

**ANDHRA LOYOLA COLLEGE (AUTONOMOUS)
VIJAYAWADA – 520 008**

**A COLLEGE WITH POTENTIAL FOR EXCELLENCE - UGC
RE-ACCREDITED AT 'A' GRADE WITH 3.65/4.00 CGPA - NAAC**



ACADEMIC COUNCIL MEETING
Wednesday, 21st March 2012

VENUE: SEMINAR HALL



ANDHRA LOYOLA COLLEGE (AUTONOMOUS)
VIJAYAWADA - 520 008

ACADEMIC COUNCIL MEETING – 2012
WEDNESDAY, 21.03.2012 AT 2.00 P.M.

SCHEDULE

Prayer: Rev Fr.Dr.D.Showraiah, SJ
Correspondent

Welcome: Rev Fr.Dr.A.Francis Xavier, SJ
Principal

Agenda:

Brief review of academic activities

Ratification of resolutions taken at the Board of
Studies meeting

Ratification of results of previous year

Suggestions by the Council Members

Any other matter:

Resolution to start B.A., Music/Dance-Animation
Design-Sound



ACADEMIC COUNCIL MEETING - LIST OF MEMBERS

Chairperson	Rev Fr.Dr.A.Francis Xavier, SJ	Principal, ALC,
University Representatives	Prof.YK Sundara Krishna .	Dept. of Comp.Sci. KU
	Dr.N.Usha	Dept of English, KU
	Dr.K.Padmaja	Dept.of Bus.Magt. KU
Management Representatives	Rev Fr.Dr.D.Showraiah, SJ	Correspondent, ALC
	Rev Fr.N.Bujji Babu, SJ	Vice Principal, ALC
	Rev Fr.GM Victor Emmanuel, SJ	Controller of Exams, ALC
Secretary-Academic Affairs	Dr.G.Srinivasa Rao	Dept. of Physics
Management Nominees and External Experts	Rev Sr.Dr.Mercy	Principal, St.Theresa College, Eluru
	Sri D Rama Krishna	Chairman, Efftronics Systems Pvt. Ltd. Vja
	Sri N Harinath	Advocate, Vijayawada
	Dr.Nambiar	Doctor, Vijayawada
Vice Principal	Dr.V.Vallabha Rao	Dept. of Hindi
Deans	Dr.M.Srinivasa Reddy	Dean of Humanities
	Dr.G.V.Ramana	Dean of Sciences
	Dr.N.A.Francis Xavier	Dean of Student Affairs
Heads of Departments	Ms.N.Nirmala Mary	English
	Dr.V.Gopala Reddy	Telugu
	Dr.V Vallabha Rao	Hindi
	Dr.M.Sivaram	Sanskrit
	Sri A Shou Reddy	Mathematics
	Dr.N.Srinivasa Rao	Statistics
	Sri AV Ravi Kumar	Physics
	Dr.B. Venkateswara Rao	Chemistry
	Dr.Mrs.B.Siva Kumari	Botany
	Sri K Ravi Sankar	Zoology
	Sri K Balachandra	Microbiology
	Ms.S.Suneetha	Biotechnology
	Sri C Ravindra Raju	History
	Sri S Yosebu	Economics
	Sri KV Vijaya Babu	Political Science
	Sri CH V Chowdary	Commerce
	Ms.M.V.Madhavi	Business Administration
	Dr.K Job Sudarshan	Ethics and Religion
	Mrs.A. Lavanya	Comp.Science
	Sri L Ekambaram	Electronics
	Sri M Satish Rajan	Visual Communication
Dr. G A Prasad Rao	Librarian	
Sri JV Nagendra Prasad	Physical Director	
Management Invitees	Dr.G.Sambasiva Rao	Telugu
	Dr.Ch. Srinivasu	Physics
	Sri GM Srirangam	Zoology
	Sri B.Syam Sundar	Commerce
	Dr.G.Sahaya Baskaran	Physics
	Sri PVS Sairam	Physics
Student Representatives	Mr.P.Naresh (DGH 11)	
	Ms.B.Jyotsna Showrilu (DML 56)	



INDEX

SI No	Department	Page No
1	English	2-19
2	Telugu	20-21
3	Hindi	22-23
4	Sanskrit	24-25
5	Mathematics	26-33
6	Statistics	34-35
7	Physics	36-37
8	Chemistry	38-39
9	Botany	40-53
10	Zoology	54-67
11	Science, Technology & Development and Environmental Studies	68-73
12	Microbiology	74-85
13	Biotechnology	86-103
14	Computer Science	104-113
15	Electronics	114-121
16	History	122-123
17	Contemporary India – Economy, Polity and Society	124-125
18	Political Science	126-139
19	Economics	140-153
20	Commerce	154-187
21	Business Administration	188-199
22	Visual Communication	200-223
23	Ethics & Religion	224-225



**Heads of the Departments to present
the Resolutions of the Board of Studies**

1	English	Ms.N.Nirmala Mary
2	Telugu	Dr.V.Gopala Reddy
3	Hindi	Dr.V Vallabha Rao
4	Sanskrit	Dr.M.Sivaram
5	Mathematics	Sri A Shou Reddy
6	Statistics	Dr.N.Srinivasa Rao
7	Physics	Sri AV Ravi Kumar
8	Chemistry	Dr.B Venkateswara Rao
9	Botany	Dr.Mrs.B.Siva Kumari
10	Zoology	Sri K Ravi Sankar
11	Science, Technology & Development and Environmental Studies	Sri K Ravi Sankar
12	Microbiology	Sri K Balachandra
13	Biotechnology	Ms.S.Suneetha
14	Computer Science	Mrs.A.Lavanya
15	Electronics	Sri L Ekambaram
16	History	Sri C Ravindra Raju
17	Contemporary India – Economy, Polity and Society	Sri C Ravindra Raju
18	Political Science	Sri KV Vijaya Babu
19	Economics	Sri S Yosebu
20	Commerce	Sri CH V Chowdary
21	Business Administration	Ms.M.V.Madhavi
22	Visual Communication	Sri M Satish Rajan
23	Ethics & Religion	Dr.K Job Sudarshan



**BOARD OF STUDIES
DEPARTMENT OF ENGLISH**

Minutes of the meeting of the Board of Studies in English held on Monday,
06.02.2012 at 3.00 PM.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *f*

University Nominee:

3. DR.M KOTESWARA RAO

External Experts:

4. PROF.KESAVA RAO
5. MS.M NALINI *M. Nalini*

Faculty:

6. MS.N NIRMALA MARY *Nirmala*
7. DR.P RAMANUJAM
8. SRI N RANGA BABU *N.R. Ranga Babu*
9. SRI D PRAVEEN *D. Praveen*
10. SRI SANJEEV KUMAR BALI *S. Sanjeev Kumar Bali*
11. MRS.G SYAMALA *G. Syamala*
12. MS.S.V.PRIYADARSINI *S.V. Priya*
13. MS.T.SAI MAMATHA *T. Sai Mamatha*
14. MS.L.SUBHA *L. Subha*
15. SRI J VENATESWARA RAO *J. Venateswara Rao*
16. MS.V.SRI DURGA *V. Sri Durga*



DEPARTMENT OF ENGLISH RESOLUTIONS

The meeting of Board of Studies in English was held on 6th February 2012 at 3.00 p.m. in the Conference Hall. And the following resolutions were unanimously passed.

It is resolved that

1. Remedial course in English for colleges book 1 and book 2 themselves are remedial programme offered to B Stream students to augment its potential for remediation purposes. The Unit IV for I Mid and Unit VIII for II Mid from Book One for I Semester, again Unit VII & VIII in II Semester are prescribed for study in addition to the Units already prescribed.
2. The foundation course for the first year weak students in General English will be introduced with grammar based syllabus. The course for a duration of two weeks will be offered from 3.30 p.m. to 4.30 p.m. with effect from 1st July 2012. And it is decided that the department will take the responsibility of preparing handouts.
3. Developing Language Skills by Manohar is replaced with Communication Skills for Technical Students authored by T.M.Farhathullah, published by Orient Black Swan, as these materials seek to address the real life communicative needs of the students in a much better way. Further more, there is a close correlation between the materials this book offers and the language lab work the students are required to do. The classroom work with this book will be reinforced by the students language lab work.
4. The extensive reading programme which has been in progress for about 10 years for the students of stream B is being strengthened with the addition of the Orient Black Swan Easy Readers to the existing collection of the books in the Department library.
5. To implement the syllabus framed for the Business English Course offered to the students of Bachelor of Business Administration (B.B.A.) course w.e.f. the academic year 2012-13.

N.Nirmala Mary
Head, Dept. of English &
Chairman, Board of Studies

**NEW**

**I BA, B.SC. & B.Com. GENERAL ENGLISH – I SEMESTER - PAPER I
STREAM B (New Syllabus)**

Course Code: ENG 111**Credits: 2****Teaching hrs per week 5****Max. Marks: 100****INTENSIVE READING AND RELATED SKILLS****Text Book: A Remedial Course in English for College – Book 1**

I Mid	: Unit 1 to 4	(3 x 5= 15 hours)
II Mid	: Units 5 to 8	(3 x 5= 15 hours)

EXTENSIVE READING**I Mid: Any two of the following simplified classics: (for Internal assessment only)**

A Tale of two cities	(8 hours)
Oliver Twist	
Tales from Shakespeare	
Treasure Island	

II Mid: Any two of the following simplified classics: (for Internal assessment only)

David Copperfield	(7 hours)
More Tales from Shakespeare	
Tales from Oscar Wilde	
Six Detective stories	

COMMUNICATION SKILLS

Text Book: Communication Skills for Technical Students T M Farhathullah Published by Orient Black Swan

Section 1. Oral Communication part 1(Functions)

I Mid –	1: Introducing oneself	(5 hours)
	2: Asking questions and giving polite replies	(5 hours)
	3: Complaining and apologizing	(5 hours)
II Mid –	4: Persuading people to do something	(5 hours)
	5: Taking the initiative	(5 hours)
	6: Seeking permission	



**I BA, B.SC. & B.Com. GENERAL ENGLISH – I SEMESTER - PAPER I
STREAM B (Old Syllabus)**

Course Code: ENG 111

Credits: 2

Max. Marks: 100

Teaching hrs per week 5

INTENSIVE READING AND RELATED SKILLS

Text Book: A Remedial Course in English for College – Book 1

I Mid : Unit 1 to 3 (3 x 5= 15 hours)

II Mid : Units 5 to 7 (3 x 5= 15 hours)

EXTENSIVE READING

I Mid: Any two of the following simplified classics: (for Internal assessment only)

A Tale of two cities (8 hours)

Oliver Twist

Tales from Shakespeare

Treasure Island

II Mid: Any two of the following simplified classics: (for Internal assessment only)

David Copperfield (7 hours)

More Tales from Shakespeare

Tales from Oscar Wilde

Six Detective stories

DEVELOPING LANGUAGE SKILLS

Text Book: Developing Language Skills Book-I published by Manohar 2007.

Oral Communication

I Mid – Unit 1: Starting a conversation: Greetings and Asking After (5 hours)

Unit 2: Introducing oneself and others (5 hours)

Unit 3: Thanking, Wishing Well, Apologizing and Excusing (5 hours)

II Mid – Unit 4: Asking for and Giving Information (5 hours)

Unit 5: Offers, Requests and Orders (5 hours)

Unit 6: Getting and Giving Permission, Agreeing and Disagreeing,
Warning and Persuading (5 hours)

**NEW**

**I B.A, B.SC. & B.Com. GENERAL ENGLISH – II SEMESTER –PAPER - II
STREAM B (New Syllabus)**

Course Code: ENG 122 B**Credits: 2****Teaching hrs per week 5****Max. Marks: 100****INTENSIVE READING AND RELATED SKILLS**

Text Book: A Remedial Course in English for College – Book 2

I Mid	: 1 to 4	(3 x 5= 15 hours)
II Mid	: 5 to 8	(3 x 5= 15 hours)

EXTENSIVE READING**I Mid:** Any two of the following simplified classics: (for Internal assessment only)

The Coral Island	(8 hours)
Swiss Family Robinson	
Robinson Crusoe	
Around the world in eighty days	

II Mid: Any two of the following simplified classics: (for Internal assessment only)

The Adventures of Tom Sawyer	(7 hours)
Outstanding Short Stories	
The Arabian Nights	

COMMUNICATION SKILLS

Text Book: Communication Skills for Technical Students T M Farhathullah Published by Orient Black Swan

Section 1. Oral Communication part 1(Functions)

I Mid –	7: Introducing oneself	(5 hours)
	8: Asking questions and giving polite replies	(5 hours)
	9: Complaining and apologizing	(5 hours)

II Mid –	10: Persuading people to do something	(5 hours)
----------	---------------------------------------	-----------

Section 6. Grammar in use

1: Sentence structure	(5 hours)
2: Verbs – classification	



**I B.A, B.SC. & B.Com. GENERAL ENGLISH – II SEMESTER –PAPER - II
STREAM B (Old Syllabus)**

Course Code: ENG 122 B

Credits: 2

Max. Marks: 100

Teaching hrs per week 5

INTENSIVE READING AND RELATED SKILLS

Text Book: A Remedial Course in English for College – Book 2

I Mid : 1 to 3 (3 x 5= 15 hours)
II Mid : 4 to 6 (3 x 5= 15 hours)

EXTENSIVE READING

I Mid: Any two of the following simplified classics: (for Internal assessment only)

- The Coral Island (8 hours)
- Swiss Family Robinson
- Robinson Crusoe
- Around the world in eighty days

II Mid: Any two of the following simplified classics: (for Internal assessment only)

- The Adventures of Tom Sawyer (7 hours)
- Outstanding Short Stories
- The Arabian Nights

DEVELOPING LANGUAGE SKILLS

Text Book: Developing language skills Book-I published by Manohar 2007.

Oral Communication

I Mid - Unit 7: Inviting, Suggesting, Accepting and Refusing (5 hours)
Unit 8: Likes and Dislikes (5 hours)
Unit 9: Regulating Speech (5 hours)

II Mid - Unit 10: Ending a Conversation: Saying Goodbye (5 hours)

Text Book: Developing language skills Book-III published by Manohar 2007

Unit 2: Filling in Missing Information (5 hours)
Unit 5: Completing a Dialogue (5 hours)

**NEW**

**II B.A, B.SC. & B.Com. GENERAL ENGLISH – III SEMESTER –PAPER - III
STREAM B (New Syllabus)**

Course Code: ENG 233 B**Credits: 2****Max. Marks: 100****Teaching hrs per week 5****I MID****INTENSIVE READING**

Text Book: Bhaskar and Prabhu (ed) English Through Reading: Volume I (Macmillan)

Unit 2: The Fun They had (7 hours)

EXTENSIVE READING

Text Book: Ramanujam (ed) An Anthology of Indian Short Stories, (ALC)

1. Kanyasulkam (4 hours)

2. Father's Help

COMMUNICATION SKILLS

Text Book: Communication Skills for Technical Students T M Farhathullah Published by Orient Black Swan

Section 4. Spoken English

I Mid – 5. Stress (4 hours)

6. Intonation

Language Lab Syllabus**English Lab**

1. Introduction to Sounds of English (5 hours)

2. Introduction to Stress & Intonation (5 hours)

II MID**INTENSIVE READING**

Text Book: Bhaskar and Prabhu (ed) English Through Reading: Volume I (Macmillan)

Unit 4: Oil (7 hours)

EXTENSIVE READING

Text Book: Ramanujam (ed) Stories for All Times (ALC)

1. Drought (4 hours)

2. Karma

COMMUNICATION SKILLS

Text Book: Communication Skills for Technical Students T M Farhathullah Published by Orient Black Swan

Section 5. Writing skills

II Mid – 2. Curriculum vitae (4 hours)

3. Curriculum Vitae (4 hours)



**II B.A, B.SC. & B.Com. GENERAL ENGLISH – III SEMESTER –PAPER - III
STREAM B (Old Syllabus)**

Course Code: ENG 233 B

Credits: 2

Max. Marks: 100

Teaching hrs per week 5

I MID

INTENSIVE READING

Text Book: Bhaskar and Prabhu (ed) English Through Reading: Volume I (Macmillan)

Unit 2: The Fun They had (7 hours)

EXTENSIVE READING

Text Book: Ramanujam (ed) An Anthology of Indian Short Stories, (ALC)

1. Kanyasulkam (4 hours)

2. Father's Help (4 hours)

GRAMMAR

Text Book: Developing Language Skills

Unit 2: Subject – Verb Agreement (5 hours)

DESCRIBING

Unit 3: Describing People (5 hours)

Language Lab Syllabus

English Lab

1. Introduction to Sounds of English (5 hours)

2. Introduction to Stress & Intonation (5 hours)

II MID

INTENSIVE READING

Text Book: Bhaskar and Prabhu (ed) English Through Reading: Volume I (Macmillan)

Unit 4: Oil (7 hours)

EXTENSIVE READING

Text Book: Ramanujam (ed) Stories for All Times (ALC)

1. Drought (4 hours)

2. Karma (4 hours)

GRAMMAR

Text Book: Developing Language Skills

Unit 3: Tenses (5 hours)

DESCRIBING

Unit 4: Describing Places (5 hours)

Language Lab Syllabus

English Lab

6. Describing Objects/Situations/People (5 hours)

**NEW**

**II B.A, B.SC. & B.Com. GENERAL ENGLISH – IV SEMESTER –PAPER - IV
STREAM B (New Syllabus)**

Course Code: **ENG 244 B**Credits: **2**Teaching hrs per week **5**Max. Marks: **100****INTENSIVE READING AND RELATED SKILLS****Text Books: English through Reading Volume I (Macmillan) Ed. Bhaskar and Prabhu.**

I Mid - Unit 07: A Wrong Man in the Workers' Paradise (7 hours)

II Mid - Unit 08: Making Surgery Safe (7 hours)

EXTENSIVE READING**Text Books: AN Anthology of Indian Short Stories, Ed. Dr. P. Ramanujam, (ALC)**

I Mid – Unit 05 : Eight Rupees (4 hours)

06 : The Eyes are not here (4 hours)

II Mid – Unit 07 : The Day the Viceroy Came (4 hours)

08 : Lemon, Yellow and Fig (4 hours)

COMMUNICATION SKILLS

Text Book: Communication Skills for Technical Students T M Farhathullah Published by Orient Black Swan

Section 5. Writing Skills**I Mid:** 4. Correspondence techniques (4 hours)

5. Memo writing (4 hours)

Section 3. Professional Communication**IIMid:** 3. Interviews (4 hours)

4. Group discussion (4 hours)

LANGUAGE LAB SYLLABUS**Career Lab****I Mid:** 3.Group Discussion (4 hours)

4. Interview Skills (4 hours)

II Mid: 6.Resume Writing (4 hours)



**II B.A, B.SC. & B.Com. GENERAL ENGLISH – IV SEMESTER –PAPER - IV
STREAM B (Old Syllabus)**

Course Code: ENG 244 B

Credits: 2

Max. Marks: 100

Teaching hrs per week 5

INTENSIVE READING AND RELATED SKILLS

Text Books: English through Reading Volume I (Macmillan) Ed. Bhaskar and Prabhu.

I Mid - Unit 07: A Wrong Man in the Workers’ Paradise (7 hours)

II Mid - Unit 08: Making Surgery Safe (7 hours)

EXTENSIVE READING

Text Books: AN Anthology of Indian Short Stories, Ed. Dr. P. Ramanujam, (ALC)

I Mid – Unit 05 : Eight Rupees (4 hours)

I Mid – Unit 06 : The Eyes are not here (4 hours)

II Mid – Unit 07 : The Day the Viceroy Came (4 hours)

II Mid – Unit 08 : Lemon, Yellow and Fig (4 hours)

DEVELOPING LANGUAGE SKILLS

Text Book: Developing Language Skills Book-I published by Manohar 2007.

GRAMMAR

I Mid - Unit 4: Active & Passive Voice (7 hours)

II Mid – Unit7: Prepositions (7 hours)

Reading Comprehension

I Mid - Unit 9: Understanding Poetry (7 hours)

Making Applications and Answering Advertisements

II Mid -Unit 1: Making Applications. (8 hours)

LANGUAGE LAB SYLLABUS

Career Lab

I Mid: 3.Group Discussion

4.Interview Skills

II Mid:6.Resume Writing

**NEW**

**I B.A, B.SC. & B.Com. GENERAL ENGLISH - I SEMESTER– PAPER - I
STREAM A (New Syllabus)**

Course Code: ENG 111 A**Credits: 2****Max. Marks: 100****Teaching hrs per week 5****I MID****INTENSIVE READING (Prose)****Text Book: Bhaskar and Prabhu (ed) English Through Reading: Volume II (Macmillan)**

Unit 1: Work and Play (5hours)

Unit 2: Three days to see (5hours)

Text Book: Ambika Sen Gupta (ed) Selected College Poems: Longman

Kamala Das: Punishment in Kindergarten (3 hours)

Ezekiel: Night of the Scorpion (2 hours)

EXTENSIVE READING (Prose)

Text Book: Ramanujam (ed) Stories for All Times (ALC)

1. An Astrologer's Day (3 hours)

2. Sparrows (3 hours)

3. A thief's story (2 hours)

COMMUNICATION SKILLS

Text Book: Communication Skills for Technical Students T M Farhathullah Published by Orient Black Swan

Section 5. Writing skills

I Mid – 2. Curriculum vitae (4 hours)

3. Report writing (4 hours)

II MID**INTENSIVE READING (Prose)****Text Book: Bhaskar and Prabhu (ed) English Through Reading: Volume II (Macmillan)**

Unit 4: Spaceship (5hours)

Unit 5: The Wisdom of Socrates (5hours)

Text Book: Ambika Sen Gupta (ed) Selected College Poems: Longman

Tennyson: Ulyses (3 hours)

Clough: Say not the struggles Naught Availeth (2 hours)

EXTENSIVE READING (Prose)**Text Book: Ramanujam (ed) Stories for All Times (ALC)**

1. The Connoisseur (4hours)

2. My Brother, My Brother (3hours)

COMMUNICATION SKILLS

Text Book: Communication Skills for Technical Students T M Farhathullah Published by Orient Black Swan

Section 5. Writing skills

4. Correspondence techniques (4hours)

5. Memo writing (3hours)



**I B.A, B.SC. & B.Com. GENERAL ENGLISH - I SEMESTER– PAPER - I
STREAM A (Old Syllabus)**

Course Code: ENG 111 A

Credits: 2

Max. Marks: 100

Teaching hrs per week 5

I MID

INTENSIVE READING (Prose)

Text Book: Bhaskar and Prabhu (ed) English Through Reading: Volume II (Macmillan)

Unit 1: Work and Play (5hours)

Unit 2: Three days to see (5hours)

Text Book: Ambika Sen Gupta (ed) Selected College Poems: Longman

Kamala Das: Punishment in Kindergarten (3 hours)

Ezekiel: Night of the Scorpion (2 hours)

EXTENSIVE READING (Prose)

Text Book: Ramanujam (ed) Stories for All Times (ALC)

1. An Astrologer's Day (3 hours)

2. Sparrows (3 hours)

3. A thief's story (2 hours)

STUDY SKILLS

Text Book: Developing Language Skills – I Oral Communication

Unit 2: Filling in Missing Information (5 hours)

DESCRIBING

Unit 3: Describing People (5 hours)

READING COMPREHENSION

Unit 6: Understanding Journalese (5 hours)

II MID

INTENSIVE READING (Prose)

Text Book: Bhaskar and Prabhu (ed) English Through Reading: Volume II (Macmillan)

Unit 4: Spaceship (5hours)

Unit 5: The Wisdom of Socrates (5hours)

Text Book: Ambika Sen Gupta (ed) Selected College Poems: Longman

Tennyson: Ulyses (3 hours)

Clough: Say not the struggles Naught Availeth (2 hours)

EXTENSIVE READING (Prose)

Text Book: Ramanujam (ed) Stories for All Times (ALC)

1. The Connoisseur (4hours)

2. My Brother, My Brother (3hours)

STUDY SKILLS

Text Book: Developing Language Skills – I Oral Communication

Unit 3: Asking for and giving Information (5 hours)

DESCRIBING

Unit 4: Describing Places (5 hours)

READING COMPREHENSION

Unit 7: Understanding Compact Writing (5 hours)

**NEW**

**I B.A, B.SC. & B.Com. GENERAL ENGLISH – II SEMESTER –PAPER - II
STREAM A (New Syllabus)**

Course Code: ENG 122 A

Credits: 2

Teaching hrs per week 5

Max. Marks: 100

INTENSIVE READING (PROSE)**Text Books: English through Reading Volume II (Macmillan) Ed. Bhaskar and Prabhu.**

I Mid - Unit 07: Individuals and Masses	(5 hours)
I Mid - Unit 08: Children at Play	(5 hours)
II Mid -Unit 09: Symptoms	(5 hours)
II Mid -Unit 10: How to avoid foolish opinions	(5 hours)

INTENSIVE READING (POETRY)**Text Books: Selected college Poems (Longman) Ambika Sen Gupta.**

I Mid - Robert Browning	: My Last Duchess	(3 hours)
I Mid - Robert Frost	: The Road not Taken	(2 hours)
II Mid - T.S.Eliot	: Journey of the Magi	(3 hours)
II Mid - W.H. Auden	: The Unknown Citizen	(2 hours)

EXTENSIVE READING**Text Book: Stories for All Times, Ed. Dr. P. Ramanujam (ALC)**

I Mid - 06. My Uncle Jules	(3 hours)
I Mid - 07. A Work of Art	(3 hours)
I Mid - 08. The Last Leaf	(3 hours)
II Mid -09. Mr. Know All	(3 hours)
II Mid -10. The Butterfly	(3 hours)

COMMUNICATION SKILLS

Text Book: Communication Skills for Technical Students T M Farhathullah Published by Orient Black Swan

Section 3. Professional Communication

I Mid -	1. Public Speaking	(3 hours)
	2. Seminars and Conferences	(3 hours)
II Mid -	3. Interviews	(3 hours)
	3. Group Discussion	(3 hours)



**I B.A, B.SC. & B.Com. GENERAL ENGLISH – II SEMESTER –PAPER - II
STREAM A (Old Syllabus)**

Course Code: ENG 122 A

Credits: 2

Teaching hrs per week 5

Max. Marks: 100

INTENSIVE READING (PROSE)

Text Books: English through Reading Volume II (Macmillan) Ed. Bhaskar and Prabhu.

I Mid - Unit 07: Individuals and Masses	(5 hours)
I Mid - Unit 08: Children at Play	(5 hours)
II Mid -Unit 09: Symptoms	(5 hours)
II Mid -Unit 10: How to avoid foolish opinions	(5 hours)

INTENSIVE READING (POETRY)

Text Books: Selected college Poems (Longman) Ambika Sen Gupta.

I Mid - Robert Browning	: My Last Duchess	(3 hours)
I Mid - Robert Frost	: The Road not Taken	(2 hours)
II Mid -T.S.Eliot	: Journey of the Magi	(3 hours)
II Mid -W.H. Auden	: The Unknown Citizen	(2 hours)

EXTENSIVE READING

Text Book: Stories for All Times, Ed. Dr. P. Ramanujam (ALC)

I Mid - 06. My Uncle Jules	(3 hours)
I Mid - 07. A Work of Art	(3 hours)
I Mid - 08. The Last Leaf	(3 hours)
II Mid -09. Mr. Know All	(3 hours)
II Mid -10. The Butterfly	(3 hours)

DEVELOPING LANGUAGE SKILLS

Text Book: Developing Language Skills Book-I published by Manohar 2007.

Oral Communication

I Mid - Unit 4: Asking for and Giving information	(5 hours)
II Mid -Unit 5: Completing a Dialogue	(5 hours)

Transferring Information

I Mid - Unit 3: Message Writing	(5 hours)
---------------------------------	-----------

Reading Comprehension

I Mid - Unit 9: Understanding Poetry	(5 hours)
II Mid -Unit 10: Understanding Narrative	(5 hours)

Making Applications and Answering Advertisements

II Mid -Unit 1: Making Applications.	(5 hours)
--------------------------------------	-----------



BUSINESS ENGLISH COURSE

(B.B.A.)

Course Objectives:

1. This course has been designed for BBA students to improve both language and business communication skills and to communicate effectively in a wide range of business situations.
2. to enable the learners to communicate effectively in English language and to develop accuracy and confidence by putting them in the context where they immediately use the language.
3. Make effective presentations.
4. Master the language skills of negotiations
5. Communicate effectively in meetings / conferences
6. Acquire specialist vocabulary and colloquial business jargon
7. Handle a wide range telephone calls effectively
8. Effective e-mail and report writing skills for various business purposes.



I BBA BUSINESS ENGLISH – I SEMESTER –PAPER - I

Course Code: ENG 111-BBA

Credits: 2

Teaching hrs per week 5

Max. Marks: 100

Unit I: ESSENTIALS OF BUSSINESS ENGLISH:

An interdiction to Business English – Aspects of Communication – Components of Effective Communication in Organization.

Unit II: REMEDIAL GRAMMER:

Basic of Grammar – Types of Sentences – Concord: Subject – verb agreement – Verb form: Sequence of Tenses – Transformation of sentences: Synthesis of sentences – Direct and direct speech – Degree of comparison – Active and Passive Voice – Common Errors including errors in spelling and punctuations.

Unit III:

(A): READING:

Reading Comprehension – Reading Techniques – Summarizing: Scanning Interpretation Skimming – form of Condensation – Comprehension Exercises.

(B): LEXIS AND BUSINESS LANGUAGE:

Business English Vocabulary - Phrases and Idioms Business terms and other words
(Words often confused and one – word substitution)

Unit IV: WRITING: BUSINESS CORRESPONDENCE:

Features of writing communication – types of Business correspondence: sales letter – Claim letter – Adjustment letter – Collection letter – Enquiry letter – Quotation letter – Job Application Letter and Resume.

Unit V: SPEAKING:

Essentials of Spoken English – Interactive Communication like introducing oneself informally, parting with friends/family, asking for directions – Speeches on various occasions / English Conversations (1 to 15)-Telephonic Conversation – Interview.

Suggested readings:

1. Leo jones, Richard Alexander: New International Business English (Communication Skills in English for Business purposes) Cambridge University press
2. K. Mohan & Meera Benarji: Developing Communication Skills, second Edition, and Macmillan Publishers.
3. J.K. Gangal: A Practical Course in Spoken English – PHI Learning Private LTD, New Delhi.
4. Raymond Murphy – essentials of English grammar.
5. M.Monipatty: the craft of Business letter Writing, Tata McGraw Hill.
6. Bill Mascull – Business Vocabulary in use (CUP 2005).



**I BBA - II SEMESTER
BUSINESS ENGLISH - SYLLABUS**

Course Code: ENG BBA 121

Credits: 2

Teaching hrs per week 5

Max. Marks: 100

Unit I

A. ADVANCED WRITING SKILLS

Business reports – Letter reports and formal reports – Memorandum Writing – Notices, Agenda and Minutes.

B. BUSINESS CORRESPONDANCE:

Bank and Insurance Correspondence – Social Correspondence – E Corresapondence / Fax/ E-Mail- Analytical Writing.

Unit II : ADVANCED READING :

Understanding Business – related Correspondences; Comprehension of factual material – Interpreting Visual Information : Tables, Graphs, and Charts – Speed Reading.

Unit III : advanced speaking skills:

Business Etiquettes – Impromptu Speeches – Debate/Role – pay – pronunciation [syllable division, stress marking phonemic transcription]

Unit IV : LISTENING SKILLS :

Face-to-Face conversation practice(16 to 30) – Oral presentation / speeches for Special occasions – Presentation Patterns.

Unit – V : LISTENING SKILLS :

Hearing and Listening – Importance of Listening – Listening Situations – Barriers top Listening – Developing Listening skills.

Suggested readings:

1. Heta A. Murphy et. AI, Effective Business Communication (M c Graww Hill 2000)
2. K.Mohans M.Benerji – Developing communication skills (Macmillan)
3. A.Ashley – “ A Hand book of Commercial Correspondence “ (OUP)
4. Francis Soundarraaj – “ Speaking and Writing for Effective Business Communication “ (Macmillan India ltd 2007)
5. The Oxford Guide to Writing and speaking by John Serly (OUP)
6. Handbook of Practical Communication Skills by – Chrissie wrought, (Jaico Publications)
7. Lester , M- Grammar in the class room, Macmillan NY



DEPARTMENT OF ENGLISH

Department of English deals with

- a. General English for B.Sc / B.A / B.Com students**

Stream A & Stream B

- b. Advances English for Special English students**
- c. Business English for BBA students**



**BOARD OF STUDIES
DEPARTMENT OF TELUGU**

Minutes of the meeting of the Board of Studies in Telugu held on Tuesday,
21.02.2012 at 2.30 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal
2. FR.N.BUJJI BABU, SJ, Vice Principal ప్రొఫె. బుజ్జిబాబు. ఎస్, ఓ.సీ

University Nominee:

3. PROF.GY PRABHAVATI DEVI జి.వై. ప్రభావతి దేవి

External Experts:

4. PROF.V.SIMMANNA
5. DR.K.SUDARSANA RAJU కె.కె.సుధర్శనరాజు

Faculty:

6. DR.V.GOPALA REDDY వ.గోపాల రెడ్డి
7. DR.G SAMBASIVA RAO గ.సంబాశివారావు
8. DR.R RAVINDRA BHAS ర.రవీంద్రా భాస్కర్
9. DR.D KRUPA RAO కె.కలపా రావు



**DEPARTMENT OF TELUGU
RESOLUTIONS**

The Board of Studies meeting of Telugu for the academic year 2011-12 was held on 21st February 2012 in the Conference Hall.

RESOLUTIONS:

1. It is unanimously resolved to continue the existing syllabus of 1st and 2nd semesters of the academic year 2011-2012, for the 1st and 2nd semesters of the academic year 2012-2013 respectively.
2. It is unanimously resolved to continue the existing syllabus of 3rd and 4th semesters of the academic year 2011-2012, for the 3rd and 4th semesters of the academic year 2012-2013 also.
3. It is unanimously resolved to continue the existing syllabus all the six semesters of Special Telugu of the academic year 2011-2012, for all the six semesters of the academic year 2012-2013 also.
4. It is resolved to offer a three year B.A., Course in Music/Dance-Animation Design and Sound with effect from the academic year 2012-2013, approved by the University Grants Commission under the Innovative Programme.


Dr.V.Gopala Reddy
H.O.D. Telugu &
Chairman, Board of Studies



**BOARD OF STUDIES
DEPARTMENT OF HINDI**

Minutes of the meeting of the Board of Studies in Hindi held on Monday, 21.02.2012,
at 2.30 PM

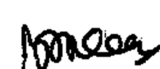
MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal
2. FR.N.BUJJI BABU, SJ, Vice Principal 

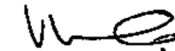
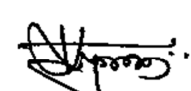
University Nominee:

3. PROF.K.SRIKRISHNA 

External Experts:

4. DR.R.S.SARRAJU
5. DR.B.NARENDRA VARMA 

Faculty

6. DR.V VALLABHA RAO 
7. SRI K PRAKASA RAO 



**DEPARTMENT OF HINDI
RESOLUTIONS**

The Board of Studies meeting of Hindi for the academic year 2011-12 was held on 21st February 2012 in the Conference Hall.

RESOLUTIONS:

1. It is resolved to continue the existing syllabus for I Year B.A., B.Sc., & B.Com., Students for 1st and 2nd semesters for the year 2012-2013. The pattern of the question paper and principles of valuation remain the same..
2. It is resolved to continue the existing syllabus for II Year B.A., B.Sc., & B.Com., Students for 3rd and 4th semesters for the year 2012-2013. The pattern of the question paper and principles of valuation remain the same.

Dr.V.Vallabha Rao
H.O.D. Hindi & Chairman
Hindi Board of Studies



**BOARD OF STUDIES
DEPARTMENT OF SANSKRIT**

Minutes of the meeting of the Board of Studies in Sanskrit held on Tuesday,
21.02.2012, at 2.30 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal

2. FR.N.BUJJI BABU, SJ, Vice Principal

University Nominee

3. DR.D.RAMAKRISHNA

D. Ramakrishna

External Experts:

4. DR.I.SRINIVASA RAO

sh

5. DR.D.N.DIKSHIT

DK

Faculty

6. DR.M SIVARAM

M. Sivaram

7. SRI N SURESH BABU

Sri N Suresh Babu



**DEPARTMENT OF SANSKRIT
RESOLUTIONS**

The Board of Studies meeting of Sanskrit for the academic year 2011-12 was held on 21st February 2012 in the Conference Hall.

RESOLUTIONS:

1. It is unanimously resolved to continue the existing syllabus of 1st and 2nd semesters of the academic year 2011-2012, for the 1st and 2nd semesters of the academic year 2012-2013 respectively.
2. It is unanimously resolved to continue the existing syllabus of 3rd and 4th semesters of the academic year 2011-2012, for the 3rd and 4th semesters of the academic year 2012-2013 also.

Dr.M.Sivaram
H.O.D. Sanskrit & Chairman
Sanskrit Board of Studies



**BOARD OF STUDIES
DEPARTMENT OF MATHEMATICS**

Minutes of the meeting of the Board of Studies in Mathematics held on Wednesday, 22.02.2012, at 3.00 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *N. Bujji Babu*

University Nominee:

3. PROF.V.SAMBASIVA RAO *V. Sambasiva Rao*

External Experts:

4. SRI M J SUBHAKAR *M. J. Subhakar*
5. SRI K MOSES *K. Moses*

Faculty:

6. SRI A SHOU REDDY *A. Shou Reddy*
7. SRI CH SESHAIH *Ch. Seshaih*
8. SRI M AROKIASAMY *M. Arokiasamy*
9. DR.NV RAMANA MURTHY *N. V. Ramana Murthy*
10. FR.G.M.VICTOR EMMANUEL, SJ
11. SRI P VENUGOPALA RAO *P. Venugopala Rao*
12. SRI M MARIA DAS *M. Mariyadas*
13. MRS.K ANURADHA *K. Anuradha*
14. MRS.B.N.PADMAVATHI *B. N. Padmavathi*
15. MRS.D.TABHITA *D. Tabhita*
16. SRI Y SAI SUBRAHMANYAM *Y. Sai Subrahmanyam*
17. MS.J HARI PRIYA *J. Hari Priya*
18. MS.A.D.PADMA *A. D. Padma*



DEPARTMENT OF MATHEMATICS RESOLUTIONS

The Board of Studies meeting of Department of Mathematics was held on 22-02-2012 in the conference hall at 3.00 pm and the following resolutions are made.

- 1) It is resolved to delete the contents starting with linear congruence till the end of Number theory in Paper-I.
- 2) It is resolved to implement unitization of syllabus and new question paper pattern for II years.
- 3) It is resolved to implement the proposed change in III year of 2010-13 batches to include, the concepts of irreducible elements and prime elements with examples and problems in polynomial rings.
- 4) It is resolved to delete “Computer algebraic systems open software MAXIMA” introduced in problem solving sessions only for the students opted for Graph theory in V semester and Discrete Mathematics in VI semester.

A.Shou Reddy
H.O.D. Mathematics &
Chairman, Board of Studies

**NEW**

I B.Sc. / B.A MATHEMATICS PAPER -1
(Differential Equations, 3-Dimensional Geometry & Real Number System)
I SEMESTER -NEW SYLLABUS

UNIT – I Differential Equations (8 Questions to be set) (20 periods)
 Linear Differential Equations – Bernoulli's Equations – Exact Equations - Reducible to exact Equations by Integrating Factors. Orthogonal Trajectories of a family of curves.
 Differential Equations of first order but not of first degree – Equations Solvable for X, Y, P.

UNIT –II Three Dimensional Geometry (4 Questions to be set) (18 periods)

Lines

Symmetrical form – Parametric form – Two point form – foot and length of perpendicular from a point to a line – The projection of a line on a given plane – Image of a point in the plane – Condition of co-planarity – To find the Equations of a straight line intersecting two given lines – shortest distance between two skew lines.

Cones & Cylinders

Definition of a cone - vertex – guiding curve – generators – Equations of the cone with a given vertex and guiding curve – condition that the general equation of the second degree should represent a cone – Definition of a cylinder – Equation to the cylinder whose generators intersect a given conic and are parallel to a given line.

UNIT – III Sphere (2 Questions to be set) (15 periods)

Plane section of a sphere – Tangent planes – Polar plane – Polar lines – Conjugate Planes – Conjugate lines – Angle between two intersecting spheres – Orthogonal Spheres – Radical planes – Radical lines – Radical centre – Co-axial system of Spheres – Limiting points.

UNIT –IV REAL NUMBER SYSTEM(4 Questions to be set) (12 periods)

Order Axiom, Field Axioms, Bounded and Unbounded subsets of real numbers, Infimum, Supremum of sets and their properties, Completeness axiom, definitions of Neighbourhood of a point, deleted Neighbourhood of a point, limit point of a set and some important properties without proofs.

Proofs of the following Theorems only.

1. Any non-empty subset of real numbers, which is bounded below, has an Infimum.
2. \mathbb{Q} is not complete.
3. Archimedean property of real numbers.

UNIT-V NUMBER THEORY (2 Questions to be set) (10 periods)

Preliminaries, properties of integers – Euclid's Lemma – Fundamental theorem of Arithmetic GCD and LCM – The number of divisors of a positive and their sum – Bracket function and its properties



Recommended Text Books:

1. A text book of Mathematics vol-I &vol-II, published by KRISHNA PRAKASHAN MANDIR. Authors: A.R Vasistha&VipinVasishtha.
2. A text book of Mathematics vol-I &vol-II, published by S.Chand& Co. Ltd, New Delhi. Authors: V VenkateswaraRao and others.
3. A text book of Mathematics vol-I &vol-II, published by Deepti publications. Authors: Dr. A Anjaneyulu.

