capital. Advantages and Disadvantages of Private Foreign investment. Case for and against Foreign Aid; Technology Transfer and MNCs.

MODULE-III: ALLOCATION OF RESOURCES

Investment criteria - Need for investment criteria in Developing Countries. Turnover Criterion. Social Marginal Productivity (SMP) Criterion - The Reinvestment Criterion and The Time Series Criterion; Project Evaluation and- Need and stages of Project Evaluation, Cost Benefit Analysis. Limitations and Uses of Cost- Benefit Analysis.

MODULE-IV: ECONOMIC PLANNING

Meaning of Economic Planning- Need for Planning in underdeveloped Countries; Types of Planning - Planning under Capitalism and Planning under Socialism, Planning in a Mixed Economy. Planning by Direction and Planning by inducement. Democratic Planning- Decentralized Planning and Indicative Planning; FMD model (Fel'dman, Mahalnobis and Domar)

Reference Books:

1. Adelman, Irma, Theories of Economic Growth and Development California: Stanford University Press.
2. AgrAwala, A.N., Indian Economy, New Delhi: Wishwa Prakasham. University Press, 1975.
3. Chakravarthi, S, Development Planning: The Indian Experience, Oxford: Clarendon Press.
4. Dasgupta P, Sen.A and Marglin. S. Guidelines for Project Evaluation, New York. UN.
5. Gupta, S.B, Monetary Economics Institutions; Theory and Policy, New Delhi, S. Chaand Co.,
6. Jhingan, M.L., Economics of Development and Planning, New Delhi: Vrinda Publishing
7. Killick.T., IMF Programmes in Developing countries: Design and Impact, London: Rutledge.
8. Lewis. W Further Development and Planning, New York: Harper & Row Publications.
9. Misra & Puri: Economic of Development and Planning, Mumbai, Himalaya Publishing Houe.
10. Mitham.D.M., Money Banking International Trade and Public Finance, Mumbai: Himalaya Publishing House.
11. Todaro, M.P., Development Planning: Models and Methods, Oxford: Oxford University Press..

KVR Govt. College for Women(A), Kurnool
DEPARTMENT OF ECONOMICS
M.A. ECONOMICS
SEMESTER – IV : : PAPER-IV
ANDHRA PRADESH'S ECONOMY

Objectives of the Course

The objective of this Paper at the postgraduate level would be to sharpen the analytical capacity of the student, by highlighting an integrated approach to the functioning aspects of the Andhra Pradesh economy, keeping in view the scope for alternative approaches. Such an analysis is essential because the Andhra Pradesh economy is a unique amalgam of alternative competing and often conflicting theories and a proper understanding of its working is imperative if the students are to comprehend the ramifications that underlie most of the observed phenomena in the Andhra Pradesh economic set-up. The emphasis of the paper is on overall social, political and economic environment influencing policy decisions. To develop all these themes, the course is divided into specific modules.

Module – I: Structure of Andhra Pradesh Economy

Gross State Domestic Product (GSDP) of Andhra Pradesh – Growth and Comparison with India and neighboring States; Contribution of Agriculture, Industry and Services Sectors to Income and Employment in Andhra Pradesh; Demographic features of Andhra Pradesh – Rural-Urban Composition of Population – Sex Ratio and Age Distribution – Literacy and Occupation Structure; Extent of poverty in Andhra Pradesh; Economic Policies and Socio Economic welfare Programmes of the Government of Andhra Pradesh.

Module – II: Land Reforms and Agriculture Development in Andhra Pradesh

Land reforms in Andhra Pradesh – Cropping pattern – Irrigation Policy of Andhra Pradesh – Agricultural Subsidies; Agricultural inputs and technology – Administrated prices including support and procurement prices - Institutional and non-institutional sources of rural credit in Andhra Pradesh – Structure and growth of cooperatives and their share in total credit, adequacy and problems; Public Distribution System in Andhra Pradesh.

