Paper-II - Prose, Poetry, Non-Detailed text

II Year (1)

(Syllabus)

04

Part I (A) English

II Year

(w.e.f. 2009-2010)

PROSE

1. Film Making — Satyajit Ray
2. Not Just Oranges — Isai Tobolsky
3. On Shaking Hands — A.G.Gardiner
4. India's Contribution to World Unity — Arnold Toynbee

POETRY

1. Solitary Reaper — William Wordsworth
2. The Road Not Taken — Robert Frost
3. Refugee Mother and Child — Chinua Achebe
4. I will Embrace only the Sun — Tripuraneni Srinivas

NON DETAIL

Short Stories

1. Gajar Halwa — Gita Hariharan
2. My Brother, My Brother — Norah Burke

One Act Plays

1. Never – Never Nest — Cedric Mount
2. Refund — Fritz Karinthi

Written Communication and Composition

1. Curriculum Vitae
2. Note – making
3. Expansion of proverbs
4. Information transfer (From Text to diagram)

—— X ——

II nd Year - English Code No. 49 (4-9)

TO BE RETURNED

Syllabus.

(2)

SRI VENKATESWARA UNIVERSITY

List of Text and Reference books prescribed for Paper-II under Part-I (A) English of Second Year B.A./B.Com/B.Sc.(Home Science)/ B.Mus/B.A.(O.L) Degree Course with effect from the academic year 2003-04.

PAPER - II

1) PROSE :

Prose for Communication Skills - Ravindra Publishing House

1. In London .... M.K. Gandhi
2. Pecuniary Independence .... P.T. Daroum
3. The Drunkard (An Exeept) .... William H. Smith
4. Three Days to See .... Helen Keller
5. Knowledge Society .... A.P.J. Abdul Kalam
6. Principles of Good Writing ... L.A. Hill
7. Man's Peril .... Bertrand Russell
8. Shooting an Elephant .... George Orwell
9. The Day Dag Hammarskjold Rode in my Jeep .... Jhon Robbins

(NOTE: The item "Classroom Activity" at the end of each Lesson is not for Testing in the Examination)

2). POETRY:

The Silent Song ---- Macmillan

1. London .... William Blake
2. Ode to the West Wind .... Percy Bysshe Shelley
3. Ode to a Nightingale .... John Keats
4. Ulysses .... Alfred Tennyson
5. The Last Ride Together .... Robert Browming
6. Because I could not stop for Death .... Emily Dickinson
7. Mending Wall .... Robert Frost
8. The Gift of India .... Sarojini Naidu
9. Advice to Fellow-Swimmers .... Kamala Das

SHORT STORIES

Vigneties of Life - Macmillion

1. The Lottery Ticket - Anton Chekov
2. Ha 'Penny - Alan Paton
3. Subha - Rabindranath Tagore
4. Diamond Dust - Ranga Rao
5. The Only American From Our Village - Arun Joshi
6. Luck - Mark Twain

Signature of the Chairman (B.O.S.)

...2/-

4) LANGUAGE STUDY:

Enriching Your Competence in English - Orient Longman

1. Phrasal Verbs and Idioms
2. Reference Skills
3. Information Transfer
4. Summarising, Note-making and Note-taking
5. Essay writing
6. Dialogue Writings
7. Presentation Skills
8. Interview

for classroom practice only

--oOOo--

Signature of the Chairman (B.O.S.)

NC

TO BE RETURNED

CONFIDENTIAL

CODE NO.

SYLLABUS

SUBJECT : Science & Civilisation

YEAR OF EXAMINATION I/II Year BA/BSc/B.Com 2003

PART I / ~~PART II~~ Part I (a) w.e.f. 1998-99

PAPER SECTION II - Science & Civilisation

Time: 1 1/2 Hrs Marks: 50

Revised syllabus in respect of Science & Civilization given effect from the academic year 1998-99.

1. THE REMOTE BEGINNINGS OF SCIENCE:

The ancient Egyptian Civilisation and the discovery of the Astronomical year. The great pyramid of Gzeh (2900 BC) as engineering marvel. The Babylonian numerical system. Development of mathematics during the vedic period. Contributions of Pythagoras and Euclid to mathematics and astronomy discovery of the "Precession of the Equinoxes" - Ptolemy's concept of the Universe.