Section A: D.E (Units I) (8Questions to be set)
Section B: 3D (Unit II) (6 Questions to be set)
Section C: Real Number System & Number Theory (Units III, IV, V)(6 Questions to be set)

**OLD**

I B.Sc. / B.A MATHEMATICS PAPER -1
(Differential Equations, 3-Dimensional Geometry & Real Number System)
I SEMESTER - OLD SYLLABUS

UNIT – I Differential Equations (6 Questions to be set) (20 periods)

1. Linear Differential Equations – Bernoulli's Equations – Exact Equations - Reducible to exact Equations by Integrating Factors.
2. Orthogonal Trajectories of a family of curves.
3. Differential Equations of first order but not of first degree – Equations Solvable for X, Y, P.

UNIT – II Three Dimensional Geometry(6 Questions to be set) (18 periods)

Lines

Symmetrical form – Parametric form – Two point form – foot and length of perpendicular from a point to a line – The projection of a line on a given plane – Image of a point in the plane – Condition of co-planarity – To find the Equations of a straight line intersecting two given lines – shortest distance between two skew lines.

Sphere

Plane section of a sphere – Tangent planes – Polar plane – Polar lines – Conjugate Planes – Conjugate lines – Angle between two intersecting spheres – Orthogonal Spheres – Radical planes – Radical lines – Radical centre – Co-axial system of Spheres – Limiting points.

Cones & Cylinders

Definition of a cone - vertex – guiding curve – generators – Equations of the cone with a given vertex and guiding curve – condition that the general equation of the second degree should represent a cone – Definition of a cylinder – Equation to the cylinder whose generators intersect a given conic and are parallel to a given line.

UNIT – III REAL NUMBER SYSTEM(3 Questions to be set) (12 periods)

Order Axiom, Field Axioms, Bounded and Unbounded subsets of real numbers, Infimum, Supremum of sets and their properties, Completeness axiom, definitions of Neighbourhood of a point, deleted Neighbourhood of a point, limit point of a set and some important properties without proofs.

Proofs of the following Theorems only.

1. Any non-empty subset of real numbers, which is bounded below, has an Infimum.
2. \mathbb{Q} is not complete.
3. Archimedean property of real numbers.

UNIT -IV NUMBER THEORY (2 Questions to be set) (15 periods)

Preliminaries, properties of integers – Euclid's Lemma – Fundamental theorem of Arithmetic GCD and LCM – The number of divisors of a positive and their sum – Bracket function and its properties – Linear congruences – definition, examples and its properties.

Theorem 1 to 11 statements only (no proofs) of the following:

1. Two integers **a** and **b** are congruent modulo **m** if they leave same remainder when divided by **m**.
2. For a fixed integer $m > 0$ the relation $a \equiv b \pmod{m}$ is an equivalence relation on the set of integers \mathbb{Z} .
3. If $a \equiv b \pmod{m}$ and $x \in \mathbb{Z}$ then i) $a \pm x \equiv b \pm x \pmod{m}$ ii) $ax \equiv bx \pmod{m}$.
4. If $a \equiv b \pmod{m}$ and $c \equiv d \pmod{m}$ then i) $a + c \equiv b + d \pmod{m}$ ii) $ac \equiv bd \pmod{m}$.
5. If $ab \equiv ac \pmod{m}$ and $(a, m) = 1$, then $b \equiv c \pmod{m}$.



Congruences, Classes and their Properties.

6. Let m be a positive integer and $S = \{0, 1, 2, \dots, m-1\}$. Then no two integers of S are congruent modulo m .
7. Let m be a positive integer and $S = \{0, 1, 2, \dots, m-1\}$. Then every $x \in Z$ is congruent modulo m to one of the integers of S .
8. If X_0 is a solution of $ax \equiv b \pmod{m}$ and $X_1 \equiv X_0 \pmod{m}$ then X_1 is also a solution of $x \equiv b \pmod{m}$.
9. If $(a, m) = 1$, then the linear congruence $ax \equiv b \pmod{m}$ has a unique solution.
10. If $(a, m) = d$ & $d \nmid b$ then congruence $ax \equiv b \pmod{m}$ has no solution.
11. If $(a, m) = d$ & $d \mid b$ then congruence $ax \equiv b \pmod{m}$ has exactly d incongruent solutions $ax \equiv X_0 + r(m/d) \pmod{m}$, $r = 0, 1, 2, \dots, d-1$ where X_0 is a solution $ax \equiv b \pmod{m}$.

Problems on Linear Congruences.

UNIT V (3 Questions to be set) (10 periods)

Definitions of Inverse modulo, Euler function ϕ and examples, Problems.

Proofs of following theorems and then Problems.

1. An integer ‘ a ’ has an inverse modulo $m \Leftrightarrow (a, m) = 1$.
2. If $n \in z^+$ and p is prime, then $\phi(P^n) = P^n - P^{n-1}$
3. Fermat’s and Wilson’s theorems.

Recommended Text Books:

1. A text book of Mathematics vol-I & vol-II, published by KRISHNA PRAKASHAN MANDIR.
Authors: A.R Vasistha & Vipin Vasishtha.
2. A text book of Mathematics vol-I & vol-II, published by S.Chand & Co. Ltd, New Delhi.
Authors: V Venkateswara Rao and others.
3. A text book of Mathematics vol-I & vol-II, published by Deepti publications.
Authors: Dr. A Anjaneyulu.

Section A:	D.E (Units I)	(6 Questions to be set)
Section B:	3D (Unit II)	(6 Questions to be set)
Section C:	Real Number System & Number Theory (Units III, IV & V)	(8 Questions to be set)

**NEW**

**III B.Sc / B.A ., MATHEMATICS PAPER – V
(RINGS, FIELDS & MATRIX THEORY)
V – SEMESTER-NEW SYLLABUS : Course Code: MAT 355**

UNIT – I (RINGS and FIELDS)

Ring definition, elementary properties of a ring, examples, Ring with (or) without zero divisors, Integral domain, field, skew field (division ring), and Boolean ring, Sub rings, sub fields, characteristics of rings, Ideals, principal ideal, prime ideals, maximal ideals.

UNIT – II (POLYNOMIAL RINGS and QUOTIENT RINGS)

Polynomial rings, Polynomial over an integral domain, division algorithm for polynomial over a field (statement only), Euclidean algorithm for polynomials over a field (statement only), Unique Factorisation theorem (Statement only), Remainder theorem (Statement only), Euclidean domains, **irreducible elements and prime elements with examples and problems**. Homomorphism of rings, Quotient rings, Kernel of a ring homomorphism, Fundamental theorem of homomorphism, isomorphism of rings and its properties.

UNIT – III (RANK OF A MATRIX)

Definition and examples of symmetric and skew symmetric matrices, Hermitian and skew Hermitian matrices, orthogonal and unitary matrices, Idempotent matrix, Periodic matrix, Nilpotent Matrix, Involutionary matrix.

Rank of Matrix (Problem Only), Echelon form of matrix, normal form, Inverse of a non singular matrix by elementary transformations(problem only).

UNIT – IV (LINEAR EQUATIONS)

Linear equations, homogeneous linear equations, fundamental set of solutions (problems only). System of linear non homogeneous equations, condition of consistency (Problems only).

UNIT –V (EIGEN VALUES and EIGEN VECTORS)

Eigen Values, Eigen Vectors of a matrix, Characteristic polynomial and characteristic equations of a matrix (problems only). Theorem: Cayley Hamilton Theorem only.

Quadratic forms, linear transformations, Congruence of matrices, reduction of a real quadratic form, (No proofs of theorems and problems only), to find two non-singular matrices P and Q such that PAQ in normal form.

TEXT BOOKS:

1. A text book of Mathematics vol III, published by Krishna PrakashanMandir.
Authors: A R Vasishtha and VipinVasishtha.
2. Matrices, published by Krishna PrakashanMandir.
Author : A.R Vasishtha.

REFERENCE BOOKS:

1. A text book of B.Sc. Mathematics vol III, published by S. Chand & Co. Ltd.
Authors: V .VenkateswaraRao and others.
2. A text book of B.Sc. Mathematics vol III, published by Deepti Publications.
Author: Dr.A.Anjaneyulu.



III B.Sc / B.A., MATHEMATICS PAPER – V
(RINGS, FIELDS & MATRIX THEORY)
V – SEMESTER - OLD SYLLABUS: Course Code: MAT 355

UNIT I - RINGS AND FIELDS

Chapter 1 : Ring definition, elementary properties of a ring, examples, Ring with (or) without zero divisors, Integral domain, field, skew field (division ring), and Boolean ring.

Chapter 2: Sub rings, sub fields characteristics of rings.

Chapter 3: Ideals, principal ideal, prime ideals, maximal ideals.

Chapter 4 : Polynomial rings, Polynomial over an integral domain, division algorithm for polynomial over a field (statement only), Euclidean algorithm for polynomials over a field (statement only), Unique Factorisation theorem (Statement only), Remainder theorem (Statement only), Euclidean domains.

Chapter 5: Homomorphism of rings, Quotient rings, Kernel of a ring homomorphism, Fundamental theorem of homomorphism, isomorphism of rings and its properties.

UNIT II – MATRIX THEORY

Chapter 6: Definition and examples of symmetric and skew symmetric matrices, Hermitian and skew Hermitian matrices, orthogonal and unitary matrices, Idempotent matrix, Periodic matrix, Nilpotent Matrix, Involutory matrix.

Rank of Matrix (Problem Only), Echelon form of matrix, normal form, Inverse of a non singular matrix by elementary transformations (problem only).

Chapter 7 : Linear equations, homogeneous linear equations, fundamental set of solutions (problems only).

Chapter 8 : System of linear non homogeneous equations, condition of consistency (Problems only).

Chapter 9 : Eigen Values, Eigen Vectors of a matrix, Characteristic polynomial and Characteristic equations of a matrix (problems only). Theorem: Cayley Hamilton Theorem only.

Chapter 10: Quadratic forms, linear transformations, Congruence of matrices, reduction of a real quadratic form, (No proofs of theorems and problems only). To find two non singular matrices P and Q such that PAQ in normal form.

TEXT BOOKS:

1. A text book of Mathematics vol III, published by Krishna PrakashanMandir.
Authors: A R Vasishtha and VipinVasishtha.
2. Matrices published by Krishna PrakashanMandir.
Author : A.R Vasishtha.

REFERENCE BOOKS:

1. A text book of B.Sc. Mathematics vol III, published by S. Chand & Co. Ltd.
Authors: V .VenkateswaraRao and others.
2. A text book of B.Sc. Mathematics vol III, published by Deepti Publications.
Author: Dr.A.Anjaneyulu.



**BOARD OF STUDIES
DEPARTMENT OF STATISTICS**

Minutes of the meeting of the Board of Studies in Statistics held on Monday, 13.02.2012, at 2.30 P.M.

MEMBERS

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *Babu*

University Nominee:

3. PROF.K.CHANDAN *K Chandan*
13/2/12

External Experts:

4. PROF.L.VENKATESWARA RAO
5. PROF.V.NAGESWARA RAO *V. Nageswara Rao*
13/2/2012

Faculty:

6. DR. N SRINIVASA RAO *N. Srinivasa Rao*
7. SRI M SRINIVAS *M. Srinivas*
13/2/12
8. SRI N SRINIVAS *N. Srinivas*
13/2/12
9. SRI K SRINIVAS *K. Srinivas*
13/2/12
10. SRI KM NAGARJUNA *K.M. Nagarjuna*
13/2/12
11. SRI N LAKSHMI NIRANJAN *N. Lakshmi Niranjan*
13/2/12



**DEPARTMENT OF STATISTICS
RESOLUTIONS**

The meeting of the Board of Studies in Statistics was held on 13th February 2012 at 2.30 p.m. in Conference hall.

The following resolution was unanimously passed in the meeting

It is resolved to retain the existing syllabi for the academic year 2012-2013.

Dr.N.Srinivasa Rao
H.O.D.Statistics &
Chairman, Board of Studies



**BOARD OF STUDIES
DEPARTMENT OF PHYSICS**

Minutes of the meeting of the Board of Studies in Physics held on Thursday,
23.02.2012 at 2.30 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *Babu*

University Nominee:

3. DR.MRK NANCHARA RAO *Mrk Nanchara*

External Experts:

4. PROF.S.P.MALLIKARJUNA RAO *S.P.Mallikarjuna*
5. SRI V RAJAGOPALA RAO *V.Rajagopala*

Faculty:

6. SRI AV RAVI KUMAR *Av Ravi Kumar*
7. DR. G VENKATESWARA RAO *G. Venkateswara*
8. DR. G SRINIVASA RAO *G. Srinivasa*
9. DR. CH SRINIVASU *Ch. Srinivasu*
10. DR. V ASHOK BABU *V. Ashok Babu*
11. DR. G MURALI KRISHNA *G. Murali Krishna*
12. DR. G SAHAYA BHASKARAN *G. Sahaya Bhaskaran*
13. SRI P SRINIVASA SASTRY *P. Srinivasa Sastry*
14. DR.T.SRI KUMAR *T. Sri Kumar*
15. SRI V DEVA SAHAYAM *V. Deva Sahayam*
16. DR. M C RAO *M. C. Rao*
17. DR.CH.SRINIVASA RAO *Ch. Srinivasa Rao*
18. SRI PVS SAIRAM *P. V. S. Sairam*
19. SRI B JOHNSON *B. Johnson*
20. MRS.CH.KALPANA *Ch. Kalpana*



DEPARTMENT OF PHYSICS RESOLUTIONS

The board of studies meeting was held on 23/02/2012 at 2.30 PM in the Conference hall.

Following are the resolutions passed.

- **Theory**
 - **I, III, V Semesters**
 - It is resolved to continue the same syllabus for papers I, III, V and VI (Subject Electives)
 - **II, IV, VI Semesters**
 - It is resolved to continue the same syllabus for papers II, IV, VII and VIII (Skilled Electives)
- **Practical**

It is resolved to continue the same experiments for Practical-I, II, III and IV
- **Project work:**
 - It is resolved that all projects are to be evaluated by both internal and external
- **General Elective:**
 - It is resolved that the same General Elective will be continued. (Physics for today life)
- **Special Paper**
 - It is resolved to continue the special paper for AP&AC “*Office Tools & C Programming*” as a single paper in place of *F I T*.

(A.V. Ravi Kumar)
Head, Dept. of Physics &
Chairman, Board of Studies



**BOARD OF STUDIES
DEPARTMENT OF CHEMISTRY**

Minutes of the meeting of the Board of Studies in Chemistry held on Tuesday,
07.02.2012 at 2.00 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *Babu*

University Nominee:

3. DR.D.RAMACHANDRAN *Ramachandran*

External Experts:

4. PROF.P.S.N.REDDY *P.S.N. Reddy*
5. DR.G THRIMURTHULU

Faculty

6. DR. B VENKATESWARA RAO *B. Venkateswara Rao*
7. DR. M VENKATESWARA RAO *M. Venkateswara Rao*
8. DR. G V RAMANA *G. V. Ramana*
9. DR. G SUBRAHMANYA SASTRY *G. Subrahmanya Sastry*
10. SRI Y HANUMANTHA RAO *Y. Hanumantha Rao*
11. SRI KTSS RAJU *K. T. S. Raju*
12. MRS.P.ANILA *P. Anila*
13. SRI K PARAMESWARA RAO *K. Parameswara Rao*
14. MS.G RAJA RAJESWARI *G. Raja Rajeswari*
15. SRI CH SIVA KRISHNA *Ch. Siva Krishna*
16. MS.K.SAI KEERTHI *K. Sai Keerthi*



**DEPARTMENT OF CHEMISTRY
RESOLUTIONS**

The Chemistry Board of Studies meeting was held on 07.02.2012 at 2.00 p.m.

The Board of Studies passed the following resolution unanimously.

It is resolved to approve the following changes.

1. The chapter “Stereo Chemistry” is shifted from Paper II of Second Semester to Paper III of Third Semester.
2. The chapter “Active Methylene Compounds and Their Reactivity” is shifted from Paper III of Third Semester to Paper VIII of Sixth Semester.

Dr.B.Venkateswara Rao
H.O.D. Chemistry &
Chairman, Board of Studies



**BOARD OF STUDIES
DEPARTMENT OF BOTANY**

Minutes of the meeting of the Board of Studies in Botany held on Thursday,
16.02.2012 at 2.30 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *Bob*

University Nominee:

3. PROF. M.VIJAYA LAKSHMI *mt*

External Experts:

4. MRS.K.JAYASREE *J*
5. PROF.K CHANDRASEKHARA NAIDU *K chandra*

Faculty:

6. DR. MRS.B SIVA KUMARI *B*
7. DR. MRS.T ROSE MARY *R*
8. DR. J C S RAO *JCS*
9. DR. FR G JAYARAJ, SJ *GJR*
10. SRI P SRINIVASA RAO *P*
11. MS.S.SAILAJA *S*
16/02/12



DEPARTMENT OF BOTANY RESOLUTIONS

The meeting of Board of Studies in Botany was held in the conference hall on 16.02.2012 at 2.30 P.M.

All the members participated actively and after thorough discussion on the syllabus, of theory & practical the following resolutions were approved by the board of studies. It was resolved that:

1. There are no changes in paper- I and II semester syllabus.
2. Paper-III- The paper title Embryology, Histology and Anatomy renamed as Plant reproduction and Plant development.
3. Paper III - Unit-III Topic- c- simple, complex and special type of tissues dropped and included root stem transition (RAM and SAM).
4. Paper-IV- Unit- II- topic –a – Structure and functions of plasma membrane, ribosome and nucleus dropped and ultra structure of plant cell included.
5. Paper-V- The existing syllabus was reshuffled. Paper-V- unit –I- topic –preparation of herbaria dropped. Unit-II- Topic- c- Engler and Prantl's system of classification dropped and Thakhtajan system of classification is introduced.. Unit-IV- topic- stress physiology and Unit- V-topic Phytohormones shifted to VII paper and photosynthesis and translocation of organic solutes from VII paper shifted to paper V and included under unit V.
6. Paper-VI- (skill based- medicinal botany) the existing syllabus was reshuffled. Unit-V- topic--rare species, endemic and endangered medicinal plants dropped and role of herbal based drugs in certain human ailments - diabetes, jaundice and asthma were included under the topic-b.
7. No changes in the VI- paper skill based subject elective molecular biology
8. Paper – VII- biosystematics and plant physiology- The existing syllabus was reshuffled. Unit- II- topic-c- Convolvulaceae dropped, Sapotaceae and Bignoniaceae included. Unit- III – topic- protein synthesis included, unit-IV- topic-- Phytohormones from paper V shifted to VII paper, topic -c- seed production included. Unit- V- stress physiology from V paper shifted to VII paper.
9. Paper-VIII- skill based- subject elective - applied micro biology the existing syllabus was reshuffled. Unit-IV- topic- penicillin detailed study and production renamed as production of penicillin. Unit- IV- topic- leprosy dropped. Unit-V- topic-AIDS, conjunctivitis, malaria dropped and hepatitis included.
10. Paper-VIII- skill based-subject elective- horticulture- the existing syllabus was reshuffled. Unit II- topic- b- title asexual propagation renamed as vegetative propagation, unit- IV – title indoor plant culture renamed as plant culture, Unit- IV – topic- b- floriculture- production of chrysanthemum and rose are included. Unit –V- topic-b- nursery production- pruning included.
11. Practical paper –I: serial no--2 bacterial cell structure dropped and included bacterial staining, serial no-3- double staining technique of slide dropped, serial no-22- t.s of needle dropped.
12. Practical paper-II- title embryology, histology and anatomy changed as plant reproduction and plant development.



13. Practical paper-III- Convolvulaceae family dropped and Sapotaceae and Bignoniaceae plants included in biosystematics. Osmosis by using potato osmoscope, demonstration of fermentation by kuhne, s vessel dropped and estimation of available nitrogen in soil by using Kjeldahl, protein analysis by U.V spectrophotometer and instrumentization – BOD, Digital leaf area meter are included.
14. Practical paper- IV – there is no change in the Horticulture and medicinal botany. In molecular biology PCR included in instrumentation.

Part-I - 5 essay questions with internal choice. One essay from each unit carrying 16 M

Part-II – 10 very short answer questions covering all 5 units. Each question carries 2 marks.

Dr. B. Siva Kumari
H.O.D. Botany &
Chairman, Board of Studies



**III B.Sc. SEMESTER-V: BOTANY PAPER-V
(BIOSYSTEMATICS & PLANT PHYSIOLOGY): BOT-355
NEW SYLLABUS**

BIOSYSTEMATICS:

UNIT-I:

a) INTRODUCTION TO PLANT TAXONOMY

Introduction, Objectives and functions of taxonomy,
Units of classification and Principle of classification.

b) NOMENCLATURE:

Binomial nomenclature,
Generic and specific epithet, author's citation,
ICBN - principles and rules,
Taxonomic rank, type concept and principle of priority

UNIT-II:

CLASSIFICATION OF ANGIOSPERMS:

- a) Bentham and Hooker's system of classification
- b) Takatajohn's system of classification

UNIT-III:

SYSTEMATIC AND ECONOMIC IMPORTANCE OF THE FOLLOWING FAMILIES:

Annonaceae, Malvaceae, Rutaceae, Fabaceae, Cucurbitaceae and Apiaceae

PLANT PHYSIOLOGY

UNIT-IV:

a) ENZYMES:

Introduction, structure & properties
Nomenclature & classification
Enzyme action

b) WATER RELATIONS

Physical properties of water,
diffusion, , osmosis, imbibition, Plasmolysis, water potential,
ascent of sap and transpiration.

UNIT-V

a) PHOTOSYNTHESIS

Introduction, chloroplast structure, pigments, pigment systems, Hill reaction, Emerson enhancement effect, PSI and PSII, electron transport and proton transport, Photphosphorylation, carbon reduction path ways- C3, C4, CAM. Photorespiration, factors effecting photosynthesis.

b) Translocation of organic solutes, source and sink.

Suggested readings:

1. Hopkins, W.G. 1995. Introduction to Plant Physiology. John Wiley & Sons Inc., New York, USA.
2. Pandey, B.P.2007. Botany for Degree Students: Plant Physiology, Biochemistry, Biotechnology, Ecology and Utilization of Plants. S.Chand & Company Ltd., New Delhi.
3. Davis, P.H. and V.H.Heywood. 1963. Principals of Angiosperm Taxonomy. Oliver and Boyd, London.
Heywood, V.H. and D.H.Moore (Eds). 1984. Current Concepts in Plant Taxonomy.

**OLD**

**III B.Sc., SEMESTER-V::BOTANY PAPER-V
(BIOSYSTEMATICS & PLANT PHYSIOLOGY)
OLD SYLLABUS**

UNIT-I: (12-Periods)

- a) Introduction to plant taxonomy :Introduction, Objectives and functions of taxonomy,
Units and Principles of classification
Preparation of herbaria
- b) Nomenclature: Binomial nomenclature,
Generic & Specific epithet and Authors citation,
ICBN -Principles and rules,
Taxonomic rank. Type concept and Principles of priority

UNIT-II: (06-Periods)

- a) Bentham and Hooker's system of classification
b) Engler and Prantl's system of classification .

UNIT-III: (12-Periods)

Systematic and economic importance of the following families.
Annonaceae ,Malvaceae, Rutaceae,
Fabaceae, Cucurbitaceae , Apiaceae

UNIT-IV: (10-Periods)

- a) Enzymes;Introduction, Structure & properties
Nomenclature & classification
Enzyme action
- b) Water relations;Physical properties of water
Diffusion, Imbibition, Osmosis, Plasmolysis and Water potential
Transpiration , Ascent of sap

UNIT-V: (12-Periods)

- a) Stress Physiology ;Water stress and Salt stress
Temperature stress and Heavy metal stress
- b) Phytohormones: Biosynthesis, Bioassay and Physiological effects of Auxins,
Gibberellins, Cytokinins , ABA,Ethylene and Brassinosteroides

Suggested Readings:

1. Hopkins, W.G. 1995. Introduction to Plant Physiology. John Wiley & Sons Inc., New York, USA.
2. Pandey, B.P.2007. Botany for Degree Students: Plant Physiology, Biochemistry, Biotechnology, Ecology and Utilization of Plants.S.Chand& Company Ltd., New Delhi.



**III. B.Sc., SEMESTER-VI: BOTANY PAPER-VII
(BIOSYSTEMATICS & PLANT PHYSIOLOGY): BOT-367
NEW SYLLABUS**

BIOSYSTEMATICS

UNIT-I:

a) CURRENT CONCEPTS IN TAXONOMY : Cytotaxonomy, Chemo-taxonomy,
Serotaxonomy and Molecular systematics (Outlines only)

b) SYSTEMATICS AND ECONOMIC IMPORTANCE OF THE FOLLOWING FAMILIES:
Asteraceae, Sapotaceae, Asclepiadaceae, Bignoniaceae, Lamiaceae

UNIT-II:

SYSTEMATICS AND ECONOMIC IMPORTANCE OF THE FOLLOWING FAMILIES:
Amaranthaceae, Euphorbiaceae, Orchidaceae, Arecaceae & Poaceae

PLANT PHYSIOLOGY

UNIT-III:

a) RESPIRATION:

Mitochondria Structure, types of respiration: glycolysis, kreb's cycle,
Electron transport mechanism, Substrate level phosphorylation,
Oxidative phosphorylation, R.Q, fermentation,
Pentose Phosphate pathway.

b) NITROGEN METABOLISM: Introduction, Nitrogen cycle,
Biological nitrogen fixation,
Mechanism of nitrogen fixation
Protein synthesis

UNIT-IV:

a) PHYTOHORMONES: Biosynthesis, Bioassay and Physiological effects of Auxins,
Gibberellins, Cytokinins, ABA, Ethylene and
Brassinosteroides

b) SEED TECHNOLOGY: Seed structure, dormancy and Seed Banks,
Factors effecting seed viability,
Seed testing, production and Seed certification

UNIT-V

STRESS PHYSIOLOGY:

a) Water stress b) Salt stress c) Temperature stress d) Heavy metal stress

Suggested readings:

1. Hopkins, W.G. 1995. Introduction to Plant Physiology. John Wiley & Sons Inc., New York, USA.
2. Pandey, B.P. 2007. Botany for Degree Students: Plant Physiology, Biochemistry, Biotechnology, Ecology and Utilization of Plants. S.Chand & Company Ltd., New Delhi.
3. Davis, P.H. and V.H. Heywood. 1963. Principles of Angiosperm Taxonomy. Oliver and Boyd, London.
4. Heywood, V.H. and D.H. Moore (Eds). 1984. Current Concepts in Plant Taxonomy. Academic Press, London.
5. Salisbury, F.B. and C.W. Ross. 1992. Plant Physiology. 4th edn. (Indian Edition), Wordsworth, Thomson Learning Inc., USA.
6. Taiz, L. and E. Zeiger. 1998. Plant Physiology (2nd Ed.) Sinauer Associates, Inc., Publishers. Massachusetts, USA.

**OLD**

**III.B.Sc., SEMESTER-VI: BOTANY PAPER-VII
(BIOSYSTEMATICS & PLANT PHYSIOLOGY): BOT-367
OLD SYLLABUS**

UNIT-I: (12-periods)

- a) Current concept in taxonomy: Cytotaxonomy, Phytochemistry (Chemotaxonomy), Serotaxonomy and Molecular systematics (Brief account) b) Systematic and economic importance of the following families;
Asteraceae, Asclepiadaeaceae, Convolvulaceae, Lamiaceae

UNIT-II: (10-Periods)

- a) Systematic and economic importance of the following families;
Amaranthaceae, Euphorbiaceae, Orchidaceae, Arecaceae, Poaceae
b) Significant Pollination mechanisms in the above families

UNIT-III: (10-Periods)

- a) Photosynthesis: Introduction, Chloroplast structure, Pigments, Pigment systems, Hill reaction, Emerson Enhancement effect, PSI and PSII, Electron Transport and Proton Transport, Photophosphorylation, Carbon Reduction Path ways- C₃, C₄ (Kranz Anatomy), CAM, Photorespiration, Factors affecting photosynthesis.
b) Translocation of organic solutes, source and sink relations

UNIT -IV : (10-periods)

Respiration: Mitochondria Structure, Types of respiration, glycolysis, Krebs's cycle, Electron transport mechanism, Oxidative phosphorylation, R.Q, Fermentation. Pentose Phosphate pathway

UNIT-V: (08-Periods)

- a) Nitrogen Metabolism: Introduction, Nitrogen cycle,
Biological nitrogen fixation,
Mechanism of nitrogen fixation
b) Seed technology; Seed structure, Seed dormancy, Seed Banks
Factors affecting seed viability
Seed testing & Seed certification



Suggested Readings:

1. Hopkins, W.G. 1995. Introduction to Plant Physiology. John Wiley & Sons Inc., New York, USA.
2. Pandey, B.P. 2007. Botany for Degree Students: Plant Physiology, Biochemistry, Biotechnology, Ecology and Utilization of Plants. S. Chand & Company Ltd., New Delhi.
3. Davis, P.H. and V.H. Heywood. 1963. Principles of Angiosperm Taxonomy. Oliver and Boyd, London.
4. Heywood, V.H. and D.H. Moore (Eds). 1984. Current Concepts in Plant Taxonomy. Academic Press, London.
5. Salisbury, F.B. and C.W. Ross. 1992. Plant Physiology. 4th edn. (Indian Edition), Wordsworth, Thomson Learning Inc., USA.
6. Taiz, L. and E. Zeiger. 1998. Plant Physiology (2nd Ed.) Sinauer Associates, Inc., Publishers



NEW

III. B.Sc., SEMESTER-V: BOTANY PAPER-VI
SUBJECT ELECTIVE: MEDICINAL BOTANY: BOT-356-MB
NEW SYLLABUS

UNIT-I: (05-Periods)

INTRODUCTION:

Terminology, importance of medicinal plants,
Herbaria, research institutes.
Medicinal gardens.

UNIT-II: (07-Periods)

ROLE OF MEDICINAL BOTANY IN DIFFERENT MEDICAL SYSTEMS: Ayurveda,
Homeopathy and Allopathy

UNIT-III: (05-Periods)

PHARMACOGNOSY:

Introduction, branches of pharmacology,
materia medica, crude drug, source and
administration drugs.
Identification tests for secondary plant
metabolites in drugs - alkaloids, steroids and
phenolics.

UNIT-IV: (05-Periods)

- a). **CULTIVATION OF MEDICINAL PLANTS:** Importance, methods of
collection harvesting and drying
b) **ETHNOBOTANY:** Ethno botanical studies in A.P

UNIT-V: (04-Periods)

a) CONSERVATION OF MEDICINAL PLANTS:

Objectives and conservation methods.

b) ROLE OF HERBAL BASED DRUGS IN TREATING CERTAIN

HUMAN ALIMENTS IN INDIA: Diabetes, jaundice and skin diseases

Suggested readings:

1. Jain, S.K. and V.Mudgal. 1999. A Handbook of Ethnobotany. Bishen Singh Mahendra Pal Singh, Dehradun.
2. Rastogi, R.R. and B.N. Mehrotra. 1993. Compendium of Indian Medicinal Plants. Vol. I & Vol. II. CSIR, Publication and Information Directorate, New Delhi.



**III. B.Sc., SEMESTER-V: BOTANY PAPER-VI
SUBJECT ELECTIVE: MEDICINAL BOTANY: BOT-356-MB
OLD SYLLABUS**

UNIT-I: (05-Periods)

1. **INTRODUCTION:** Terminology, importance of medicinal plants, Herbaria
Research Institutes and medicinal gardens

UNIT-II: (07-Periods)

2. **ROLE OF MEDICINAL BOTANY IN DIFFERENT MEDICAL SYSTEMS:**
Ayurveda, Homeopathy and Allopathy

UNIT-III: (05-Periods)

3. **PHARMACOGNOSY:** Introduction, branches of pharmacology, materiamedica,
crude drug, source of drugs, drug administration, identification tests for secondary
Plant metabolites in drugs - alkaloids, steroids and phenolics

UNIT-IV: (05-Periods)

4. **CULTIVATION OF MEDICINAL PLANTS:** Importance, methods of collection
harvesting and drying
5. **ETHNOBOTANY:** Ethno botanical studies in A.P

UNIT-V: (04-Periods)

6. **CONSERVATION OF MEDICINAL PLANTS:** Objectives, rare species, endemic
and endangered medicinal plants and conservation methods

Suggested Readings:

1. Jain, S.K. and V.Mudgal. 1999. A Handbook of Ethnobotany. Bishen Singh MahendraPal Singh,
Dehradun.
2. Rastogi, R.R. and B.N. Mehrotra. 1993. Compendium of Indian Medicinal Plants. Vol.I &
Vol. II.
CSIR, Publication and Information Directorate, New Delhi.



NEW

**III. B.Sc., SEMESTER-VI: BOTANY PAPER-VIII
SKILL BASED ELECTIVE: APPLIED MICROBIOLOGY: BOT: 368-AM
NEW SYLLABUS**

UNIT-I: (06-Periods)

- a) Introduction, history of microbiology and Koch's postulates
- b) Microscopy: Compound Microscope, Electron microscopy-TEM and SEM
- c) Bacterial cell: Structure and Growth

UNIT-II: (06-Periods)

- a) Types of Bacteria basing on nutritional requirements,
- b) Preparation of Medium, physical conditions required for growth (Temp, PH)

UNIT-III: (04-Periods)

Disease process: Immunotherapy and Chemotherapy

UNIT-IV: (05-Periods)

- a) Antibiotic: production of Penicillin
- b) Microbial diseases of Humans caused by
- c) Bacteria- Tuberculosis

UNIT-V: (05-Periods)

Microbial diseases of Humans caused by
Virus- Hepatitis
Protozoa- Amoebiasis

Suggested readings:

1. Mc kane, L. and K. Judy.1996. Microbiology-Essentials & Applications. Mc Graw Hill, New York.
2. Pelczar, J. 2006. Microbiology.Tata Mc Graw-Hill Publishing Company Ltd. New Delhi.



**III. B.Sc., SEMESTER-VI:: BOTANY PAPER-VIII
SKILL BASED ELECTIVE: APPLIED MICROBIOLOGY: BOT: 368-AM
OLD SYLLABUS**

UNIT-I: (06-Periods)

- 1) Introduction, history of microbiology and Koch's postulates
- 2) Microscopy: Compound Microscope, Electron microscopy-TEM and SEM
- 3) Bacterial cell: Structure and Growth

UNIT-II: (06-Periods)

- 4) Types of Bacteria basing on nutritional requirements, Types of media
- 5) Preparation of Medium, Physical conditions required for growth (Temp, PH)

UNIT-III:(04-Periods)

- 6) Disease process
- 7) Immunotherapy and Chemotherapy
- 8) Antibiotic: Penicillin detailed study and production

UNIT-IV: (05-Periods)

- 9) Microbial diseases of Humans caused by Bacteria-TB, Leprosy

UNIT-V: (05-Periods)

- 10) Microbial diseases of Humans caused by
Virus-AIDS, Conjunctivitis
Protozoa-Malaria, Amoebiasis

Suggested Readings:

1. Mckane, L. and K. Judy.1996. Microbiology-Essentials and Applications.McGrawHill, New York.
2. Pelczar, J. 2006. Microbiology.TataMcGraw-Hill Publishing Company Ltd. New Delhi.



NEW

**III B.Sc., SEMESTER-VI: BOTANY PAPER-VIII
SKILL BASED ELECTIVE: HORTICULTURE: BOT: 368-HC
NEW SYLLABUS**

UNIT-I: Introduction (06-Periods)

- a) Brief history of Horticulture
- b) Protection of Horticultural plants: Weeds, Animal pests and diseases
- c) Principles, methods of pest control and classification of Pesticides

UNIT-II: Propagation of Horticultural plants (06-Periods)

- a) Sexual propagation: Seed production and certification process, seed quality analysis, seed viability and longevity
- b) Vegetative propagation: Grafting and Layering
- c) Specialized underground structure: Plants propagated by separation
Plants propagated by division

UNIT-III: Plant Culture (04-Periods)

- a) House plants: Plants grown in the windows, Garden rooms, hanging baskets
- b) Terrarium culture: Types of terrariums, tools,
the planting medium, planting, care and maintenance

UNIT-IV: Indoor Plant Culture (04-Periods)

- a) Bonsai: Principles, Creating the Bonsai, Training bonsai, Repotting bonsai and post Establishment care
- b) Floriculture: Introduction, production of *chrysanthemum* and *Rosa indica*.
- c) Green house/Poly house.

UNIT-V: Outdoor Plant Culture (06-Periods)

- a) **Land scaping:** Landscaping, Categories, designing of Landscaping and plants in the land scape
- b) **Nursery production:** Location of the nursery, types, site preparation, nursery beds and pruning.

Suggested readings:

1. Adams, C.R., K.M.Banford and M.P.Early. 1993. Principles of Horticulture. Butterworth Heineman Ltd., London.
2. Agrawal, P.K. 1993. Hand Book of Seed Technology. Dept. of Agriculture & Cooperation. National Seed Corporation Ltd., New Delhi.
3. Gorer, R. 1978. The Growth of Gardens. Feber and Faber Ltd., London.
4. Rao, K.M. 1991. A Text Book of Horticulture. McMillan India Ltd, New Delhi.



III B.Sc., SEMESTER-VI: BOTANY PAPER-VIII
SKILL BASED ELECTIVE: HORTICULTURE: BOT: 368-HC
OLD SYLLABUS

UNIT-I: Introduction (06-Periods)

1. Brief history of Horticulture
2. **Protection of Horticultural plants:** a) Weeds, Parasitic plants, Animal pests and diseases
b) Principles and methods of Pest control,
Classification of Pesticides

UNIT-II: Propagation of Horticultural plants (06-Periods)

1. **Sexual propagation:** Seed production and certification process, Seed quality analysis, Seed viability and longevity
2. **Asexual propagation:** Advantages and Disadvantages,
Cutting, Grafting, Layering
3. **Specialized under ground structure:** Plants propagated by separation
Plants propagated by division

UNIT-III: Indoor Plant Culture (04-Periods)

1. **House plants:** Plants grown in the windows, Garden rooms, hanging baskets
2. **Terrarium culture:** Types of terrariums, Tools, the planting medium, Planting, Care and Maintenance

UNIT-IV: Indoor Plant Culture (04-Periods)

3. **Bonsai:** Principles, Creating the Bonsai, Training bonsai, Repotting bonsai and Post Establishment care
4. **Hydroponic production:** Basic principles, Types of soil less plant culture

UNIT-IV: Outdoor Plant Culture (06-Periods)

1. **Land scaping:** Landscaping, Categories of Landscaping, Landscape designing, Plants in the Land scape
2. **Nursery production:** Location of the Nursery, Site preparation, Nursery structures, Types of Nursery Production
3. **Floriculture:** Introduction, Green house, Poly house, Mist chamber, Shade net.

Suggested Readings:

1. Adams, C.R., K.M. Banford and M.P. Early. 1993. Principles of Horticulture. Butterworth Heineman Ltd., London.
2. Agrawal, P.K. 1993. Hand Book of Seed Technology. Dept. of Agriculture & Cooperation. National Seed Corporation Ltd., New Delhi.
3. Gorer, R. 1978. The Growth of Gardens. Feber and Faber Ltd., London.
4. Rao, K.M. 1991. A Text Book of Horticulture. McMillan India Ltd, New Delhi.



**BOARD OF STUDIES
DEPARTMENT OF ZOOLOGY**

Minutes of the meeting of the Board of Studies in Zoology held on Friday, 24.02.2012
at 2.30 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Dr. Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *B. Babu*

University Nominee:

3. PROF.V.VIVEKA VARDHANI *V - viveka vardhani*

External Experts:

4. DR. K. RAMANESWARI *K. Rameswari*
5. PROF.G.GNANAMANI *G. Gnanamani*

Faculty

6. SRI K RAVI SANKAR *K. Ravi Sankar*
7. SRI G M SRIRANGAM *G. M. Srirangam*
8. SRI B JOHN *B. John*



DEPARTMENT OF ZOOLOGY RESOLUTIONS

The B.O.S in Zoology met on Friday, 24th Feb., 2012 at 2.30pm in the college conference hall.

Rev.Fr.Dr.A.Francis Xavier, SJ. Principal, welcomed the gathering. Initiating the deliberations, Sri. K. Ravisankar, Chairman, B.O.S. read out the resolutions of the previous board and reviewed the syllabus followed during the current academic year.

The following resolutions were passed unanimously

1. It is resolved to include only morphology and reproduction in Paramoecium under the type study of Paramoecium in Unit-I, include only morphology and life cycle of Obelia under the type study of Obelia in Unit-II, to delete blood vascular system in the type study of Hirudinaria in Unit-III, to delete respiratory tree in Holothuroidea in Unit-V in the Paper-I titled Animal diversity-I(Non-chordata) with effect from the academic year 2012-13.
2. It is resolved to delete the type study of Balanoglossus and Herdmania and introduce type study of Amphioxus and retrogressive metamorphosis in Herdmania Unit-I and to delete the excretory system from the type study of Columba in Unit-V in the Paper-II titled Animal diversity-II(Chordata) with effect from the academic year 2012-13.
3. It is resolved to continue with the existing syllabus for the Paper-III, titled Animal physiology and Developmental biology, General elective (Pharma Drug marketing), Paper-V(Ecology, Evolution and Animal behavior), Paper-VI(Principles of Biochemistry, Immunology-subject electives), paper-VII(Applied Zoology) and Paper-VIII(Ornamental Fisheries-skill based elective) for the next academic year.
4. It is resolved to change the title of Unit-I from Clinical Biochemistry and Microbiology to Clinical Biochemistry and Public health Parasitology in Paper-VIII (Clinical biology and Community and Social medicine)
5. It is resolved to delete the diseases Diphtheria, Whooping cough, common cold, Mumps, Measles, Small pox, Polio, Hepatitis A and B and introduce Amoebiasis, Malaria, Taeniasis, Filariasis in Unit-I of Paper- VIII(Clinical biology and Community and Social medicine) with effect from 2012-13.
6. It is resolved to shift the topic "Cancer" from Unit-I to Unit-IV in Paper VIII (Clinical biology and Community and Social medicine).
7. It is resolved to delete drugs Marijuana, Heroin, LSD, ECSTASY, and control and management of drug addiction from Unit-IV of Paper-VIII (Clinical biology and Community and Social medicine).
8. The meeting ended with Sri. G.M.Srirangam, proposing vote of thanks.