Module – III: Growth of Industry and Services Sectors in Andhra Pradesh

Industrial Development in Andhra Pradesh – Growth and structure of industries – Incentives to industries – Industrial corridors in and SEZs in Andhra Pradesh – Bottlenecks for Industrial Development – Power Projects; Importance, composition and growth of Services Sector with special reference to Transport and Communication, Tourism and Information Technology

Module – IV: State Finances and Five Year Plans of Andhra Pradesh

Andhra Pradesh Budgetary Resources and Constraints – Fulfillment of the conditions of Andhra Pradesh Bifurcation Act – Central Assistance and Issues of Conflict – Public Debt and Projects of External Assistance - Outlays, Financing Public Sector Plan and Resource Allocation Pattern in the Five Year Plans of Andhra Pradesh; Regional disparities in income, industrial output, rainfall, irrigation, health and education in Andhra Pradesh.

REFERENCES:

1. R.S. Rao, Fifty Years of A.P 1956 -2006, CDR and Communications, Himayat Nagar, Hyderabad.
2. V.H.Rao, A.P. at fifty, CDR and Communications, Himayat Nagar, Hyderabad.
3. C.H. Hanumantha Rao and Mahendra Dev, A.P. Development, Economic Reforms and Challenges Ahead, CESS, Begumpet, Hyderabad.
4. Y.V. Krishna Rao and S.Subramanyam, Development of A.P. 1956-2001 – A Study of Regional disparities, NER Research Central, Vishalandhra Publishers, Hyderabad.
5. Socio-Economic Survey of A.P., Govt. of A.P.
6. Govt. of A.P. Human Development Report, A.P. CESS, Begampet, Hyderabad.
7. National Council of Applied Economics Research. New Delhi, Survey of Backward district of A.P.

KVR Govt. College for Women(A), Kurnool
DEPARTMENT OF ECONOMICS
M.A. ECONOMICS
SEMESTER – IV: : PAPER-V
FINANCIAL MARKETS AND INSTITUTIONS

Objectives: To equip the student with an understanding of the structure, organization, and working of Internal and International financial Institutions and markets connected with the regulation in India.

Module – I: Financial System – An Introduction

Concept and Nature of Financial System – Functions of the Financial System – Structure of the Financial System and Economic Development; Financial Markets – Concepts and Characteristics of Money and Capital markets – Indicators and Recent Trends in the Financial System – Financial Sector Reforms in India

Module – II: Banking in India

Concept and Types Commercial Banks – Functions and Principles of Commercial Banks – Balance Sheet of Commercial Banks – Process of Credit Creation; Concept of Central Banking and Functions of Reserve Bank of India – Concept, Functions and Importance of Development Banks – Major Development Banks in India – IDBI, ICICI, SIDBI, NABARD.

Module – IV: Financial Markets in India

Money Market: Components and Functions – Sub-Markets of Money Market – Recent Trends and Importance of Money Market in India; Capital Market: Components, and Functions – Recent Trends and Importance of Capital Market in India; Stock Exchange: Concepts and Functions – SEBI and Its Functions – Recent Changes in New Issues

Module – V: International Financial Markets

Introduction to Foreign Exchange Market – Concepts of Exchange Rates – Devaluation and Depreciation – International Liquidity – International Financial Institutions: objectives and functions of IMF, World Bank, IDA, IFC, ADB and BRICS Bank – Concepts of Euro-Dollar, Euro-Currency and Petro-Dollar Markets.

Reference Books:

- Bhole, L.M. (1999) : Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
- Bhole, L.M. (2000) : Indian Financial System, Chugh Publications, Allahabad.
- Chandra, P. (1997) : Financial Markets, (4th Edition), Tata McGraw Hill, New Delhi.
- Khan, M.Y. (1996) : Indian Financial System, Tata Mc Graw Hill, New Delhi.
- Machiraju, H.R. (1997) : International Financial Markets in India, Wheeler Publishing, Allahabad.
- Machiraju, M.R. (1999) : Indian Financial Systems, Vikas Publishing House, New Delhi.
- Prasad, K.N. (2001) : Development of India's Financial System, Sarup & Sons, New Delhi.
- Rangarajan, C. (1999) : Indian Economics: Essays on Money and Finance, UBS Publication, New Delhi.
- Suraj. B. Gupta: : Monetary Economics, Sultan S. Chand, New Delhi