2. BIRTH OF MODERN SCIENCE:

Contributions of Copernicus, Galileo, Newton and Kepler to Astronomy and Physics. The Concept of Universal Gravity.

3. SIGNIFICANT DISCOVERIES OF THE 20th CENTURY:

Significant discoveries of the 20th Century in the fields of Physical, biological and Medical Sciences and their impact on society. Advancement in space explorations.

(PTO)

NOTE: 1. Paper Setters are requested to retrun the syllabus sheets along with the Question Paper(s) set by them to the Chairman of the Board of Paper Setters, who will consolidate all the syllabus sheets and transmit to the Controller of Exams., S.V. University, after the question papers are finalised by the Board. In any circumstances syllabus sheets should not be sent direct to the University.

2. Paper Setters are requested to cover entire syllabus uniformly and follow the Previous Year Question Papers setting the Question Paper.

3. Remuneration bills for setting the question papers have to be sent by the Paper Setters to the Chairman of the Board of Paper Setters along with the Question Papers. He/she will transmit them to this office with his/her counter signature.

Signature of the Chairman (B.O.S.)

1 & 9-9

4. ENVIRONMENTAL PROTECTION:

Scientific concepts of (a) Physical and Chemical Environment (b) Ecological Environment and (c) Social and Cultural Environment. Physical and Chemical Environment: Polluting agents. Air, water and soil pollutions. The Bhopal tragedy.

Ecological Environment: Communities and food pyramids - interdependency land use patterns, Bio-diversity. Need for ecological balance. The Tehri dam controversy.

Social and Cultural Environment : Population dynamics - Living Standards - Resource consumption. Social Justice.

Text Book "Science & Civilization" by Prof. K.S. Chalam, Academic Staff College, Andhra University and Prof. C. Subba Rao, Dept. of Geo-Physics, Andhra University.

The text book for Science & Civilization is available with the Director, A.U. Press & Publications.

Ref:-- History of Growth of Physical Sciences
by Sir James Jeans.

Signature
Chairman (B.O.S.)

Paper-II - Drama, Upanishad, Prose, Poets, Alankaras & Grammar.

12.

II year

(Syllabus)

SRI VENKATESWARA UNIVERSITY : TIRUPATI

SANSKRIT

PART I (b) (w.e.f. 2009-2010)

II Year (Second Language)

(1) Drama
(2) Drama (Modern)
(3) Upanishad
(4) Prose
(5) Bhoja Prabandha story
(6) History of Literature
(7) Alankaras,
(8) Grammar

Drama

1).Pratima Gruham
Pratima of Bhasa III act only

2) Modern Drama
Bharata Samskruteh mulam
P. Sreeramachandrudu from (Susamhata Bharatam VI act)

3) Upanisadadesah
Bruhadaranayaka — Dakara katha
Sikshanusasanam — Sikshavalli of Taittiriya

Prose

4) Sukanasopadesah
From Kadambari Sangraha

5) Bhojasya Saraswati Sushama
From Bhojaprabandha Page No. 74 (Abridged form)

6) Poets and Books from History of literature
1) Panani
(2) Kautilya
3) Bharatamuni
(4) Bharavi
5) Magha
(6) Sri Harsha
7) Bhavabhuti
(8) Sankaracharya
9) Dandin
(10) Jagannadha

7) Alankaras from Kuvalayananda
(1) Upama
(2) Ananvayaa
(3) Utpreksha
(4) Deepakam
(5) Aprastutaprasamsa
(6) Drstantam
(7) Arthantaranyasa
(8) Virodha Bhasa
(9) Ullekha
(10) Vyajasthuti

8) Grammar

Declensions :

Halanta Nouns
(1) Jalamuc
(2) Vac
(3) Marut
(4) Bhagavat
(5) Pachat
(6) Rajan
(7) Gunin
(8) Naman
(9) Vidwas
(10) Manas

Pronouns :
Asmad, Yushmad, Idam, Tat, Etat, Yat, Kim

Participles :
Ktva, Lyap, tumun, Kta, Ktavat, Shatr, Shanac, Tavya

paper-II - Ancient and Modern poetry, Grammer & Composition.