K.Ravi Sankar
H.O.D. Zoology &
Chairman, Board of Studies

**NEW**

**I B.Sc.- ZOOLOGY-SEMESTER – I - PAPER - I
ANIMAL DIVERSITY-I: NON-CHORDATA : ZOO- 111
NEW SYLLABUS**

UNIT – I: PROTOZOA, ORIGIN OF METAZOA AND PORIFERA (15 hours)

Type study of *Paramecium* (morphology and reproduction only)

Nutrition in Protozoa.

Origin of metazoa.

Type study of *Sycon*

Canal systems in sponges.

UNIT-II: CNIDIARIA AND PLATHEYLMINTHES (12 hours)

Type study of *Obelia* (morphology and reproduction only)

Polymorphism in Hydrozoa and corals and coral reefs.

Type study of *Fasciola*

UNIT - III: ANNELIDA AND MOLLUSCA (15 hours)

Type study of *Hirudinaria* (except haemocoelomic system)

Vermiculture.

Type study of *Pila* (external morphology, digestive system and nervous system only)

Torsion in Gastropoda

UNIT -IV: ONYCHOPHORA AND ARTHROPODA (12 hours)

Onychophora - Characters and Affinities.

Type study of *Palaemon* (external morphology without appendages, digestive system, respiratory system, nervous system and reproductive system only)

Apiculture.

UNIT – V: ECHINODERMATA (6 hours)

Type study of *Asterias* (external morphology and water vascular system only)

TEXTBOOKS:

1. Invertebrate Zoology: E. L. Jordan and P. S. Verma
2. A Textbook of Invertebrates: R. L. Kotpal
3. Invertebrate Zoology: P. S. Dhami and R. S. Dhami
4. Unified Course in Zoology, Vol. 1: Dr. Ramesh Chand

REFERENCE BOOKS:

1. Invertebrate Zoology: R. D. Barnes
2. Invertebrate Zoology: Marshall and Williams



**I B.Sc.- ZOOLOGY-SEMESTER – I - PAPER - I
ANIMAL DIVERSITY-I: NON-CHORDATA : ZOO- 111
OLD SYLLABUS**

UNIT – I: PROTOZOA, ORIGIN OF METAZOA AND PORIFERA (15 hours)

Type study of *Paramecium*
Nutrition in Protozoa.
Origin of metazoa.
Type study of *Sycon*
Canal systems in sponges.

UNIT-II: CNIDIARIA AND PLATHEYLMINTHES (12 hours)

Type study of *Obelia*
Polymorphism in Hydrozoa and corals and coral reefs.
Type study of *Fasciola*

UNIT - III: ANNELIDA AND MOLLUSCA (15 hours)

Type study of *Hirudinaria*
Vermiculture.
Type study of *Pila* (external morphology, digestive system and nervous system only)
Torsion in Gastropoda

UNIT -IV: ONYCHOPHORA AND ARTHROPODA (12 hours)

Onychophora - Characters and Affinities.
Type study of *Palaemon* (external morphology without appendages, digestive system, respiratory system, nervous system and reproductive system only)
Apiculture.

UNIT – V: ECHINODERMATA (6 hours)

Type study of *Asterias* (external morphology and water vascular system only)
Respiratory tree in Holothuroidea

TEXTBOOKS:

1. Invertebrate Zoology: E. L. Jordan and P. S. Verma
2. A Textbook of Invertebrates: R. L. Kotpal
3. Invertebrate Zoology: P. S. Dhama and R. S. Dhama
4. Unified Course in Zoology, Vol. 1: Dr. Ramesh Chand

REFERENCE BOOKS:

1. Invertebrate Zoology: R. D. Barnes
2. Invertebrate Zoology: Marshall and Williams



NEW

**I B.Sc.- ZOOLOGY-SEMESTER – II - PAPER - II
ANIMAL DIVERSITY-II: CHORDATA : ZOO- 122
NEW SYLLABUS**

UNIT-I: PROCHORDATA (14 hours)

Type study of Amphioxus
Affinities of Hemichordata.
Herdmania retrogressive metamorphosis only

UNIT-II: AGNATHA AND PISCES (8 hours)

Characters of Cyclostomata with examples.
Migration in fishes.
Scales in fishes.

UNIT-III: AMPHIBIA (15 hours)

Type study of *Rana* – external morphology, digestive, respiratory and excretory systems only.
Parental care in Amphibia

UNIT – IV: REPTILIA (8 hours)

Type study of *Calotes* – circulatory, nervous and reproductive systems only.

UNIT-V: AVES AND MAMMALIA (15 hours)

Type study of *Columba* (exoskeleton, respiratory system, circulatory system only)
Volant adaptations and migration of birds.
Dentition in mammals.

TEXT BOOKS:

1. Vertebrate Zoology: E. L. Jordan and P. S. Verma
2. A Textbook of Vertebrates: R. L. Kotpal
3. Vertebrate Zoology: P. S. Dhama and R. S. Dhama
4. Unified Course in Zoology, Vol. 2: Dr. Ramesh Chand

REFERENCE BOOKS:

1. A Text Book of Vertebrates: Parker and Haswell
2. Anatomy of the Chordates: Charles K. Weichert



**I B.Sc.- ZOOLOGY-SEMESTER – II - PAPER - II
ANIMAL DIVERSITY-II: CHORDATA : ZOO- 122
OLD SYLLABUS**

UNIT-I: PROCHORDATA (14 hours)

Type study of *Balanoglossus*

Affinities of Hemichordata.

Type study of *Herdmania* including retrogressive metamorphosis

UNIT-II: AGNATHA AND PISCES (8 hours)

Characters of Cyclostomata with examples.

Migration in fishes.

Scales in fishes.

UNIT-III: AMPHIBIA (15 hours)

Type study of *Rana* – external morphology, digestive, respiratory and excretory systems only.

Parental care in Amphibia

UNIT – IV: AND REPTILIA (8 hours)

Type study of *Calotes* – circulatory, nervous and reproductive systems only.

UNIT-V: AVES AND MAMMALIA (15 hours)

Type study of *Columba* (exoskeleton, respiratory system, circulatory system and excretory systems only)

Volant adaptations and migration of birds.

Dentition in mammals.

TEXT BOOKS:

1. Vertebrate Zoology: E. L. Jordan and P. S. Verma
2. A Textbook of Vertebrates: R. L. Kotpal
3. Vertebrate Zoology: P. S. Dhami and R. S. Dhami
4. Unified Course in Zoology, Vol. 2: Dr. Ramesh Chand

REFERENCE BOOKS:

1. A Text Book of Vertebrates: Parker and Haswell
2. Anatomy of the Chordates: Charles K. Weichert

**NEW**

**I B.Sc.-ZOOLOGY-SEMESTERS – I & II - PRACTICAL- I
ANIMAL DIVERSITY: NON-CHORDATA AND CHORDATA
NEW SYLLABUS**

1. General characters and classification of the following phyla and sub-phyla up to classes with suitable examples:
Protozoa, Porifera, Cnidaria, Platyhelminthes, Nematoda, Annelida, Arthropoda, Mollusca, Echinodermata, Hemichordata, Urochordata and Cephalochordata and Agnatha – cyclostomata.
Pisces (up to subclass only), Amphibia (up to orders), Reptilia (up to orders), Aves (up to subclass only) and Mammalia (up to infraclass only).

2. Identification, observation and classification of the following museum slides and specimens.
Protozoa – *Euglena*, *Amoeba*, *Paramecium* and *Vorticella*
Porifera – *Sycon*, *Hyalonema*, *Euspongia* and *Spongilla*
Cnidaria – *Hydra*, *Obelia*, *Aurelia*, *Metridium* and *Gorgonia*
Platyhelminthes – *Fasciola hepatica* and *Taenia solium*
Nematoda – *Ascaris lumbricoides* male and female
Annelida – *Nereis*, *Pheretima* and *Hirudinaria*
Arthropoda – *Aranea*, *Palamnaeus*, *Julus* and *Scolopendra*
Mollusca – *Chiton*, *Pila*, *Aplysia*, *Loligo* and *Sepia*
Echinodermata – *Asterias*, *Echinus*, *Ophiothrix*, *Holothuria* and *Antedon*
Hemichordata – *Balanoglossus*
Urochordata – *Herdmania* and *Botryllus*
Cephalochordata – *Branchiostoma*
Pisces – *Scoliodon*, *Stegostoma*, *Torpedo*, *Trygon*, *Labeo* and *Anabas*
Amphibia – *Amblystoma*, *Hyla*, *Rana* and *Bufo*
Reptilia – *Chelone*, *Testudo*, *Trionyx*, *Naja*, *Vipera*, *Natrix*, *Bungarus*, *Ptyas*, *Hydrophis*, *Draco*, *Phrynosoma*, and *Varanus*
Aves – *Psittacula* (parrot), *Eudymnis* (koel) and *Halcyon* (kingfisher)
Mammalia – *Manis* (scaly anteater)

3. Dissections:
Major dissections:
Leech – excretory and reproductive systems
Prawn – Appendages and nervous system
Unio – digestive system
Calotes – Arterial system (demonstration only)
Minor dissections:
Leech – mounting of jaws
Unio – mounting of pedal ganglion
Calotes – urinogenital systems and mounting of brain (demonstration only)



**I B.Sc.-ZOOLOGY-SEMESTERS – I & II - PRACTICAL- I
ANIMAL DIVERSITY: NON-CHORDATA AND CHORDATA
OLD SYLLABUS**

1. General characters and classification of the following phyla and sub-phyla up to classes with suitable examples:
Protozoa, Porifera, Cnidaria, Platyhelminthes, Nematoda, Annelida, Arthropoda, Mollusca, Echinodermata, Hemichordata, Urochordata and Cephalochordata and Agnatha – cyclostomata.
Pisces (up to subclass only), Amphibia (up to orders), Reptilia (up to orders), Aves (up to subclass only) and Mammalia (up to infraclass only).
2. Identification, observation and classification of the following museum slides and specimens.
Protozoa – *Euglena*, *Amoeba*, *Paramecium* and *Vorticella*
Porifera – *Sycon*, *Hyalonema*, *Euspongia* and *Spongilla*
Cnidaria – *Hydra*, *Obelia*, *Aurelia*, *Metridium* and *Gorgonia*
Platyhelminthes – *Fasciola* and *Taenia solium*
Nematoda – *Ascaris* male and female
Annelida – *Nereis*, *Pheretima* and *Hirudinaria*
Arthropoda – *Aranea*, *Palamnaeus*, *Julus* and *Scolopendra*
Mollusca – *Chiton*, *Pila*, *Aplysia*, *Loligo* and *Sepia*
Echinodermata – *Asterias*, *Echinus*, *Ophiothrix*, *Holothuria* and *Antedon*
Hemichordata – *Balanoglossus*
Urochordata – *Herdmania* and *Botryllus*
Cephalochordata – *Branchiostoma*
Pisces – *Scoliodon*, *Stegostoma*, *Torpedo*, *Trygon*, *Labeo* and *Anabas*
Amphibia – *Amblystoma*, *Hyla*, *Rana* and *Bufo*
Reptilia – *Chelone*, *Testudo*, *Trionyx*, *Naja*, *Vipera*, *Natrix*, *Bungarus*, *Ptyas*, *Hydrophis*, *Draco*, *Phrynosoma*, and *Varanus*
Aves – *Psittacula* (parrot), *Eudymnis* (koel) and *Halcyon* (kingfisher)
Mammalia – *Manis* (scaly anteater)
3. Dissections:
Major dissections:
Leech – excretory and reproductive systems
Prawn – Appendages and nervous system
Pila – nervous system
Calotes – Arterial system
Minor dissections:
Leech – mounting of jaws
Pila – mounting of radula
Calotes – urinogenital systems and mounting of brain



NEW

**III B.Sc., - ZOOLOGY- SEMESTER-V – PAPER-VI
PRINCIPLES OF BIOCHEMISTRY: ZOO-356-BC
SUBJECT ELECTIVE - NEW SYLLABUS**

UNIT-1: METABOLISM (10 hours)

Metabolic pathway of carbohydrates - Kreb's cycle and economics of energy production, HMP pathway, glycconeogenesis, glycogenesis and glycolysis.

UNIT-2: (7 hours)

Metabolic pathway of proteins - hydrolysis of proteins, transamination, deamination and Ornithine cycle.

Metabolic pathway of lipids - oxidation of fatty acids.

UNIT – 3: (3 hours)

Elementary knowledge and the role of the following minerals- sodium, potassium, calcium, iron, copper, phosphates and chlorides.

UNIT-4: ENZYMES (8 hours)

Outline classification, enzyme kinetics, factors influencing enzyme activity- pH, temperature, enzyme inhibition. Proenzymes, coenzymes and isoenzymes.

UNIT-5: (2 hours)

Movement of materials through cell membrane-Active transport, passive transport and bulk transport.

TEXTBOOKS:

1. A Textbook of Biochemistry: B.D. Singh
2. A Textbook of Biochemistry: U. Satyanarayana

REFERENCE BOOKS:

1. Biochemistry: Lehninger
2. Biochemistry: Stryer



**III B.Sc., - ZOOLOGY- SEMESTER-V – PAPER-VI
PRINCIPLES OF BIOCHEMISTRY: ZOO-356-BC
SUBJECT ELECTIVE - OLD SYLLABUS**

UNIT-1: METABOLISM (10 hours)

Metabolic pathway of carbohydrates - Kreb's cycle and economics of energy production, HMP pathway, glyconeogenesis, glycogenesis and glycolysis.

UNIT-2: (7 hours)

Metabolic pathway of proteins - hydrolysis of proteins, transamination, deamination and Ornithine cycle.

Metabolic pathway of lipids - oxidation of fatty acids.

UNIT – 3: (3 hours)

Elementary knowledge and the role of the following minerals- sodium, potassium, calcium, iron, copper, phosphates and chlorides.

UNIT-4: ENZYMES (8 hours)

Outline classification, enzyme kinetics, factors influencing enzyme activity- pH, temperature, enzyme inhibition. Proenzymes, coenzymes and isoenzymes.

UNIT-5: (2 hours)

Movement of materials through cell membrane-Active transport, passive transport and bulk transport.

TEXTBOOKS:

1. A Textbook of Biochemistry: B.D. Singh
2. A Textbook of Biochemistry: U. Satyanarayana

REFERENCE BOOKS:

1. Biochemistry: Lehninger
2. Biochemistry: Stryer

**NEW**

**III B.Sc., - ZOOLOGY- SEMESTER-VI – PAPER-VIII
CLINICAL BIOLOGY AND COMMUNITY & SOCIAL MEDICINE: ZOO-368-CB
SKILL-BASED ELECTIVE - NEW SYLLABUS**

Objectives:

1. To acquire basic skills in running laboratory as a vocation.
2. To learn basic techniques in haematology, clinical biochemistry and clinical microbiology.
3. To understand the basic principles of clinical immunology.
4. To acquire basic knowledge in community and social medicine.

SECTION – A: CLINICAL BIOLOGY.**UNIT-1: CLINICAL BIOCHEMISTRY AND PUBLIC HEALTH PARASITOLOGY (7 hours)**

Regulation of blood sugar.

Diabetes mellitus – characteristic features and types of diabetes.

Glucose tolerance test.

Symptoms and therapy of -

Common protozoan, helminthic diseases- Amoebiasis, Malaria, Taeniasis, Filariasis,

Common bacterial diseases- Tuberculosis Tetanus, Cholera, Leprosy , Plague,

Common viral diseases -Chicken pox, Dengue fever, Rabies, Encephalitis.

UNIT -2: HAEMATOLOGY (7hours)

Composition and functions of blood.

Blood groups and Rh system.

Disorders of blood cells- anemia and Leukemia.

Blood clotting and its abnormalities –Theories (Howell's theory, Best and Tailor's theory and Fuld and Spiros theory) ,Mechanism of coagulation , abnormalities of blood clotting and anti coagulants.

UNIT-3: CLINICAL IMMUNOLOGY (7hours)

What is immunology, types of immunity, brief account of humoral immunity (brief account of B- lymphocytes, types of anti bodies , antibody structure, mode of action of antibodies like neutralization, agglutination ,precipitation, opsonisation complement system) and brief account of cellular immunity(Types of T- lymphocytes ,types of lymphokines and their role. Hyper sensitivity- Definition, types: immediate hyper sensitivity (anaphylaxis , generalized anaphylaxis localized anaphylaxis , antibody dependent toxicity, immune complex reaction) and Delayed hyper sensitivity; Prevention and treatment of hyper sensitivity.



SECTION-B: COMMUNITY AND SOCIAL MEDICINE

UNIT-4: (4 hours)

Drug addiction- common drugs (tobacco, cocaine), their side effects.

Alcoholism- effects on various organs like heart, lungs, liver, pancreas, brain, and intestine; chronic alcoholism, alcoholic withdrawal syndrome, control and treatment.

Cancer biology- what is cancer, types, characteristics of cancer cells and causative factors.

UNIT-5 (5 hours)

Sexually transmitted diseases- gonorrhoea and syphilis (symptoms, diagnosis, treatment and control).

HIV and AIDS

Nutritional deficiency diseases - kwashiorkor and marasmus.

TEXT BOOK:: Microbiology: Pelzar

REFERENCE BOOK: Praful B. Godkar- A Text book of Medical Lab Technology.

**OLD**

**III B.Sc., - ZOOLOGY- SEMESTER-VI – PAPER-VIII
CLINICAL BIOLOGY AND COMMUNITY & SOCIAL MEDICINE: ZOO-368-CB
SKILL-BASED ELECTIVE - OLD SYLLABUS**

Objectives:

1. To acquire basic skills in running laboratory as a vocation.
2. To learn basic techniques in haematology, clinical biochemistry and clinical microbiology.
3. To understand the basic principles of clinical immunology.
4. To acquire basic knowledge in community and social medicine.

SECTION – A: CLINICAL BIOLOGY**UNIT-1: CLINICAL BIOCHEMISTRY AND MICROBIOLOGY (7 hours)**

Regulation of blood sugar.

Diabetes mellitus – characteristic features and types of diabetes.

Glucose tolerance test.

Symptoms and therapy of -

Common bacterial diseases- Tuberculosis, Diphtheria, Tetanus, Whooping cough, Cholera, Leprosy, Plague,

Common viral diseases, Common cold influenza, measles, mumps, chicken pox, small pox, polio, Chicken pox, Dengue fever, Rabies, Encephalitis, Hepatitis A&B

Cancer biology- what is cancer, types, characteristics of cancer cells and causative factors.

UNIT -2: HAEMATOLOGY (7hours)

Composition and functions of blood.

Blood groups and Rh system.

Disorders of blood cells- anemia and Leukemia.

Blood clotting and its abnormalities –Theories (Howell's theory, Best and Tailor's theory and Fuld and Spiros theory) ,Mechanism of coagulation , abnormalities of blood clotting and anti coagulants.

UNIT-3: CLINICAL IMMUNOLOGY (7hours)

What is immunology, types of immunity, brief account of humoral immunity (brief account of B- lymphocytes, types of anti bodies , antibody structure, mode of action of antibodies like neutralization, agglutination ,precipitation, opsonisation complement system) and brief account of cellular immunity(Types of T- lymphocytes ,types of lymphokines and their role. Hyper sensitivity- Definition, types: immediate hyper sensitivity (anaphylaxis , generalized anaphylaxis localized anaphylaxis , antibody dependent toxicity, immune complex reaction) and Delayed hyper sensitivity; Prevention and treatment of hyper sensitivity.



SECTION-B: COMMUNITY AND SOCIAL MEDICINE

UNIT-4: (4 hours)

Drug addiction- common drugs (tobacco, cocaine, marijuana, heroin, LSD, ECSTASY), their side effects, control and management..

Alcoholism- effects on various organs like heart, lungs, liver, pancreas, brain, and intestine; chronic alcoholism, alcoholic withdrawal syndrome, control and treatment.

UNIT-5 (5 hours)

Sexually transmitted diseases- gonorrhoea and syphilis (symptoms, diagnosis, treatment and control).

HIV and AIDS

Nutritional deficiency diseases - kwashiorkor and marasmus.

TEXT BOOK:: Microbiology: Pelzar

REFERENCE BOOK: Praful B. Godkar- A Text book of Medical Lab Technology.



BOARD OF STUDIES
DEPARTMENT OF SCIENCE, TECHNOLOGY & DEVELOPMENT
AND ENVIRONMENTAL STUDIES

Minutes of the meeting of the Board of Studies in Science, Technology & Development and Environmental Education held on Friday, 09.03.2012 at 10.30 A.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier SJ*
2. FR.N.BUJJI BABU, SJ, Vice Principal

University Nominee:

3. DR.JN LAVANYA LATHA *J. Nareene Lavanya Latha*

External Experts:

4. SRI V BABU RAO *Sri V Babu Rao*
5. MS.P.M.VASANTHA KUMARI *P.M. Vasantha*

Faculty:

6. SRI K RAVI SANKAR *K. Ravi Sankar*
7. DR.MRS.B.SIVA KUMARI *B. Siva Kumari*
8. DR.MRS.T.ROSE MARY *T. Rose Mary*
9. DR.J.CHANDRA SEKHAR RAO
10. SRI P SRINIVASA RAO *P. Srinivasa Rao*
11. MRS.S.SAILAJA *S. Sailaja*



**DEPARTMENT OF SCIENCE, TECHNOLOGY & DEVELOPMENT
AND ENVIRONMENTAL STUDIES
RESOLUTIONS**

The meeting of Board of Studies in Science, Technology & Development and Environmental Studies was held on 9-3-2012 at 10.30 am in College conference hall. The meeting chaired by Mr. K. Ravi Shankar, Head, Department of Zoology, Chairman, BOS welcomed the gathering. The following resolutions were passed unanimously.

I). It was resolved to make modifications in the syllabus of Science, Technology and Development paper (semester-III) as follows:

Unit I :

- Scientific methods i.e. observation, hypothesis, experiment, theory and law. Hydrological cycle are included.
- Soil characteristics, texture, fertility and its control. water consumption at global and regional levels, management of water bodies, Stanley Miller experiment, bacterial transformation, Hershey chase experiment were dropped.

Unit –II :

- Tetracycline, antimalarial, analgesics and HIV AIDS drugs, nylon 66-rubber and synthetic rubber were dropped.
- Replacing N, P fertilizers with synthetic fertilizers.

Unit- III :

- New media technologies- satellite communication, internet were proposed.
- Press radio, T.V, venereal diseases- Gonorrhoea, syphilis were dropped.
- AIDS detailed study was proposed.

Unit- IV : Genetic engineering and its applications, agriculture, cloning were dropped

Unit –V :

- Techniques in farming and crop production, food processing methods were dropped
- Green, blue, white revolutions were included.

II). It was resolved to make modifications in the syllabus of Environmental studies (semester IV) paper as follows:

Unit-I and Unit-II: The topic “Ecosystem” was moved from existing unit –II to Unit – I.

Unit – V :

- The title “Human population and environment” was changed into “Human population”.
- Concept of ecotourism and social forestry were dropped.
- “Population characteristics” was renamed as “Demographic studies in human population” in which a) population size b)dispersion c) Age structure d) Natality e)Mortality f) Life expectancy g) demographic transition were included.

III). It was resolved to adopt uniform pattern of question paper.

The meeting concluded with Dr.Mrs. B. Siva Kumari, proposing vote of thanks.

(K.Ravi Sankar)
Chairman, Board of Studies

**NEW**

**II B.A / B.Sc / B. Com - SEMESTER – III
SCIENCE, TECHNOLOGY & DEVELOPMENT
NEW SYLLABUS**

UNIT – I

Science and Technology- Introduction, scientific method – procedure of science, observation, hypothesis, experiment, theory and law.

Earth system _ Characteristic features- Geological layers, Hydrosphere, Atmosphere. Geological layers - crust, mantle and core. Hydrosphere –Hydrological cycle. Atmosphere – Troposphere, Stratosphere, Ionosphere. (3hrs)

Life sciences : Concept of origin of life, DNA as Genetic material.

Composition of blood, Blood groups and compatibility.

Vitamins – Natural sources, biological significance and deficiency disorders. (3hrs)

UNIT – II

Chemical Sciences – Drugs – Antibiotics – Penicillin (2hrs)

Plastics and Polymers – Polyethene, Polyvinylchloride (PVC) .(2hrs)

Fertilisers- Synthetic and Biofertilizers their applications.(2hrs)

TECHNOLOGY AND DEVELOPMENT**UNIT – III**

Communication: New Media technologies – Satellite Communication, Internet.(2hrs)

Health: Sex determination in human beings; Genetic disorders – Color blindness, Haemophilia, Turners syndrome, Klinefelters syndrome (3hrs)

Venereal diseases – AIDS in detail (3hrs)

UNIT - IV

Biotechnology – Introduction, Applications – Health and Human welfare. (3hrs)

Mushroom cultivation- Spawn production, mushroom production.(2hrs)

UNIT- V

Agriculture Technology – Various revolutions in Indian agriculture-Green, White and Blue revolutions(4hrs).

Food Technology - Food preservation methods.(2 hrs)

National Institutions (Sciences) – List of national institutions and their headquarters.(1hr)

References:

- 1) Science and Civilization-Madan Lal Malpani ,V.Prabhakaraiah
- 2) Animal physiology-P.S.Verma and Agarwal



**II B.A / B.Sc / B. Com - SEMESTER – III
SCIENCE, TECHNOLOGY & DEVELOPMENT
OLD SYLLABUS**

UNIT – I

Earth system – Characteristic features – Lithosphere, Hydrosphere, Atmosphere. Lithosphere – Soil characteristics, texture, fertility and its control. Hydrosphere – water consumption at global level and regional level; management of water bodies. Atmosphere – troposphere, Stratosphere, ionosphere (3 hr)

Life sciences – Concept of origin of life (Stanley Muller Experiment) DNA as genetic material (Bacterial transformation, Hershey Chase expt); Composition of blood; Blood groups and compatibility; Vitamins – natural sources, biological significance and deficiency disorders (5 hrs)

UNIT – II

Chemical Sciences – Drugs – Antibiotics – Penicillin, tetracycline, anti malarial, analgesics HIV AIDS drugs – abacavir (Ziagen), Zidovudine (Retravir, AZT, ADV). (3hrs)

Plastics and Polymers – Polythene, Polyvinylchloride (PVC) nylon 66 – rubber and synthetic rubber (2hrs)

Fertilisers – Nitrogen and Phosphorus fertilisers – Biofertilisers – applications and their effects on nature. (2 hrs)

TECHNOLOGY AND DEVELOPMENT

UNIT – III

Communication: Press, Radio, TV and satellite with special reference to genesis, advancement and present scenario. (2hrs)

Health: Sex determination in human beings; genetic disorders – color blindness, hemophilia, Turner's syndrome, Klienfelter's syndrome. Venereal diseases – gonorrhoea, syphilis. AIDS. (4hrs)

UNIT - IV

Biotechnology – Introduction, applications – health and human welfare, agriculture, cloning (Dolly). Genetic Engineering (rDNA technology) and its applications. Mushroom culture. (4hrs)

UNIT- V

Agriculture Technology – Techniques in farming and crop production; various revolutions in Indian Agriculture (2hrs)

Food Technology - Food processing (ginger/chilly processing) methods of food preservation. (2hrs)

National Institutions (Sciences) – List of national institutions and their headquarters. (1hr).

References:

- 1) Science and Civilization-Madan Lal Malpani ,V.Prabhakaraiah
- 2) Animal physiology-P.S.Verma and Agarwal



**II BA/B.Sc/B.Com – IV SEMESTER
ENVIRONMENTAL STUDIES : EST 240
NEW SYLLABUS**

UNIT – 1:**THE MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES AND ECOSYSTEM**

- a) Definition and importance of environmental studies (1hr)
- b) ECOSYSTEM: Concept of an ecosystem – Structure and Function of an ecosystem (biogeochemical cycles are not included)
- Structure- Producers, consumers and decomposers (2hrs)
- Functional: Food chains, Food web and Ecological Pyramids. (4hrs)

UNIT-2**NATURAL RESOURCES:**

- Renewable resources – Forest (uses of forests, overexploitation, deforestation and causes of deforestation) (2hrs)
- Non-renewable resources – Coal, Petroleum, Natural gas and Nuclear Energy . (3hrs)

UNIT – 3:**BIODIVERSITY AND ITS CONSERVATION:**

- Introduction, definition, levels - Genetic, Species and Ecosystem diversity. (1hr)
- Threats to biodiversity –habitat loss, poaching of wildlife. (2hrs)
- Conservation of biodiversity – *In situ* and *Ex situ* conservation. (4hrs)

UNIT – 4:**ENVIRONMENTAL POLLUTION:**

- Causes, effects and control measures of Air pollution, Water pollution, Soil & Radio active pollution. {with particular emphasis on Global warming, green house gases – (CO₂ and CFCs) Acids rains, Ozone layer depletion} (6hrs)
- Climate change
- The Environment Protection Act, 1986 (1hr)

UNIT – 5:**HUMAN POPULATION:**

- Introduction, definition, Demographic studies in human population.- (a. Population size, b. Dispersion, c. Age structure, d. Natality, e. Mortality, f. Life expectancy, g. Demographic transition) (4hrs)

Reference:

- 1) Environmental Studies by Anubha Kaushik & C.P. Kaushik
- 2) Fundamental concepts in environmental studies by Dr. D.D. Mishra.
- 3) Ecology by Mohan P. Arora
- 4) Ecology & Environment by P.D. Sharma.



**II BA/B.Sc/B.Com – IV SEMESTER
ENVIRONMENTAL STUDIES : EST 240
OLD SYLLABUS**

UNIT – 1: MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES

Definition and importance of environment (1hr)

UNIT – 2:

a) **ECOSYSTEM**

Concept of ecosystem – structure and functions of an ecosystem (biogeochemical cycles are not included).

Structure- Producers, consumers and decomposers (2hrs)

Functional: Ecological Pyramids, Food chains, Food web, Energy flow (4hrs)

b) **NATURAL RESOURCES**

Renewable resources – Forest (uses of forests, overexploitation, deforestation and causes of deforestation) (2hrs)

Nonrenewable resources – Coal, petroleum, natural gas and nuclear energy . (3hrs).

UNIT – 3: BIODIVERSITY AND ITS CONSERVATION IN INDIA

Introduction, definition, genetic, species and ecosystem diversity. (1hr)

Threats to biodiversity –habitat loss, poaching of wildlife. (2hrs)

Conservation of biodiversity – in situ and ex situ conservation. (4hrs)

UNIT – 4: ENVIRONMENTAL POLLUTION

Causes, effects and control measures of

Air pollution, Water pollution ,Soil& Radio active pollution.

(with particular emphasis on Global warming, green house gases – CO₂ and CFCs
Acids rains, Ozone depletion) (6hrs)

Climate change

The Environment Protection Act, 1986 (1hr)

UNIT – 5: HUMAN POPULATION AND ENVIRONMENT

Population definition, Population characters, concepts of Ecotourism and social forestry. (4hrs)

Reference:

- 1) Environmental Studies by Anubha Kaushik & C.P.Kaushik
- 2) Fundamental concepts in environmental studies by Dr. D.D.Mishra.
- 3) Ecology by Mohan P.Arora
- 4) Ecology & Environment by P.D.Sharma.



**BOARD OF STUDIES
DEPARTMENT OF MICROBIOLOGY**

Minutes of the meeting of the Board of Studies in Microbiology held on
Wednesday, 08.02.2012 at 02.00 PM.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal

University Nominee:

3. DR.K.AMMANI *Ammannu-K 8/2/12*

External Experts:

4. SRI J RAM PRASAD *J Ram Prasad 8/2/12*
5. SRI V UMAMAHESWARA RAO *Umamaheswararao 8/2/12*

Faculty:

6. DR.B.SIVA KUMARI *B. Siva Kumari*
7. SRI.K BALACHANDRA *K. Balachandra 8/2/12*
8. MS.M.GLORY *M. Glory 8/2/12*



DEPARTMENT OF MICROBIOLOGY RESOLUTIONS

The Board of Studies in **Microbiology** held in Conference Hall on 08.02.2012.

All the members participated actively and discussed about the Microbiology syllabus, model paper of theory & practicals for the 1st, 2nd & 3rd year B.Sc and projects for the final year students and the following resolutions are made.

It is resolved that:

1. Semester I: (Paper-I) Unit-I: Alexander Fleming, Beijernick & Winogrdsky topics have been deleted as the students will be taught in their final year about the scientists
2. Semester-IV: (Paper IV) Unit- I: Order of the topics was changed.(Cistron, Recon & Muton)
Unit-IV: In 'Artificial mechanism of gene transfer' topic, Chemical methods were added
Unit- V: The topic 'Basic Principles of Genetic Engineering' was changed as 'Brief account on r-DNA technology'
3. Semester -V: (Paper-V) Unit III: *Azotobacter* and *Cyanobacteria* were deleted.
Unit IV: Tomato leaf curl was deleted in plant diseases
Unit-V: Industrial production of Vitamins & Biogas were deleted
4. Semester- VI (Paper-VII) Unit IV: Autoimmunity and transplantation topics were deleted as the topics will be discussed in Unit V
Unit V: 'Graves disease' was deleted in 'Autoimmunity' topic
5. Semester-VI : (Paper-VIII) Unit I: the topic 'Antiviral substances' was deleted
Unit III: The topic 'Gonnorrhoea' was deleted and AIDS& Hepatitis were incorporated in the topic ' contact diseases'

K.Balachandra
HOD Microbiology
Chairman, Board of Studies

**NEW**

**I B.Sc. SEMESTER- I MICROBIOLOGY PAPER-I
INTRODUCTORY MICROBIOLOGY : MIB-111
NEW SYLLABUS**

UNIT-I

No. of periods: 8

Definition and History of Microbiology
Contributions of Antony Von Leeuwenhoek, Louis Pasteur, Robert Koch, Edward Jenner
Importance and applications of Microbiology
Outline classification of living organisms- Hackel, Whittaker, Carlwoese

UNIT-II

No. of periods: 6

Principles and applications of Microscopy,
Types of Microscopy: Bright field, Dark field, Phase-Contrast, Fluorescent and Electron
Microscopy (SEM and TEM).
Micrometry-Ocular and stage Micrometers, Determination of cell size.

UNIT-III

No. of periods: 6

Classification of bacteria according to Bergey's manual of systematic bacteriology 2nd edition
up to order level
General characters of Archaeobacteria, Cyanobacteria, Actinomycetes
Ultra structure of bacterial cell
Invariant components- Cell wall, Cell membrane, Ribosomes, Nucleoid
Variant components- Capsule, Flagella, Fimbriae, Endospore, and Storage granules.

UNIT-IV:-

No. of periods: 10

General characters, classification and importance of Microalgae,
General characters, classification (Ainsworth) and importance of fungi
General characters and classification of protozoa

UNIT-V:

No. of periods: 8

General characters and classification of viruses
Structure of TMV and HIV
Structure and replication of T4 bacteriophage (Lytic cycle) & Lambda bacteriophage
(Lysogenic cycle)



**I B.Sc. SEMESTER- I MICROBIOLOGY PAPER-I
INTRODUCTORY MICROBIOLOGY : MIB-111
OLD SYLLABUS**

UNIT-I:-

No.of periods: 8

Definition and History of Microbiology

Contributions of Antony Von Leeuwenhoek, Louis Pasteur, Robert Koch, Edward Jenner, Alexander Fleming , Beijernick, Winogradsky .

Importance and applications of Microbiology

Outline classification of living organisms-Hackel, Whittaker, Carlwoese

UNIT-II:-

No. of periods: 6

Principles and Applications of Microscopy,

Types of Microscopy: Bright field, Dark field, Phase-Contrast, Fluorescent and Electron Microscopy (SEM and TEM).

Micrometry-Ocular and stage Micrometers, Determination of cell size.

UNIT-III:-

No. of periods: 6

Classification of bacteria according to Bergey's manual of systematic bacteriology 2nd edition up to order level

General characters of Archebacteria, Rickettsia, Mycoplasma, Cyanobacteria, Actinomycetes, Ultra structure of bacterial cell

Invariant components-Cell wall, Cell membrane, Ribosome's, Nucleoid

Variant components- Capsule, Flagella, Fimbriae, Endospore, and Storage Granules.

UNIT-IV:-

No.of periods: 10

General characters and classification and importance of Microalgae,

General characters and classification (ainsworth) and importance of fungi

General characters and classification of protozoa

UNIT-V:

No.of periods: 8

General characters and classification of viruses;

Structure of TMV and HIV

Structure and replication of T4 bacteriophage (Lytic cycle) & Lambda bacteriophage (Lysogenic cycle)



NEW

**II.B.Sc. SEMESTER-IV: MICROBIOLOGY PAPER-IV
MICROBIAL GENETICS: MIB-244
NEW SYLLABUS**

UNIT-1

No of periods: 7

Gene concept- Classical concept, Modern concept
(Cistron, Recon, Muton).
Structure and organization of prokaryotic DNA
Plasmids – Characters, Types of plasmids: R, Col, F and Ti plasmids

UNIT-II

No of periods: 7

Mutations- Spontaneous and Induced, Base pair changes, Frame shifts, Deletions, Inversions, Insertions
Various physical and chemical mutagens
Outlines of DNA damage
Outlines of DNA repair mechanisms

UNIT-III

No. of periods: 8

Transposable elements in bacteria (Is elements, Composite & Tn transposons)
Transposable elements in Eukaryotes
Eg; maize, drosophila

UNIT-IV

No. of periods: 7

Artificial mechanism of gene transfer- electroporation, biolistics, microinjection, macroinjection, chemical methods
Gene transfer among bacteria-transformation, conjugation, transduction

UNIT-V

No. of periods: 7

Brief account on r-DNA technology: Restriction endonucleases,
DNA Polymerases and Ligases, Vectors
Applications of genetic engineering in Industry, Agriculture and Medicine.



**II.B.Sc. SEMESTER-IV: MICROBIOLOGY PAPER-IV
MICROBIAL GENETICS: MIB-244
OLD SYLLABUS**

UNIT-1:-

Gene concept- classical concept, Modern concept
(Muton, Recon and Cistron).

No of periods:7

Structure and organization of prokaryotic DNA

Plasmids –Characters, Types of plasmids: R, Col, Fand Ti plasmids

UNIT-II:-

No of periods:7

Mutations- Spontaneous and Induced, Base pair changes, Frame shifts, Deletions, Inversions, Insertions;

Various physical and chemical mutagens;

Outlines of DNA damage

Outlines of DNA repair mechanisms

UNIT-III:-

No. of periods: 8

Transposable elements in bacteria (Sn, Composite, Tn)

Transposable elements in Eukaryotes'

Eg; maize, drosophila

UNIT-IV:-

No. of periods: 7

Artificial mechanism of gene transfer-electroporation, biolistics

Gene transfer among bacteria-transformation transduction and conjugation

UNIT-V:-

No. of periods: 7

Basic principles of genetic engineering: Restriction endonucleases, DNA Polymerases and Ligases, Vectors

Application of genetic engineering in Industry, Agriculture and Medicine.

**NEW**

**III.B.Sc. SEMESTER-V: MICROBIOLOGY PAPER-V
AGRICULTURAL AND ENVIRONMENTAL MICROBIOLOGY: MIB-355
NEW SYLLABUS**

<p>UNIT-I Biotic and abiotic components of soil; soil horizons Microbial Interactions - Mutualism, Commensalism, Antagonism, Competition, Parasitism, Predation Role of Micro organisms in nutrient cycling (Carbon, Nitrogen & Sulphur cycles)</p>	No. of periods: 9
<p>UNIT-II Microorganisms of water & polluted water Sewage water treatment (Primary, Secondary and Tertiary); Outlines of Biodegradation of Environmental pollutants (pesticides) Solid waste disposal, (Sanitary land fills, Compost) Microbiology of Air Spore trapping techniques</p>	No. of periods: 8
<p>UNIT-III Introduction to Agricultural Microbiology Rhizosphere, Phyllosphere Plant growth promoting microorganisms- <i>Mycorrhizae</i>, <i>Rhizobium</i>, Phosphate solubilising micro-organisms Outlines of Biological N₂ fixation (symbiotic, non symbiotic).</p>	No. of periods: 8
<p>UNIT-IV Concept of disease in plants Plant diseases, symptoms, etiology & control of Fungi, Bacteria, Viruses Groundnut rust, Angular Leaf spot of cotton, Little leaf of Brinjal</p>	No. of periods: 6
<p>UNIT-V Principles of plant disease control- Quarantine regulation, eradication and Chemical control (fungicides) Biological control of plant diseases Biopesticides-<i>Bacillus thuringiensis</i>, nuclear polyhedrosis virus, <i>Trichoderma</i>.</p>	No. of periods: 7

**OLD**

III.B.Sc. SEMESTER-V: MICROBIOLOGY PAPER-V
AGRICULTURAL AND ENVIRONMENTAL MICROBIOLOGY: MIB-355
OLD SYLLABUS

UNIT-I:- No. of periods: 9

Biotic and Abiotic components of soil
 Microbial Interactions - Mutualism, Commensalisms, Antagonism, Competition, Parasitism, Predation; Role of Micro organisms in nutrient cycling (Carbon, Nitrogen & Sulphur cycles)

UNIT-II:- No. of periods: 8

Microorganisms of water & polluted water
 Sewage water treatment (Primary, Secondary and Tertiary);
 Outlines of Biodegradation of Environmental pollutants (pesticides)
 Solid waste disposal, (Sanitary landfills, Compost)
 Microbiology of Air
 Spore Trapping Techniques

UNIT-III:- No. of periods: 8

Introduction Agricultural Microbiology
 Rhizosphere, Phyllosphere
 Plant growth promoting microorganisms- *Mycorrhizae*, *Rhizobium*, *phosphate solubilising micro-organisms*, *Azotobacter*, *Cyanobacteria*.
 Outlines of biological N₂ fixation (symbiotic, non symbiotic).