M.A. DEGREE EXAMINATION – 2019
THIRD SEMESTER
ECONOMICS
PAPER – I: ENVIRONMENTAL ECONOMICS

Time: 3 Hrs

SECTION-A
Answer any FOUR Questions
Each Question Carries 5 Marks

Max: Marks: 80

(4x 5= 20)

1. Need for maintaining ecological balance.
2. Explain the theory of natural resource development.
3. Impact of environmental development on economic growth.
4. Different measures of ecological imbalances.
5. Importance of Fisheries development.
6. Sources and causes of environmental pollution.
7. Different measures of pollution control in India.
8. Ecology and Eco- systems.

SECTION-B

Answer ALL Questions
Each Question Carries 15Marks

(4 x15= 60)

9. (a) Explain the systems approach to ecology and examine the relationship (between pollution growth and human ecology.
- Or
- (b) Describe the interrelationship between ecology and eco systems.
10. (a) Examine the implications of ecological imbalances on the economic system.
- Or
- (b) Explain the effects of ecological imbalances on agriculture and allied activities.
11. (a) Discuss the impact of forest conservation, depletion of common property resources on agriculture development.
- Or
- (b) Explain the economics of exhaustible and non-exhaustible resources.
12. (a) discuss the prevailing state of legal system and environmental education India.
- (Or)
- (b) Write about the welfare economics foundations of pollution in relation with pareto optimality and externalities.

M. D. Bawade
B. S. Bawade

U. S. Bawade

K. Venkatesh

M.A. DEGREE EXAMINATION – 2019

THIRD - SEMESTER

ECONOMICS

PAPER – II: COMPUTER FUNDAMENTAL AND OFFICE AUTOMATION

Time: 3 Hrs

SECTION – A

Max. Marks: 80

Answer any FOUR Questions

Each Question Carries 5 Marks

(4x5=20)

1. List the four parts of a complete computer system.
2. What is Hardware and Software? Give examples.
3. List eight of the Internet's major services.
4. E-mail is not a real-time communications system. What does this mean?
5. List three forms in which commercial software can be acquired.
6. In a word processor, what makes a block of text? What happens when you press ENTER in a word processor?
7. What is the difference between a spreadsheet and a worksheet?
8. Briefly explain about "Statistical Package for the Social Sciences" (SPSS) package.

SECTION-B

Answer ALL Questions

Each Question Carries 15 Marks

(4 x15= 60)

9. (a) Identify four categories of computer hardware.
(or)
(b) Most standard keyboards include five major groups of keys. List them.
10. (a) What are the four primary functions that an operating system performs?
(or)
(b) What is a bookmark in a Web browser and what do bookmarks allow you to do?
11. (a) Explain the terms Freeware and Open source software.
(or)
(b) What is a presentation? Describe two ways you can create slides in a presentation program.
12. (a) Explain the purpose of a formula bar in a spreadsheet program with a suitable example.
(or)
(b) What are 10 characteristics to be specified under the columns of the Variable View window of the Data Editor.

M. D. Banerjee
Banerjee

W. S. Srinivasan

K. Venkatesh

M.A. DEGREE EXAMINATION – 2019
THIRD SEMESTER
ECONOMICS
PAPER –III: ECONOMIC GROWTH MODELS

Time: 3Hrs

SECTION-A

Max. Marks: 80

Answer any FOUR Questions
Each Question Carries 5 Marks

(4 x 5= 20)

1. Examine the differences between economic growth and development .
2. Common characteristic features of developing Nations.
3. Discuss the significance of the Marxian theory of economic development.
4. Write about the salient features of Neo-Classical growth models.
5. Examine the features of Solow and Meade models of Economic Growth.
6. Conditions required for un balanced growth.
7. What are the conditions required for unbalanced growth.
8. Critically explain the theory of Big Push.