(Syllabus)

18 II year

ఉన్నత విద్యామండలి, హైదరాబాద్

బి.ఏ., బి.కాం., బి.యస్.సి., డిగ్రీ తొలి సంవత్సరం సిలబస్

ద్వితీయ భాష - జనరల్ తెలుగు-పాఠ్యప్రణాళిక

2009-10 నుండి అమలులోకి వస్తుంది

పేపరు-11 II year. Part - I (b)

ప్రాచీన కవిత్వం

1. పోతన - వామనావతారము
ఆంధ్రభాగవతం - పదిమిదవ స్కంధం (585-621)
"కులమున్ రాజ్యము" నుండి "రవిబింబబువమించ" వరకు

2. కోటవిగోపరాజు - శాలివాహన విజయం
సింహాసన ద్వాత్రింశిక - ఒకటవ ఆశ్వాసం (115-165)
"సజ్జన దానధర్మ" నుండి "ఇట్లు విక్రమార్కుడీల్గిన" వరకు

3. రఘునాథ నాయకుడు - క్రీస్మర్తువు - బోయపల్లి వాల్మీకి చరిత్ర - రెండవ ఆశ్వాసం (70-100) "కోకిల కంఠ" నుండి అవిన నమ్మాను వరకు

ఆధునిక కవిత్వం

4. కుసుమ ధర్మన్న - ఆలకింపుమయ్య హరిజన శతకము (1-20)
"శ్రీహరినుత వీదు" నుండి "నీకులంబువారు" వరకు

5. పింగళి, కాటూరి - సౌందరనందము నుండి ధర్మసంపాదము
("అల్లవనిల్చి" నుండి "అసదృశమ్మగు" వరకు)

6. కాళోజీనారాయణ రావు-బతకమ్మా! బ్రతుకు (నాగొడవలోంచి) "గుమ్మడిపూలు" నుండి "అమ్మమమరువని" వరకు.

7. డా॥ అందెశ్రీ - మనిషి

8. విమల - వంటిల్లు " ఎంత అద్భుతమైంది" నుండి "ఒంటరి వంటగదులు" వరకు

(P.T.O)

వ్యాకరణం

1. ఛందస్సు - ఉత్పలమాల, చంపకమాల, శార్దూలము, మత్తేభము, కందము, తేటగీతి, ఆటవెలది

2. అలంకారాలు - ఉపమ, రూపక, ఉత్ప్రేక్ష, స్వభావోక్తి అతిశయోక్తి, అర్థాంతరన్యాస, దృష్టాంతము

3. సామాన్యవ్యాసాలు - సమకాలీన సాంస్కృతిక, వైజ్ఞానిక, సామాజిక అంశాలు

డిగ్రీ రెండవ సంవత్సరం పాఠ్యగ్రంథాన్ని మారుతి పబ్లిషింగ్ హౌస్, హైదరాబాదు వారు ప్రచురించడానికి సిఫారసు చేస్తూ తీర్మానించి అనుమతి కోరడమైనది.

పాలోచన - వ్యస సంపుటి

1. వ్యక్తిత్వ వికాసం
2. అభివ్యక్తి నైపుణ్యం
3. తెలుగు భాష
4. మాధ్యమాలకు రచన

వ్యాససంకలనాన్ని లాబ్రెన్ పబ్లిషింగ్ హౌస్, హైదరాబాదు వారు ప్రత్యేకంగా ముద్రించడానికి సిఫారసుచేస్తూ తీర్మానించి అనుమతి కోరడమైనది.

ఉపవాచకము (నాటకం)

1. బోయిభీమన్న - పాతేరు

ప్రచురణ, హైమావతి భీమన్న ఎత్రమంజిల్ కాలనీ, హైదరాబాదు.