UNIT-IV:- No. of periods: 6

Concept of disease in plants
 Plant diseases, Symptoms, Etiology, Control caused by Fungi, Bacteria, Viruses
 Plant diseases Symptoms, Etiology, Control caused by Groundnut rust
 Plant diseases Symptoms, Etiology, Control caused by Angular Leaf spot of cotton
 Plant diseases Symptoms, Etiology, Control caused by Tomato leaf curl
 Plant diseases symptoms Etiology, control caused by little leaf of Brinjal

UNIT-V:- No. of periods: 7

Principles of plant disease control- Quarantine regulation, Eradication and Chemical control (fungicides)
 Biological control of plant diseases
 Biopesticides- *Bacillus thuringiensis*, nuclear polyhedrosis virus, *Trichoderma*.

**NEW**

**III.B.Sc. SEMESTER-VI: MICROBIOLOGY PAPER-VII
IMMUNOLOGY: MIB-367
NEW SYLLABUS**

UNIT-I No. of periods: 6

History and Development of immunology
Types of immunity-Innate, Acquired, Active, Passive, Humoral and Cell mediated immunity
Immune response- primary and secondary immune responses

UNIT-II No. of periods: 8

Organs and Cells of the Immune system
Primary (Thymus, Bursa of fabricius, Bone marrow).
Secondary (Spleen and Lymph nodes).

UNIT-III No. of periods: 8

Antigens-Types, chemical nature, antigenic determinants, haptens
Factors effecting antigenicity.
Antibodies- basic structure, types, properties and functions of Immunoglobulins
Components and activation of Complement system
(Classical& Alternative Pathways)

UNIT-IV No of periods: 6

Types of Hypersensitivity- Immediate and Delayed
Type 1-Anaphylactic hypersensitivity
Type 2- Antibody dependent cytotoxic hypersensitivity
Type 3- Immune complex- Mediated hypersensitivity
Type 4- Cell-mediated hypersensitivity

UNIT-V No of periods: 6

Basics of Autoimmunity
Auto immune disorders- Myasthenia gravis, Systemic lupus erythematosus,
Rheumatoid arthritis, Insulin-dependent diabetes mellitus.
Transplantations- organ and tissue transplantation in humans.



OLD

**III.B.Sc. SEMESTER-VI: MICROBIOLOGY PAPER-VII
IMMUNOLOGY: MIB-367
OLD SYLLABUS**

UNIT-I:- No. of periods: 6

History and Development of immunology
Types of immunity-Innate and Acquired, Active, Passive, Humoral and Cell mediated immunity and Immune response- primary and secondary immune responses

UNIT-II:- No. of periods: 8

Immune system: - organs and cells of immune system
Primary (Thymus, Bursa fabricis, Bone marrow).
Secondary (Spleen and Lymph nodes).

UNIT-III:- No. of periods: 8

Antigens-Types, chemical nature, antigenic determinants, haptens
Factors effecting antigenicity.
Antibodies- basic structure, types, properties and function of immunoglobulins,
Components and activation of complement system (classical, Alternative)

UNIT-IV:- No of periods :6

Types of hypersensitivity- Immediate and delayed
Type 1-Anaphylactic hypersensitivity
Type 2- Antibody dependent cytotoxic hypersensitivity
Type 3- Immune complex- Mediated hypersensitivity
Type 4- Cell-mediated hypersensitivity
Auto immunity and transplantation

UNIT-V:- No of periods: 6

Autoimmunity
Basics of autoimmunity
Auto immune disorders-Graves disease, Myasthenia gravis, Systemic lupus erythematosus,
Rheumatoid arthritis, insulin-dependent diabetes mellitus.
Transplantations- organ and tissue transplantation in humans.



NEW

**III.B.Sc. SEMESTER-VI: MICROBIOLOGY PAPER-VIII
MEDICAL AND CLINICAL MICROBIOLOGY: MIB-368
NEW SYLLABUS**

UNIT-I

No. of periods: 8

History of Medical Microbiology
Normal flora of human body.
Non specific defence mechanisms, Mechanical barriers
Antibacterial substances- lysozyme, complement, properdin, Phagocytosis

UNIT-II

No. of periods: 8

General account, Causal organism, pathogenesis, epidemiology, diagnosis, prevention and control of following diseases:-

Air borne diseases : Tuberculosis, Influenza
Food & Water borne diseases : Cholera, Typhoid, Hepatitis-A, Polio, Amoebiasis

UNIT-III

No. of periods: 10

General account, Casual organism, pathogenesis, epidemiology, diagnosis, prevention and control of following diseases

Insect Borne diseases : Malaria, Dengue
Contact diseases : Syphilis, AIDS, Hepatitis-B
Zoonotic diseases : Rabies, Anthrax
General account on Nosocomial infections

UNIT-IV

No. of periods: 6

General principles of Diagnostic Microbiology
Collection, transport and processing of clinical samples
General methods of laboratory diagnosis- cultural, biochemical, serological methods.
Tests for antimicrobial susceptibility.

UNIT-V

No. of periods: 6

Elements of Chemotherapy-therapeutic drugs, mode of action of penicillin and sulfa drugs and their clinical use
Antiviral substances (interferons, base analogues), Antifungal drugs,
Anti protozoan drugs
Brief account on vaccines



OLD

**III.B.Sc. SEMESTER-VI: MICROBIOLOGY PAPER-VIII
MEDICAL AND CLINICAL MICROBIOLOGY: MIB-368
OLD SYLLABUS**

UNIT-I:-

No. of periods: 8

History of medical microbiology
Normal flora of human body.
Host pathogen interactions- bacterial toxins, Virulence, Attenuation
Non specific defence mechanisms, Mechanical barriers,
Antibacterial substances- lysozyme, complement, properdin, Antiviral substances,
Phagocytosis,

UNIT-II:-

No. of periods: 8

General account, Causal organism, pathogenesis, epidemiology, diagnosis, prevention and control of following diseases
Air borne diseases : Tuberculosis, Influenza
Food & Water Borne diseases : Cholera, Typhoid, Hepatitis-A, polio, amoebiosis

UNIT-III:-

No. of periods: 10

General account, Casual organism, pathogenesis, epidemiology, diagnosis, prevention and control of following diseases
Insect Borne diseases : Malaria, Dengue
Contact diseases : Syphilis, Gonorrhoea
Zoonotic diseases : Rabies, Anthrax
Blood Borne diseases : AIDS, Hepatitis-B
General account on Nosocomial infections

UNIT-IV:-

No. of periods: 6

General principles of diagnostic microbiology
Collection, transport and processing of clinical samples
General methods of laboratory diagnosis- cultural, biochemical, serological methods.
Tests for antimicrobial susceptibility.

UNIT-V:-

No. of periods: 6

Elements of chemotherapy-therapeutic drugs, mode of action of penicillin and sulfa drugs and their clinical use
Antiviral substances (interferon's, base analogues), Antifungal drugs, Anti protozoan drugs
Brief account on vaccines



**BOARD OF STUDIES
DEPARTMENT OF BIOTECHNOLOGY**

Minutes of the meeting of the Board of Studies in Biotechnology held on Biotechnology, 14.02.2012 at 12.00 Noon.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *Babu*

University Nominee:

3. DR.B VIJAYA LAKSHMI

Vijayalakshmi
14.2.2012

External experts:

4. SRI SRINIVASA REDDY
5. DR.K.SRIRAMA MURTHY

S. Sri. Rama Murthy
14/2/2012

Faculty:

6. MS.S.SUNEETHA
7. MS.CH.HARI LAKSHMI

Suneetha

Harilakshmi-CH



DEPARTMENT OF BIOTECHNOLOGY RESOLUTIONS

The meeting of board of studies in Biotechnology was held on Tuesday, 14.02.2012 at 12.00 noon in the conference hall.

The following resolutions were passed unanimously.

1. It is resolved to delete the Enzymatic proteins, Structural proteins, Defence proteins, Membrane proteins .Transport &Storage proteins in unit-IV of paper I-titled Cell biology genetics & bio molecules .
2. It is resolved to delete the NMR, X-ray Crystallography, ,Mass spectroscopy in unit-IV of paper II titled bio analytical techniques
3. It is resolved to include the RAPD, RFLP, DNA finger printing or Profiling and its applications in unit V of paper III titled Molecular biology
4. It is resolved to include reporter genes unit IV of paper IV titled genetic engineering
5. It is resolved to include patent in unit V of paper VI titled Fermentation technology
6. It is resolved to include Seed culture, stem culture and embryo culture in unit I of paper VIII titled Plant and animal biotechnology
7. It is resolved to modify the pattern of question paper in part A for all the semester examinations

S.SUNEETHA
H.O.D. Biotechnology &
Chairman, Board of Studies

**NEW**

**I B.Sc. BIOTECHNOLOGY-SEMESTER I- PAPER-I
CELLBIOLOGY, GENITICS & BIOMOLECULES: BTY111
NEW SYLLABUS**

UNIT - I: CELL BIOLOGY

1. Basic cell types ----- Prokaryotic & Eukaryotic
2. Detail account of the Plasma membrane,
3. Golgi complex,
4. Endoplasmic reticulum,
5. Nucleus
6. Mitochondria,
7. Chloroplast & ribosome's of eukaryotic cells
8. Prokaryotic and Eukaryotic genome organization
9. Cell cycle & cell division-----stages of mitosis & meiosis.

UNIT-II: GENITICS

1. Introduction to genetics --- Mendel laws: Law of dominance, law of segregation & law of independent assortment.
2. Test cross & Back cross
3. Genotype & Phenotype
4. Exceptions to Mendel laws
5. Multiple alleles ---- skin color of rabbit
6. Sex linked inheritance
7. Sex determination in humans & drosophila
8. Lethality 9.Recombination & Crossing over

UNIT - III: CARBOHYDRATES

1. Definition & classification of carbohydrates
2. Monosaccharide's: aldoses & ketose
3. Disaccharides: Maltose, Iso maltose, Lactose, Sucrose
4. Tetra saccharides, Tri saccharides
5. Poly saccharides :
 - I) Homo polysaccharides ---
 - A) Structural polysaccharides: cellulose, chitin
 - B) Storage polysaccharides: Starch & Glycogen.
 - II) Hetero polysaccharides--- Heparin

LIPIDS:-

Classification of lipids:-

1. Simple Lipids (fats & waxes),
2. Compound lipids (Phospholipids, Non-phospholipids, Derived lipids)
3. Derived lipids: Alcohols, Sterols, and Fatty acids (Structures and linkage)



UNIT - IV: AMINOACIDS & PROTEINS:-

1. Structures of amino acids, peptide bond formation
2. Classification of amino acids
3. Structural levels of protein organization: primary, secondary, tertiary and quaternary levels

UNIT - V: NUCLEIC ACIDS

1. Structures of purines and pyrimidines, Nucleosides and Nucleotides
2. Evidence for DNA as genetic material:
Transformation principle: GRIFFIT Experiment Avery et al experiment
3. Labeling experiment of Hershey and chase
4. Watson & Crick model of DNA ,A & Z forms of DNA
5. Evidence for RNA as genetic material of TMV
6. Structural of mRNA, t RNA and rRNA

RECOMMENDED BOOKS:

- Principles of biochemistry: Nelson and cox (LEHINGER)
- Biochemistry J.L.Jain Cell Biology: C.B. Powar
- Cell biology: De Robertis
- Cell biology, Genetics, Molecular biology, Evolution & Ecology -P.S Verma & V. K. Agarwal
- Cytology – P. S Verma & Agarwal
- A text book of Biotechnology – Volume I- Cell biology & Genetics - S. Ram reddy, K. Venkateswarlu, M. Madhusudan Rao, T. Christopher
- Genetics – P.K. Gupta
- A text book of Biotechnology – Volume I- Rehana Khan
- Biotechnology – B.D. Singh
- Cell & Molecular biology – Rastogi
- Genetics of populations & Applied genetics – B. D .Singh
- Genetics – III edition – Manroe W. Strickberger
- Genetics – IV edition – Susan & Elrod, William Stansfield
- Outline of Biochemistry – E. E . Conn
- Biochemistry – U. Satyanarayana & U. Chakrapani
- Biochemistry & Clinical pathology - M. R. Chowdhari, S. B. Gokhale
- HARPER'S Illustrated Biochemistry, 27th edition – Robert K. Murray, Daryl K. Granner & Victo R. W. Rodwell



OLD

**I B.Sc. BIOTECHNOLOGY-SEMESTER I- PAPER-I
CELLBIOLOGY, GENITICS & BIOMOLECULES: BTY111
OLD SYLLABUS**

UNIT - I: CELL BIOLOGY

1. Basic cell types ----- Prokaryotic & Eukaryotic
2. Detail account of the Plasma membrane,
3. Golgi complex,
4. Endoplasmic reticulum,
5. Nucleus
6. Mitochondria,
7. Chloroplast & ribosome's of eukaryotic cells
8. Prokaryotic and Eukaryotic genome organization
9. Cell cycle & cell division----stages of mitosis & meiosis.

UNIT-II: GENITICS

1. Introduction to genetics --- Mendel laws: Law of dominance, law of segregation & law of independent assortment.
2. Test cross & Back cross
3. Genotype & Phenotype
4. Exceptions to Mendel laws
5. Multiple alleles ---- skin color of rabbit
6. Sex linked inheritance
7. Sex determination in humans & drosophila
8. Lethality 9.Recombination & Crossing over

UNIT - III: CARBOHYDRATES

1. Definition & classification of carbohydrates
2. Monosaccharide's: aldoses & ketose
3. Disaccharides: Maltose, Iso maltose, Lactose, Sucrose
4. Tetra saccharides, Tri saccharides
5. Poly saccharides :
 - I) Homo polysaccharides ---
 - A) Structural polysaccharides: cellulose, chitin
 - B) Storage polysaccharides: Starch & Glycogen.
 - II) Hetero polysaccharides--- Heparin



LIPIDS:-

Classification of lipids:-

1. Simple Lipids (fats & waxes),
2. Compound lipids (Phospholipids, Non-phospholipids, Derived lipids)
3. Derived lipids: Alcohols, Sterols, and Fatty acids (Structures and linkage)

UNIT - IV: AMINOACIDS & PROTEINS:-

1. Structures of amino acids, peptide bond formation
2. Classification of simple, complex & derived proteins
3. Based on their biological functions
 - a. Enzymatic proteins
 - b. Defense proteins
 - c. Membrane proteins
 - d. Storage proteins
4. Structural levels of protein organization: primary, secondary, tertiary and quaternary levels

UNIT V: - NUCLEIC ACIDS

1. Structures of purines and pyrimidines, Nucleosides and Nucleotides
2. A=T & G≡C base pairing
3. Evidence for DNA as genetic material:
4. Transformation principle: GRIFFIT Experiment Avery et al experiment
5. Labeling experiment of Hershey and chase
6. Watson & Crick model of DNA ,A & Z forms of DNA
7. Evidence for RNA as genetic material of TMV
8. Structural of mRNA, t RNA and rRNA

RECOMMENDED BOOKS:

Principles of biochemistry: Nelson and cox (LEHINGER)

Biochemistry J.L.Jain Cell Biology: C.B. Powar

Cell biology: De Robertis

**NEW**

I B.Sc BIOTECHNOLOGY – SEMISTER II – PAPER II
BIOANALYTICAL TECHNIQUES: BTY 122
NEW SYLLABUS

UNIT - I: P^H METRY AND ITS APPLICATIONS

1. Principle and applications of P^H metry
2. Definition on P^H
3. Determination of P^{ka} values of amino acids
4. Buffers used in bio analytical techniques
5. Henderson – Heselbalch equation

UNIT - II: CHROMATOGRAPHY

1. Chromatography – principle –Applications
2. Paper chromatography
3. Thin layer chromatography
4. Ion exchange chromatography
5. Gel filtration chromatography
6. HPLC
7. Gas chromatography
8. Affinity chromatography

UNIT - III: CENTRIFUGATION

1. Centrifuge principle
2. Application of ultra-centrifuge
3. Differential centrifugation
4. Density gradient centrifugation

UNIT - IV: ELECTROPHORESIS & SPECTROPHOTOMETRY

1. Electrophoretic techniques :-
(A) principle (B) Applications of agarose gel (C) SDS PAGE (D) Iso electric focusing
2. Principles applications of Spectrophotometry & Fluorimetry.

UNIT - V: RADIO ACTIVITY

1. Introduction to radio activity
2. Emission of alpha, beta and gamma particles
3. Geiger Muller and scintillation counter
4. Applications of radio activity in biology

REFERENCE BOOKS

- Biochemistry-by Dr. U. Satyanarayana
- Textbook of bio physical chemistry - by Upadhyaya and Upadhyaya nadh
- Practical biochemistry by Wilson and walker
- A textbook of Biophysics – R. N. Roy
- Text book of Biophysics – G. R. Chatwal
- Biophysics – Mohan –P Arora
- An Introduction to Practical Biochemistry – David T. Plummer



**I B.Sc BIOTECHNOLOGY – SEMISTER II – PAPER II
BIOANALYTICAL TECHNIQUES: BTY 122
OLD SYLLABUS**

UNIT- I: P^H METRY AND ITS APPLICATIONS

1. Principle and applications of P^H metry
2. Definition on P^H
3. Determination of P^{ka} values of amino acids
4. Buffering systems in biological systems
5. Henderson – Heselbalch equation

UNIT- II: CHROMATOGRAPHY

1. Chromatography – principle –Applications
2. Paper chromatography
3. Thin layer chromatography
4. Ion exchange chromatography
5. Gel filtration chromatography
6. HPLC
7. Gas chromatography
8. Affinity chromatography

UNIT - III: CENTRIFUGATION

1. Centrifuge principle
2. Application of ultra-centrifuge
3. Differential centrifugation
4. Density gradient centrifugation
5. Principles & applications of colorimetry
6. Spectrophotometry
7. fluorimetry

UNIT - IV: ELECTROPHORESIS & SPECTROPHOTOMETRY

1. Electrophoretic techniques :-
(A) principle (B) Applications of agarose gel (C) SDS PAGE (D) Iso electric focusing
2. Techniques for the study of protein structure – NMR spectroscopy, X-ray crystallography & Mass spectroscopy.

UNIT – V: RADIO ACTIVITY

1. Introduction to radio activity
2. Emission of alpha, beta and gamma particles
3. Geiger Muller and scintillation counter
4. Applications of radio activity in biology

REFERENCE BOOKS

1. Biochemistry-by Dr. U. Satyanarayana
2. Practical biochemistry - by Upadhyaya and Upadhayanadh
- by Wilson and walker

**NEW**

**II. B.Sc. BIOTECHNOLOGY – SEMESTER III – PAPER III
MOLECULAR BIOLOGY: BTY-233
NEW SYLLABUS**

UNIT - I: REPLICATION OF DNA

1. Flow of genetic information & Central dogma of molecular biology
2. Nucleic acid: Watson and crick model of DNA and Types of DNA.
3. Models of DNA Replication – conservative, semi-conservative, dispersive (including Meselson - Stahl experiment)
4. Mechanism & Enzymology of DNA Replication: DNA polymerase, DNA ligase, DNA helicase, DNA Gyrase, topoisomerases, SSB
5. Types of replications: Bidirectional replication in E.coli, rolling circle replication in ϕ X 174

UNIT- II:- TRANSCRIPTION AND TRANSLATION

1. Mechanism of transcription : Initiation , Elongation, Termination in prokaryotes and eukaryotes
2. Proteins and factors involved in transcription
3. Post transcriptional modifications- splicing
4. Mechanism of translation : initiation , elongation , termination in prokaryotes and eukaryotes
5. Post translational modifications
6. Properties of genetic code(Wobble hypothesis) and its elucidation

UNIT- III: PROTEIN TRAFFICKING

1. Protein trafficking-signal peptide, peptide transport.
2. Protein sorting
3. Membrane targeting of protein& secretory pathways.
4. Alternative protein transport mechanisms

UNIT - IV: REGULATION OF GENE EXPRESSION

1. Operon concept
2. Discovery of lac system : induction , and catabolic repression of lac system
3. Mechanism of tryptophan regulation: Repression and attenuation
4. Mechanism of arabinose regulation , and araC protein regulation

UNIT - V: APPLICATIONS OF MOLECULAR BIOLOGY

1. Diagnosis of infectious diseases
2. Diagnosis of genetic diseases
3. RFLP
4. RAPD

REFERENCE BOOKS

- Molecular biology and Biotechnology by B.D Singh
- Molecular biology of the gene - Fifth edition.
- Genes VII, Lewin B, Oxford University press.
- Cell and molecular biology by De Robertis
- Molecular biology, Genetic engineering & Immunology - B. D. Singh
- Cell & Molecular biology – Rastogi
- Advanced Molecular biology – R. M. Twyman
- Computational Molecular biology- an algorithmic approach – Pavel A. Pevzner
- Molecular biology & Genetic engineering – P. K. Gupta
- Text book of Biotechnology – R. C. Dubey



**II. B.Sc. BIOTECHNOLOGY – SEMESTER –III PAPER III
MOLECULAR BIOLOGY: BTY-233
OLD SYLLABUS**

UNIT - I: REPLICATION OF DNA

1. Flow of genetic information & Central dogma of molecular biology
2. Nucleic acid: Watson and crick model of DNA and Types of DNA.
3. Models of DNA Replication – conservative, semi-conservative, dispersive (including Meselson - Stahl experiment)
4. Mechanism & Enzymology of DNA Replication: DNA polymerase, DNA ligase, DNA helicase, DNA Gyrase, topoisomerases, SSB
5. Types of replications: Bidirectional replication in E.coli, rolling circle replication in ϕ X 174

UNIT - II: TRANSCRIPTION AND TRANSLATION

1. Mechanism of transcription : Initiation , Elongation, Termination in prokaryotes and eukaryotes
2. Proteins and factors involved in transcription
3. Post transcriptional modifications- splicing
4. Mechanism of translation : initiation , elongation , termination in prokaryotes and eukaryotes
5. Proteins & factors involved in translation
6. Post translational modifications
7. Properties of genetic code(Wobble hypothesis) and its elucidation
8. Ribosome structure in prokaryotes & eukaryotes
9. rRNA synthesis

UNIT - III: PROTEIN TRAFFICKING

1. Protein trafficking-signal peptide, peptide transport.
2. Protein sorting
3. Membrane targeting of protein& secretory pathways.
4. Alternative protein transport mechanisms

UNIT- IV: REGULATION OF GENE EXPRESSION

1. Operon concept
2. Discovery of lac system : induction , and catabolic repression of lac system
3. Mechanism of tryptophan regulation: Repression and attenuation
4. Mechanism of arabinose regulation , and araC protein regulation

UNIT- V: APPLICATONS OF MOLECULAR BIOLOGY

1. Methods of DNA assay
2. DNA in the diagnosis of infectious diseases
3. DNA in the diagnosis of genetic diseases
4. DNA analysis for human diseases and environmental monitoring
5. DNA finger printing or profiling

REFERENCE BOOKS

- Molecular biology and biotechnology by B.D Singh
- Molecular biology of the gene, 5th edition.
- Genes VII, Lewin B, Oxford University press.
- Cell and molecular biology by De Robertis

**NEW**

**II B.Sc BIOTECHNOLOGY IV-SEMESTER-PAPER-IV
GENETIC ENGINEERING: BTY-244
NEW SYLLABUS**

UNIT -1: INTRODUCTION AND TOOLS OF rDNA TECHNOLOGY

1. Introduction and scope of rDNA technology
2. Tools of rDNA technology
3. Types of Restriction endonucleases, Ligases, Polymerases, Phosphatases, Kinases & nucleases.
4. Cloning vehicles: plasmids, cosmids and yeast vectors.

UNIT-2: GENE TRANSFER MECHANISMS

1. Gene transfer mechanism in plants
 - A) Vector mediated transformation
 - i) *Agrobacterium* mediated transformation
 - ii) Plant viruses as vector mediated transformation
 - B). Non vector mediated transformation
 - i) Physical methods -Shotgun, microinjection, liposome mediated & electroporation
 - ii) Chemical methods
2. Animal cell transmission with SV40, recombinant vaccinia virus

UNIT-3: TECHNIQUES OF rDNA

1. Blotting techniques- Southern, Northern, Western blotting (hybridization techniques)
2. Gene amplification : PCR, types of PCR, applications of PCR
3. DNA Fingerprinting (or) profiling
4. DNA sequencing : Maxam-gilbert's method , Sanger's di-deoxy method

UNIT – 4: CLONING

1. Cloning : Definition
2. Construction of gene (reporter genes also)
3. Ligation , adaptors, linkers and homo polymer tailing
4. Construction of cDNA libraries & genomic libraries
5. Advantages of genomic libraries

UNIT-5: APPLICATIONS OF rDNA TECHNOLOGY

1. Applications of rDNA technology in agriculture , medicine and environment
2. Production of economically important products through rDNA technology
 - A. Insulin
 - B. Interferons
 - C. Growth hormone
 - D. Erythropoietin
 - E. Golden rice.



REFERENCE BOOKS

- Text book of biotechnology - R. C. Dubey
- Expanding horizons of biotechnology - B. D. Singh
- Text book of biotechnology - U. Satyanarayana
- Biotechnology – The biological principles – M. D. Trevan & S Boffey
- Molecular biology, Genetic engineering & Applications of Biotechnology – B. D. Singh
- Basic Biotechnology – Second edition – Colin Ratledge
- Genes VII, Lewin B, Oxford University press.
- Gene Biotechnology – S. N. Jogdand

**OLD**

**II B.Sc BIOTECHNOLOGY IV-SEMESTER-PAPER-IV
GENETIC ENGINEERING: BTY-244
OLD SYLLABUS**

UNIT -1: INTRODUCTION AND TOOLS OF rDNA TECHNOLOGY

1. Introduction and scope of rDNA technology
2. Tools of rDNA technology
3. Types of Restriction endonucleases, Ligases, Polymerases, Phosphatases, Kinases & nucleases.
4. Cloning vehicles: plasmids, cosmids and yeast vectors.

UNIT-2: GENE TRANSFER MECHANISMS

1. Gene transfer mechanism in plants
2. Vector mediated transformation
3. *Agrobacterium* mediated transformation
4. Plant viruses as vector mediated transformation, Non vector mediated transformation
5. shotgun, microinjection, liposome mediated & electroporation
6. Animal cell transmission with SV40, recombinant vaccinia virus

UNIT-3: TECHNIQUES OF rDNA

1. Principle and applications of agarose gel electrophoresis
2. Blotting techniques- Southern, Northern, Western blotting (hybridization techniques)
3. Gene amplification : PCR, types of PCR, applications of PCR
4. DNA sequencing : Maxam-gilbert's method , Sanger's di-deoxy method

UNIT – 4: CLONING

1. Cloning : Definition , ligation , adaptors, linkers and homo polymer tailing
2. Construction of cDNA libraries & genomic libraries
3. Advantages of genomic libraries

UNIT-5: APPLICATIONS OF RDNA TECHNOLOGY

1. Applications of rDNA technology in agriculture , medicine and environment
2. Production of economically important products through rDNA technology
3. Insulin
4. Interferons
5. Growth hormone
6. Erythropoietin
7. Golden rice.



REFERENCE BOOKS

- Text book of biotechnology by R. C Dubey
- Text book of biotechnology by B. D. Singh
- Text book of biotechnology by U. Satyanarayana
- Biotechnology – The biological principles – M. D. Trevan & S Boffey
- Molecular biology, Genetic engineering & Applications of Biotechnology – B. D. Singh
- Basic Biotechnology – Second edition – Colin Ratledge
- Genes VII, Lewin B, Oxford University press.
- Gene Biotechnology – S. N. Jogdand

**NEW**

**III B.Sc BIOTECHNOLOGY – SEMESTER – V, PAPER VI
FERMENTATION TECHNOLOGY: BTY-356
NEW SYLLABUS**

UNIT- I: INTRODUCTION TO FERMENTATION TECHNOLOGY

1. Historical perspectives of fermentation technology and its applications
2. Fundamentals involved in production of microbial products, types of fermentations (aerobic & anaerobic)
3. Isolation, preservation & improvement of industrially important micro organisms

UNIT- II: MEDIA PREPARATION & TYPES OF FERMENTATION PROCESSES

1. Basic description of fermentor.
2. Types of fermentors : Batch, Fed batch, Continuous, Stirred tank & Air lift fermentors
3. Types of fermentation media, media preparation & sterilization
4. Inoculum preparation
5. Stock culture maintenance

UNIT –III: DOWN STREAM PROCESSING

1. Removal of insoluble waste : Centrifugation & Filtration
2. Cell disruption : Mechanical, Enzymatic & Chemical
3. Product isolation : Solvent extraction, Aqueous two phase system
4. Purification techniques : Precipitation membrane separation (Micro filtration, Ultra filtration, Nano filtration & Reverse osmosis)

UNIT – IV: PRODUCTION OF FERMENTATION PRODUCTS

1. Production of enzymes : Amylase
2. Production of secondary metabolites : Antibiotics – Streptomycin
3. Production of amino acid - Glutamic acid
4. Organic acids : Acetic acid

UNIT – V: INTELLECTUAL PROPERTY RIGHTS

1. General introduction to intellectual property rights
2. Patent
3. Copy rights
4. Trade mark

REFERENCE BOOKS

- A.H.PATEL
- Industrial Microbiology - Stanbery
- Introduction To Biochemical Engineering - D. G RAO
- Industrial Microbiology - Creuger & Creuger
- Bioprocess Engineering Principles – Pauline M. Dora
- Industrial Biotechnology – Indu Shekhar Thakur



OLD

**III B.Sc BIOTECHNOLOGY – SEMESTER – V, PAPER VI
FERMENTATION TECHNOLOGY: BTY-356
OLD SYLLABUS**

UNIT-I: INTRODUCTION TO FERMENTATION TECHNOLOGY

1. Historical perspectives of fermentation technology and its applications
2. Fundamentals involved in production of microbial products, types of fermentations (aerobic & anaerobic)
3. Isolation, preservation & improvement of industrially important micro organisms

UNIT- II: MEDIA PREPARATION & TYPES OF FERMENTATION PROCESSES

1. Materials used in preparation of media
2. Types of fermentation media, media preparation & sterilization
3. Inoculum preparation
4. Stock culture maintenance
5. Types of fermentors : Batch, Fed batch, Continuous, Stirred tank & Air lift fermentors
6. Basic description of fermentor.

UNIT –III: DOWN STREAM PROCESSING

1. Removal of insoluble waste : Centrifugation & Filtration
2. Cell disruption : Mechanical, Enzymatic & Chemical
3. Product isolation : Solvent extraction, Aqueous two phase system
4. Purification techniques : Precipitation membrane separation (Micro filtration, Ultra filtration, Nano filtration & Reverse osmosis)

UNIT – IV: PRODUCTION OF FERMENTATION PRODUCTS

1. Production of enzymes : Amylase
2. Production of secondary metabolites : Antibiotics – Streptomycin
3. Production of two amino acids
4. Organic acids : Glutamic acid and Acetic acid

UNIT – V: INTELLECTUAL PROPERTY RIGHTS

1. General introduction to intellectual property rights
2. Trade secrets
3. Copy rights
4. Trade mark

REFERENCE BOOKS

- A.H.PATEL
- INDUSTRIAL MICROBIOLOGY BY STANBERY
- INTRODUCTION TO BIOCHEMICAL ENGINEERING BY D. G RAO
- INDUSTRIAL MICROBIOLOGY BY CREUGER

**NEW**

**III B. Sc. BIOTECHNOLOGY, VI SEMESTER, PAPER VIII
PLANT AND ANIMAL BIOTECHNOLOGY: BTY-368
NEW SYLLABUS**

UNIT – I: PLANT BIOTECHNOLOGY

1. Introduction to plant tissue culture
2. Preparation and sterilization of plant tissue culture media (MS media)
3. Types of plant tissue culture : Seed culture, Stem culture, Embryo culture & Anther culture
4. Callus culture
5. Meristem culture
6. Micro propagation

Unit – II: PLANT BIOTECHNOLOGY

1. Isolation , fusion & culture of protoplast
2. Production of transgenic plants
3. Plant bioreactors for the production of secondary metabolites.

Unit – III: ANIMAL BIOTECHNOLOGY

1. History and development of cell culture
2. Preparation and sterilization of serum and serum free media and Maintenance of animal cells
3. Primary cultures and cell line Maintenance (monolayer and suspension cultures)
4. Production of transgenic animals - fish, mice, sheep.

Unit IV: STEM CELLS

1. Stem cells
2. Types of stem cells – embryonic and adult stem cells and its applications
3. Applications of stem cells in various fields.
4. Ethical, social and legal concerns of biotechnology.

Unit – V: APPLICATIONS

1. Applications of plant tissue culture in agriculture, horticulture and industry.
2. Applications of transgenic plants.
3. Applications of transgenic animals.

REFERENCE BOOKS

- Biotechnology - U.V Satyanarayana
- Plant and animal biotechnology - B.D Singh
- Introduction to Plant Tissue Culture – Razdan
- Plant Biotechnology – K.G. Ramawat
- Introduction to Plant Biotechnology, Second edition – H. S. Chawla
- Biotechnology 5 – Animal Biotechnology, Immunology & Plant Biotechnology – M. K. Sateesh
- Plant Biotechnology –Methods &Protocols – S. Janarthan & S. Vincent
- Animal Biotechnology – M. M. Ranga



**III B. Sc. BIOTECHNOLOGY, VI SEMESTER, PAPER VIII
PLANT AND ANIMAL BIOTECHNOLOGY: BTY-368
OLD SYLLABUS**

UNIT – I: PLANT BIOTECHNOLOGY

1. Introduction to plant tissue culture
2. Preparation and sterilization of plant tissue culture media (MS media)
3. Types of plant tissue culture : Callus culture
4. Meristem culture
5. Micro propagation

Unit – II: PLANT BIOTECHNOLOGY

1. Isolation , selection and fusion of protoplast
2. Production of transgenic plants and applications
3. Plant bioreactors for the production of secondary metabolites.

Unit – III: ANIMAL BIOTECHNOLOGY

1. History and development of cell culture
2. Preparation and sterilization of serum and serum free media and Maintainance of animal cell media
3. Primary and secondary cell line Maintainance (monolayer and suspension cultures)
4. Production of transgenic animals - fish, mice, sheep and their applications.

Unit – IV: STEM CELLS

1. Stem cells research
2. Types of stem cells – embryonic and adult stem cells and its applications
3. Applications of stem cells in various fields.
4. Ethical, social and legal concerns of biotechnology.

Unit – V APPLICATIONS

1. Applications of plant tissue culture in agriculture, horticulture and industry.
2. Applications of transgenic plants
3. Applications of transgenic animals.

REFERENCE BOOKS

- Biotechnology U.V Satyanarayana
- Plant and animal biotechnology B.D Singh
- Introduction to biotechnology Razdan



**BOARD OF STUDIES
DEPARTMENT OF COMPUTER SCIENCE**

Minutes of the meeting of the Board of Studies in Computer Science held on Friday,
17.02.2012 at 12.00 Noon.

MEMBERS:

1. FR.DR A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *Babu*

University Nominee:

3. DR.R.KIRAN KUMAR

External Experts:

4. MR.JAYA KRISHNA *T. Paul*
5. MR.G.SIVA RATHNA KIRAN *Babu*

Faculty:

6. MRS.A LAVANYA *A Lavanya 17/2/12*
7. SRI S.A.B. NEHRU *S. S. A. B. Nehru*
8. SRI K.B.S. SASTRY *K. B. S. Sastry*
9. SRI T KAMALAKAR RAJU *T. Kamalakar 17/2/12*
10. MRS.L.NAGESWARI DEVI *L. Nageswari*
11. MS.P.SUSHMA *P. Sushma*
12. MS.K.APARNA *K. Aparna*
13. MS.CH SANDHYA RANI *Ch. Sandhya Rani*
14. N. Sireesha *N. Sireesha*



DEPARTMENT OF COMPUTER SCIENCE RESOLUTIONS

The Board of Studies in computer Science met on 17.02.2012 and the following resolutions were passed.

1. The Board approved the following new titles, syllabus for B.Sc., Computer Science course for V & VI semester theory and practical.

V Semester:

Theory: Paper V - Programming with Java

Practical: Practical V - Programming with Java

Theory: Paper VI (Elective) - Digital Multimedia
Web Technology

Practical: Practical VI (Elective)- Digital Multimedia
- Web Technology

VI Semester:

Theory: Paper VII - Principles of Operating System

Practical: Practical VII - Linux Shell Programming

Theory: Paper VIII (Elective) - Software Engineering
Data Communications & Networking

Practical: Practical VIII (Elective) – Testing Tools
Network Programming

2. It is resolved to follow the modified syllabus for **Fundamentals of Information Technology (FIT)**.

A.Lavanya
H.O.D Computer Science &
Chairman, Board of Studies

**NEW**

III B.SC - V SEMESTER - COMPUTER SCIENCE – PAPER V
PROGRAMMING WITH JAVA **
NEW SYLLABUS

Unit I:**Fundamentals of Object Oriented Programming:**

Object Oriented Paradigm, Basic concepts of OOPs, Benefits of OOPs, and Applications of oops,

Java Evolution: Java history, Java features, Java & Internet, Java & WWW, Web browsers, Hardware & Software sequences.

Overview of Java Language: Java fundamentals, Program structures, Character set, Key words, Identifiers, Java statements.

Unit II:

Constants, Variables & Data types: Java constants, variables, Data types, declarations, assigning values to variables, scope of variables, symbolic constants, input values to variables.

Operators and Expressions: Types of Operators, Precedence, Evaluation of expressions, mathematical functions.

Decision making and Branching: If, while, do while, for, break, switch, continue statements, labeled loops.

Unit III:

Classes, Objects and Methods: Class definition, creating objects, constructors, method over loading, static members and methods, nesting methods, Inheritance, overriding methods, final variable and methods, classes, abstract methods, classes, visibility modes.

Arrays and strings: One-dimensional and two-dimensional arrays, creating an array, strings arrays, methods.

Interfaces: Multiple Inheritances, Defining interfaces, extending interfaces, implementing interface, accessing interface variables, implementing multiple inheritance with the help of interface.

Unit IV:

Package: Putting class together, Java API Packages, creating, using and accessing a package, adding a class to package, hiding classes.

Multi-threaded programming: Creating threads, extending the thread class, stopping and blocking a thread, life cycle of a thread.

Managing Errors and Exceptions: Types of errors, Exceptions, syntax of exception handling code, multiple catch statements using finally statement.



Unit V:

Applet Programming:

Building applets, Applet life cycle, Executing applets, passing parameters to applet, Displaying numerical values, Getting input from user

Graphics Programming:

Graphics class, lines, rectangles, circles, ellipses, polygons, graphs

Managing Files:

Stream classes, byte stream, character stream, creation of files, reading writing characters, reading writing bytes

Textbook:

E. Balaguruswamy; Programming with Java a primer; TataMcGraw Hill Publications II Edition

Reference book:

The complete reference Java2 – fifth edition

****INTRODUCED AS MAJOR PAPER**

**OLD**

III B.SC - V SEMESTER - COMPUTER SCIENCE – PAPER VI
PROGRAMMING WITH JAVA **
OLD SYLLABUS

Unit I:**Fundamentals of Object Oriented Programming:**

Object Oriented Paradigm, Basic concepts of OOPs, Benefits of OOPs, and Applications of oops,

Java Evolution: Java history, Java features, Java & Internet, Java & WWW, Web browsers, Hardware & Software sequences.

Overview of Java Language: Java fundamentals, Program structures, Character set, Key words, Identifiers, Java statements.

Unit II:

Constants, Variables & Data types: Java constants, variables, Data types, declarations, assigning values to variables, scope of variables, symbolic constants, input values to variables.

Operators and Expressions: Types of Operators, Precedence, Evaluation of expressions, mathematical functions.

Decision making and Branching: If, while, do while, for, break, switch, continue statements, labeled loops.

Unit III:

Classes, Objects and Methods: Class definition, creating objects, constructors, method over loading, static members and methods, nesting methods, Inheritance, over riding methods, final variable and methods, classes, abstract methods, classes, visibility modes.

Arrays and strings: One-dimensional and two-dimensional arrays, creating an array, strings arrays, methods.

Interfaces: Multiple Inheritances, Defining interfaces, extending interfaces, implementing interface, accessing interface variables, implementing multiple inheritance with the help of interface.

Unit IV:

Package: Putting class together, Java API Packages, creating, using and accessing a package, adding a class to package, hiding classes.

Multi-threaded programming: Creating threads, extending the thread class, stopping and blocking a thread, life cycle of a thread.

Managing Errors and Exceptions: Types of errors, Exceptions, syntax of exception handling code, multiple catch statements using finally statement.

Textbook:

E. Balaguruswamy; Programming with Java a primer; TataMcGraw Hill Publications II Edition

Reference book:

The complete reference Java2 – fifth edition

**** PREVIOUSLY, IT WAS AN ELECTIVE**



NEW

**III B.SC - V SEMESTER - COMPUTER SCIENCE – PAPER VI
ELECTIVE - WEB TECHNOLOGY**
NEW SYLLABUS**

Unit 1

Introduction to the Internet: Computers in Business Networking, internet E-mail - Resources Sharing, Gopher, WWW, Usenet, Telnet, Bulletin Board Service, Wide Area Information Service

Introduction to Web Design: The anatomy of website, Development Life Cycles, Web Browsers, An Overview of Common Web Technologies and languages, Design and production tools.