SECTION-B

Answer ALL Questions
Each Question Carries 15 Marks

(4 x 15= 60)

9. (a) Examine the different issues relating to measuring to economic growth and Development.
(Or)
(b) write about the factors affecting economic growth and write about sustainable Development.
10. (a) Critically explain the Schumpeter` s theory of economic development .
(Or)
(b) Examine the relevance of the Rostow` s stages of economic growth in the context of Indian Economy.
11. (a) Briefly outline the basic the features of Harrod- Domar growth model.
(Or)
(b) Critically explain the Kaldor` s growth model.
12. (a) Briefly explain Nelso` s low level Equilibrium Trap.
(Or)
(b) Discuss the theories of Balanced and Unbalanced Growth.

M. D. Bavaiah
K. Venkatesh

D. Srinivasan

K. Venkatesh

M.A. DEGREE EXAMINATION – 2019
THIRD SEMESTER
ECONOMICS
PAPER: IV - AGRICULTURAL ECONOMICS

Time: 3Hrs

SECTION-A

Max. Marks: 80

Answer any FOUR Questions

Each Question Carries 5 Marks

(4 x 5= 20)

1. Discuss the importance of resource use in agricultural production?
2. Explain the scope of Agricultural Economics.
3. Examine the impact of Agricultural development on environment.
4. Explain the importance of Dairying and Fisheries.
5. What is resource substitution? What are its possibilities in agricultural.
6. Difference between Risk and Uncertainty?
7. Explain the main principals of Farm Management
8. Explain the significance of production function analysis

SECTION-B

Answer ALL Questions

Each Question Carries 15 Marks

(4 x 15= 60)

9. (a) Discuss the role of the Agricultural Economics Development
(Or)
(b) Explain the role of the Agricultural Economics Development.
10. (a) Define the natural and Scope of Rural development and explain different approaches to rural development of India.
(Or)
(b) Examine the inter relationship between agriculture and economic development.
11. (a) Analyze the concepts of risk and uncertainty in agriculture and evolve a strategy to meet risk and uncertainty in India agriculture.
(Or)
(b) Examine the nature of cost relationship and profit maximization in India.
12. (a) Define production function and examine the factor- product relationship in agriculture.
(Or)
(b) Analyze the aspects relation g to resource management in Indian agriculture.

M. D. Bavatale
Pravin
J. S. Mohan
K. Venkatesh

M.A. DEGREE EXAMINATION - 2019
THIRD SEMESTER
ECONOMICS
PAPER – V : INDUSTRIAL ECONOMICS

Time: 3 Hrs

SECTION –A

Max. Marks: 80

Answer any Four Questions

Question Carries 5 Marks

(4 x 5 = 20)

1. What do you mean by Industrialization ?
2. Explain objectives of Organizational firm.
3. Explain the relationship between market structure and profitability.
4. Write a note on Economies and diseconomies of scale.
5. Explain the objectives of price policy.
6. Define merger and integration.
7. Discuss benefits of Rationalization.
8. Write about the measurement of productivity.

SECTION – B

Answer ALL Questions

(4 x 15 = 60)

Each Question Carries 15 Marks

9. (a) Discuss the methods and pattern of Industrialization
(or)
(b) Elucidate the factors influencing the optimum firm.
10. (a) Discuss the Sargent Florence's theory of Industrial location.
(or)
(b) Explain advantage and disadvantages of small scale production.
11. (a) Explain the principles of marginal cost pricing method.
(or)
(b) Discuss the measurement of diversification vertical integration and merger.
12. (a) Explain the function of National Productivity Council.
(or)
(b) Explain factors influencing industrial productivity in India.

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M.A. DEGREE EXAMINATION -2019.