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Signature of the
Chairman (B.O.S.)
(20...|D....Exams)

Paper-II - Modern Language & History of Telugu Literature 19 II year

(Syllabus)

ఉన్నత విద్యామండలి, హైదరాబాదు సిలబస్

బి.ఏ., రెండవ సంవత్సరం, పాఠ్యప్రణాళిక

రెండవ పేపరు-మోడరన్ లాంగ్వేజి ప్రైమర్ తెలుగు సాహిత్య చరిత్ర

2009-10 నుండి అమలులోకి వస్తుంది

పేపరు-11 II year Part II

1. ప్రాఙ్నన్నయ యుగం -సాహిత్య వికాసం నన్నయ - తిక్కన - ఎఱ్ఱన
2. శివకవి యుగం - నన్నెచోడుడు, పండితారాధ్యుడు, పాల్కురికి సోమన ద్విపద కావ్య సంప్రదాయం
3. శ్రీనాథకవి యుగం - పోతన
4. పదసాహిత్యం - అన్నమయ్య, క్షేత్రయ్య, త్యాగయ్య, కంచర్ల గోపన్న
5. ప్రబంధ యుగం -ప్రబంధలక్షణాలు,పెద్దన,తిమ్మన, శ్రీకృష్ణదేవరాయులు, ధూర్జటి, రామరాజభూషణుడు, మారన, మొల్ల.
6. నాయకరాజాల పాలనలో సాహిత్యం - యక్షగానాలు, వచనకావ్యాలు శతకాలు (సుమతి, వేమన), విజయ విలాసము.
7. ఆధునిక కవిత్వం - గురజాడ, కృష్ణశాస్త్రి జాషువా, శ్రీశ్రీ, దాశరథి.
8. నవల - కందుకూరి, ఉన్నవ, విశ్వనాథ, కొడవటిగంటి
9. నాటకం - ధర్మవరం, వేదం వెంకటరాయ శాస్త్రి తిరువతి వేంకటకవులు
10. కథానిక - శ్రీపాద సుబ్రహ్మణ్య శాస్త్రి, చలం, పాలువల్లి రామారావు, కనుపర్తి వరలక్ష్మమ్మ, మధురాంతకం రాజారాం.

ఆధారగ్రంథాలు

1. పింగళి లక్ష్మీకాంతం
2. ఆరుద్ర - సమగ్రాంధ్ర సాహిత్యం
3. ఆచార్య జి. నాగయ్య - తెలుగు సాహిత్య సమీక్ష
4. శ్లిష్టా రామకృష్ణ శాస్త్రి - ఆంధ్ర వాఙ్మయ చరిత్ర
5. ద్వా. నా. శాస్త్రి - తెలుగు సాహిత్య చరిత్ర
6. పి.నా.రె - సమగ్రాంధ్ర సాహిత్యం - సాంప్రదాయం - ప్రయోగం

Signature of the Chairman (B.O.S.)

Paper-II - Poetry, History of Hindi Literature General Essay and Translation II year

24

(Syllabus)

SRI VENKATESWARA UNIVERSITY : TIRUPATI

II nd Year Hindi (Part -I -(B)- Syllabus 2009-10

Part - I Hindi II nd Year B.A/B.Sc/B.Com/ Degree Course Examinations

Syllabus :-

KAVYA DEEP - Editor Sri B. Radha Krishna Murthy.
Maruthi Publications - Guntur.

The following poems are prescribed from "Kavya Deep"

I काव्यदीप - (Kavya Deep)

1. कबीरदास
2. सूरदास
3. तुलसीदास
4. मातृभूमि — मैथिलीशरण गुप्त
5. अशोक की चिंता — जयशंकर प्रसाद
6. भारतमाता — सुमित्रानन्दन पंत
7. भूलगलती — गजानन माधव मुक्तिबोध
8. ठूँठ — आलूरि बैरागी चौधरी
9. ओ दीपका बुझने के पहले — पी. आदेश्वर राव

II हिन्दी साहित्य का इतिहास (History of Hindi Literature)

भक्तिकाल - (Bhaktikal)

1. ज्ञानमार्गी शाखा और कबीर (Gnanamargi Sakha and Kabbir)
2. प्रेममार्गी शाखा और जायसी (Premamargi Sakha and Jayasi)
3. कृष्णभक्ति शाखा और सूरदास (Krishna Bhakti Sakha and Surdas)
4. राममक्ति शाखा और तुलसीदास (Rama Bhakti Sakha and Tulasidas)

III निबन्ध - (General Essays)