Unit II

Introduction to HTML: Designing a home page, HTML document, Anchor tag - Hyperlinks, Head and body section, Header section, Title, Prologue, links, colorful pages, comment, body section, heading horizontal ruler, paragraph, tabs, images and pictures, lists and their types, nested lists, table handling.

Unit III

Frames: Frameset definition, frame definition, nested framesets, Forms and form elements

DHTML and Style Sheets: defining Styles, elements of styles, linking a style sheet to a HTML document, inline styles, External style sheets, internal Style sheets & Multiple Style Sheets.

Unit IV

Java Script: Introduction, Identifiers, Operators, Functions, Event Handling, Objects, array, math, string, window Object.

Site Delivery and Management: The importance of delivery, web protocols, Domain name service, web servers, outsourcing the web hosting, managing the web servers

Unit V

XML : Document type definition, Extensible HTML, Extensible style sheet language, Linking language, Forms, Simple object access protocol.

Text Book:

C. Xavier, "World wide web designing with HTML", Tata McGraw Hill, 2000.

Reference Book:

Thomas A. Powell, "The Complete Reference Web Design", Tata McGraw-Hill.

**** NEWLY INTRODUCED**



NEW

**SEMESTER VI - III B.SC., COMPUTER SCIENCE, PAPER – VIII
ELECTIVE- DATA COMMUNICATION AND NETWORKING
NEW SYLLABUS**

Unit I

Introduction: Data communication, network, protocols and standards, standards organization

Basic Concepts:

Line configuration, topology, transmission modes, categories of networks, inter network

OSI model:

Model, functions of seven layers

Unit II

Signals:

Analog and digital signals, a-periodic and periodic signals, analog signals, digital signals

Transmission media:

Guided media, unguided media

Multiplexing:

Frequency division multiplexing, time division multiplexing, WDM

Unit III

Local area Networks:

Project 802, Ethernet, Token bus, Token ring, FDDI

Unit IV

Metropolitan Networks:

Distributed queue dual bus, SMDS

Switching:

Circuit switching, packet switching, message switching

Unit V

Networking and Internetworking Devices:

Repeaters, bridges, routers, gateways, firewall & routing algorithms

Text Book:

Behrouz Forouzan, Introduction to Data Communication and Networking, Tata Mc Graw Hill
II Edition.

Reference:

Andrew S. Tanenbaum, Computer Networks, Tata Mc Graw Hill



OLD

**SEMESTER VI - III B.SC., COMPUTER SCIENCE, PAPER – VIII
ELECTIVE- DATA COMMUNICATION AND NETWORKING
OLD SYLLABUS**

Unit I

Introduction: Data communication, network, protocols and standards, standards organization

Basic Concepts:

Line configuration, topology, transmission modes, categories of networks, inter network

OSI model:

Model, functions of seven layers

Unit II

Signals:

Analog and digital signals, a-periodic and periodic signals, analog signals, digital signals

Transmission media:

Guided media, unguided media

Multiplexing:

Frequency division multiplexing, time division multiplexing, WDM

Unit III

Local area Networks:

Project 802, Ethernet, Token bus, Token ring, FDDI

Metropolitan Networks:

Distributed queue dual bus, SMDS

Unit IV:

Switching:

Circuit switching, packet switching, message switching

Integrated services digital network (ISDN) services, history, subscriber access to ISDN, broadband ISDN

Unit V:

Networking and Internetworking Devices:

Repeaters, bridges, routers, gateways, firewall & routing algorithms

TCP/IP: overview of TCP/IP, network layer, transport layer, application layer, WWW

Text Book:

Behrouz Forouzan, Introduction to Data Communication and Networking, Tata Mc Graw Hill II Edition.



NEW

I B.A/B.SC
FUNDAMENTALS OF INFORMATION TECHNOLOGY (FIT)
NEW SYLLABUS

UNIT – I

IT- introduction – application

Data Representation – Binary, Decimal, Octal, Hexadecimal

Types of Computers – Generation of Computers – Components of a Computer System CPU, Organization of Computer Memory, Cache Memory, Virtual memory,

UNIT – II

Input & Output Devices, Secondary Storage Devices

UNIT – III

Types of Languages - Translators

Operating System – Definition – functions

Types of Operating Systems – Brief details of batch processing, Multi Programming, multi tasking, time sharing, and real time operating systems

Introduction to DOS - Internal commands & External Commands

UNIT – IV

Classification of networks – LAN - WAN - MAN

Communication system elements: Communication modes - Transmission media, transmission modes – Network Topologies.

UNIT - V

Internet - Intranet – services - URL – DNS - Email Components - Browser - Search Engines.

Text Book:

“Information Technology the Breaking Wave” - Denis P. Curtin, Kim Folley

Tata Mc Graw Hill 1998



OLD

I B.A/B.SC
FUNDAMENTALS OF INFORMATION TECHNOLOGY (FIT)
OLD SYLLABUS

UNIT – I

IT- introduction – application

Data Representation – Binary, Decimal, Octal, Hexadecimal

Types of Computers – Generation of Computers

CPU, ALU, Control units, Registers, Instruction set, Instruction execution, Memory access, cache memory, I/O Devices, Secondary Storage Devices, communication ports

UNIT – II

Types of Languages - Operating System – evolution - Types – interfaces - OS services – features of Windows 95 and Windows NT

UNIT – III

DBMS – introduction – advantages – disadvantages – architecture – models

Relational data base design – entity – query – keys

UNIT – IV

Communication system elements: Communication modes – circuit switching – packet switching - Types of networks – LAN - WAN - MAN

Network Topologies – communication media - modem

UNIT – V

Multimedia – introduction – application - tools

Internet - WWW - URL – DNS - Email - Browser - Search Engines

Text Book:



“Information Technology the Breaking Wave” - Denis P. Curtin, Kim Folley
Tata Mc Graw Hill 1998




**BOARD OF STUDIES
DEPARTMENT OF ELECTRONICS**

Minutes of the meeting of the Board of Studies in Electronics held on Tuesday,
14.02.2012, at 10.00 A.M.

MEMBERS:

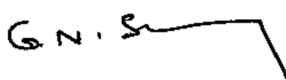
1. FR.DR.A.FRANCIS XAVIER, SJ, Principal 
2. FR.N.BUJJI BABU, SJ, Vice Principal 

University Nominee:

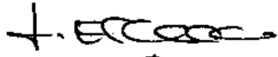
3. PROF.P.SIDDAIAH 

External Experts:

4. DR.ETHIRAJA RAVINDRAN

5. DR.G.N.SWAMY 

Faculty

6. SRI L. EKAMBARAM 

7. SRI VHS BRAHMAM PATNALA 



**DEPARTMENT OF ELECTRONICS
RESOLUTIONS**

The meeting of Board of Studies in Electronics was held on Monday, 14th February 2012 at 10 A.M.

The following resolutions were unanimously passed.

1. In 2nd year practical Paper II clipping & clamping practical are added.
2. In 5th semester in the Paper VII, **PC MAINTENANCE AND TROUBLE SHOOTING [PCMT]** in Unit-1, internal organization of 80286, internal organization of 80386 & 80486 topics are replaced with features and comparison.
3. In 6th semester- Practical paper VI: T.V demo practical is added.
4. New Question paper pattern is introduced with internal choice for 2nd Year students.

L.Ekambaram
H.O.D.Electronics & Chairman
Board of Studies

**NEW**

**II B.SC YEAR – ELECTRONICS
PRACTICAL II – ANALOG AND DIGITAL ELECTRONICS LAB
NEW SYLLABUS**

1. Single stage RC – coupled amplifier – frequency response.
2. Voltage regulator using IC- 7805 and IC-7905
3. OP-Amp (IC 741) as
 - a) Inverting amplifier.
 - b) Non- inverting amplifier.
 - c) Comparator.
4. OP-Amp (IC 741) as
 - a) Adder.
 - b) Subtractor
5. OP-Amp (IC 741) as
 - a) Integrator.
 - b) Differentiator.
6. OP-Amp as Wien bridge oscillator.
7. Astable multivibrator – Determination of frequency (using IC741 Op-Amp).
8. Monostable multivibrator–Determination of pulse width (using IC 741Op Amp)
9. Verification of logic gates using discrete components.
10. Verification of Half Adder & Full Adder
11. Half Sub tractor & Full Sub tractor
12. Conversion of Binary to Gray & Gray to Binary Numbers
13. Flip-Flops
14. Left Shift registers & Right Shift registers
15. Decade counter, Ripple Counter.
16. Simulation experiments using appropriate electronic circuit simulation software.
 - a) RC coupled amplifier.
 - b) Oscillator.
 - c) 555 timer.
 - d) Transistor as an amplifier.
17. Clipping using Diode.
18. Clamping using Diode

Note: Student has to perform the following experiments

- (1) Any 12 experiments among the experiment numbers 1 to 15.
- (2) Experiment Number 16 (a,b,c and d) is compulsory



**II B.SC YEAR – ELECTRONICS
PRACTICAL II – ANALOG AND DIGITAL ELECTRONICS LAB
OLD SYLLABUS**

1. Single stage RC – coupled amplifier – frequency response.
2. Voltage regulator using IC- 7805 and IC-7905
3. OP-Amp (IC 741) as
 - a) Inverting amplifier.
 - b) Non- inverting amplifier.
 - c) Comparator.
4. OP-Amp (IC 741) as
 - a) Adder.
 - b) Subtractor
5. OP-Amp (IC 741) as
 - a) Integrator.
 - b) Differentiator.
6. OP-Amp as Wien bridge oscillator.
7. Astable multivibrator – Determination of frequency (using IC741 Op-Amp).
8. Monostable multivibrator–Determination of pulse width (using IC 741Op Amp)
9. Verification of logic gates using discrete components.
10. Verification of Half Adder & Full Adder
11. Half Sub tractor & Full Sub tractor
12. Conversion of Binary to Gray & Gray to Binary Numbers
13. Flip-Flops
14. Left Shift registers & Right Shift registers
15. Decade counter, Ripple Counter.
16. Simulation experiments using appropriate electronic circuit simulation software.
 - a) RC coupled amplifier.
 - b) Oscillator.
 - c) 555 timer.
 - d) Transistor as an amplifier.

Note: Student has to perform the following experiments

- 1. Any 12 experiments among the experiment numbers 1 to 15.**
- 2. Experiment Number 16 (a,b,c and d) is compulsory**

**NEW**

**III B.Sc. V SEMESTER - ELECTRONICS - PAPER VII
PC MAINTENANCE AND TROUBLE SHOOTING: ELE-357
NEW SYLLABUS**

UNIT – I**INTRODUCTION TO COMPUTERS:**

Block diagram & types of computers. Mother Board Characteristics, choosing a Motherboard, Installing a Mother board, Upgrading system BIOS. Bus Slots – ISA, MCA, EISA, PCI, USB and firmware (IEEE 1394). Features and comparison of 80286, 80386 and 80486, Characteristics of Pentium MMX, Comparison of Pentium-2 with all other processors. Dual core, core 2 duo, quad, P4, P4HT, I3, I5, I7 processors.

UNIT – II

BASIC TROUBLE SHOOTING: Introduction about proper tools in system maintenance, Various test equipment for PC servicing, Reasons for failure of resistor, Reasons for failure of capacitor, Reasons for failure of other components, Safety precautions during trouble shooting.

Keyboard: Types of keyboards block diagram of keyboard, keyboard connectors. reasons for failure of keyboard.

Mouse: Working and components of mouse and different connectors.

Add on cards: MDA, CGA, VGA, Sound card, NIC card, SCSI Controller and FDC and HDC.

UNIT – III

STORAGE DEVICES: Introduction about disk drives, Characteristics of different disk drives

FDD:- Different types, working and components of drives.

HDD:- Different types, working and components of HDD drives partitioning & Formatting HDD

CDROM:- Different types working and components of CDROM drives.

DVD:- Different types, working and components of DVD.

Reasons for failure of disk drives

UNIT –IV

SMPS: linear, AT, ATX,

Block of SMPS and description of each block.

INTRODUCTION to UPS & SPS:

Reasons for power supply failure, Impact of power supply failure on PC

MONITOR: Introduction about display units, Different display technologies, block diagram, Reasons for display failure.

UNIT – V

PRINTERS:- Different types of printers, dot matrix, INKJET & LASER PRINTER – components and working.

PREVENTIVE MAINTANCE – Effect of heat and noise, Effect of corrosion on PC, Effect of power fluctuations, Effect of magnetic fields on system performance, EMI effect, Virus protection, Tools and techniques of S/W trouble shooting.

TEXT BOOKS:

1. UPGRADING AND REPAIRING PC – SCOTT MULLER.
2. **IBM PC and Clones:** Hardware, Troubleshooting and Maintenance --- GOVINDARAJALU, B

REFERENCE BOOKS:

1. I.T. HARDWARE - NATSHELL.
2. PRINTED MANUALS.



III B.Sc. V SEMESTER - ELECTRONICS - PAPER VII
PC MAINTENANCE AND TROUBLE SHOOTING: ELE-357
OLD SYLLABUS

UNIT – I**INTRODUCTION TO COMPUTERS:**

Block diagram & types of computers. Mother Board Characteristics, choosing a Motherboard, Installing a Mother board, Upgrading system BIOS. Bus Slots – ISA, MCA, EISA, PCI, USB and firmware (IEEE 1394). Comparison of 80286 & 80386, internal organization of 80286, internal organization of 80386, Comparison of 80486 with others, Characteristics of Pentium MMX , Comparison of Pentium-2 with all other processors. Dual core, core 2 duo, quad, P4, P4HT, I3, I5, I7 processors.

UNIT – II

BASIC TROUBLE SHOOTING: Introduction about proper tools in system maintenance, Various test equipment for PC servicing, Reasons for failure of resistor, Reasons for failure of capacitor, Reasons for failure of other components, Safety precautions during trouble shooting.

Keyboard: Types of keyboards block diagram of keyboard, keyboard connectors. reasons for failure of keyboard.

Mouse: Working and components of mouse and different connectors.

Add on cards: MDA, CGA, VGA, Sound card, NIC card, SCSI Controller and FDC and HDC.

UNIT – III

STORAGE DEVICES: Introduction about disk drives, Characteristics of different disk drives

FDD:- Different types, working and components of drives.

HDD:- Different types, working and components of HDD drives partitioning & Formatting HDD

CDROM:- Different types working and components of CDROM drives.

DVD:- Different types, working and components of DVD.

Reasons for failure of disk drives

UNIT –IV

SMPS: linear, AT, ATX,

Block of SMPS and description of each block.

INTRODUCTION to UPS & SPS:

Reasons for power supply failure, Impact of power supply failure on PC

MONITOR: Introduction about display units, Different display technologies, block diagram, Reasons for display failure.

UNIT – V

PRINTERS:- Different types of printers, dot matrix, INKJET & LASER PRINTER – components and working.

PREVENTIVE MAINTANCE – Effect of heat and noise, Effect of corrosion on PC, Effect of power fluctuations, Effect of magnetic fields on system performance, EMI effect, Virus protection, Tools and techniques of S/W trouble shooting.

TEXT BOOKS:

1. UPGRADING AND REPAIRING PC – SCOTT MULLER.

2. **IBM PC and Clones:** Hardware, Troubleshooting and Maintenance --- GOVINDARAJALU, B

REFERNCE BOOKS:

1. I.T. HARDWARE

- NATSHELL.

2. PRINTED MANUALS.



NEW

**III B.SC – ELECTRONICS
PRACTICAL – COMMUNICATION LAB
NEW SYLLABUS**

1. Amplitude modulation (AM)
2. Amplitude De-modulation
3. Frequency modulation (FM)
4. Frequency De-modulation
5. Pulse Amplitude modulation (PAM)
6. Pulse Width modulation (PWM)
7. Pulse Position modulation (PPM)
8. Pulse Code modulation (PCM)
9. Characteristics of LED
10. Characteristics of APD
11. Design and study of fiber optical analog link.
12. Study of loss Characteristics of fiber optics at different wavelengths.
13. Bending losses of graded index fiber
14. Bending losses of step indexed fiber
15. Losses in single and multi loop.
16. Losses in point to point coupling.
17. T.V demo kit demonstration



**III B.SC – ELECTRONICS
PRACTICAL – COMMUNICATION LAB
OLD SYLLABUS**

1. Amplitude modulation (AM)
2. Amplitude De-modulation
3. Frequency modulation (FM)
4. Frequency De-modulation
5. Pulse Amplitude modulation (PAM)
6. Pulse Width modulation (PWM)
7. Pulse Position modulation (PPM)
8. Pulse Code modulation (PCM)
9. Characteristics of LED
10. Characteristics of APD
11. Design and study of fiber optical analog link.
12. Study of loss Characteristics of fiber optics at different wavelengths.
13. Bending losses of graded index fiber
14. Bending losses of step indexed fiber
15. Losses in single and multi loop.
16. Losses in point to point coupling.



**BOARD OF STUDIES
DEPARTMENT OF HISTORY**

Minutes of the meeting of the Board of Studies in History held on Monday,
05.03.2012, at 2.30 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *Babu*

University Nominee:

3. DR.S.MURALI MOHAN *[Signature]*

External Experts:

4. DR.BEARNARD D' SAMY
5. SRI K SRINIVASULU

Faculty

6. SRI CH RAVINDRA RAJU — *[Signature]*
7. DR.M.SRINIVASA REDDY — *[Signature]*
8. MRS.P. NAGASRI *P. Nagasri*



**DEPARTMENT OF HISTORY
RESOLUTIONS**

The meeting Board of Studies in History was held on Monday, 5th March 2012 at 2.30 p.m.

The Board of Studies, after discussing all the units in all the papers viz. I to VIII and the General Elective paper offered by the Department passed the following resolutions unanimously.

1. It is resolved to continue the same existing syllabus of all papers without any modifications for the academic year 2012-2013.
2. The model paper, syllabi and the question paper pattern are recommended to be continued as earlier.

C.Ravindra Raju
H.O.D. History & Culture
& Chairman, Board of Studies



BOARD OF STUDIES
CONTEMPORARY INDIA – ECONOMY, POLITY AND SOCIETY

Minutes of the meeting of the Board of Studies in Indian Heritage and Culture (IHC)
held on Monday, 05.03.2012, at 2.30 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *Babu*

University Nominee:

3. PROF.MV RAMKUMAR RATNAM *Ram Kumar*

External Experts:

4. DR.BEARNARD D' SAMY
5. SRI K SRINIVASULU

Faculty

6. SRI CH RAVINDRA RAJU *Ch Raju*
7. DR.M.SRINIVASA REDDY *M. Srinivasa Reddy*
8. MRS.P. NAGASRI *P. Nagasri*



**CONTEMPORARY INDIA – ECONOMY, POLITY AND SOCIETY
RESOLUTIONS**

The meeting of the Board of Studies in **Contemporary India – Economy, Polity and society** was held on Monday, 5th March 2012 at 3.30 p.m.

1. The Board unanimously resolved to continue the existing Syllabus, model paper and examination pattern of the Foundation Course for the academic year 2012-2013 without any modifications.

Sri C Ravindra Raju
H.O.D. History & Culture
Chairman, Board of Studies



**BOARD OF STUDIES
DEPARTMENT OF POLITICAL SCIENCE**

Minutes of the meeting of the Board of Studies in Politics held on Wednesday,
15.02.2012 at 10.30 A.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal

University Nominee:

3. PROF.K.CHANDRA KUMAR *K. Chandra Kumar*

External Experts:

4. SRI VVG KRISHNAMACHARYULU
5. DR.N.J.PADMAKAR

N.J. Padmakar Babu

Faculty

6. SRI KV VIJAYA BABU
7. SRI P KRISHNARJUNA RAO
8. Dr. A. SAMUEL DAYAKAR

K.V. Vijaya Babu
P. Krishna Rao
A. Samuel Dayakar



**DEPARTMENT OF POLITICAL SCIENCE
RESOLUTIONS**

DATE: 15-02-2012

TIME-10.30A.M

The following resolutions have been passed unanimously by the Board of Studies:

1. It is resolved to add Gramsci with topics (a) Hegemony and (b) critique of Philosophical and Economic Determinism to the Unit V of Paper entitled Western Political Thought with Paper Code POL 355 of V Semester, III year.
2. It is resolved to delete a chapter entitled diplomacy and to add Unit V entitled 'Contemporary Global Concerns' with topics (a) International Terrorism: Causes and Consequences (b) Gender Justice : Problems and Prospects (c) Environmental Issues : The Kyoto Protocol and the Copenhagen Summit 09 and (d) Features of Emerging International Political and Economic Order to the Paper entitled International Relations with paper code POL 356 and also to add (c) India's Role in the UN Peace Keeping Missions abroad in the Unit II of the same Paper of V Semester , III year..
3. It is resolved to add (g) Decision Making Theory of Herbert Simon to the Unit II and (g) Line and Staff Agencies – Functions and Differences to the Unit III and (c) Citizens' Control and (d) Right to Information Act (India) 2005 to Unit IV of Paper entitled Public administration with Paper Code No POL 367 of VI Semester , III Year..
4. It is resolved to add Gautama Buddha and his views on Dhamma and Sangha to the Unit I of Paper Indian Political Thought with Paper Code POL 368 of VI Semester, III Year.
5. It is also resolved to adopt new model question papers for semesters III and IV with internal choice covering all the five units. In the new model paper, the descriptive type carries 80 marks (each unit carries 16 marks each) and the objective type questions carry 20 marks(having questions like 10 multiple questions 05 fill in the blanks questions and 05 true/ false questions)

K.V.Vijaya Babu
H.O.D. Political Science
& Chairman, Board of Studies



NEW

**III B.A - V SEMESTER - POLITICAL SCIENCE – PAPER V
WESTERN POLITICAL THOUGHT:POL 355
NEW SYLLABUS**

UNIT– I	NO OF PERIODS-25
PLATO: a) Theory of Justice b) Theory of Education c) Theory of Communism d) Philosopher – King ARISTOTLE: a) Theory of State b) Theory of Revolutions c) Views on Slavery	
UNIT – II	NO OF PERIODS -05
MACHIAVELLI a) Advice to the Prince b) On Religion and Politics	
UNIT- III	NO OF PERIODS -20
THOMAS HOBBS: a) Social Contract Theory b) Sovereignty JOHN LOCKE: a) Social Contract Theory b) Theory of Natural Rights J.J. ROUSSEAU: a) Social Contract Theory b) General Will	
UNIT-IV	NO OF PERIODS-15
J S MILL a) Liberty b) Representative form of Government HEGEL: a) Ideal State b) Dialectics	
UNIT – V	NO OF PERIODS -25
KARL MARX a) Dialectical Materialism b) Materialistic Interpretation of History c) Theories of Surplus Value and Class War d) Dictatorship of the Proletariat and Withering away of State. GRAMSCI: a) Hegemony b) Critique of Philosophical and Economic Determinism	

BOOKS RECOMMENDED:



SELECTED READINGS

- | | |
|---|--|
| 1. Sukhbir Singh | A History of Political Thought |
| 2. D. R. Bhandari | History of European Political Philosophy |
| 3. J.P.Suda | A History Of Political Thought |
| 4. V.D. Mahajan | A History of Modern Political Thought |
| 5. Subrata Mukherjee &
Sushila Ramaswamy | A History of Political Thought – Plato to Marx |

REFERENCE BOOKS

- | | |
|-----------------------------------|--|
| 1. Earnest Barker | Greek Political Theory |
| 2. G H Sabine | A History Of Political Theory |
| 3. W.A. Dunning | A History of Political Theories (vols1,2,3.) |
| 4. Karl Marx and Friedrich Engels | Communist Manifesto |
| 5. Chantal Mouffe | Gramsci and Marxist Theory |
| 6. A. Arblaster | The Rise and Decline of Western Liberalism |
| 7. T. Bottomore | Karl Marx |



OLD

**III B.A - V SEMESTER - POLITICAL SCIENCE – PAPER V
WESTERN POLITICAL THOUGHT:POL 355
OLD SYLLABUS**

CONTENTS OF THE COURSE:

Chapter – I: PLATO:

- e) Theory of Justice
- f) Theory of Education
- g) Theory of Communism
- h) Philosopher – King

Chapter – II: ARISTOTLE:

- d) Theory of State
- e) Theory of Revolutions
- f) Views on Slavery

Chapter – III: MACHIAVELLI

- c) Advice to the Prince
- d) On Religion and Politics

Chapter – IV: THOMAS HOBBS:

- c) Social Contract Theory
- d) Sovereignty

Chapter – V: JOHN LOCKE:

- c) Social Contract Theory
- d) Theory of Natural Rights

Chapter – VI: J.J. ROUSSEAU:

- c) Social Contract Theory
- d) General Will

Chapter- VII: J S MILL

- a) Liberty
- b) Representative form of Government

Chapter – VIII: HEGEL:

- c) Ideal State
- d) Dialectics

Chapter – IX: KARL MARX

- e) Dialectical Materialism
- f) Materialistic Interpretation of History
- g) Theories of Surplus Value and Class War
- h) Dictatorship of the Proletariat and Withering away of State.



III B.A - V SEMESTER - POLITICAL SCIENCE – PAPER V
INTERNATIONAL RELATIONS:POL 356
NEW SYLLABUS

UNIT- I	NO OF PERIODS -05
INTRODUCTION	
a) Definition, nature and scope of International Relations	
b) Differences between International Relations and International Politics	
UNIT – II	NO OF PERIODS -10
FOREIGN POLICY:	
a) India’s Foreign Policy – Determinants	
b) Study of India’s Foreign policy with special reference to Its neighbours - China, Pakistan, and Sri Lanka	
c) India ‘s role in UN peace keeping missions abroad.	
UNIT–III	NO OF PERIODS -10
NON – ALIGNMENT:	
a) Meaning, Genesis and growth	
b) Relevance of the movement in the changed context	
UNIT- IV	NO OF PERIODS -15
MAJOR ISSUES IN INTERNATIONAL RELATIONS:	
a) Cold War – Origin, Growth and Decline	
b) Decline of the Socialist bloc – Causes and Consequences	
c) Regional Co-operation – European Union, and SAARC	
d) NPT and CTBT	
UNIT- V	NO OF PERIODS -20
CONTEMPORARY GLOBAL CONCERNS:	
a) International Terrorism –Causes and Consequences	
b) Gender Justice – problems and prospects.	
c) Environmental Issues – The Kyoto Protocol & the Copenhagen Summit ‘09	
d) Features of Emerging International Political and Economic Order.	

XXX



BOOKS RECOMMENDED:

SELECTED READINGS

- | | |
|-------------------------|---|
| 1. Vinay Kumar Malhotra | International Relations |
| 2. Prakash Chandra | International Relations |
| 3 .V.P. Dutt | India's Foreign Policy |
| 4. Mahendra Kumar | Theoretical Aspects of International Politics |

REFERENCE BOOKS

- | | |
|---|--|
| 1. Jayatanuja Bandyopadhyaya | The Making of India's Foreign Policy |
| 2.J.Evans | Feminism and Political Theory |
| 3.Joseph Frankel | International Relations In a Changing World. |
| 4.Norman D. Palmer &
Howard C. Perkins | International Relations- The Community in
Transition |
| 5. Peter Calvocoressi | World Politics Since 1945 |
| 6. Jayatanuja Bandyopadhyaya | North Over South |
| 7.K.P. Mishra and K.R. Narayan (ed) | Non – Alignment in Contemporary International
Relations |
| 8. Ratna Tikoo | Indo- Pak Relations |



III B.A - V SEMESTER - POLITICAL SCIENCE – PAPER V
INTERNATIONAL RELATIONS:POL 356
OLD SYLLABUS

CONTENTS OF THE COURSE:

Chapter – I: INTRODUCTION

- a) Definition , nature and scope of International Relations
- b) Differences between International Relations and International Politics

Chapter - II: DIPLOMACY:

- a) Definition and meaning
- b) Classical Diplomacy
- c) Modern Diplomacy

Chapter - III: FOREIGN POLICY:

- a) India's Foreign Policy – Determinants
- b) Study of India's Foreign policy with special reference to Its neighbours - China, Pakistan, and Sri Lanka

Chapter – IV: NON – ALIGNMENT:

- a) Meaning, Genesis and growth
- b) Relevance of the movement in the changed context

Chapter – V: MAJOR ISSUES IN INTERNATIONAL RELATIONS:

- a) Cold War – Origin, Growth and Decline
- b) Decline of the Socialist bloc – Causes and Consequences
- c) Regional Co-operation – European Union, and SAARC
- d) NPT and CTBT
- e) International Terrorism – causes and Consequences

--X--



NEW

**III B.A - VI SEMESTER - POLITICAL SCIENCE – PAPER VII
PUBLIC ADMINISTRATION:POL 367
NEW SYLLABUS**

UNIT- I	NO OF HOURS -15
INTRODUCTION	
a) Meaning, Nature, and Scope of Public Administration	
b) Relations Between Public and Private Administration	
c) Politics – Administration Dichotomy	
UNIT – II	NO OF HOURS -15
APPROACHES TO PUBLIC ADMINISTRATION	
a) Max Weber – Bureaucratic Model	
b) Classical Approach – Gulick & Urwick	
c) Human Relations Theory - Elton Mayo	
d) Social – Psychological Theory – Mc Gregor	
e) Hierarchy of Needs – Abraham Maslow	
f) Ecological Approach – FW Riggs	
g) Decision making Theory - Herbert Simon	
UNIT – III:	NO OF HOURS -20
PRINCIPLES OF ORGANISATION:	
a) Hierarchy	
b) Span of Control	
c) Unity of Command	
d) Centralization	
e) Decentralization	
f) Delegation	
g) Line and staff Agencies- Functions and Differences	
UNIT – IV	NO OF HOURS -25
PUBLIC CONTROL OVER ADMINISTRATION:	
a) Legislative Control	
b) Judicial Control	
c) Citizen’s Control	
d) Right to Information Act (India) 2005	
UNIT- V	NO OF HOURS -15
RECENT TRENDS IN PUBLIC ADMINISTRATION:	
a) State versus Market: A Debate	
b) E – Governance and Its Utility	
c) New Public Management Perspective	

XXX



BOOKS RECOMMENDED:

SELECTED READINGS

1. S.P Naidu
2. Vishnoo Bhagwan & Vidya Bhushan
3. C.P. Bhambri
4. M.P.Sharma
5. Avasti A & S.R. Maheswari

Public Administration
Public Administration
Public Administration
Public Administration
Public Administration

REFERENCE BOOKS

1. Dimock M.E, Dimock G.O and Koenig
2. F.M. Marx
3. Raymond W. Cox III et.al.
4. Pfiffner and Presthus
5. Dwight Waldo
6. D. Ravindra Prasad et.al.
7. S.R.Maheswari
7. David Osborne & Ted Gaebler

Public Administration
Elements Of Public Administration
Public Administration in Theory &
Practice
Public Administration
The Study of Public Administration
Administrative Thinkers
Administrative Theories
Reinventing Government



OLD

**III B.A - VI SEMESTER - POLITICAL SCIENCE – PAPER VII
PUBLIC ADMINISTRATION:POL 367
OLD SYLLABUS**

CONTENTS OF THE COURSE

Chapter – I: INTRODUCTION

- d) Meaning, Nature, and Scope of Public Administration
- e) Relations Between Public and Private Administration
- f) Politics – Administration Dichotomy

Chapter – II: APPROACHES TO PUBLIC ADMINISTRATION

- h) Max Weber – Bureaucratic Model
- i) Classical Approach – Gulick & Urwick
- j) Human Relations Theory - Elton Mayo
- k) Social – Psychological Theory – Mc Gregor
- l) Hierarchy of Needs – Abraham Maslow
- m) Ecological Approach – FW Riggs

Chapter – III: PRINCIPLES OF ORGANISATION:

- h) Hierarchy
- i) Span of Control
- j) Unity of Command
- k) Centralization and Decentralization
- l) Delegation

Chapter – IV: LINE AND STAFF AGENCIES:

- a) Meaning, Nature, and Types
- b) Functions
- c) Relation & Differences between them with examples
- d) Line and Staff Agencies in India

Chapter – V: PUBLIC CONTROL OVER ADMINISTRATION:

- e) Legislative Control
- f) Judicial Control

Chapter VI: RECENT TRENDS IN PUBLIC ADMINISTRATION:

- d) State versus Market: A Debate
- e) E – Governance and Its Utility
- f) New Public Management Perspective

--X--



**III B.A - VI SEMESTER - POLITICAL SCIENCE – PAPER VIII
INDIAN POLITICAL THOUGHT:POL 368
NEW SYLLABUS**

UNIT – I	NO OF PERIODS- 20
MANU	
a) Varna System	
b) Kingship	
c) Welfare State	
GAUTAMA BUDDHA	
a) Dhamma	
b) Sangha	
KAUTILYA:	
a) Kingship	
b) Religion and Politics Dichotomy	
c) Mandala Theory	
UNIT – II	NO OF PERIODS- 10
GANDHI	
a) Concept of Non – Violence	
b) Theory of Trusteeship	
c) Concept of Gram Swaraj	
d) Role of Mahatma in India’s Freedom Struggle	
UNIT – III	NO OF PERIODS- 10
M.N. ROY	
a) Views on India’s Freedom Struggle	
b) Radical Humanism	
JAYA PRAKASH NARAYAN:	
a) Total Revolution	
b) Sarvodaya	
UNIT – IV	NO OF PERIODS- 10
NEHRU	
a) Democratic Socialism	
b) Maker of Modern India	
UNIT– V	NO OF PERIODS- 10
AMBEDKAR	
a) Views on Indian Society	
b) Dalit Movement	
c) Influence of Ambedkarism on current Indian Politics	

XXX



BOOKS RECOMMENDED:

SELECTED READINGS

1. H. R. Mukhi Ancient Indian Political Thought & Institutions
2. V.P Varma Modern Indian Political Thought
3. W. N. Kuber B.R. Ambedkar
4. S . Vijayaraghavan & R. Jayaram Political Thought
- 5.

REFERENCE BOOKS

1. J. Spellman The political Theory of Ancient India.
2. Manu Manusmriti
3. Kautilya Arthasastra
4. MK Gandhi My Experiments with Truth
5. Jawaharlal Nehru Discovery of India
6. MN Roy M.N. Roy's Memories
7. R.S. Sharma Aspects of Political Ideas and Institutions in Ancient India.
8. A.S. Altekar State and Government in Ancient India.



**III B.A - VI SEMESTER - POLITICAL SCIENCE – PAPER VIII
INDIAN POLITICAL THOUGHT:POL 368
OLD SYLLABUS**

CONTENTS OF THE COURSE

Chapter – I: MANU

- Varna System
- Kingship
- Welfare State

Chapter – II: KAUTILYA:

- Kingship
- Religion and Politics Dichotomy
- Mandala Theory

Chapter – III GANDHI

- Concept of Non – Violence
- Theory of Trusteeship
- Concept of Gram Swaraj
- (d) Role of Mahatma in India's Freedom Struggle

Chapter – IV: M.N. ROY

- Views on India's Freedom Struggle
- Radical Humanism

Chapter – V: NEHRU

- Democratic Socialism
- Maker of Modern India

Chapter VI Jaya Prakash Narayan :

- Total Revolution
- Sarvodaya

Chapter – VII: AMBEDKAR

- Views on Indian Society
- Dalit Movement
- Influence of Ambedkarism on current Indian Politics

XXXX



**BOARD OF STUDIES
DEPARTMENT OF ECONOMICS**

Minutes of the meeting of the Board of Studies in Economics on Tuesday,
24.01.2012, at 2.30 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal

University Nominee:

3. PROF.M KOTESWARA RAO *M Rao 24/1/12*

External Experts:

4. SRI A RAJA SEKHAR *A. Sekhar*
5. SMT.AROGYAMMA *T. Arogyamma 24/1/2012*

Faculty

6. SRI S YOSEBU *Yosebu*
7. MRS.S.BABY RANI *Baby Rani*
8. SRI SATYANARAYANA



**DEPARTMENT OF ECONOMICS
RESOLUTIONS**

The Economics Board of Studies met on 24th January 2012 at 2.30 p.m. in the Conference Hall.

The following resolutions have been unanimously passed to retain the same syllabus with slight modifications and the same examination pattern for the academic year 2012-2013 for First year B.A, B.Com., Second year and Third year B.A.

1. In I Semester, paper – I and Paper- II of I B.Com , No changes have been made.
2. In paper –I of I B.A. in Unit – 1 – wages, profit, interest deleted, Robbins definition added. In paper - II of I B.A., no changes have been made.
3. In paper - III of II B.A., in Unit -2, investment criteria deleted. Unit - 5 - Agricultural labor problems – remedies added .Role of services health, education & IT.
4. In paper – VI of II B.A., In Unit – 2 –SHGs – Micro Finance added. In Unit – 2, structural distribution deleted, I n Unit – 4, Large scale industries deleted. In Unit – 5, social sector, health, education added.
5. In paper – V of III B.A., Unit - 3, rural employment, employment generation programs added. In Unit - 4, non-farm employment added.
6. In paper - VI of III B.A., Tariffs , Central and State Financial relations, recent Finance Commission added.
7. In paper – VII of III B.A., in Unit - 3, property rights approach to environment deleted. In Unit – 4, Pollution Control Boards - activities added.
8. In paper – VIII of III B.A., In Unit - 1, Theories of International trade, Foreign Exchange Management Act (FEMA) added.

S.YOSEBU
H.O.D. Economics &
Chairman, Board of Studies



NEW

**I B.A. ECONOMICS - I SEMESTER – PAPER - I
ECONOMIC THEORY: ECO 111
NEW SYLLABUS**

Unit: 1

SCOPE

Micro and Macro economics , definitions of Adam Smith, Robbins and Samuelson, concepts static and dynamic analysis-concepts of general and partial equilibrium.

(number of periods: 15)

Unit: 2

DEMAND

Concept of cardinal utility, law of demand-elasticity of demand-types & measurement-indifference curve analysis-consumers equilibrium- price, income & substitution effect-derivation of demand curve, consumers surplus.

(number of periods:20)

Unit: 3

PRODUCTION

Production function- Iso-quant curve -law of variable proportions - returns to scale - economies of scale – concept of cost and their interrelation.

(number of periods: 20)

Unit: 4

DISTRIBUTION

Marginal productivity theory of distribution and concepts of rent, wage, profit and interest.

(number of periods:10)

Unit: 5

MARKETS

Concept of equilibrium of a firm - price & output determination under perfect competition – monopoly - monopolistic competition - concept of kinky demand curve.

(number of periods:15)

REFERENCE BOOKS:

1. Principles of economics : M.L.Seth, Himalaya publications
2. Advanced economic theory : Ahuja: Kalyani publications
3. Macro economics : Gardener Ackley, Cambridge publications
4. Modern economic theory : K.K.Dewett, S.Chand publication.



**I B.A. ECONOMICS - I SEMESTER – PAPER - I
ECONOMIC THEORY: ECO 111
OLD SYLLABUS**

Unit: 1

SCOPE

Micro and Macro economics , definitions of Adamsmith and Samuelson’s –concepts static and dynamic analysis-concepts of general and partial equilibrium.

(Periods: 15)

Unit: 2

DEMAND

Concept of cardinal utility, indifference curve analysis-consumers equilibrium- price, income & substitution effect-derivation of demand curve- law of demand-elasticity of demand-types & measurement-consumers surplus.

(Periods:20)

Unit: 3

PRODUCTION

Production function- Iso-quant curve -law of variable proportions - returns to scale - economies of scale – concept of cost and their interrelation.

(periods: 20)

Unit: 4

DISTRIBUTION

Marginal productivity theory of distribution and concepts of rent, wage, profit and interest.

(periods:10)

Unit: 5

MARKETS

Concept of equilibrium of a firm - price & output determination under perfect competition – monopoly - monopolistic competition - concept of kinky demand curve.

(periods:15)

REFERENCE BOOKS:

1. Principles of economics : M.LSeth, Himalaya publications
2. Advanced economic theory : Ahuja: Kalyani publications
3. Macro economics : Gardener Ackley, Cambridge publications
4. Modern economic theory : K.K.Dewett, S.Chand publication.



NEW

**II B.A ECONOMICS - III SEMESTER -PAPER III
INDIAN ECONOMIC DEVELOPMENT: ECO 233
NEW SYLLABUS**

Unit: 1

CONCEPTS

Development and underdevelopment – factors conducive & hindrances to development – measurement of development – physical quality of life index, human development index & human poverty index – net economic welfare. (number of periods:25)

Unit: 2

APPROACHES TO DEVELOPMENT

Liberalization, Privatization, Globalization, Impact of economic reforms on Indian economy . (number of periods:20)

Unit: 3

PLANNING

A brief review of objectives and achievements and failures of five-year plans – current five - year plan and its objectives. (number of periods: 10)

Unit: 4

ECONOMIC PROBLEMS

Causes and remedies of unemployment, poverty and anti poverty programmes- inequalities in income-TPDS (number of periods: 10)

Unit: 5

AGRICULTURE AND INDUSTRY

A brief review of land reforms – green revolution – agricultural marketing and agricultural price policy. role of small scale industries and their sickness and special packages in industrial policy resolution 1991. (number of periods: 25)

REFERENCE BOOKS:

1. Indian economy : Dutt and Sundaram ,S.Chand co
2. Indian economic problems : Misra and Puri ,Kalyani publishers
3. The economics of development & planning: M.L Jhingan, Kalyani publishers.
4. Indian economy : Vaish .M.C,Jain publishers.
5. Indian economy : Dhar .P. K ,Kalyani publishers



**II B.A ECONOMICS - III SEMESTER -PAPER III
INDIAN ECONOMIC DEVELOPMENT: ECO 233
OLD SYLLABUS**

Unit: 1

CONCEPTS

Development and underdevelopment – factors conducive & hindrances to development – measurement of development – physical quality of life index, human development index & human poverty index – net economic welfare. (periods:25)

Unit: 2

APPROACHES TO DEVELOPMENT

Balanced & unbalanced growth – investment criteria – import substitution and export promotion. (periods:20)

Unit: 3

PLANNING

A brief review of objectives and achievements and failures of five-year plans – current five - year plan and its objectives. (periods: 10)

Unit: 4

ECONOMIC PROBLEMS

Causes and remedies of unemployment, poverty and anti poverty programmes- inequalities in income-TPDS (periods: 10)

Unit: 5

AGRICULTURE AND INDUSTRY

A brief review of land reforms – green revolution – agricultural marketing and agricultural price policy. role of small scale industries and their sickness and special packages in industrial policy resolution 1991. (periods: 25)

REFERENCE BOOKS:

1. Indian economy : Dutt and Sundaram ,S.Chand co
2. Indian economic problems : Misra and Puri ,Kalyani publishers
3. The economics of development & planning: M.L Jhingan, Kalyani publishers.
4. Indian economy : Vaish .M.C,Jain publishers.
5. Indian economy : Dhar .P. K ,Kalyani publishers



NEW

**II B.A ECONOMICS IV- SEMESTER – PAPER- IV
ANDHRA PRADESH ECONOMY: ECO 244
NEW SYLLABUS**

Unit :1

PLACE OF A.P IN INDIAN ECONOMY

Basic features- population, SGDP, level of employment, land, minerals, climate, forests.