FOURTH SEMESTER

ECONOMICS

PAPER - III : ECONOMICS OF GROWTH AND DEVELOPMENT *Development and Planning*

Time: 3 Hrs

Max. Marks: 80

SECTION – A

Answer any FOUR Questions

Each Question Carries 5 Marks

(4 x 5 = 20)

2. Role of agriculture in Economic Development.
3. Need for planning in under developed countries.
4. Components of foreign investments.
5. Fiscal Policy in developing countries.
6. Types of Planning.
7. Disadvantages of private foreign investment.
8. Trade and Economic Development.
9. Need for investment criteria.

SECTION - B

Answer All questions

Each Question carries 15 marks

(4 x 15 = 60)

9. (a) Examine the Choice of Techniques in the planned economic development of a country.
(or)
(B) Examine the role agriculture in Economic Development.
10. (a) Write about impact of W.T.O. on developing countries.
(or)
(b) Analyze the need for technology transfer and MNC's in the context of developing countries.
11. (a) Examine the differences between planning under capitalist and socialist systems.
(or)
(b) Critically evaluate the need for planning in under developed countries.
12. (a) Briefly review the achievements and failures of planning in India.
(or)
(b) Analyze the importance of project evaluation and cost benefit analysis.

M. D. Banerjee
Banerjee

U. S. Chatterjee *to v. s. Chatterjee*

M.A. DEGREE EXAMINATION - 2019.
FOURTH SEMESTER
M.A. ECONOMICS
PAPER - IV: ANDHRA PRADESH ECONOMY

Time: 3 Hrs

Max. Marks: 80

SECTION – A

Answer any FOUR Questions
Each Question Carries 5 Marks

(4 x 5 = 20)

1. Gross state domestic product (GSDP)
2. Resource allocation pattern in the five year plans.
3. Land use pattern.
4. Size and growth rate of population.
5. Commercial banks.
6. Problems of credit.
7. Growth of service sector.
8. Development of communications.

SECTION – B

Answer All questions.

(4 x 15=60)

Each Question Carries 15 Marks

9. (a) Discuss the sectoral contributing to income and employment.
(Or)
(b) Explain the resource allocation pattern in the five year plan in India.
10. (a) How the land reforms and implemented in Andhra Pradesh.
(Or)
(b) Discuss the size and growth of population and sex composition and levels of Literacy in A.P.
11. (a) What is the role of regional rural banks in financing for debvelopment of the Economy.
(Or)
(b) Critically examine the growth and structure of cooperatives.
12. (a) What is the important of social sector? Discuss the growth of transport, Communication, tourism and information.
(Or)
(b) Discuss the problems and prospects of services sector in Andhra Pradesh.

M. J. Bavaideh





K. Venkatesh

M.A. DEGREE EXAMINATION - 2019.
FOURTH SEMESTER
ECONOMICS
PAPER - V : FINANCIAL MARKETS AND INSTITUTIONS

Time: 3 Hrs

Max. Marks: 80

SECTION – A

Answer any FOUR Questions
Each Question Carries 5 Marks

(4 x 5 = 20)

1. State the functions of a good financial system.
2. Define financial system and list out its indicators.
3. Write a note on the Call money market.
4. What are the components of money market.
5. What are Gilt edged securities.
6. Distinguish between primary and secondary securities markets.
7. State the functions of international financial markets.
8. Write a short note on BRICKS bank.

SECTION – B

Answer All questions.
Each Question Carries 15 Marks

(4 x 15=60)

- 9.(a) Discuss the evolution and structure of Financial system.
(Or)
(b) Examine the role of financial system in promoting economic development.
10. (a) Discuss structure and functions of Discount and Finance House of India.
(Or)
(b) Elucidate the role of Securities Trading Corporation of India in the development of capital market in India.
- 11.(a) Analyse the functions of Securities and Exchange Board of India (SEBI).
(Or)
(b) Critically evaluate the role of Bombay Stock Exchange in promoting the capital market in India.
- 12.(a) Assess the role of Asian Development Bank in the economic development of South Asian countries in general and India in particular.
(Or)
(b) Discuss the need for reforming the present international monetary system.

U. J. Bhandari
K. Venkatesh

K. Venkatesh

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