1. समाचार पत्र (Samachar patra)
2. दूरदर्शन (Door darshan)
3. बेकारी की समस्या (Bekari ki Samasya)
4. भ्रष्टाचार कारण और निवारण (Bhrastachara:karan Aur Nivaran)
5. पर्यावरण प्रदूषण निवारण (Paryavaran Pradhusan Nivaran)
6. समय का सदुपयोग (Samay ka Sadupayog)
7. मैं और मेरा देश (Mai Aur Mera Desh)
8. विज्ञान से हानि-लाभ (Vignan Se Hani-Labh)

(P.T.O)

Cont .....P. 2

IV. प्रयोजनमूलक हिन्दी (Prayojan Moolak Hindi)

1. परिपत्र (Paripatra)
2. ज्ञापन (Gynapan)
3. सूचना (Suchana)
4. आधिसूचना (Adhi Suchana)
5. अर्धसरकारी पत्र (Ardha Sarkari Patra)

V. अनुवाद (Translation)

From Telugu to Hindi (Passage about ten lines

(Or)

from English to Hindi (Passage about ten lines)

TO BE RETURNED CODE NO. 36 II year

CONFIDENTIAL

SYLLABUS

T : BA/BSc/B.Com. - URDU

EXAMINATION : II Year Exam

(B) ~~PART II~~ Another Language

II : Prose, Poetry and Translation

(Revised from 1999 - 2000)

Common to all

Time: 3 Hrs Marks: 100

PAPER II : PROSE, POETRY AND TRANSLATION

TITLE OF THE TEXT BOOK : Intheqabe Adab Part-II : Published by Urdu Academy, Andhra Pradesh, Hyderabad

I. POETRY : 1. Masnavi : Sahrul Bayan by Meer Hasan (Aqhaze Daasthan only)

2. Marsiya : Meer Anees (Dus Band) Jab Nowjavan Pieer Shahdeen Se Juda Huwa.

3. Qasida : Kha Seeda Dar Madah Bahadur Shah Zafar by Zauq (20 Ashar only)

4. Rubayath : The first Rubayee of the following each poet.
(1) Anees (2) Akbar Ilhabadi (3) Amjad Hyderabadi
(4) Firaq Gorakhpuri

II. PROSE : The following essays are prescribed :
(1) Yade Mazi by Moulana Hali
(2) Abul Kalam Azad by Abid Hussain
(3) Mehaman by Rasheed Ahmed Siddiqui

(NOTE : (Zara Muskurayeya by Yousuf Nazim is omitted)

Qutoot : Ghalib Ke Qutoot (only three)

Dasthan : Sair Pahale Darweshki by Meer Amman Dehalvi

NOTE : (Safarnama is omitted)

III. TRANSLATION : From English into Urdu.

NOTE: 1. Paper Setters are requested to retrun the syllabus sheets along with the Question Paper(s) set by them to the Chairman of the Board of Paper Setters, who will consolidate all the syllabus sheets and transmit to the Controller of Exams., S.V. University, after the question papers are finalised by the Board. In any circumastances syllabus sheets should not be sent direct to the University.

2. Paper Setters are requested to cover entire syllabus uniformly and follow the Previous Year Question Papers setting the Question Paper.

3. Remuneration bills for setting the question papers have to be sent by the Paper Setters to the Chairman of the Board of Paper Setters along with the Question Papers. He/she will transmit them to this office with his/her counter signature.

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Signature of the Chairman (B.O.S.)

Signature of the Chairman (B.O.S.) for 2005

TO BE RETURNED

CONFIDENTIAL

CODE No. 37

SYLLABUS

SUBJECT : BA - URDU

YEAR OF EXAMINATION : II Year Exam

~~PART I~~ / PART II : (Revised from 1999-2000)

PAPER II : Poetry

Time: 3Hrs

Marks: 100

PAPER II : POETRY

Name of the Text Book : Gowhar-e-Adab - Compiled by Osmania University, Hyderabad and Published by Urdu Academy, Andhra Pradesh, Hyderabad.
(Asnafe Sukhan Ka Taruf, Shora Ki Mukhthasar Sawane Hayath)

1. Ghazal : The following first two ghazals of each poet :
   (1) Wali Dakni (2) Meer Taqi Meer (3) Ghalib
   (4) Jigar (5) Majrooh
2. Masnavi : Intheqabe Gulzare Naseem by Daya Sankar Saseem.
3. Qadida : Qaseeda by Kakuravi.
4. Marsia : Marsia by Meer Anees First 10 Bands only.
5. Nazm : The first two Nazms of the following poets.
   (1) Iqbal (2) Josh (3) Faiz (4) Maqdoom (5) Wajd.