(Number of periods:10)

Unit: 2

GROWTH OF AP ECONOMY SINCE ITS FORMATION

National income trends – structural distribution – plan wise growth – developmental programmes in A.P.

(Number of periods:20)

Unit :3

AGRICULTURAL SECTOR

Green revolution in A.P– agricultural marketing – agriculture and allied activities (sugar, dairy) - food security & agricultural credit.

(Number of periods: 30)

Unit : 4

INDUSTRIES IN A.P:

Large scale industries – small scale industries – handicraft and handloom industries in A.P – jute and power sector in A.P.

(number of periods:15)

Unit: 5

SERVICE SECTOR IN A.P

Infrastructure- irrigation projects, roads and information technology.

(number of periods:15)

REFERENCE BOOKS

1. A.P Economy since independence :A.V.Ramana rao, Kalyani publishers
2. A.P . Economy :Mahendradev & Hanumantrao, Kalyani publishers



OLD

**II B.A ECONOMICS IV- SEMESTER – PAPER- IV
ANDHRA PRADESH ECONOMY: ECO 244
OLD SYLLABUS**

Unit :1

PLACE OF A.P IN INDIAN ECONOMY

Basic features- population, SGDP, level of employment, land, minerals, climate, forests.
(Periods:10)

Unit: 2

GROWTH OF AP ECONOMY SINCE ITS FORMATION

National income trends – structural distribution – plan wise growth – developmental programmes in A.P.
(Periods:20)

Unit :3

AGRICULTURAL SECTOR

Green revolution in A.P– agricultural marketing – agriculture and allied activities (sugar, dairy, poultry, marine trade) - food security & agricultural credit.
(Periods: 30)

Unit : 4

INDUSTRIES IN A.P:

Large scale industries – small scale industries – handicraft and handloom industries in A.P – jute and power sector in A.P.
(periods:15)

Unit: 5

SERVICE SECTOR IN A.P

Infrastructure- irrigation projects, roads and information technology.
(periods:15)

REFERENCE BOOKS

1. A.P Economy since independence :A.V.Ramana rao
2. A.P . Economy : Mahendradev & Hanumantrao

**NEW**

**V SEMESTER –III B.A - ECONOMICS - PAPER –VI
ELECTIVE - PUBLIC FINANCE: ECO356
NEW SYLLABUS**

Unit : 1

PUBLIC FINANCE : Meaning and scope of Public Finance – public finance and private finance – sources of public revenue. (no.of.hrs: 10)(20 marks)

Unit : 2

TAXATION: Taxation – meaning – Direct and Indirect Taxes - their merits and demerits – Canons of taxation – incidence of taxation – effects of taxation – Characteristics of good tax system. (no.of.hrs:15,marks:25)

Unit : 3

PUBLIC EXPENDITURE: Meaning and classification of public expenditure – canons and effects of public expenditure. (no.of.hrs: 10)(15 marks)

Unit : 4

PUBLIC DEBT : Public debt - sources of public debt - effects of public debt - debt redemption methods – growth of India's public debt – Concept of budget deficit . (no.of.hrs: 15) (20 marks)

Unit : 5

TARIFFS : Tariffs – meaning – classification of tariffs and concept of Optimum Tariff-Central and State financial relations-13TH Finance Commission. (no.of.hrs :10)(20 marks)

Reference books :

Fundamentals of public finance	: Mithani.D.M.Kalyani publishers
Public finance	: Lekhi .R.K,Kalyanipublishers
Public finance	: Bhatia,Jain publishers.
Public finance theory and practice	:Mankar ,S.C.Co .ltd.
Public finance	: J.K.Mehta,Chand & Chand co.



**VI SEMESTER –III B.A - ECONOMICS - PAPER –VIII
ELECTIVE - INTERNATIONAL TRADE: ECO368
NEW SYLLABUS**

Unit : 1

THEORIES OF INTERNATIONAL TRADE:

Inter-regional and International trade –Absolute advantage, Comparative advantage and Hecksher- Ohlin theories – Foreign Exchange Management Act (FEMA)

(no.of.hrs :10)(15 marks)

Unit : 2

BALANCE OF PAYMENTS: Concept of balance of payments and balance of trade -disequilibrium in balance of payments, causes and corrective measures .

(no.of.hrs :15)(20 marks)

Unit : 3

FOREIGN TRADE IN INDIA : Composition and direction of foreign trade – export promotion policy - high lights of EXIM Policy, Foreign Direct Investment(FDIs)

(no.of.hrs :15)(20 marks)

Unit : 4

INTERNATIONAL FINANCIAL INSTITUTIONS :

International Monetary Fund (IMF), International Bank for Reconstruction and Development (IBRD)

World Trade Organization (WTO)

(No.of. hrs : 10)(25 marks)

Unit : 5

GLOBALIZATION :

Concepts of Liberalization, Privatization and Globalization (LPG), their implementation in developing nations .

(no.of.hrs:10) (20 marks)

Reference books:

International Economics : Francis Cherunilam, Himalayan publishers

International Economics : Shrivastava, Jain publishers

International Economics : Malhotra, S.Chand Co.ltd



OLD

**III B.A ECONOMICS V SEMESTER -PAPER VI
ELECTIVE - PUBLIC FINANCE AND INTERNATIONAL TRADE: ECO 356 PF
OLD SYLLABUS**

Unit:1

PUBLIC FINANCE

Meaning and scope of public finance –public finance and private finance- sources of public revenue (number of periods :10)

Unit :2

TAXATION

Taxation-meaning-direct and indirect taxes –their merits and demerits-canons of taxation-incidence of taxation-effects of taxation- characteristics of a good tax system. (number of periods :15)

Unit: 3

PUBLIC EXPENDITURE

Meaning and classification of public expenditure: canons and effects of public expenditure (number of periods:10)

Unit: 4

PUBLIC DEBT

Public debt-sources of public debt –effects of public debt-methods of debt redemption-growth of India’s public debt-concept of budget deficit. (number of periods:15)

Unit:5

THEORIES OF INTERNATIONAL TRADE

Inter-regional and international trade – absolute advantage, comparative advantage and Hecksher-Ohlin theories. (number of periods :10)

REFERENCE BOOKS

- | | | |
|--------------------------------------|---|-------------------------|
| 1. Fundamentals of public finance | : | Mithani. |
| 2. Public finance | : | Lekhi.R.K. |
| 3. Public finance | : | Bhatia,Jain publishers. |
| 4. Public finance theory and finance | : | Mankar. |
| 5. Public finance | : | J.KMehta. |
| 6. International economics | : | M.L.Jhingan. |



**III B.A ECONOMICS V SEMESTER -PAPER VI
ELECTIVE - PUBLIC FINANCE AND INTERNATIONAL TRADE: ECO 368 PF
OLD SYLLABUS**

Unit: 1

TARIFFS AND BALANCE OF PAYMENTS

Tariffs – meaning- classification of tariffs and concepts of optimum tariff.

(number of periods:10)

Unit: 2

BALANCE OF PAYMENTS

Concepts of balance of payments and balance of trade-disequilibrium in balance of payments, causes and corrective measure.

(number of periods: 15)

Unit: 3

FOREIGN TRADE IN INDIA

Composition and direction of foreign trade – export promotion policy- highlights of Exim policy, Foreign Direct Investment(FDI).

(number of periods:15)

Unit: 4

INTERNATIONAL FINANCIAL INSTITUTIONS

International Monetary Fund(IMF), International Bank for Reconstruction and Development(IBRD),World Trade Organization(WTO)

(number of periods:10)

Unit: 5

GLOBALIZATION

Concepts of Liberalization, Privatization and Globalization(LPG), their implementation in developing nations.

(number of periods:10)

REFERENCE BOOKS:

1. International economics : Dwivedi.
2. International economics : Francis cheruniliam
3. International relations : Malhotra.
4. International economics : Shrivatsava.



NEW

**III B.A ECONOMICS - V SEMESTER - PAPER V
RURAL DEVELOPMENT : ECO 355
NEW SYLLABUS**

Unit : 1

SCOPE OF RURAL DEVELOPMENT:

The concept of rural development – approaches to rural development
(no .of .hrs:10)(15mrks)

Unit : 2

RURAL DEMOGRAPHY: Population policy –approaches to control rural population – family welfare programmes - problems of nutrition and medical care
(number of hours :15)(25marks)

Unit : 3

RURAL POVERTY AND UNEMPLOYMENT: Causes of poverty - measurement of rural poverty – poverty line –anti poverty programs- employment generation programs- Conditions of Rural Artisans – rural indebtedness.
(no .of. hrs:20),(25marks)

Unit : 4

RURAL DEVELOPMENT INSTITUTIONS :Panchayat Raj – DRDA-ITDA,NABARD-DIC-Their objectives and functions, significance of rural industrialization – Micro Finance-Non – farm employment .
(no.of.hrs :25)(marks :20)

Unit : 5

RURAL SOCIAL SECTOR :
Problems of Health, a critical review of Arogya sree- rural education and adult education ,it's implementation and NRHM.
(no.of.hrs: 20)(15: marks)

Reference books:

Rural Development in India	:I.Satyasundaram,Himalaya publishers.
Rural Development & banks	:Goyal.K.G.Kalyani Publishers
Agriculture & Rural Development	:Dr.K.Venkata reddy,Kalyani publishers.
Rural Development in India	:Lingaiah ,S.Chand .Co .ltd.



OLD

**III B.A ECONOMICS - V SEMESTER - PAPER V
RURAL DEVELOPMENT : ECO 355
OLD SYLLABUS**

Unit: 1

SCOPE OF RURAL DEVELOPMENT

The concept of rural development – approaches to rural development.
(number of periods:10) (15marks)

Unit : 2

RURAL DEMOGRAPHY

Population policy-approaches to control rural population – family welfare programmes – problems of nutrition and medical care (number of periods:15) (25marks)

Unit: 3

RURAL POVERTY

Causes of poverty- measurement of rural poverty- poverty line- anti poverty programmes – conditions of rural artisans- rural indebtedness. (number of periods:20) (25marks)

Unit: 4

RURAL DEVELOPMENT INSTITUTIONS

Panchayat Raj- DRDA -ITDA - NABARD-DIC - their objectives and functions, significance of rural industries - micro finance. (number of periods :25)(20marks)

Unit : 5

RURAL SOCIAL SECTOR

Problems of health, a critical review of Arogyasri- rural education and adult literacy, it's implementation and NRHM. (number of periods: 20) (15marks)

REFERENCE BOOKS

- | | |
|------------------------------------|---|
| 1. Rural development in India | :I.Satya sundaram, Himalaya publishers. |
| 2. Rural development & banks | :Goyal K.G,Kalyani publishing house. |
| 3. Rural development in India | :Lingaiah, S.Cchnd co ltd. |
| 4. Agriculture & rural development | :Dr.K .Venkata reddy, Kalyani publishing house. |
| 5. Poverty in India | :Dandekar & Rath,Chand&Chand co ltd. |



**BOARD OF STUDIES
DEPARTMENT OF COMMERCE**

Minutes of the meeting of the Board of Studies in Commerce held on Wednesday, 15.02.2012, at 2.00 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *B. Babu*

University Nominee:

3. PROF.S VIJAYA RAJU *Vijaya Raju*

External Experts:

4. PROF. ~~TECHINAPPA~~ N. ANJANEYALU *Anjaneyalu*
5. MRS.A.UTTAM DURGA

Faculty:

6. SRI CH V CHOWDARY *C.V. Chowdary*
7. DR. NA FRANCIS XAVIER *Dr. N. Francis Xavier*
8. SRI B SYAM SUNDAR *Syam Sundar*
9. MRS.K.KIRANMAYEE *Kiranmayee*
10. MS.V.P.M.P.KUMARI *V.P.M.P. Kumari*
11. SRI CH PRASANNA KUMAR *Ch. Prasanna Kumar*
12. MS.N.NIRMALA RANI *N. Nirmala Rani*
13. MS.K.BHARATI LAKSHMI *Bharati Lakshmi*
14. MRS.P.ASA LAKSHMI *P. Asa Lakshmi*
15. MS.K.MAHALAKSHMI *K. Mahalakshmi*
16. MS.KVB SAILAJA *Sailaja*
17. MRS.M.ROHINI
18. SRI L PRAKASA RAO *Prakasa Rao*



DEPARTMENT OF COMMERCE RESOLUTIONS

Resolutions passed at the 26th Commerce Board of Studies Meeting held on 15th February 2012, Wednesday, at 2.00 P.M in the Conference Hall.

Resolutions:-

1. The minutes of the previous Board of Studies Meeting were Read out and approved.
2. Resolved to introduce practicals for 3rd B.COM for 25 Marks in the internals.
3. Resolved to introduce paper “Programming in C⁺⁺ in the 4th semester in the place of “Java Programming” for the 2nd B.COM Computers.
4. Resolved to introduce paper “Advanced Corporate Accounting” as elective subject in the V and VI Semesters in the place of “ Income Tax Law and Practice “for the 3rd B.COM (General)
5. It is resolved to implement new question paper pattern for II year.

Ch. Veeraiah Chowdary
H.O.D. Commerce &
Chairman, Board of Studies

**NEW**

**II B.COM (COMP) - 1V SEMESTER
PROGRAMMING WITH C++
NEW SYLLABUS**

UNIT-1:

OOPs, A new paradigm-Evaluation of programming paradigm-objects-classes
Multiple viewing of the same object-Encapsulation and Data Abstraction-Inheritance-
Delegation-Object Composition-Polymorphism-Message Communication.
Popular OOPs language-Merits and Demerits of Oop methodology-Application of OOPs.

UNIT-11:

Application of C++-Structure of C++ program-Tokens-Expression-Basic data types.
Symbolic constants-declaring data types-reference variable-operators in C++.
Scope resolution operator-Expressions and Implicit Conversions-Control structures.
Functions in C++-Call by Reference-Call by Value-Inline functions-Default arguments-
Constant Arguments-Classes and objects-Defining Member Functions-Nesting Member
Functions-Private Member Function-Static Member Functions.

UNIT-111:

Arrays of Objects-Creating String Objects-Relational operations-String characteristics-Friend
Function-Returning Objects-Constant Member Functions-Pointer to Members-Constructor
with Default Arguments-Copy Constructor.
Dynamic Constructor-Destructors.

UNIT-1V:

Operator over Loading and Type Conversions-Rules for Operator Over loading-Function over
loading-Function over loading with arguments.
Inheritance-Single inheritance- Types of Base Classes-Types of derivation-Public-Private-
Protected Inheritance-Multilevel inheritance-Multiple Inheritance-Hierarchical Inheritance-
Hybrid Inheritance-Polymorphism.

UNIT-V:

Basics of Exception Handling-Exception Handling Machanism-Rethrowing an Exception-
C++ Streams-Unformatted I/O operations-Classes for file stream operations-Opening and
Closing File

Reference Books:

- 1.E.Balagurusamy "Object oriented programming with C++"
- 2.R.Ravichandran "Programming with C++"



**III B.COM GENERAL - SEMESTER- V
ELECTIVE - ADVANCED CORPORATE ACCOUNTING
NEW SYLLABUS**

UNIT –I

THE ACCOUNTS OF HOLDING COMPANIES-I

The Nature of Holding Companies – Legal requirements for a Holding Company – Schedule VI of the companies Act and Subsidiary Companies – Preparation of Consolidated Balance Sheet – Cancellation of Investment Account – Minority Interest – Cost of Acquiring Control or Goodwill – Capital Reserve - Preference Share Capital in Subsidiary Companies – Debentures in Subsidiary Companies – Pre-acquisition Profits/Reserves – Pre-acquisition Losses – Inter-company Transactions – Unrealised Profit on Stock – Contingent Liabilities - .

UNIT-II

THE ACCOUNTS OF HOLDING COMPANIES-II

Revaluation of Assets – Bonus Shares – Treatment of Dividend Received from Subsidiary Company – Goodwill in the Balance Sheet of Subsidiary Company – Proposed Dividend – Interim Dividend by Subsidiary Company (Including Problems Related to Single Subsidiary Company).

Lab: Computation of Problems using Excel/Accounting Packages.

UNIT-III : ACCOUNTS OF ELECTRICITY COMPANIES-I

Meaning of Double-Account System – Revenue Account and Net Revenue Account – Capital Account (Receipts and Expenditure on Capital Account) and general Balance Sheet. Replacement of an Asset. Important Provisions of Indian Electricity Act 1910. Electricity Supply Act 1948 and the Companies Act 1956.

UNIT_IV: ACCOUNTS OF ELECTRICITY COMPANIES-II

Formats of Relevant Accounts – Calculation of Reasonable Return and Disposal of Surplus. Preparation of Net Revenue Account and Balance Sheet(Including Problems).

LAB: Computation of Problems using Excel/Accounting Packages.

UNIT-V: ACCOUNTING FOR PRICE LEVEL CHANGES (INFLATION ACCOUNTING)

Introduction, Limitations of Historical Accounting, Methods of Accounting for Price Level Changes, Current Cost Accounting (CCA) – Methods, Preparation of Income Statement, Cost Balance Sheet under CCA/CCB (Including Problems)

Lab: Computation of Problems using Excel/ Accounting Packages.



NEW

**III B.COM GENERAL - SEMESTER- VI
ELECTIVE - ADVANCED CORPORATE ACCOUNTING
NEW SYLLABUS**

UNIT-1: HUMAN RESOURCE ACCOUNTING

Definition , Objectives, Approaches, Assumptions, Advantages, Limitations of HRA, HRA in India. Human Resource Cost Accounting, Historical Cost Accounting Replacement Cost Method, Opportunity Cost Method (Theory Only)

UNIT II: SOCIAL RESPONSIBILITY ACCOUNTING:

Meaning , Nature of Social Responsibility, Need, Objectives, Accounting Concept and Objectives of Social Responsibility , Indicators of Social Performance(Theory only).

UNIT III: LEASE ACCOUNTING:

Meaning, Accounting treatment

Lab work: Computation of problems using Excel /Accounting packages.

UNIT IV: LIQUIDATION OF COMPANIES-I:

Scope, Contributory, Preferential payments, preference dividend. Statement of Affairs and Deficiency /Surplus accounts.

UNIT V: LIQUIDATION OF COMPANIES-II

Liquidators final statement of accounts, Liquidators remuneration, Receiver for Debenture holders, B-list, Contributories (Including Problems)

Lab: Computation of problems using Excel and Accounting Packages.

Reference Books:

Advanced Corporate Accounting: S.P. Jain, K.L.Narang.



**III.B.COM (GENERAL & COMP) V SEMESTER
PRACTICAL AUDITING
NEW SYLLABUS (w.e.f. 2012-13)**

Hours per week: 5 (4+1)

Max Marks: 100

Unit: Introduction to auditing

Auditing: meaning-definition-evolution –objectives-importance. Types of audit: Based on ownership (proprietorship, partnership, companies, trusts, co-operative societies, government departments)-Based on time (Interim, final, continuous, Balance sheet) - Based on objectives (Independent, Financial, Internal, Cost, Tax, Government, Secretarial).

Unit II: Planning of audit and control

Auditor: Qualifications and disqualifications- Qualities-Appointment and reappointment-removal-rights-duties-liabilities

Audit planning: Engement letter-Audit programeAudit notebook –Audit papers-Audit workbook- Audit contents-Audit markings- Internal check-Internal control-(sales-purchases-Fixed assets-cash-bank-payroll)-Accounting controls and sampling in audit.

(Lab work: preparation of audit programme for an organization)**Unit III: Vouching of Financial statements:**

Vouching: Meaning of cash and trading transactions-investigation, verification and valuation of assets and liabilities, differences between vouching, investigation, verification and valuation

(Lab work: Vouching of cash book of a local business unit)**Unit IV: Audit of financial statements**

Audit of Financial statements: Receipts-payments, sales, purchase, fixed assets, investments, personal ledger-inventories, capital and reserves- other assets-other liabilities

Unit V: Audit of institutions

Audit of institutions: Partnership-manufacturing and other companies –non trading concerns. Audit report: contents-preparation of audit report-fair report-Qualified report

(Lab work: collection of model audit reports from local auditor and preparation of similar reports)

Text book: Jain and Narang (Kalyani publishers)

References:

1. Practical auditing : Spicer and Pegler
2. Principles of auditing : Jadish prakash
3. Practical auditing : T.N Tandon
4. Auditing : Dinkar pagare
5. Auditing: : R.Gsaxena

**OLD**

**III.B.COM (GENERAL & COMP) V SEMESTER
PRACTICAL AUDITING
OLD SYLLABUS (w.e.f. 2011-12)**

Hours per week: 5(4+1)

Max Marks: 100

Unit: Introduction to auditing

Auditing: meaning-definition-evolution –objectives-importance. Types of audit: Based on ownership (proprietorship, partnership, companies, trusts, co-operative societies, government departments)-Based on time (Interim, final, continuous, Balance sheet) - Based on objectives (Independent, Financial, Internal, Cost, Tax, Government, Secretarial).

Unit II: Planning of audit and control

Auditor: Qualifications and disqualifications- Qualities-Appointment and reappointment-removal-rights-duties-liabilities

Audit planning: Engement letter-Audit programeAudit notebook –Audit papers-Audit workbook- Audit contents-Audit markings- Internal check-Internal control-(sales-purchases-Fixed assets-cash-bank-payroll)-Accounting controls and sampling in audit.

Unit III: Vouching of Financial statements:

Vouching: Meaning of cash and trading transactions-investigation, verification and valuation of assets and liabilities, differences between vouching, investigation, verification and valuation

Unit IV: Audit of financial statements

Audit of Financial statements: Receipts-payments, sales, purchase, fixed assets, investments, personal ledger-inventories, capital and reserves- other assets-other liabilities

Unit V: Audit of institutions

Audit of institutions: Partnership-manufacturing and other companies –non trading concerns.

Audit report: contents-preparation of audit report-fair report-Qualified report

Text book: Jain and Narang (Kalyani publishers)

References:

1. Practical auditing : Spicer and Pegler
2. Principles of auditing : Jadish prakash
3. Practical auditing : T.N Tandon
4. Auditing : Dinkar pagare
5. Auditing: : R.Gsaxena



**III.B.COM (GENERAL & COMP) VI-SEMESTER
BUSINESS CORRESPONDENCE AND REPORT WRITING
NEW SYLLABUS (W.E.F 2012-13)**

Hours per week: 5(4+1)

MaxMarks:100 (70+30)

Unit1: Basics of communication

Meaning and definition of communication-elements of communication- communication models-functions and importance of communication –forms of communication –levels of communications objectives of communication barriers of communication

(Lab work: preparation of charts for elements, communication models and barriers of communication)

Unit II: Types of communication

Oral communication-meaning-definition –Advantages and Disadvantages- Medias for oral communication- face to face, teleconference, telephone and voice mail

Written communication-meaning-advantages and disadvantages, Medias for written communication- Fax and e-mail.

Non verbal communication- meaning-types- kinesics-proxemics- physical context

(Lab work: preparation of charts on types of communication and communication medias being used in different organizations)

Unit III: Essentials of effective communication

The essentials of effective communication (7c's and 4s's)

Communication networks- vertical-horizontal and diagonal- external communication

(Lab work: preparation of a chart on communication network pertaining to an organization)

Unit IV: Business letters

Introduction –essentials of business writing- functions of business letters-parts of business letters- letters relating to application for job, calling for interviews, appointment orders, termination orders sales letters, complaints and adjustments

(Lab work: drafting specimen copies for different types of business letters)

Unit V: Report writing

Meaning and definition –features-types of reports- essentials of good business reports-steps in business report writing-preparation of routine reports, confidential reports, technical reports, directors reports, auditors reports and press report

(Lab work: preparation of business reports)

Text book:

Business correspondence and report writing : Varinder Kumar

Reference books:

1. Business correspondence and report writing : V.Balamohandas

2. Business communication : Asha kaul



OLD

**III.B.COM (GENERAL & COMP) VI-SEMESTER
BUSINESS CORRESPONDENCE AND REPORT WRITING
OLD SYLLABUS (W.E.F 2011-12)**

Hours per week: 5(4+1)

MaxMarks:100 (70+30)

Unit1: Basics of communication

Meaning and definition of communication-elements of communication- communication models- functions and importance of communication –forms of communication –levels of communications objectives of communication barriers of communication

UnitII: Types of communication

Oral communication-meaning-definition –Advantages and Disadvantages- Medias for oral communication- face to face, teleconference, telephone and voice mail

Written communication-meaning-advantages and disadvantages, Medias for written communication- Fax and e-mail.

Non verbal communication- meaning-types- kinesics-proxemics- physical context

UnitIII: Essentials of effective communication

The essentials of effective communication (7c's and 4s's)

Communication networks- vertical-horizontal and diagonal- external communication

Unit1V: Business letters

Introduction –essentials of business writing- functions of business letters-parts of business letters-letters relating to application for job, calling for interviews, appointment orders, termination orders sales letters, complaints and adjustments

UnitV: Report writing

Meaning and definition –features-types of reports- essentials of good business reports-steps in business report writing-preparation of routine reports, confidential reports, technical reports, directors reports, auditors reports and press report

Text book:

Business correspondence and report writing : Varinder Kumar

Reference books:

1. Business correspondence and report writing : V.Balamohandas
2. Business communication : Asha kaul



CORPORATE ACCOUNTING
III B.COM (GENERAL, COMPUTERS) - V SEMESTER
NEW SYLLABUS -2012-13

UNIT-I

Accounting standards –need and importance – An overview of Indian accounting standards.

UNIT -II

Valuation of good will- need for valuation –methods of valuation –normal profit method, super profit method- capitalization method.

UNIT-III

Valuation of shares –need for valuation – methods of valuation- net assets method, yield basis.

Method, fair value method.

UNIT-IV

Company final accounts- provisions relating to preparation of final accounts – profit and loss account and balance sheet.

LAB WORK- preparation of final accounts using computers.

Profit prior to incorporation

Acquisition of business

UNIT-V

Amalgamation and external reconstruction

Amalgamation –in the nature of merger and purchase –calculation of purchase consideration –treatment in the books of transferor and transferee (as per accounting standard 14, excluding inter company holdings) recording transactions relating to mergers)

LAB WORK- recording transactions relating to mergers using computers

Reference Books- Corporate Accounting- S.P.Jain &K.L.Narang.



NEW

**CORPORATE ACCOUNTING
III B.COM (GENERAL, COMPUTERS) - VI SEMESTER
NEW SYLLABUS – 2012-13**

UNIT-1

Issue of bonus shares- provisions of company's act and SEBI guide lines . Accounting treatment

Lab work – accounting using computers

UNIT-11

Internal reconstruction accounting treatment –preparation of final statements after reconstruction.

LAB WORK- recording of transactions using computers.

UNIT-111

Bank accounts- books and registers to be maintained by banks –slip system of posting – rebate on bills discounte schedule of advances – non performance assets –legal provisions relating to final accounts.

LAB WORK-

Preparation of final accounts using computers

UNIT-1V

Life insurance companies – preparation of revenue account,profit and loss account ,balance sheet and valuation balance sheet.

UNIT-V

General insurance- preparation of final accounts –with reference to Fire &Marine insurance only

Reference Books- Corporate Accounting- S.P.Jain & K.L.Narang.



**CORPORATE ACCOUNTING
III B.COM (GENERAL, COMPUTERS)
V SEMESTER (2011-12) (OLD SYLLABUS)**

UNIT-1

Accounting standards –need and importance – An overview of Indian accounting standards.

UNIT -11

Valuation of good will- need for valuation –methods of valuation –normal profit method, super profit method- capitalization method.

UNIT-111

Valuation of shares –need for valuation – methods of valuation- net assets method, yield basis.

Method, fair value method.

UNIT-1V

Company final accounts- provisions relating to preparation of final accounts – profit and loss account and balance sheet.

UNIT-V

Amalgamation and external reconstruction

Amalgamation –in the nature of merger and purchase –calculation of purchase consideration –treatment in the books of transferor and transferee (as per accounting standard 14 ,excluding inter company holdings) recording transactions relating to mergers)

Reference Books- Corporate Accounting- S.P.Jain &K.L.Narang.



OLD

**CORPORATE ACCOUNTING
III B.COM (GENERAL, COMPUTERS)
VI SEMESTER (2011-12) (OLD SYLLABUS)**

UNIT-1

Issue of bonus shares- provisions of company's act and SEBI guide lines . Accounting treatment

UNIT-11

Internal reconstruction accounting treatment –preparation of final statements after reconstruction.

UNIT-111

Bank accounts- books and registers to be maintained by banks –slip system of posting – rebate on bills discounte schedule of advances – non performance assets –legal provisions relating to final accounts.

UNIT-1V

Life insurance companies – preparation of revenue account,profit and loss account ,balance sheet and valuation balance sheet.

UNIT-V

General insurance- preparation of final accounts –with reference to Fire &Marine insurance only

Reference Books- Corporate Accounting- S.P.Jain &K.L.Narang.



**III B.COM (GENERAL & COMP) - V SEMESTER
COST AND MANAGEMENT ACCOUNTING – I
(NEW SYLLABUS w.e.f. 2012-13)**

Course code: CMA 351**Hours per week: (4+2)****Credits: 4****Max. Marks: 100****Unit I: INTRODUCTION: (12 hours)**

Cost Accounting: definitions, features, objectives, functions, scope, advantages and limitations. Installation of costing system. Cost Accounting Vs Financial Accounting.

Unit II: ELEMENTS OF COSTS: (12 hours)

Cost concepts-Cost classification -Preparation of Cost Sheet and Tenders. Relationship of costing department with other departments. Single or Output Costing.

Unit III: MATERIALS: (12 hours)

Material Cost: direct and indirect material cost, Inventory control techniques-stock levels, EOQ, ABC analysis. Issue of materials to production- Pricing methods-FIFO, LIFO with base stock, average methods.

Unit IV: LOBOUR: (12 hours)

Labor cost: direct and indirect labor cost- methods of payment of wages including incentive plans –Halsey and Rowan plans, Tailors Piece Rate method.

Unit V: OVERHEADS: (12 hours)

Overheads: features, classification, methods of allocation and apportionment of overheads. Primary distribution and secondary distribution (Direct Redistribution Method, Step distribution Method, Simultaneous Equation Method, Repeated Distribution Method and Trial and Error Method). Methods of absorption of overheads (Direct Martial Cost Method , Direct Lobour Method, Prime Cost Method, direct Lobour Hour Method and Machine Hour Rate)

LAB WORK: (30 hours)

Preparation of Cost sheet and stores ledger using computers. Calculation of wages using computers

Text Book:

Cost and Management Accounting Jain and Narang Kalyani Publishers

Suggested Readings:

1. Cost and Management Accounting	M.N Arora	Himalaya Publishing House
2. Management accounting	Sarma and Gupta	Kalyani publishers
3. Management accounting	S.P.Guptha	S.Chnad co
4. Management accounting	S.N.maheswari	Sultan chand and sons

**NEW**

**III B.COM (GENERAL & COMP) - VI SEMESTER
COST AND MANAGEMENT ACCOUNTING – II
(NEW SYLLABUS w.e.f. 2012-13)**

Course code: CMA 362**Credits: 4****Hours per week: (4+2)****Max. Marks: 100****Unit -I JOB AND CONTRACT COSTING: (12 Hours)**

Theory: Objectives and Features of Job Costing, advantages and disadvantages of Job Costing – procedure of Job Costing system. Contract costing, Types of contract, retention money, cost plus contracts, escalation clause and work in progress.

Problems: Problems on preparing Job Cost sheet. Problems on preparing contract account including ascertainment of profits on incomplete contracts.

Unit -II PROCESS COSTING: (12 Hours)

Theory: Features of process costing, advantages and limitations of process costing. Treatment of normal and abnormal losses.

Problems: Preparation of process cost accounts (excluding equivalent products and inter process profits). Simple problems on Joint Products and By-Products.

Unit -III MANAGEMENT ACCOUNTING: (12 Hours)

Theory: Definitions, features, objectives, functions, scope, advantages and limitations of Management Accounting. Difference between Management Accounting and Financial Accounting- Difference between Management Accounting and Cost Accounting.

Unit -IV: BUDGETARY CONTROL AND MARGINAL COSTING: (12 Hours)

Theory: Meaning, objectives and importance of Budgetary Control-Fixed, Flexible Budget, Marginal Costing-Break Even Analysis.

Problems: Budgetary Control-Fixed, Flexible Budget, Marginal Costing-Break Even Analysis. and Standard Costing-Material and labour Variances

Unit -V: STANDARD COSTING AND VARIANCE ANALYSIS: (12 Hours)

Theory: Meaning of Standard Cost and Standard Costing – Advantages and Disadvantages of Standard Costing - Standard Costing and Budgetary Control. Standard Cost and Estimated Cost. Meaning of Material and Labour Variances

Problems: Problems on Material and Labour Variances

LAB WORK: (30 hours)

Preparation of Contract accounts and Process cost accounts, Preparation of Budgets and Marginal cost and Variances using computers.

Text Book:

Cost and Management Accounting Jain and Narang Kalyani Publishers

Suggested Readings:

- | | | |
|-----------------------------------|-----------------|---------------------------|
| 1. Cost and Management Accounting | M.N Arora | Himalaya Publishing House |
| 2. Management accounting | Sarma and Gupta | Kalyani publishers |
| 3. Management accounting | S.P.Guptha | S.Chnad co |
| 4. Management accounting | S.N.maheswari | Sultan chand and sons |



**III B.COM (GENERAL & COMP) - V SEMESTER
COST AND MANAGEMENT ACCOUNTING – I
(2011-12) (OLD SYLLABUS)**

Course code: CMA 351
Hours per week: (4+2)

Credits: 4
Max. Marks: 100

Unit I: INTRODUCTION: (12 hours)

Cost Accounting: definitions, features, objectives, functions, scope, advantages and limitations. Installation of costing system. Cost Accounting Vs Financial Accounting.

Unit II: ELEMENTS OF COSTS: (12 hours)

Cost concepts-Cost classification -Preparation of Cost Sheet and Tenders. Relationship of costing department with other departments. Single or Output Costing.

Unit III: MATERIALS: (12 hours)

Material Cost: direct and indirect material cost, Inventory control techniques-stock levels, EOQ, ABC analysis. Issue of materials to production- Pricing methods-FIFO, LIFO with base stock, average methods.

Unit IV: LOBOUR: (12 hours)

Labor cost: direct and indirect labor cost- methods of payment of wages including incentive plans –Halsey and Rowan plans, Tailors Piece Rate method.

Unit V: OVERHEADS: (12 hours)

Overheads: features, classification, methods of allocation and apportionment of overheads. Primary distribution and secondary distribution (Direct Redistribution Method, Step distribution Method, Simultaneous Equation Method, Repeated Distribution Method and Trial and Error Method). Methods of absorption of overheads (Direct Martial Cost Method, Direct Lobour Method, Prime Cost Method, direct Lobour Hour Method and Machine Hour Rate)

Text Book:

Cost and Management Accounting Jain and Narang Kalyani Publishers

Suggested Readings:

1. Cost and Management Accounting	M.N Arora	Himalaya Publishing House
2. Management accounting	Sarma and Gupta	Kalyani publishers
3. Management accounting	S.P.Guptha	S.Chnad co
4. Management accounting	S.N.maheswari	Sultan chand and sons

**OLD**

**III B.COM (GENERAL & COMP) - VI SEMESTER
COST AND MANAGEMENT ACCOUNTING – II
(2011-12) (OLD SYLLABUS)**

Course code: CMA 362**Credits: 4****Hours per week: (4+2)****Max. Marks: 100****Unit -I JOB AND CONTRACT COSTING: (12 Hours)**

Theory: Objectives and Features of Job Costing, advantages and disadvantages of Job Costing – procedure of Job Costing system. Contract costing, Types of contract, retention money, cost plus contracts, escalation clause and work in progress.

Problems: Problems on preparing Job Cost sheet. Problems on preparing contract account including ascertainment of profits on incomplete contracts.

Unit -II PROCESS COSTING: (12 Hours)

Theory: Features of process costing, advantages and limitations of process costing. Treatment of normal and abnormal losses.

Problems: Preparation of process cost accounts (excluding equivalent products and inter process profits). Simple problems on Joint Products and By-Products.

Unit -III MANAGEMENT ACCOUNTING: (12 Hours)

Theory: Definitions, features, objectives, functions, scope, advantages and limitations of Management Accounting. Difference between Management Accounting and Financial Accounting- Difference between Management Accounting and Cost Accounting.

Unit -IV: BUDGETARY CONTROL AND MARGINAL COSTING: (12 Hours)

Theory: Meaning, objectives and importance of Budgetary Control-Fixed, Flexible Budget, Marginal Costing-Break Even Analysis.

Problems: Budgetary Control-Fixed, Flexible Budget, Marginal Costing-Break Even Analysis. and Standard Costing-Material and labour Variances

Unit -V: STANDARD COSTING AND VARIANCE ANALYSIS: (12 Hours)

Theory: Meaning of Standard Cost and Standard Costing – Advantages and Disadvantages of Standard Costing - Standard Costing and Budgetary Control. Standard Cost and Estimated Cost. Meaning of Material and Labour Variances

Problems: Problems on Material and Labour Variances

Text Book:

Cost and Management Accounting Jain and Narang Kalyani Publishers

Suggested Readings:

1. Cost and Management Accounting	M.N Arora	Himalaya Publishing House
2. Management accounting	Sarma and Gupta	Kalyani publishers
3. Management accounting	S.P.Guptha	S.Chnad co
4. Management accounting	S.N.maheswari	Sultan chand and sons



**III.B.COM (GENERAL) V SEMESTER
HUMAN RESOURCE MANAGEMENT-1
NEW SYLLABUS (w.e.f. 2012-13)**

Hours per week: 5

Max Marks:100

UNIT I : INTRODUCTION:

1. Nature and Scope of Human Resource Management: Concepts and Nature of Human resource Management – Objectives and Importance, Functions and Scope of HRM.
2. HRM in India: History of Personal management – Genesis and Growth in India, Evolution of the Concept – Impediments Progress – Environment of HRM – Measures to Speed up Growth.

UNIT II PROCUREMENT OF HUMAN RESOURCES:

Human Resource Planning: Concepts and Objectives –Need and Importance – Process and levels of HRP – problems of and Guidelines for HRP.

UNIT III : RECRUITMENT AND SELECTION :

Recruitment and Selection: Meaning and process of Recruitment –Sources and Techniques of Recruitment – Recruitment practices in India – Meaning and Process of Selection – Selection tests and Interviews.

UNIT IV: TRAINING AND DEVELOPMENT:

1. Training of operatives: Importance and objectives of Training – Identifying training needs – Designing a training program me – Methods of training and evaluation of training effectiveness – Retraining.
2. Human Resources Development: Concept of HRD. Personnel vs. HRD Objectives, Mechanism and Assumptions of HRD – need and significance of HRD in Indian Industry – Qualities of HRD manager – Principles of HRD employee counseling.

UNIT V : COMPENSATION:

1. Job Evaluation: Concept, Process and Objectives of Job Evaluation – Advantages and limitations – Essentials of successful job evaluation.
2. Wages and Salary administration: Objectives and Principles – essentials of a sound wage structure – Factors affecting wages – methods of wage payment – Wage policy in India – Executive Compensation.

LAB WORK:

Case study, Field Work, Role play, Collection of Specimen forms of different Acts.

REFERENCE BOOKS:

1. Human Resource Management: Dr. CB Gupta
2. Human Resource Management: KK Ahuja.
3. Human Resource Management: K Aswathappa.



NEW

**III.B.COM (GENERAL) - VI SEMESTER
HUMAN RESOURCE MANAGEMENT-11
NEW SYLLABUS (w.e.f. 2012-13)**

Hours per week: 5

Max Marks:100

UNIT I: APPRAISAL AND JOB CHANGES:

1. Performance Appraisal: Concept and Objectives – Uses and Process – Problems in Performance appraisal – essentials of Effective appraisal system – methods and techniques of appraisal – appraisal of managers – appraisal interview – appraisal of potential.

UNIT II: MAINTENANCE:

1. Organizing the Personnel Function: Organization of Personnel department – Qualities of Personnel Manager – Status and role of personnel manager.

2. Employee Welfare: Meaning and Significance of Labour Welfare – Labour Welfare Agencies – Labour Welfare Officer – Types of Welfare Services – Statutory Welfare Provision.

3. Social Security: Concept of Social Security – Social Security in India – The Workmen's Compensation Act – The Employee State Insurance Act – The Employee Provident Fund Act and Miscellaneous Provision Act - The Maternity Benefit Act – The Paymen Of Gratuity Act.

UNIT III: INTEGRATION:

1. Work Environment: Physical , mental and social environment – meaning of Fatigue, Monotony and Boredom – Causes , measurement and Consequences of Fatigue – methods of Reducing fatigue.

2. Morale: Measurement of Morale- meaning and importance – factors influencing morale – impact of morale on productivity – measurers for building high morale.

UNIT IV: HUMAN RESOURCES CONTROL:

Human Resource Accounting and Human Resource Information System: Meaning And Objectives of HRA – Advantages and Limitations – Costs and Methods of Human Resources.

UNIT V : EMERGING TRENDS IN HRM:

Emerging Trends in HRM: Future of HRM – Future role of personnel manger.

LAB WORK:

Case study, Field Work, Role play, Collection of Specimen forms of different Acts.

REFERENCE BOOKS:

1. Human Resource Management: Dr. CB Gupta
2. Human Resource Management: KK Ahuja.
3. Human Resource Management: K Aswathappa



**III.B.COM (GENERAL) V SEMESTER
HUMAN RESOURCE MANAGEMENT-1
(OLD SYLLABUS)**

Hours per week: 5

Max Marks: 100

UNIT I : INTRODUCTION:

1. Nature and Scope of Human Resource Management: Concepts and Nature of Human resource Management – Objectives and Importance, Functions and Scope of HRM.
2. HRM in India: History of Personal management – Genesis and Growth in India, Evolution of the Concept – Impediments Progress – Environment of HRM – Measures to Speed up Growth.

UNIT II PROCUREMENT OF HUMAN RESOURCES:

Human Resource Planning: Concepts and Objectives –Need and Importance – Process and levels of HRP – problems of and Guidelines for HRP.

UNIT III : RECRUITMENT AND SELECTION :

Recruitment and Selection: Meaning and process of Recruitment –Sources and Techniques of Recruitment – Recruitment practices in India – Meaning and Process of Selection – Selection tests and Interviews.

UNIT IV: TRAINING AND DEVELOPMENT:

1. Training of operatives: Importance and objectives of Training – Identifying training needs – Designing a training program me – Methods of training and evaluation of training effectiveness – Retraining.
2. Human Resources Development: Concept of HRD. Personnel vs. HRD Objectives, Mechanism and Assumptions of HRD – need and significance of HRD in Indian Industry – Qualities of HRD manager – Principles of HRD employee counseling.

UNIT V : COMPENSATION:

1. Job Evaluation: Concept, Process and Objectives of Job Evaluation – Advantages and limitations – Essentials of successful job evaluation.
2. Wages and Salary administration: Objectives and Principles – essentials of a sound wage structure – Factors affecting wages – methods of wage payment – Wage policy in India – Executive Compensation.

REFERENCE BOOKS:

1. Human Resource Management: Dr. CB Gupta
2. Human Resource Management: KK Ahuja.
3. Human Resource Management: K Aswathappa.



**III.B.COM (GENERAL) VI SEMESTER
HUMAN RESOURCE MANAGEMENT-11
(OLD SYLLABUS)**

Hours per week: 5

Max Marks: 100

UNIT I: APPRAISAL AND JOB CHANGES:

1. Performance Appraisal: Concept and Objectives – Uses and Process – Problems in Performance appraisal – essentials of Effective appraisal system – methods and techniques of appraisal – appraisal of managers – appraisal interview – appraisal of potential.

UNIT II: MAINTENANCE:

1. Organizing the Personnel Function: Organization of Personnel department – Qualities of Personnel Manager – Status and role of personnel manager.

2. Employee Welfare: Meaning and Significance of Labour Welfare – Labour Welfare Agencies – Labour Welfare Officer – Types of Welfare Services – Statutory Welfare Provision.

3. Social Security: Concept of Social Security – Social Security in India – The Workmen's Compensation Act – The Employee State Insurance Act – The Employee Provident Fund Act and Miscellaneous Provision Act - The Maternity Benefit Act – The Paymen Of Gratuity Act.

UNIT III: INTEGRATION:

1. Work Environment: Physical , mental and social environment – meaning of Fatigue, Monotony and Boredom – Causes , measurement and Consequences of Fatigue – methods of Reducing fatigue.

2. Morale: Measurement of Morale- meaning and importance – factors influencing morale – impact of morale on productivity – measurers for building high morale.

UNIT IV: HUMAN RESOURCES CONTROL:

Human Resource Accounting and Human Resource Information System: Meaning And Objectives of HRA – Advantages and Limitations – Costs and Methods of Human Resources.

UNIT V : EMERGING TRENDS IN HRM:

Emerging Trends in HRM: Future of HRM – Future role of personnel manger.

REFERENCE BOOKS:

1. Human Resource Management: Dr. CB Gupta
2. Human Resource Management: KK Ahuja.
3. Human Resource Management: K Aswathappa



**III B.COM (GENERAL) (V SEMESTER)
MARKETING AND SALES MANAGEMENT – I
NEW SYLLABUS (W.E.F. 2012-13)**

UNIT I: INTRODUCTION: (15 Hours)

Definition and Meaning of Marketing, Classification of Markets. Evolution of Marketing, Significance of marketing.

UNIT II : MARKET ANALYSIS & SELECTION : (15 Hours)

Marketing Environment; Macro & Macro components and their impact on marketing decisions; Market Segmentation and Positioning, Buyer Behaviour; consumer decision making process; determinants of consumer behavior.

UNIT – III PRODUCT PLANNING & DEVELOPMENT : (15 Hours)

Meaning and definition and concepts of a product, Objects of product planning, components of product planning, product & other related concepts – products characteristics, product classification, product port polio, product line, product life cycle- stages, problems.

UNIT – IV : PRODUCT PLANNING & DEVELOPMENT : (15 Hours)

Product planning & development strategies, steps in new product development; reasons for product failure; How to achieve success in new product; consumer adoption process stage in adoption process – Adoption categories.

UNIT – V : PRICING DECISIONS : (15 Hours)

Factors affecting Price determination; pricing policies and strategies; decisions & rebates.

LAB WORK:

Detailed discussion on classification of Markets with examples, Brief report on segmentation, preparation of product, using segmentation, prepare products, introduce product portfolio and product line research different products life cycle stages, preparation of new product.

REFERENCE BOOKS:

- | | |
|--------------------------|----------------------------------|
| • Marketing Management | C.N. Sontakki Kalyani Publishers |
| • Marketing Management | S.P Bansal Kalyani Publishers |
| • Principle of Marketing | Philip Kotlar and Gray Armstrong |

**NEW**

**III B.COM (GENERAL) (VI SEMESTER)
MARKETING AND SALES MANAGEMENT – II
NEW SYLLABUS (W.E.F 2012-13)**

Hours per Week : 5**Max. Marks100****UNIT – I : PRODUCT DECISIONS : (15 Hours)**

Product Branding – Role & Limitations of branding – Requisition of good brand name brand strategies – Product packaging - packaging decisions – packing strategies – product labeling – after sale services.

UNIT – II : CHANNELS OF DISTRIBUTION : (15Hours)

Meaning, classification of channels and factors governing the choice of channels of distribution. Wholesales and Retailers – types and their functions; importance, Functions and kind of warehouse.

UNIT – III : PRODUCT PROMOTION – I : (15 Hours)

Personal selling – merits & limitations, methods of personnel selling, types of sales manager, sales promotion: meaning & objectives & tools of sales promotion.

UNIT – IV : PRODUCT PROMOTION – ii (15 Hours)

Meaning, benefits and growth of direct marketing, consumer database and direct marketing, forms of direct marketing, online marketing and e-commerce, Integrated direct marketing.

UNIT – V : SERVICE MARKETING: (15 Hours)

Definition, concepts in service marketing, characteristics of services, growth of service marketing and factors influencing it and service marketing mix.

LAB WORK :

Prepare a new product, and give branding, packaging and labeling to the product, prepare a report on personal selling, forms of direct marketing, e-commerce, online marketing.

REFERENCE BOOKS:

- | | |
|--------------------------|----------------------------------|
| • Marketing Management | C.N. Sontakki Kalyani Publishers |
| • Marketing Management | S.P Bansal Kalyani Publishers |
| • Principle of Marketing | Philip Kotlar and Gray Armstrong |

◇◇◇OO◇◇◇



**III B.COM (GENERAL) (V SEMESTER)
MARKETING AND SALES MANAGEMENT – I
OLD SYLLABUS (W.E.F 2011-12)**

Hours per Week: 5

Max. Marks: 100

UNIT I: INTRODUCTION : (15 Hours)

Definition and Meaning of Marketing, Classification of Markets. Evolution of Marketing, Significance of marketing.

UNIT II : MARKET ANALYSIS & SELECTION : (15 Hours)

Marketing Environment; Macro & Macro components and their impact on marketing decisions; Market Segmentation and Positioning, Buyer Behaviour; consumer decision making process; determinants of consumer behavior.

UNIT – III PRODUCT PLANNING & DEVELOPMENT : (15 Hours)

Meaning and definition and concepts of a product, Objects of product planning, components of product planning, product & other related concepts – products characteristics, product classification, product portfolio, product line, product life cycle- stages, problems.

UNIT – IV : PRODUCT PLANNING & DEVELOPMENT : (15 Hours)

Product planning & development strategies, steps in new product development; reasons for product failure; How to achieve success in new product; consumer adoption process stage in adoption process – Adoption categories.

UNIT – V : PRICING DECISIONS : (15 Hours)

Factors affecting Price determination; pricing policies and strategies; decisions & rebates.

REFERENCE BOOKS:

- Marketing Management C.N. Sontakki Kalyani Publishers
- Marketing Management S.P Bansal Kalyani Publishers
- Principle of Marketing Philip Kotlar and Gray Armstrong

**OLD**

**III B.COM (GENERAL) (VI SEMESTER)
MARKETING AND SALES MANAGEMENT – II
OLD SYLLABUS (W.E.F 2011-12)**

Hours per Week : 5**Max. Marks : 100****UNIT – I : PRODUCT DECISIONS : (15 Hours)**

Product Branding – Role & Limitations of branding – Requisition of good brand name brand strategies – Product packaging - packaging decisions – packing strategies – product labeling – after sale services.

UNIT – II : CHANNELS OF DISTRIBUTION : (15Hours)

Meaning, classification of channels and factors governing the choice of channels of distribution. Wholesales and Retailers – types and their functions; importance, Functions and kind of warehouse.

UNIT – III : PRODUCT PROMOTION – I : (15 Hours)

Personal selling – merits & limitations, methods of personnel selling, types of sales manager, sales promotion: meaning & objectives & tools of sales promotion.

UNIT – IV : PRODUCT PROMOTION – ii (15 Hours)

Meaning, benefits and growth of direct marketing, consumer database and direct marketing, forms of direct marketing, online marketing and e-commerce, Integrated direct marketing.

UNIT – V : SERVICE MARKETING: (15 Hours)

Definition, concepts in service marketing, characteristics of services, growth of service marketing and factors influencing it and service marketing mix.

REFERENCE BOOKS:

- | | |
|--------------------------|----------------------------------|
| • Marketing Management | C.N. Sontakki Kalyani Publishers |
| • Marketing Management | S.P Bansal Kalyani Publishers |
| • Principle of Marketing | Philip Kotlar and Gray Armstrong |

◇◇◇OO◇◇◇



**III B.COM., V SEMESTER - (GENERAL & COMPUTERS)
BUSINESS LAW-I
NEW SYLLABUS (W.E.F. 2012-2013)**

HOURS PER WEEK:5
MAX MARKS 100

UNIT I: CONTRACT ACT:

1. AGREEMENT AND CONTRACT: Definition and meaning- Essentials of a valid contract – Types of contracts
2. Offer and Acceptance: Definition – Essentials of a valid offer and acceptance-communication and revocation of offer and acceptance.

UNIT: IICONTRACT ACT II:

1. Consideration: Definition and importance – Essentials of valid consideration – the Doctrines of ‘Stranger to Contract’ and No Consideration – No Contract – Capacity to contract- special rules regarding minor’s agreements.
2. Consent: Free Consent- Flaw in Consent-: Coercion – Undue influence – Fraud- Misrepresentation and Mistake.

(Lab Work: Students are expected to know the cases of Contract act and able to create a written contract)

UNIT III: DISCHARGE OF A CONTRACT I

1. Legality of object and consideration:- illegal and immoral agreements- agreements opposed to public policy.
2. Agreements expressly declared to be void – Wagering agreements and contingent contracts.

UNIT IV: DISCHARGE OF A CONTRACT-II

1. Discharge of a contract:- various modes of discharge of a contract – performance of contracts.
2. Breach of contract- types- remedies for breach of contract.

UNITV: SALE OF GOODS ACT

1. Contract of sale : Definition- features- definition of terms goods- types of goods- rules of transfer of property in goods- differences between sale and agreement to sell
2. Rights of an unpaid seller
3. Conditions and warranties- meaning and distinction- express and implied conditions and warranties- sale by non-owners- auction sale.

(Lab Work: Students are expected to know the cases and practical problems relating to the Sale of Goods Act. Students are advised to refer to the Internet Website and prepare the assignments)

Text Book:

Business law Jain and Narang Kalyani Publishers

Suggested Books;

Kapoor ND	Mercantile Law	Sultan Chand
Kapoor ND	Company Law	Sultan Chand
Balachandran	Business Law	Tata
Tulsain	Mercantile Law	Tata

**OLD**

**III B.COM., (GENERAL & COMPUTERS) - V SEMESTER
BUSINESS LAW-I
OLD SYLLABUS (W.E.F2011-2012)**

HOURS PER WEEK:5
MAX MARKS 100

UNIT I: CONTRACT ACT:

1. AGREEMENT AND CONTRACT: Definition and meaning- Essentials of a valid contract – Types of contracts
2. Offer and Acceptance: Definition – Essentials of a valid offer and acceptance- communication and revocation of offer and acceptance.

UNIT: II CONTRACT ACT II:

Consideration: Definition and importance – Essentials of valid consideration – the Doctrines of ‘Stranger to Contract’ and No Consideration – No Contract – Capacity to contract- special rules regarding minor’s agreements.

Consent: Free Consent- Flaw in Consent-: Coercion – Undue influence – Fraud- Misrepresentation and Mistake.

UNIT III: DISCHARGE OF A CONTRACT I

Legality of object and consideration:- illegal and immoral agreements- agreements opposed to public policy.

Agreements expressly declared to be void – Wagering agreements and contingent contracts.

UNIT IV: DISCHARGE OF A CONTRACT-II

Discharge of a contract:- various modes of discharge of a contract – performance of contracts.

Breach of contract- types- remedies for breach of contract.

UNITV: SALE OF GOODS ACT

Contract of sale : Definition- features- definition of terms goods- types of goods- rules of transfer of property in goods- differences between sale and agreement to sell

Rights of an unpaid seller

Conditions and warranties- meaning and distinction- express and implied conditions and warranties- sale by non-owners- auction sale.

Text Book:

Business law	Jain and Narang	Kalyani Publishers
--------------	-----------------	--------------------

Suggested Books;

Kapoor ND	Mercantile Law	Sultan Chand
Kapoor ND	Company Law	Sultan Chand
Balachandran	Business Law	Tata
Tulsain	Mercantile Law	Tata



**III B.COM., (GENERAL & COMPUTERS) – VI SEMESTER
BUSINESS LAW-II
NEW SYLLABUS - W.E.F. 2012-2013**

UNIT I: CONSUMER PROTECTION ACT:

Definitions of the terms consumer, unfair trade practices, restrictive trade practices and complainant- rights of consumers- consumer protection councils- consumer redressal agencies- penalties for violation.

UNIT II: INTELLECTUAL PROPERTY RIGHTS:

Intellectual Property Rights:- Meaning – Need and objectives- Meaning of the terms industrial property, literary property, copy rights, patents, trademarks, trade names, trade secrets, industrial designs, geographical indications. Information Technology Act, 2000: aims and objectives-a brief overview of the Act.

(Lab Work: Students are expected to know the Model for a complaint, check list of requirements for petitions to be filed before the National Consumer Disputes Redressal Commission: cases and practical problems under the Consumer Protection Act and Right to Information Act. Students are advised to refer to the Internet Website and prepare the assignments)

UNIT III: COMPANY LAW (MANAGEMENT OF COMPANIES)

Directors- qualifications- disqualifications- appointment- removal- rights and duties- company meetings and resolutions- appointment of company secretary.

UNIT IV: COMPANY LAW (DOCTRINE OF ULTRA VIRES)

Doctrine of ultra vires and its effects- doctrine of constructive notice- doctrine of indoor management- exceptions.

UNIT V: COMPANY LAW (WINDING UP OF COMPANIES)

Meaning- various modes- compulsory winding up- powers and duties of official liquidator- members and creditors voluntary winding up- winding up subject to the supervision of the court- dissolution.

(Lab Work: Students are expected to know the cases of Companies Act. Students are advised to refer to the Internet Website and prepare the assignments).

Text Book:

Business law	Jain and Narang	Kalyani Publishers
--------------	-----------------	--------------------

Suggested Books;

Kapoor ND	Mercantile Law	Sultan Chand
Kapoor ND	Company Law	Sultan Chand
Balachandran	Business Law	Tata
Tulsain	Mercantile Law	Tata

**OLD**

**III B.COM., VI SEMESTER - (GENERAL & COMPUTERS)
BUSINESS LAW-II
OLD SYLLABUS**

UNIT I : CONSUMER PROTECTION ACT :

Definitions of the terms consumer, unfair trade practices, restrictive trade practices and complainant- rights of consumers- consumer protection councils- consumer redressal agencies- penalties for violation.

UNIT II: INTELLECTUAL PROPERTY RIGHTS:

Intellectual Property Rights:- Meaning – Need and objectives- Meaning of the terms industrial property, literary property, copy rights, patents, trade marks, trade names, trade secrets, industrial designs, geographical indications. Information Technology Act, 2000: aims and objectives-a brief overview of the Act.

UNIT III: COMPANY LAW (MANAGEMENT OF COMPANIES)

Directors- qualifications- disqualifications- appointment- removal- rights and duties- company meetings and resolutions- appointment of company secretary.

UNIT IV: COMPANY LAW (DOCTRINE OF ULTRA VIRES)

Doctrine of ultra vires and its effects- doctrine of constructive notice- doctrine of indoor management- exceptions.

UNIT V: COMPANY LAW (WINDING UP OF COMPANIES)

Meaning- various modes- compulsory winding up- powers and duties of official liquidator- members and creditors voluntary winding up- winding up subject to the supervision of the court- dissolution.

Text Book:

Business law	Jain and Narang	Kalyani Publishers
--------------	-----------------	--------------------

Suggested Books;

Kapoor ND	Mercantile Law	Sultan Chand
Kapoor ND	Company Law	Sultan Chand
Balachandran	Business Law	Tata
Tulsain	Mercantile Law	Tata



**III B.COM (GENERAL) V SEMESTER
FAM 351 FINANCIAL MANAGEMENT-I
NEW SYLLABUS (W.E.F. 2012-13)**

Hours per week: 5

Max. Marks: 100

Unit I: Nature and Scope of Financial Management

Meaning of Business finance—Meaning of Financial Management—Objectives of Financial Management—Scope of Financial Management—Financial Functions—Investment Decisions—Financing Decisions—Dividend Decisions—Liquidity Decisions—Financial Planning—Relationship between Financial Management and other areas of management—Financial Management and Financial Accounting—Organization of Finance Function

Unit-II: Concepts of Valuation

Concept of Valuation—Time Value of Money—Valuation Concept—Compound Value—Discounting Concept

Unit-III: Financial Planning

Meaning of Financial Planning—Estimating Capital Requirements—Fixed capital—working capital—capitalization—pattern of financing—time of flotation

Unit-IV: Operating Leverage

Concept of Leverage—types of leverage—Operating Leverage—Operating Break Even Point

Unit V: Financial Leverage

Financial Leverage—measurement—significance of Financial Leverage—Combined Leverage

Lab Work:

MS-Excel applications in Time Value of Money—Financial Functions—Future Value of a single cash flow—Future Value of an Annuity—Annuity of a Future Value (Sinking Fund)—Present Value of a Single Cash Flow—Present Value of an Annuity—Annuity of a Present Value (Capital Recovery)—Present Value of an Uneven Cash Flow—Constantly growing Annuity—Multi-period Compounding—Yield or IRR Calculation

Text book: Elements of Financial Management—SN Maheswari

Reference Books:

Financial Management—IM Pandey
Financial Management—Khan and Jain
Financial Management—Shashi K Gupta & RK Sharma



OLD

**III B.COM (GENERAL) V SEMESTER
FAM 351 FINANCIAL MANAGEMENT-I
OLD SYLLABUS**

Hours per week: 5

Max. Marks: 100

Unit I: Nature and Scope of Financial Management

Meaning of Business finance—Meaning of Financial Management—Objectives of Financial Management—Scope of Financial Management—Financial Functions—Investment Decisions—Financing Decisions—Dividend Decisions—Liquidity Decisions—Financial Planning—Relationship between Financial Management and other areas of management—Financial Management and Financial Accounting—Organization of Finance Function

Unit-II: Concepts of Valuation

Concept of Valuation—Time Value of Money—Valuation Concept—Compound Value—Discounting Concept

Unit-III: Financial Planning

Meaning of Financial Planning—Estimating Capital Requirements—Fixed capital—working capital—capitalization—pattern of financing—time of flotation

Unit-IV: Operating Leverage

Concept of Leverage—types of leverage—Operating Leverage—Operating Break Even Point

Unit V: Financial Leverage

Financial Leverage—measurement—significance of Financial Leverage—Combined Leverage

Text book: Elements of Financial Management—SN Maheswari

Reference Books:

Financial Management—IM Pandey

Financial Management—Khan and Jain

Financial Management—Shashi K Gupta & RK Sharma



**III B.COM (GENERAL) VI SEMESTER
FAM 362 FINANCIAL MANAGEMENT-II
NEW SYLLABUS (W.E.F. 2012-13)**

Hours per week: 5

Max. Marks: 100

Unit-I: Capital Budgeting

Capital budgeting—Tactical Vs Strategic Investment Decisions--Importance of Capital Budgeting—kinds of investment proposals—factors affecting capital investment decisions—forecasting future cost

Unit II: Capital Budgeting Appraisal Methods

Payback period method—discounted cash flow methods—net present value method—internal rate of return methods—Accounting Rate of Return Method

Unit III: Capital Structure

Capital structure and Financial structure—patterns of financial structure—capital structure theories—Net Income-Net Operating Income—MM Hypothesis—features of an appropriate Capital Structure—Factors determining capital structure—capital structure practices in India—

Unit IV: Cost of Capital

Cost of Capital—importance—Classification—controversy regarding cost of capital—determination of cost of capital—computation of cost of capital—Cost of Debt—Cost of Preference Capital—Cost of Equity (simple problems)

Unit V: Working Capital Management

Concept of Working Capital—need for working capital—types of working capital—adequacy of working capital—management of working capital

Lab work:

Finance functions in MS-Excel—Payback period—Net Present Value—Internal Rate of Return

Text book: Elements of Financial Management—SN Maheswari

Reference Books:

Financial Management—IM Pandey

Financial Management—Khan and Jain

Financial Management—Shashi K Gupts & RK Sharma



OLD

**III B.COM (GENERAL) VI SEMESTER
FAM 362 FINANCIAL MANAGEMENT-II
OLD SYLLABUS**

Hours per week: 5

Max. Marks: 100

Unit-I: Capital Budgeting

Capital budgeting—Tactical Vs Strategic Investment Decisions--Importance of Capital Budgeting—kinds of investment proposals—factors affecting capital investment decisions—forecasting future cost

Unit II: Capital Budgeting Appraisal Methods

Payback period method—discounted cash flow methods—net present value method—internal rate of return methods—Accounting Rate of Return Method

Unit III: Capital Structure

Capital structure and Financial structure—patterns of financial structure—capital structure theories—Net Income-Net Operating Income—MM Hypothesis—features of an appropriate Capital Structure—Factors determining capital structure—capital structure practices in India—

Unit IV: Cost of Capital

Cost of Capital—importance—Classification—controversy regarding cost of capital—determination of cost of capital—computation of cost of capital—Cost of Debt—Cost of Preference Capital—Cost of Equity (simple problems)

Unit V: Working Capital Management

Concept of Working Capital—need for working capital—types of working capital—adequacy of working capital—management of working capital

Text book: Elements of Financial Management—SN Maheswari

Reference Books:

Financial Management—IM Pandey

Financial Management—Khan and Jain

Financial Management—Shashi K Gupts & RK Sharma



DEPARTMENT OF COMMERCE

Department of Commerce deals with

- a. B.Com General**
- b. B.Com Computers**



**BOARD OF STUDIES
DEPARTMENT OF BUSINESS ADMINISTRATION**

Minutes of the meeting of the Board of Studies in ^{MANAGEMENT} held on 6th February, 2012 at 10.00 AM in the conference hall.

Members:-

1. Fr. Dr. A. Francis Xavier, SJ, principal
Lunch Room
2. Fr. Bujji Babu, SJ, vice principal

University Nominee:-

- Dr. Ch. Jayasankara Prasad

External Experts:-

- V. Srinivas, KLU
- G.V.S. R.N.S.A. Sastrey, KBN

Members:-

- Dr. NA. Francis Xavier
- M.V. Mandhani
- Miss. T. Chaitanya Lalshani
- Miss. K. Bhanathi Lalshani
- Ms. Rohini



**DEPARTMENT OF BUSINESS ADMINISTRATION
RESOLUTIONS**

The meeting of Board of Studies in Business Administration was held on Monday, 6th March 2012 at 10.00 a.m.

The Board passed the following resolutions unanimously.

1. The minutes of the previous Board of Studies meeting were read out and approved.
2. Resolved to introduce Business Correspondence and Report Writing, Business Regulatory Frame Work, Business Entrepreneurship, Company Accounts, and Bank Management in the Third Semester for 2nd B.B.A. w.e.f. 2012-2013.
3. Resolved to introduce Soft Skills and Personality Development, Company Law, Research Methodology, Practical Auditing, Organisation Behaviour in the Fourth Semester for 2nd B.B.A. w.e.f. 2012-2013.
4. Resolved to introduce two weeks internship program at the end of Fourth Semester.
5. Resolved to introduce the Entrance Exam for B.B.A. course.

M.V.Madhavi
H.O.D. Business Administration
& Chairman, Board of Studies



II BBA - III SEMESTER
BUSINESS CORRESPONDANCE AND REPORT WRITING

Hours per week: 5

COURSE CODE: BBA231

CREDITS: 4

MAX MARKS: 100

UNIT I - BASICS OF COMMUNICATION:

Meaning and Definition of Communication – Elements of Communication – Objectives of communication – Functions & Importance of Communication – Forms of Communication – Levels of Communications – Barriers of Communication.

UNIT II - TYPES OF COMMUNICATION:

Oral Communication: Meaning, Advantages and Disadvantages – Medias for Oral Communication: Face to Face, Teleconference, Telephone and Voice mail.

Written Communication: Meaning, Advantages and Disadvantages – Medias for Written Communication: Fax and E- Mail. Non Verbal Communication: Meaning, Types, Kinesics, Proxemics and Physical Context.

UNIT III - ESSENTIALS OF EFFECTIVE COMMUNICATION:

The Essentials of Effective Communication – Communication Network: Vertical, Horizontal & Diagonal – External Communication.

UNIT IV - BUSINESS LETTERS:

Introduction – Essentials of Business Writing – Functions of Business letters – Parts of Business Letters – Letters relating to Application for job, calling for Interviews, Appointment orders, Termination orders, Sales Letters, Compliments and Adjustments.

UNIT V - REPORT WRITING:

Report Writing: Meaning and Definition – Features – Types of Reports – Essentials of good Business Reports – Steps in Business Report Writing- Preparation of Routine reports and special reports. Progress Reports, Technical Reports, Confidential Reports, Directors Reports, Auditors Reports and Press Reports.

TEXT BOOK:

1. Business Correspondence and Report Writing: Varinder Kumar

REFERENCE BOOKS:

1. Business Communication : B N Sikdear.
2. Business Communication : Asha Kaul.



**II BBA - III SEMESTER
BUSINESS REGULATORY FRAME WORK**

COURSE CODE: BBA232

HOURS PER WEEK: 6

CREDITS: 4

MAX MARKS: 100

UNIT I - CONTRACT ACT – AN OVERVIEW:

The Indian Contracts Act, 1872 – Nature of the Contract - Classification of Contracts – Essentials of a Valid Contract; Offer and Acceptance - Communication and Revocation; Capacity to Contract – Consideration; Free Consent –Legality of Object; Performance of a Contract – Discharge of a Contract – Breach of a Contract and Remedies.

UNIT II - CONTRACT OF AGENCY AND SALE OF GOODS ACT, 1930:

Agency - Meaning and Nature of Agency – Kinds of Agents – Creation of Agency- Duties and Rights of Principal –Duties, Rights and Liability of the Agent –Termination of Agency. Sale of Goods Act – Definition and Features - Distinction between Sales and Agreement to Sell- – Conditions and Warranties – Performance of Contract of Sale –Transfer of Ownership – Rights of an Unpaid Seller.

UNIT III - CONSUMER PROTECTION ACT, 1986:

Consumer Protection Act – Meaning – Definition of terms Consumer, Unfair trade practices, Restrictive Trade Practices and Complainant. Consumer Rights – Machinery for Redressal of Consumer Grievances – Consumer Protection Councils – Penalties for Violations.

UNIT IV - NEGOTIABLE INSTRUMENTS ACT, 1881:

Negotiable Instrument - Meaning – Types - Characteristics of Negotiable Instruments – Kinds of a Negotiable Instrument; Endorsement – Kinds of Endorsement; Presentation of Negotiable Instrument –Discharge of a Negotiable Instrument.

UNITV - THE RIGHT OF INFORMATION ACT, 2005:

Nature – Scope – Right to Information – Procedure of getting Information - Public Authorities – The Central Information Commission - Constitution Powers and Functions- The State Information Commission – Constitutions and Powers and Functions – Appeals – Penalties.

REFERENCES BOOKS:

1. Ravindra Kumar:Legal Aspects of Business, Cengage learning, New Delhi,2009
2. Pathak: Legal Aspects of Business, Tata McGraw Hill, New Delhi, 2010
3. S.N.Maheshwari, S.K.Maheshwari: A Manual of Business Laws, Himalaya Publishing House, Mumbai, 2009.
4. N.D.Kapoor: Business Law, Sultan Chand, New Delhi.



**II BBA - III SEMESTER
BUSINESS ENTREPRENEURSHIP**

**COURSE CODE: BBA233
HOURS PER WEEK: 6**

**CREDITS: 4
MAX MARKS: 100**

UNIT – I ENTREPRENEURSHIP:

Entrepreneurship - Importance, Characteristics and Qualities of Entrepreneurship- Role of Entrepreneurship, Theories of Entrepreneurship; Ethics and Social Responsibilities - Problems, Prospectus and Challenges faced by Indian Economy.

UNIT – II INSTITUTIONAL FINANCE:

Institutional Finance and Entrepreneurship - Government Assistance and Incentives - Role of IDBI, NIESBUD, SISI, DIC Financial Institutions, Commercial Banks, Entrepreneurial Development Institutes Infra-structural Facilities. Assistance and Incentives - Infra-structural Facilities, Assistance Extended by Technical Consultancy Organizations.

UNIT – III ASPECTS OF ENTREPRENEURIAL ORGANIZATIONS:

Different Aspects of Entrepreneurial Organizations, Performance of Entrepreneurial Skill; Effectiveness of Entrepreneurship; Identification of Business Opportunities - Selection of Product, Size of Unit, Technology and Plant Location; Project Formulation and Report.

UNIT – IV ENTREPRENEURSHIP TRAINING AND MANAGEMENT:

Entrepreneurship and Management; Training and Development Programme; Evaluation of Entrepreneurship Development; Development of Support System, Training for New and Existing Entrepreneurs, Feedback and Performance of Trainees. Women Entrepreneurship – Role & Importance, Profile Women Entrepreneur, Problems of Women Entrepreneurs.

UNIT – V INNOVATION AND CREATIVITY:

Innovation and Creativity - Entrepreneurship Sources and Methods of Ideas, Planning and Development of Programmes, E-business Ventures; New Venture Management – Emerging Trends.

REFERENCE BOOKS:

1. Entrepreneurship Development: Desai, Vasant.
2. Entrepreneurship Development, Gupta, C. B.
3. Narayana Reddy: Entrepreneurship. Cengage learning, New Delhi, 2010
4. Rajeev Roy: Entrepreneurship, Oxford University Press, New Delhi, 2010
5. V.Gangadhar, Narsimha Chary: Entrepreneurship Development, Kalyani Publishers, New Delhi, 2007
6. H.Nandan: Fundamentals of Entrepreneurship, PHI Learning, New Delhi, 2009



II BBA - III SEMESTER COMPANY ACCOUNTS

COURSE CODE: BBA234

HOURS PER WEEK: 6

CREDITS: 4

MAX MARKS: 100

UNIT I - ACCOUNTING STANDARDS:

Accounting Standards - Need and importance - An overview of Indian Accounting Standards and International Accounting Standards.

UNIT II - VALUATION OF GOODWILL AND SHARES:

Valuation of Goodwill - Need and methods - Normal Profit Method, Super Profits Method – Capitalization Method.

Valuation of shares - Need for Valuation - Methods of Valuation - Net assets method, Yield basis method, Fair value method.

UNIT III - ISSUE OF BONUS SHARES:

Issue of bonus shares-Provisions of company's Act and SEBI guide lines. Acquisition of business and profits prior to incorporation. – Accounting treatment

UNIT IV - COMPANY FINAL ACCOUNTS:

Preparation of Final Accounts – Provisions relating to preparation of final accounts – Profit and loss account and balance sheet.

UNIT V- AMALGAMATION AND INTERNAL RECONSTRUCTION:

Amalgamation -- In the nature of merger and purchase – Calculation of purchase consideration -Treatment in the books of transferor and transferee (as per Accounting Standard 14, excluding inter- company holdings) Recording of transactions relating to mergers.

Internal Reconstruction - Accounting Treatment– Preparation of final statements after reconstruction. Recording of transactions relating to Internal Reconstruction.

TEXT BOOK:

Corporate Accounting : S.P. Jain & K.L Narang

REFERENCE BOOKS:

- | | |
|--|-----------------------------------|
| 1. Principles and Practice of Accounting | : R.L. Gupta & V.K. Gupta |
| 2. Advanced Accountancy Vol-II | : S.N.Maheshwari & V.L.Maheshwari |
| 3. Advanced Accountancy | : Shukla and Grewal |
| 4. Advanced Accountancy | : R.L. Gupta and Radhaswamy |
| 5. Corporate Accounting | : Goyal VK |
| 6. Corporate Accounting | : Verma KK |



II BBA - III SEMESTER BANK MANAGEMENT

HOURS PER WEEK: 6

COURSECODE: BBA 235

CREDITS: 4

MAX. MARKS: 100

UNIT I - TYPES OF BANKS:

Definition of Bank, Functions of Commercial Banks and Reserve Bank of India. (Forms of various accounts and deposits). Regional Rural banks, Cooperative banks, Micro Finance, Priority Sector Lending, Indigenous banking, Role of NABARD, Development Financial institutions – SFC, SIDBI.

UNIT II - BANKING SYSTEMS AND ITS REGULATION:

(a) Branch banking, Unit Banking, Correspondent banking, Group banking, Deposit banking, mixed banking and Investment banking. An overview of banking; Banking Sector Reforms with special reference to Prudential Norms: capital adequacy norms, income recognition norms.

(b) Classification of assets and NPAs.

(c) Innovations in Banking-ATMs, E-Banking, Credit cards, Online & Offshore Banking, etc (working and operations)

UNIT III - FINANCIAL INTERMEDIARIES AND SERVICES:

Merchant bankers, Mutual funds, Leasing companies, Venture Capital Funds, Forfeiting, Loan Syndication, Factoring, Custodial Services, Depository Services, and Depository Participants.

UNIT IV - BANKER AND CUSTOMER:

Banker and customer definition and their relationship, types of customers and modes of operations, procedure and precaution for opening an account, pass book & its features, Rights, duties and obligations of the banker.(Application forms for opening accounts, Cheque Books, pass books, requisition slips for withdrawals and deposits, bank statements,etc)

UNIT V - LOANS AND ADVANCES:

Types of loans and advances, principles of sound lending policies, credit appraisals of various forms of loans and advances- modes of creating charges- lien, pledge ,mortgage and hypothecation (Documents required for sanction of loans and advances)

REFERENCE BOOKS:

1. Sundaram and Varsheney - Banking Theory Law and Practice, Sultan Chand & Sons, New Delhi, 2005.
2. Maheshwari and Paul R.R... : Banking theory Law and Practice
3. Tannans-- : Banking Law and Practice in India
4. M. Y. Khan : Indian Financial System



II BBA - IV SEMESTER
SOFT SKILLS AND PERSONALITY DEVELOPMENT

COURSE CODE: BBA241

HOURS PER WEEK: 5

CREDITS: 4

MAX MARKS: 100

UNIT I:

Introduction to soft skills and their importance in different walks of life – Language proficiency – Voice modulation – Writing circulars and notices – Developing conversation skills.

UNIT II:

Building Confidence – Personal Grooming – Adaptability – Forming habits – General awareness - Facing Interviews.

UNIT III:

Interpersonal Skills – Team Building – Group Dynamics; Intrapersonal Skills - Motivation – Attitude – Listening Skills – Facing social dilemmas.

UNIT IV:

Persuasive Skills: Realizing dreams – Focusing on Important points – GD Level 1 and GD Level 2 –General Awareness – Taking a Stand – Professionalism.

UNIT V:

Work Ethics – Problem solving, Reasoning; Creativity – Adaptability; Handling Emotions – Emotional Quotients; Stress Management – Forms and Types; Conflict Management Skills.

REFERENCE BOOKS:

1. Communication Skills – Meenakshi Raman and Sangeetha Sharma.
2. English Conversation Practice – Grand Taylor.
3. Business Communication – Process &Product – Mary Ellen Guffery.
4. The Difference Book of Body Language – Allan and Barbara Pease.



II BBA - IV SEMESTER COMPANY LAW

COURSE CODE: BBA 242

HOURS PER WEEK: 6

CREDITS: 4

MAX MARKS: 100

UNIT I: THE INDIAN COMPANIES ACT 1956:

Meaning – Kinds of Companies – Formation of Company; Documents related with incorporation; Memorandum of Association and Articles of Association – Prospectus – Share Capital – Company Management and Administration – Types of Meeting – Liquidation of Company.

UNIT II: DIRECTOR AND SECRETARY:

Director and Secretary - Qualification and Disqualification – Appointment – Removal – Remuneration – Powers, Duties and Responsibilities. Meetings- Requisites of valid Meetings – Types of Meetings; Minutes of the Meetings and Resolutions; Role of Independent Director.

UNIT III: MERGERS AND ACQUISITIONS:

Mergers and Acquisitions – Winding up – Meaning - Modes of Winding up and Procedures of Winding up.

UNIT IV: THE SECURITIES – CONTRACT (REGULATION) ACT, 1956:

Definition – Importance – functions – Recognition of Stock Exchange – Listing of Securities – Trading of Securities – Penalties and Procedure.

UNIT V: THE SECURITY EXCHANGE BOARD OF INDIA 1992:

Establishment of SEBI – Powers and Functions of SEBI – Registration of Stock Brokers – Sub brokers – Share Transfer Agents; Inside Trading.

REFERENCE BOOKS:

1. Company Law by A K Bagrial, Vikas Publishing House, New Delhi.
3. Company Law By Sigh Avtar , Eastern Book Company, Lucknow.
4. SEBI Guidelines & Listing of Companies House:V.A.Avadhani, Himalaya Publishing House, Mumbai.
5. Legal Environment of Business: K.Aswathappa.
6. Introduction of Company Law: Dr. Avtar Sigh , Eastern Book Company, Lucknow.
7. The Securities Exchange Board of Indian Act 1992:Law Publishers(India) Pvt. Ltd. Allahabad.



II BBA - IV SEMESTER RESEARCH METHODOLOGY

COURSE CODE: BBA 243

HOURS PER WEEK: 6

CREDITS: 4

MAX MARKS: 100

UNIT I: INTRODUCTION:

Nature and Importance of research, The role of Business research, Research process, pure research vs. applied research, qualitative research vs quantitative research, exploratory research, descriptive research and experimental research, Ethical issues in Business research.

UNIT II: RESEARCH DESIGN:

Meaning of Research Design. Functions and goals of Research Design, characteristics, phases, design for different types of research, Salient features Good research proposal, pilot study and developing a case study; selection of an appropriate survey research design.

UNIT III: SAMPLING AND DATA COLLECTION METHODS:

Sources of Data - Primary data and Secondary data, tools and techniques of collecting data. Methods of collecting data - Personal interviews, telephone interviews, self-administered questionnaires Sampling design and sampling procedures. Random vs. Non-random sampling techniques, determination of sample size.

UNIT IV: MEASUREMENT CONCEPTS:

Levels of measurement and types of scales - Criteria for good measurement – Survey instrument and Questionnaire design and Criteria for Good Survey instruments - Psychometric, psychological and social instruments used in management research.

UNIT V: DATA ANALYSIS:

Editing and Coding, transform raw data into information, basic data analysis – Tabulation and Graphic Presentations, Descriptive statistics; Stating a hypothesis, Hypothesis testing – Chi-square Test, T – Test and Z Test.

REFERENCE BOOKS:

1. C.R. Kothari: “*Research Methodology*”, Wishwa Prakashan, 2009.
2. Panneerselvam R: “*Research Methodology*”, PHI Learning Private Limited, New Delhi, 2009.
3. Battacharya, DK: “*Research Methodology*”, Excel Books, New Delhi.
4. Sachdeva: “*Business Research Methods*”, Himalaya Publishing House, Mumbai



II BBA- IV SEMESTER PRACTICAL AUDITING

COURSE CODE: BBA244

CREDITS: 4

HOURS PER WEEK: 6

MAX MARKS: 100

UNIT I: INTRODUCTION TO AUDITING:

Auditing - Meaning – Definition - Evolution – Objectives – Importance – Auditing vs Accounting; Limitations and Advantages; Types of audit - Based on ownership (proprietorship, partnership, companies, trusts, co-operative societies, government departments) - Based on time (Interim, final, continuous, Balance sheet) - Based on objectives (Independent, Financial, Internal, Cost, Tax, Government, Secretarial).

UNITII: PLANNING OF AUDIT AND CONTROL:

Auditor: Qualifications and disqualifications- Qualities-Appointment and reappointment-removal-rights-duties-liabilities. Audit planning: Engagement letter - Audit programme - Audit notebook – Audit papers - Audit workbook- Audit contents-Audit markings- Internal check-Internal control-(sales-purchases-Fixed assets-cash-bank-payroll)- Role of Auditor; Accounting controls and sampling in audit.

UNITIII: VOUCHING OF FINANCIAL STATEMENTS:

Vouching: Meaning of cash and trading transactions-investigation, verification and valuation of assets and liabilities, differences between vouching, investigation, verification and valuation.

UNITIV: AUDIT OF FINANCIAL STATEMENTS:

Audit of Financial statements: Receipts-payments, sales, purchases, fixed assets, investments, personal ledger-inventories, capital and reserves- other assets-other liabilities

UNITV: AUDIT OF INSTITUTIONS:

Audit of institutions: Partnership - manufacturing and other companies – non trading concerns. Audit report: contents - preparation of audit report - fair report - Qualified report; Comptroller and Auditor General of India Reports.

Text book:

Practical auditing : Jain and Narang, Kalyani publishers.

References:

1. Practical auditing : Spicer and Pegler.
2. Principles of auditing : Jadish Prakash.
3. Practical auditing : T.N. Tandon.
4. Auditing : Dinkar Pagare, R.Gsaxena.



II BBA- IV SEMESTER ORGANIZATIONAL BEHAVIOUR

HOURS PER WEEK: 6
CREDITS: 4

COURSECODE: BBA 245
MAX. MARKS: 100

UNIT I INTRODUCTION:

Meaning of Organizational Behavior – Emergence of OB as a discipline; Contributing disciplines to OB field, Significance of OB, Challenges and opportunities for OB, Organizational model, theory and design.

UNIT –II INDIVIDUAL BEHAVIOR:

Personality- personality determinants; Personality traits: The Big five Model, Major personality attributes influencing OB; Theories of personality; Values - Types of values; Learning – Theories of learning; Principles of learning; Attitudes – Types of Attitudes, work attitudes.

UNIT –III PERCEPTION:

Perception: Meaning –Process ;Factors influencing process; Learning and reinforcement – Motivation – Theories of Motivation – Maslow, Herzberg, Theory X and Theory Y; Applications of motivation; Stress – Causes and Consequences of stress; Stress management.

UNIT-IV GROUP BEHAVIOR:

Groups – Nature of Groups; Types of Groups; Stages of group Development; Group Cohesiveness; Group Decision Making; Leadership – Nature; Theories of leadership; Traits Theories, Behavioral theories and Contingencies theories; Conflict Management – Conflict process.

UNIT-V ORGANIZATIONAL CULTURE:

Organizational Culture and Change Management – Nature; Cultures functions; – Creating and Sustaining Organizational Culture; Cross Cultural Transformation – Tools and Techniques; Forces for change; Resistance to change ; Approaches to managing Organizational Change; Organizational Development – Techniques for Organizational Development.

TEXT BOOK:

Robbins, Stephen & Sanghi,S, “Organizational Behavior” Pearson Education,2009

REFERENCE BOOKS:

1. Aswathappa, “Organizational Behavior” Himalya Publishig ouse,2008.
2. Luthans F..”Organizational Behavior” Prientice Hall, 2007.
3. Varma, M.M., 1992, Organizational Behavior , Forward Book Depot, New Delhi.



**BOARD OF STUDIES
DEPARTMENT OF VISUAL COMMUNICATIONS**

Minutes of the meeting of the Board of Studies in Visual Communication held on Monday, 27.02.2012, at 2.30 P.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal

University Nominee

3. Dr. SMT.T.VIJAYA LAKSHMI *T. V. Lakshmi* 27/02/2012

External Experts

4. PROF.HENRY MARIA VICTOR *Henry Maria Victor*

5. SRI MAHESH *Mahesh*

Faculty:

6. SRI T.RAJA KUMAR *T. Raja Kumar*

7. SRI M.SATISH RAJAN *M. Satish Rajan*

8. SRI N SRIDHAR *N. Sridhar*

9. SRI K UDAY KIRAN *K. Uday Kiran* 27/02/2012

10. MS.RAZIA SHABEENA *Razia Shabeena* 27/2/12

11. SRI K VIDYA SAGAR *K. Vidya Sagar*

12. MS.G.DIVYA *G. Divya* 27/2/12

13. SRI S A B NEHRU

14. SRI DINESH *Dinesh*

15. Santosh Kumar Biswal

Santosh Kumar Biswal

16. Yaseem Anwar Baska

Yaseem Anwar Baska



DEPARTMENT OF VISUAL COMMUNICATIONS RESOLUTIONS

The following are the resolutions passed in the Board of studies meeting held on February 27, 2012 at 2.30 pm to 4 pm.

The outcome of the meeting has passed the following modifications to be made in the syllabus for the next academic year 2012-2013.

1. It is resolved to modify the Human Communication paper in Semester-I as follows:
unit-5 is removed and '**Group Communication-types procedures formats and Mass Communication- Components, Forms and functions**' are added to Unit- 1, and unit-4 is divided into to two equal halves. i.e the part **Interpersonal Relationships is formed as Unit V**.
2. It is resolved to correct the syllabus of Film Mechanism and Aesthetics of Semester-I, the word '**Film movement**' has been changed to '**Film speed**'.
3. It is resolved to include the topic in Visual Drawing paper in Semester-II as School of Indian arts in Unit-2. i.e. '**Study of different Indian School of Art like Cave Art, Ajanta, Rajasthan Deccan, Ajanta Murals, Rajasthan School of Arts, Deccan School of Arts, Contemporary Indian art like Bengal school of Arts etc**' is added to Unit II. The topic 'figurative Anatomy' in unit II is shifted to unit III.
4. It is resolved to exclude the word "**the manufacture**" in the First Unit of Media Culture and Society paper in Semester-II.
5. It is resolved to include the topic "**Testing an Advertisement**" in the Unit-V of the Advertising Basics in Semester-III.
6. It is resolved to include '**Official Secrets Act**' and modify the sequence of topics Unit II of Media laws and Ethics paper in Semester-IV This may read as '**Contempt of Court Defamation Libel and Slander Official Secrets Act – Right to information act – Puffery**'; and added '**Indian Contracts Act - an overview**' and '**Cyber laws –an overview**' in unit-V.
7. It is resolved to include the topic "**HDTV and 3D Television technologies**" in Unit-II of the Television Production- I in Semester-IV.
8. It is resolved to include the topic "**Communication Research – an overview**" in Unit-V of the Media Research Orientation in Semester-V.
9. It was resolved to include the topic "**Structure of Television Program**" in unit-IV of the Television Production- II in Semester-V.
10. It is resolved to correct the topics of Unit 2 in Development Communication paper in Semester-V as follows: the words 'Differences from General Communication' was replaced with 'Development Support Communication'. In unit-5, the words 'Taxonomy of Advertisements' and 'taxonomy of social Ads' were removed.

M.Sathish Rajan
H.O.D. Visual Communication &
Chairman, Board of Studies

**NEW****B.SC VISUAL COMMUNICATIONS**

Advertising basics- New Syllabus	
Major : Viscom Paper – 3 Category: MC (Theory)	Credit : 3 No. of Hrs / Week : 4

Unit 1

Introduction to Advertising. Definition and Types. Structure and Functioning of an AD Agency. Advertiser - Agency Relationship.

Unit 2

Audience Analysis, Segmentation, Targeting and Positioning; Audience Research - Demographics, Psychographics.

Unit 3

Creative Aspects of Advertising. Art Direction. Creative Aspects in Print and Electronic media. Print Production; Electronic Production.

Unit 4

Outdoor Advertising. Media Choices. Sales Promotion. The Role of PR in Advertising.

Unit 5

Advertising Ethics. Legal Aspects of Advertising. Advertising social issues. Political Advertising. Dynamics of creating and executing the complete campaign strategy. Testing an Advertisement.

Key Texts:

1. Coutland L. Boove, John V. Thill, George P. Dovel, Marian Burk Wood, Advertising Excellence, Mc Graw-Hill, Inc. N.Y. 1995.
2. Frank Jefkins, Advertising Made Simple, Rupa & Co, NewDelhi. 1992.
3. William F. Arens, Contemporary Advertising, Irwin/McGraw-Hill, 1999.



**B.SC VISUAL COMMUNICATIONS
ADVERTISING BASICS- OLD SYLLABUS**

Major : Viscom Paper – 3
Category : MC (Theory)

Credit : 3
No. of Hrs / Week : 4

Unit 1

Introduction to Advertising. Definition and Types. Structure and Functioning of an AD Agency. Advertiser - Agency Relationship.

Unit 2

Audience Analysis, Segmentation, Targeting and Positioning; Audience Research - Demographics, Psychographics.

Unit 3

Creative Aspects of Advertising. Art Direction. Creative Aspects in Print and Electronic media. Print Production; Electronic Production.

Unit 4

Outdoor Advertising. Media Choices. Sales Promotion. The Role of PR in Advertising.

Unit 5

Advertising Ethics. Legal Aspects of Advertising. Advertising social issues. Political Advertising. Dynamics of creating and executing the complete campaign strategy.

Key Texts:

1. Cutland L. Boove, John V. Thill, George P. Dovel, Marian Burk Wood, Advertising Excellence, Mc Graw-Hill, Inc. N.Y. 1995.
2. Frank Jefkins, Advertising Made Simple, Rupa & Co, NewDelhi. 1992.
3. William F. Arens, Contemporary Advertising, Irwin/McGraw-Hill, 1999.

**NEW****B.SC VISUAL COMMUNICATIONS**

Human Communication- New Syllabus	
Major : Viscom Paper – 1	Credit : 3
Category: MC (Theory)	No. of Hrs / Week : 4

Unit 1

History of Communication – Definitions – Types – Preliminaries to Human Communication: Nature, Components, Purposes & Postulates – Universal Model of Communication. Group Communication: Types, Procedures & Formats. Mass Communication: Components, Forms & Functions.

Unit 2

The Self in Communication – Self-Awareness & Self-Disclosure – Perception – Perception Process – Processes Influencing Perception – Attribution – Listening – Nature of Listening – Active Listening.

Unit 3

Verbal Communication: Language, Symbols, & Meanings. – Barriers in Language & Verbal Interaction. Principles of Language & Verbal Interaction. Social Aspects of Language and Verbal Interaction.

Unit 4

Non Verbal Communication - Body Communication, Space, Territoriality, and Touch Communication. Paralanguage & Time.

Unit 5

Interpersonal Relationships: Definitions, Characteristics, & Interpersonal Attraction. Relationship Development & Deterioration.

Key Texts:

1. Joseph A. Devito, Human Communication- The Basic Course, Harper & Row, New York, 1988.
2. Vandermark and Leth, Interpersonal Communication, Cummings Publishing Co., California, 1977.

Reference:

1. Kincaid, Lawrence and Wilbur Schramm, Fundamentals of Human Communication, East West Communication Institute, Honolulu, 1974.
2. Harry. C, On Human Communication, John Wiley & Sons, New York, 1957.



**B.SC VISUAL COMMUNICATIONS
HUMAN COMMUNICATION - OLD SYLLABUS**

Major	: Viscom Paper – 1	Credit	: 3
Category	: MC (Theory)	No. of Hrs / Week	: 4

Unit 1

History of Communication – Definitions – Types – Preliminaries to Human Communication: Nature, Components, Purposes & Postulates – Universal Model of Communication.

Unit 2

The Self in Communication – Self-Awareness & Self-Disclosure – Perception – Perception Process – Processes Influencing Perception – Attribution – Listening – Nature of Listening – Active Listening.

Unit 3

Verbal Communication: Language, Symbols, & Meanings. – Barriers in Language & Verbal Interaction. Principles of Language & Verbal Interaction. Social Aspects of Language and Verbal Interaction.

Unit 4

Non Verbal Communication - Body Communication, Space, Territoriality, and Touch Communication. Paralanguage & Time. Interpersonal Relationships: Definitions, Characteristics, & Interpersonal Attraction. Relationship Development & Deterioration.

Unit 5

Group Communication: Types, Procedures & Formats. Mass Communication: Components, Forms & Functions.

Key Texts:

1. Joseph A. Devito, Human Communication- The Basic Course, Harper & Row, New York, 1988.
2. Vandermark and Leth, Interpersonal Communication, Cummings Publishing Co., California, 1977.

Reference:

1. Kincaid, Lawrence and Wilbur Schramm, Fundamentals of Human Communication, East West Communication Institute, Honolulu, 1974.
2. Harry. C, On Human Communication, John Wiley & Sons, New York, 1957.

**NEW****B.SC VISUAL COMMUNICATIONS**

Media Laws & Ethics- New Syllabus	
Major : Viscom Paper – 4	Credit : 3
Category: MC (Theory)	No. of Hrs / Week : 4

Unit 1

Brief history of media laws in India. Constitution of India. Indian legal system. Legal aspects. Fundamental rights. Restrictions. Freedom of the Press.

Unit 2

Contempt of court. Defamation, Libel & Slander, Official Secrets Act - Right to Information - Puffery

Unit 3

Laws related to the Press. Newspaper registration. The Press Council. Copy Right. Media Contracts- An Overview.

Unit 4

Indian Cinematograph Act. Prassar Bharathi. The cable TV network regulation Act. Ombudsmen.

Unit 5

Media and ethics. Code of conduct in various media. Ethical issues in media. Social responsibility of the media person.

Key Texts:

1. Vrdisha Barua, Press and the Media Laws. Universal law publishing, New Delhi, 2006.
2. Durga Das Basu, Laws of the Press, Wadhua, New Delhi, 2002.
3. Kiran R. N., Philosophies of Communication and Media Ethics, B. R. Publishing Corporation, New Delhi, 2000.



**B.SC VISUAL COMMUNICATIONS
MEDIA LAWS & ETHICS- OLD SYLLABUS**

Major	: Viscom Paper – 4	Credit	: 3
Category	: MC (Theory)	No. of Hrs / Week	: 4

Unit 1

Brief history of media laws in India. Constitution of India. Indian legal system. Legal aspects. Fundamental rights. Restrictions. Freedom of the Press.

Unit 2

Contempt of court. Defamation and libel. Right to Information – Slander – Puffery.

Unit 3

Laws related to the Press. Newspaper registration. The Press Council. Copy Right. Media Contracts.

Unit 4

Indian Cinematograph Act. Prassar Bharathi. The cable TV network regulation Act. Ombudsmen.

Unit 5

Media and ethics. Code of conduct in various media. Ethical issues in media. Social responsibility of the media person.

Key Texts:

1. Vrdisha Barua, Press and the Media Laws. Universal law publishing, New Delhi, 2006.
2. Durga Das Basu, Laws of the Press, Wadhua, New Delhi, 2002.
3. Kiran R. N., Philosophies of Communication and Media Ethics, B. R. Publishing Corporation, New Delhi, 2000.

**NEW****B.SC VISUAL COMMUNICATIONS**

Development Communication- New Syllabus	
Major : Viscom Paper – 5	Credit : 3
Category: MC (Theory)	No. of Hrs / Week : 4

Unit 1

The Nature of Development. Defining development as a Goal, as a Process; Key Concepts in Development: Self-reliance, Dependence, Cultural Identify, Decentralization, Participation, Modernization, Industrialisation, First-Second-Third-Fourth World, Basic Needs etc. Complexities of development efforts; Alternate paths to Development; Development and Colonialism; Development and Tradition bound Society.

Unit 2

The Concept of Development Communication: Definitions of Development Communication, Roles of Development Communication, and Philosophy of Development Communication – Differences from Development Support Communication, Goals of Development Communication. Differences between Communication for Development and Development Communication; Models of Daniel Lerner, Everett Rogers and Wilbur Schramm.

Unit 3

Communication for social change. Using Folk forms for Social Change; Taking Theatre into the streets.

Unit 4

Empowerment through Silver Screen; Role of a Communicator in the process of social change. Folk forms and 'alternative silver screen' for social change.

Unit 5

Social Advertising. Historical perspective of advertising. Social advertising – the concept, why of social advertising. Social advertising in India – areas covered under social advertising, agencies involved in social advertising: the DVAP and other media units, organized sector and voluntary organizations, international agencies.

Key Texts:

- 1.Melkote, Srinivas R. and Leslie Steeves – Communication for Development in the Third World: Theory and Practice for Empowerment, Sage Publications. New Delhi 2001.
- 2.Vollan, Clayton and Jim Simmons (Ed) – Development Communication: A Resource Manual for Teaching, Asian Mass Communication Research and Information Center, Singapore, 1985.



**B.SC VISUAL COMMUNICATIONS
DEVELOPMENT COMMUNICATION - OLD SYLLABUS**

Major	: Viscom Paper – 5	Credit	: 3
Category	: MC (Theory)	No. of Hrs / Week	: 4

Unit 1

The Nature of Development. Defining development as a Goal, as a Process; Key Concepts in Development: Self-reliance, Dependence, Cultural Identify, Decentralization, Participation, Modernization, Industrialisation, First-Second-Third-Fourth World, Basic Needs etc. Complexities of development efforts; Alternate paths to Development; Development and Colonialism; Development and Tradition bound Society.

Unit 2

The Concept of Development Communication: Definitions of Development Communication, Roles of Development Communication, and Philosophy of Development Communication – Differences from General Communication, Goals of Development Communication. Differences between Communication for Development and Development Communication; Models of Daniel Lerner, Everett Rogers and Wilbur Schramm.

Unit 3

Communication for social change. Using Folk forms for Social Change; Taking Theatre into the streets.

Unit 4

Empowerment through Silver Screen; Role of a Communicator in the process of social change. Folk forms and 'alternative silver screen' for social change.

Unit 5

Social Advertising. Historical perspective of advertising. Taxonomy of advertising. Social advertising – the concept, why of social advertising, taxonomy of social ads. Social advertising in India – areas covered under social advertising, agencies involved in social advertising: the DVAP and other media units, organized sector and voluntary organizations, international agencies.

Key Texts:

1. Melkote, Srinivas R. and Leslie Steeves – Communication for Development in the Third World: Theory and Practice for Empowerment, Sage Publications. New Delhi 2001.
2. Vollan, Clayton and Jim Simmons (Ed) – Development Communication: A Resource Manual for Teaching, Asian Mass Communication Research and Information Center, Singapore, 1985.

**NEW****B.SC VISUAL COMMUNICATIONS**

VC- DRAWING- New Syllabus	
Major : Semester 2	Credit : 2
Category: MC (Theory)	No. of Hrs / Week : 3

Objective: To study the form and structure of animate and in animate objects and learn the process of visual representation of ideas.

UNIT: 1

Drawing –representational or realistic –with one source lighting – basic value/dark value differences, soft and hard edges in opposition ,color, texture, warm and cold, darks and lights, twinning of form in space and value relationship to environment.

UNIT:2

Study of human anatomy- skeleton, muscles, head, hand, leg and foot; structures, posture and movements in drawing. Study of Indian and Western artists.

UNIT:3

Study of figure- frontal and profile –expressions, clothed figures , figures in an environment; observation and human interpretation, personal expression; Approaches to painting model sensation, response, empathy, tension, color, and composition.

UNIT:4

Perspective- sense of form and space on two dimensional surface-linear perspective [horizon line ,vanishing points, intersecting line],-aerial perspective[color and value for light and atmosphere].

UNIT:5

Conventional and unconventional drawing techniques, value studies and volumetric analysis, contour drawing; Drawing from imagination and subconscious, abstraction and atmospheric drawing.

Methodology:

Theoretical inputs coupled with extensive studio demonstrations and practical sessions.

Evaluation:

Internal assessments: Assignments 20% Test 30%.

External examination: Project 10% Test 40%.



**B.SC VISUAL COMMUNICATIONS
VC- DRAWING- OLD SYLLABUS**

Semester 2
Category: MC

Credit: 2
No. of hrs/Week: 3

UNIT: 1

Drawing –representational or realistic –with one source lighting – basic value/dark value differences, soft and hard edges in opposition ,color, texture, warm and cold, darks and lights, twinning of form in space and value relationship to environment.

UNIT:2

Study of human anatomy- skeleton, muscles, head, hand, leg and foot; structures, posture and movements in drawing. Study of different Indian School of Art like Cave Art, Ajanta, Rajasthan Deccan, Ajanta Murals, Rajasthan School of Arts, Deccan School of Arts, Contemporary Indian art like Bengal school of Arts etc.

UNIT:3

Study of figure- frontal and profile –expressions, clothed figures , figures in an environment; observation and human interpretation, personal expression; Approaches to painting model sensation, response, empathy, tension, color, and composition.

UNIT:4

Perspective- sense of form and space on two dimensional surface-linear perspective [horizon line ,vanishing points, intersecting line],-aerial perspective[color and value for light and atmosphere].

UNIT:5

Conventional and unconventional drawing techniques, value studies and volumetric analysis, contour drawing; Drawing from imagination and subconscious, abstraction and atmospheric drawing.

Methodology:

Theoretical inputs coupled with extensive studio demonstrations and practical sessions.

Evaluation:

Internal assessments: Assignments 20% Test 30%.

External examination: Project 10% Test 40%.

**NEW****B.SC VISUAL COMMUNICATIONS**

Media Research Orientation- New Syllabus	
Major : Viscom Paper – 6	Credit : 2
Category: MC (Practical)	No. of Hrs / Week : 4

Unit 1

The need and relevance of media research. Responsibility and Involvement. Scientific and non scientific methods. Steps involved in designing a research project. Research objectives. Research problem. Hypothesis. Types of research methods – historical, Case study, Content analysis, etc.

Unit 2

Types of research design – Exploratory, Descriptive and Experimentation. Merits and Demerits of these Methods. Opinion polls and audience research and viewership ratings. Protocols of research methods.

Unit 3

Data collection methods. Primary data and secondary data. Types of secondary data. Survey data, Observation data. General accuracy of data collected. Questionnaire method. Structured and non-structured. Telephone and personal interviews. Questionnaire construction methods.

Unit 4

Sampling. Types of sample. Random, Cluster, Stratified Systematic, Probability and non-probability, Convenience, judgment, Quota, etc. Sampling problems. Sample error. Choosing a sample design.

Unit 5

Preparation and tabulation of collected data. Data analysis. Identifying interdependencies. Steps involved in writing a research paper/report. Written research report. Evaluation of the research procedure. **Communication Research - An overview.**

Key Texts:

- 1.Hansen, Andres et al., Mass Communication Research Methods. Macmillan Press Ltd. London, 1988.
- 2.Wimmer, D Roger and Dominick R Joseph, Mass Media Research – An Introduction, Wadsworth Publishing Company, California 1991.

Reference:

1. Dr. Mercado, Communication Research Methods, University of Philippines, Manila, 1979.
2. Parnela L. Alreck and Robert B. Settle, The Survey Research handbook, Irwin Homewood, Illinois, 1985.



**B.SC VISUAL COMMUNICATIONS
MEDIA RESEARCH ORIENTATION- OLD SYLLABUS**

Major	: Viscom Paper – 6	Credit	: 2
Category	: MC (Practical)	No. of Hrs / Week	: 4

Unit 1

The need and relevance of media research. Responsibility and Involvement. Scientific and non scientific methods. Steps involved in designing a research project. Research objectives. Research problem. Hypothesis. Types of research methods – historical, Case study, Content analysis, etc.

Unit 2

Types of research design – Exploratory, Descriptive and Experimentation. Merits and Demerits of these Methods. Opinion polls and audience research and viewership ratings. Protocols of research methods.

Unit 3

Data collection methods. Primary data and secondary data. Types of secondary data. Survey data, Observation data. General accuracy of data collected. Questionnaire method. Structured and non-structured. Telephone and personal interviews. Questionnaire construction methods.

Unit 4

Sampling. Types of sample. Random, Cluster, Stratified Systematic, Probability and non-probability, Convenience, judgment, Quota, etc. Sampling problems. Sample error. Choosing a sample design.

Unit 5

Preparation and tabulation of collected data. Data analysis. Identifying interdependencies. Steps involved in writing a research paper/report. Written research report. Evaluation of the research procedure.

Key Texts:

1. Hansen, Andres et al., Mass Communication Research Methods. Macmillan Press Ltd. London, 1988.
2. Wimmer, D Roger and Dominick R Joseph, Mass Media Research – An Introduction, Wadsworth Publishing Company, California 1991.

Reference:

1. Dr. Mercado, Communication Research Methods, University of Philippines, Manila, 1979.
2. Parnela L. Alreck and Robert B. Settle, The Survey Research handbook, Irwin Homewood, Illinois, 1985.

**NEW****B.SC VISUAL COMMUNICATIONS**

Media Culture & Society- New Syllabus	
Major : Viscom Paper – 2	Credit : 3
Category: MC (Theory)	No. of Hrs / Week : 4

Unit 1

Why media education? – Seven reasons why media education is necessary –Media Saturation. Media Influence – The management of information – Media Education & Democracy – The increasing importance of Visual Communication and Information – Educating for future.

Unit 2

How and How Not to study media – A theoretical framework for media education – Core concepts – A distinctive mode of enquiry: towards for critical autonomy – Media Pedagogy – The media as agents of culture decline: the legacy of Leavis & Thompson – The media as popular art form – The media as aid to learning and dissemination of knowledge and experience – The media as agents of Communication.

Unit 3

Media Determinants: Owners and Controlling companies –Media Institutions – The State and the law – Advertisers – Self-regulation by the media – Media Personnel – Economic Determinants.

Unit 4

Media Rhetoric: The Rhetoric of the image – Image & text – The effect of Camera and Crew – Set-ups – Film & Sound Editing – Interpretative Frameworks – Visual Codings – Narration.

Unit 5

Media Ideology: Defining Ideology – Hegemony – Myth – Ideology in the Classroom Problematising the audience – Audience positioning – Subjectivity – Pleasure –Audience Dynamics – Impact of media on society.

Key Texts:

1.Len Masterman, Teaching the Media, Comedia Publishing Group, London, 1985.

Reference:

1.Alvarado, Gutch and Wollen, Learning the Media, Macmillan Education Ltd., 1987.
2.Tim O’Sullivan and Brian Duttar, Studying the Media- An Introduction, Arnold, London, 2003.



**B.SC VISUAL COMMUNICATIONS
MEDIA CULTURE & SOCIETY – OLD SYLLABUS**

Major	: Viscom Paper – 2	Credit	: 3
Category	: MC (Theory)	No. of Hrs / Week	: 4

Unit 1

Why media education? – Seven reasons why media education is necessary –Media Saturation. Media Influence – The manufacture and management of information – Media Education & Democracy – The increasing importance of Visual Communication and Information – Educating for future.

Unit 2

How and How Not to study media – A theoretical framework for media education – Core concepts – A distinctive mode of enquiry: towards for critical autonomy – Media Pedagogy – The media as agents of culture decline: the legacy of Leavis & Thompson – The media as popular art forms – The media as aids to learning and dissemination of knowledge and experience – The media as agents of Communication.

Unit 3

Media Determinants: Owners and Controlling companies –Media Institutions – The State and the law – Advertisers – Self-regulation by the media – Media Personnel – Economic Determinants.

Unit 4

Media Rhetoric: The Rhetoric of the image – Image & text – The effect of Camera and Crew – Set-ups – Film & Sound Editing – Interpretative Frameworks – Visual Codings – Narration.

Unit 5

Media Ideology: Defining Ideology – Hegemony – Myth – Ideology in the Classroom Problematising the audience – Audience positioning – Subjectivity – Pleasure –Audience Dynamics – Impact of media on society.

Key Texts:

1. Len Masterman, Teaching the Media, Comedia Publishing Group, London, 1985.

Reference:

1. Alvarado, Gutch and Wollen, Learning the Media, Macmillan Education Ltd., 1987.
2. Tim O’Sullivan and Brian Duttar, Studying the Media- An Introduction, Arnold, London, 2003.



B.SC VISUAL COMMUNICATIONS

Major : Electronic Media Paper Category: MC (Theory)	Credit : 3 No. of Hrs / Week :
---	-----------------------------------

Unit 1

Basic Television System – Expanded Studio & Electronic Field Production Systems – Production Elements – Production Personnel – Television Studio – Studio Control Room – Master Control – Studio Support Areas.

Unit 2

Analog and Digital Camera Television – Basic Image Creation – Basic Color of the Video Display – Introduction to Digital – Benefits of Digital Television – Scanning Systems: Interlaced and Progressive Scanning, DTV, HDTV and 3D TV Technologies – Flat – Panel Displays.

Unit 3

The Television Camera – Parts of the Camera – How the Camera Works – Types of Cameras – Electronic Characteristics – Operational Characteristics – Light to Video Image.

Unit 4

Lenses – It's Types – Operational Characteristics & Controls – Angle of View – Standard Camera Mounts & Movements – Special Camera Mounts – Camera Operation & Picture Composition – Lighting Instruments & Lighting Controls. Light Intensity, Lamps and Color Media.

Unit 5

Lighting – Quality of Light – Color Temperature – Lighting Functions – Special Lighting Techniques – Contrast – Balancing Light Intensity – Light Plot – Operation of Studio Lights – EFP/ENG Lighting.

Key Texts:

1. Herbert Zettl, Television Production Handbook, California, Thomson-Wadsworth, 2006.
2. Gerald Millerson, Effective TV Production, London, Focal Press, 2002.

Practical: (Team Work)

1. Basic Shots, Camera Angles & Movements
2. Quickie
3. Multi Camera Interview
4. Road Show



**B.SC VISUAL COMMUNICATIONS
TELEVISION PRODUCTION – I - OLD SYLLABUS**

Major	: Electronic Media Paper – 4	Credit	: 3
Category	: MC (Theory)	No. of Hrs / Week	: 4

Unit 1

Basic Television System – Expanded Studio & Electronic Field Production Systems – Production Elements – Production Personnel – Television Studio – Studio Control Room – Master Control – Studio Support Areas.

Unit 2

Analog and Digital Camera Television – Basic Image Creation – Basic Color of the Video Display – Introduction to Digital – Benefits of Digital Television – Scanning Systems: Interlaced and Progressive Scanning, DTV, HDTV and 3D TV Technologies – Flat – Panel Displays.

Unit 3

The Television Camera – Parts of the Camera – How the Camera Works – Types of Cameras – Electronic Characteristics – Operational Characteristics – Light to Video Image.

Unit 4

Lenses – It's Types – Operational Characteristics & Controls – Angle of View – Standard Camera Mounts & Movements – Special Camera Mounts – Camera Operation & Picture Composition – Lighting Instruments & Lighting Controls. Light Intensity, Lamps and Color Media.

Unit 5

Lighting – Quality of Light – Color Temperature – Lighting Functions – Special Lighting Techniques – Contrast – Balancing Light Intensity – Light Plot – Operation of Studio Lights – EFP/ENG Lighting.

Key Texts:

1. Herbert Zettl, Television Production Handbook, California, Thomson-Wadsworth, 2006.
2. Gerald Millerson, Effective TV Production, London, Focal Press, 2002.

Practical:

1. Basic Shots, Camera Angles & Movements
2. Quickie
3. Multi Camera Interview
4. Road Show



B.SC VISUAL COMMUNICATIONS

Major : Electronic Media Paper Category: MC (Theory)	Credit : 3 No. of Hrs / Week : 4
---	-------------------------------------

Unit 1

Television Scenery – Properties and Set Dressings – Elements of Scene – Production People – Non Technical & Technical Personnel – Television Talent – Performing Techniques – Acting Techniques – Auditions – Makeup – Clothing and Costuming.

Unit 2

Producing – Preproduction Planning: From Idea to Script – Coordination – Line Producer: Host & Watchdog – Postproduction Activities.

Unit 3

Production Scheduling - Basic Rules - The Script – The Breakdown Sheet – The Production Board – Parameter Factors – Arranging the Board – How many days? – The Shooting Schedule.

Unit 4

Direction – Director’s Roles – Preproduction Activities – Production Method – Production Team – Scheduling – Script Formats – Script Marking – Floor Plan – Location Sketch – Moving from Script to Screen. **Structure of Television Program.**

Unit 5

Direction in Production & Postproduction Activities – Multi Camera Directing Procedures – Directing Rehearsals – Directing the Show – Single Camera Directing Procedures – Controlling Clock Time & Subjective Time – ENG / EFP Techniques.

Key Texts:

1. Herbert Zettl, Television Production Handbook, California, Thomson-Wadsworth, 2006.
2. Gerald Millerson, Effective TV Production, London, Focal Press, 2002.

Practical: (Group Work)

1. Demonstration Program
2. Television Commercial
3. Documentary
4. Short Film

**NEW****B.SC VISUAL COMMUNICATIONS**

Film Mechanism & Aesthetics- New Syllabus	
Major : Viscom Paper – 2	Credit : 2
Category: MC (practical)	No. of Hrs / Week : 3

Unit 1

Cinema as an institution. Film as an experience, entertainment, commodity, communication medium. The origin of world cinema. A brief overview of film History with special reference to India & Andhra Pradesh. Film Structure: Narration and Narrative. Restricted & Omniscient Narration. Linear & Non- Linear Narratives. Concept, Plot, Story & Conflict, Three- Act Structure, Protagonist & Antagonist. The Three Phases in Production.

Unit 2

The Shot: Characteristics, Types – ECU...ELS, Meanings; Scene & Sequence. Camera Angles & Movements (PAN, TILT, TRACK, DOLLY, CRAB, CRANE, STEADICAM etc.) Camera Lens. Frame: Size (16, 35, 70, Cinemascope with anamorphic lens), Aspect ratio, Film Stock, Film speed – 12, 16, 24 fps... High Speed Photography, Slow Speed or Stop motion Photography. Frame Aesthetics – Line, Mass, Space, Angle, Level, Height.

Unit 3

Performance, Settings, Properties, Costume, Lighting, Editing, Background Music, SFX. Mise-en-scene, Montage, Cinematic codes. Film Editing & Film Sound: History – Hollywood, Russian; Types of transitions – F. I., F.O., CUT, DISSOLVE, WIPE; Shot to Shot relationship – graphic, rhythmic, spatial, temporal; Continuity editing – 180 degree rule, match on action, eye-line match, cheat cut, cross cut; Discontinuous editing – jump cut; Video editing – Non-Linear & Online Editing.

Unit 4

Film Genres: Fiction & Non Fiction, Action, Adventure, Comedy, Children, Animated, Melodrama, Musical, Historical, Horror & Thriller, Sci-fiction. Documentary & Docudrama.

Unit 5

Different Types of Cinema – Bollywood, Third World Cinema, Hollywood, National Cinemas. Film Concepts and Film Movements – Great Auteur from Hollywood, Europe, Russia, Asia & India. Film Audience. Audience Positioning. Audience as the Meaning Makers. Hero Worship. Fan Clubs. Problematising Audience – Film Appreciation – How to write Film Review.

Key Texts:

1. Michael Rabiger, Directing – Film Techniques & Aesthetics, Burlington, Focal Press, 2003.
2. Bordwell K and Thomson K, Film Art – An Introduction, New York, Knopf, 1990.
3. Steven Ascher, & Edward Pincus, The Filmmaker's Handbook, England, Plume, 1999.



**B.SC VISUAL COMMUNICATIONS
FILM MECHANISM & AESTHETICS - OLD SYLLABUS**

Major	: Viscom Paper – 2	Credit	: 2
Category	: MC (Practical)	No. of Hrs / Week	: 3

Unit 1

Cinema as an institution. Film as an experience, entertainment, commodity, communication medium. The origin of world cinema. A brief overview of film History with special reference to India & Andhra Pradesh. Film Structure: Narration and Narrative. Restricted & Omniscient Narration. Linear & Non- Linear Narratives. Concept, Plot, Story & Conflict, Three- Act Structure, Protagonist & Antagonist. The Three Phases in Production.

Unit 2

The Shot: Characteristics, Types – ECU...ELS, Meanings; Scene & Sequence. Camera Angles & Movements (PAN, TILT, TRACK, DOLLY, CRAB, CRANE, STEADICAM etc.) Camera Lens. Frame: Size (16, 35, 70, Cinemascope with anamorphic lens), Aspect ratio, Film Stock, Film Movement – 12, 16, 24 fps... High Speed Photography, Slow Speed or Stop motion Photography. Frame Aesthetics – Line, Mass, Space, Angle, Level, Height.

Unit 3

Performance, Settings, Properties, Costume, Lighting, Editing, Background Music, SFX. Mise-en-scene, Montage, Cinematic codes. Film Editing & Film Sound: History – Hollywood, Russian; Types of transitions – F. I., F.O., CUT, DISSOLVE, WIPE; Shot to Shot relationship – graphic, rhythmic, spatial, temporal; Continuity editing – 180 degree rule, match on action, eye-line match, cheat cut, cross cut; Discontinuous editing – jump cut; Video editing – Non-Linear & Online Editing.

Unit 4

Film Genres: Fiction & Non Fiction, Action, Adventure, Comedy, Children, Animated, Melodrama, Musical, Historical, Horror & Thriller, Sci-fiction. Documentary & Docudrama.

Unit 5

Different Types of Cinema – Bollywood, Third World Cinema, Hollywood, National Cinemas. Film Concepts and Film Movements – Great Auteur from Hollywood, Europe, Russia, Asia & India. Film Audience. Audience Positioning. Audience as the Meaning Makers. Hero Worship. Fan Clubs. Problematising Audience – Film Appreciation – How to write Film Review.



Key Texts:

1. Michael Rabiger, Directing – Film Techniques & Aesthetics, Burlington, Focal Press, 2003.
2. Bordwell K and Thomson K, Film Art – An Introduction, New York, Knopff, 1990.
3. Steven Ascher, & Edward Pincus, The Filmmaker’s Handbook, England, Plume, 1999.



**B.SC VISUAL COMMUNICATIONS
COMPUTER SCIENCE & ELECTRONIC MEDIA**

Sem.	Visual Communication	Computer Science	Electronic Media
1	Human Communication (T) / (4h/3c) Visual Literacy & Drawing-I (P) / (3h/2c)	Information Comm. Technologies (T) / (4h/3c) Designing Tools (P) / (3h/2c)	Basic Photography (T) / (4h/3c) Film Mechanism & Aesthetics * (P) / (3h/2c)
2	Media Culture & Society (T) / (4h/3c) Visual Literacy & Drawing-II * (P) / (3h/2c)	Desktop Publishing - I (T) / (4h/3c) Desktop Publishing - I (P) / (3h/2c)	Communication Models & Theories (T) / (4h/3c) Digital Photography (P) / (3h/2c)
3	Advertising Basics* (T) / (4h/3c) Script Writing (P) / (3h/2c) Copy Writing (GE) (3h/1c)	Desktop Publishing - II (T) / (4h/3c) Desktop Publishing - II (P) / (3h/2c)	Radio Broadcasting* (T) / (4h/3c) Audiography (P) / (3h/2c)
4	Media Laws & Ethics (T) / (4h/3c) Graphic Design (p) (3h/2c) Copy Writing (GE) / (3h/1c)	Web Technologies (T) / (4h/3c) Web Designing (P) / (3h/2c)	Television Production - I (T) (4h/3c) Television Production - I (P) (3h / 2c)
5	Development Communication (T) / (4h/3c) Campaign Strategies (P) (3h/2c) Media Research Orientation (p) / (2h/1c) Visual Analysis Tools (T) / (3h / 2c)	Digital Multimedia (T) / (4h/3c) Digital Multimedia (P) / (2h/1c)	Television Production - II (T) / (4h/3c) Television Production - II (P) (3h/2c)
6	Project (P) / (8c) Internship (P) / (10c) Study Paper (p) / (5c) Extra Curricular Activities (1c)		

T – Theory P – Practical GE – General Elective h- Hours/week c-Credits



**BOARD OF STUDIES
DEPARTMENT OF ETHICS & RELIGION**

Minutes of the meeting of the Board of Studies in Ethics and Religion held on Friday,
17.02.2012 at 10.00 A.M.

MEMBERS:

1. FR.DR.A.FRANCIS XAVIER, SJ, Principal *Francis Xavier*
2. FR.N.BUJJI BABU, SJ, Vice Principal *Babu*

External Experts:

3. FR JOHN PACKIARAJ, SJ *absent*
4. SRI P VEERABRAHMAM *Mr. Veerabrahmam*

Faculty:

5. DR.K JOB SUDARSHAN *Dr. K. Job Sudarshan*
6. MS.Y.PARIMALA *Ms. Y. Parimala*
7. FR.A.STANLEY, SJ *A. Stanley SJ*
8. FR.A.FRANCIS XAVIER, SJ



**DEPARTMENT OF ETHICS & RELIGION
RESOLUTIONS**

The Meeting of the Ethics and Religion Board of Studies was held on 17-02-2012 and the following resolutions were passed unanimously.

1. Resolved to keep the syllabus unchanged for the next academic year 2012-13
2. Resolved to make efforts to integrate teaching of values with the core subjects
3. Resolved to arrange guest lectures as per convenience.

Dr.K.Job Sudarshan
Head & Chairman
Ethics & Religion Board of Studies