Signature of the Chairman (B.O.S.)

Signature of the Chairman (B.O.S.) for 2006

NOTE: 1. Paper Setters are requested to return the syllabus sheets along with the Question Paper(s) set by them to the Chairman of the Board of Paper Setters, who will consolidate all the syllabus sheets and transmit to the Controller of Exams., S.V. University, after the question papers are finalised by the Board. In any circumastances syllabus sheets should not be sent direct to the University.

2. Paper Setters are requested to cover entire syllabus uniformly and follow the Previous Year Question Papers setting the Question Paper.

3. Remuneration bills for setting the question papers have to be sent by the Paper Setters to the Chairman of the Board of Paper Setters along with the Question Papers. He/she will transmit them to this office with his/her counter signature.

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CODE No. 41

II year

SYLLABUS

SUBJECT : B.A. - ENGLISH

YEAR OF EXAMINATION : II Year Exam 2002

~~PART~~ / PART II W.e.f. 1999 - 2000

PAPER II : Communicative English - II

Time : 3 Hrs Marks : ~~75~~ 80

SECOND YEAR B.A. DEGREE COURSE 9 (1999-2000)

PART - II : COMMUNICATIVE ENGLISH

Syllabi, list of text and reference books prescribed for Communicative English under part-II of Second Year B.A. Degree Course for the academic year 1999-2000.

PAPER - II COMMUNICATIVE ENGLISH - II

Theory Max Marks: ~~[illegible]~~ ~~75~~ 80

A) THEORY : 3 hrs.

I. Fundamentals of Broadcasting:

(a) Concept of Communications-Old methods-printed medium-Electronic media.
(b) Transformation in the dissimination of information.
(c) Press and Broadcasting.
(d) Power of Broadcasting.
(e) World Systems of Broadcasting

II. Radio as Medium of Communication (a) Types of Public Service Radio Programmes (b) Educational Broadcasting.

III. Television as Medium of Communication.

Signature of the Chairman (B.O.S.)

(PTO)

NOTE: 1. Paper Setters are requested to retrun the syllabus sheets along with the Question Paper(s) set by them to the Chairman of the Board of Paper Setters, who will consolidate all the syllabus sheets and transmit to the Controller of Exams., S.V. University, after the question papers are finalised by the Board. In any circumstances syllabus sheets should not be sent direct to the University.

2. Paper Setters are requested to cover entire syllabus uniformly and follow the Previous Year Question Papers setting the Question Paper.

3. Remuneration bills for setting the question papers have to be sent by the Paper Setters to the Chairman of the Board of Paper Setters along with the Question Papers. He/she will transmit them to this office with his/her counter signature.

IV. Educational T.V. - Impact of T.V. on Book Medium.
V. T.V. for entertainment - Educating Rural Public.
VI. Effect of T.V. and Radio on Children.
VII. The Audience.
VIII. T.V. and Cinema - T.V. and Theatre.
IX. Radio and T.V. Programme.

LIST OF TEXT BOOKS FOR II YEAR B.A. COMMUNICATIVE ENGLISH

1. The art of Broadcasting : by S.P. Jain.
2. Radio News Writing and Editing: by Carl Warrn.
3. Techniques of T.V. Production : by G.Hillowrooh.
4. Broadcasting and the People : by Mehra Masain.
5. Communication : by Study Circle. pub. b Higginbothams. PVT(LTD) Madras.

Signature of the
Chairman (B.O.S.)

II Year

Human values and Professional Ethics – paper II

Syllabus for II Year Degree Course

Unit – I: Understanding Harmony in the Family and Society

1. Understanding the meaning of Vishwas; Difference between Intention and Competence
2. Understnding the Meaning of Samman, Difference between respect and differentiation; the other salient values in relationship
3. Understanding the harmony in the society (society being an extension of family): Samadhan, Samridhi, Abhay, Sah-astitva as comprehensive human Goals

Unit – II: Harmony in Human relationship and Nature

1. Visualizing a universal harmonious order in society – Undivided society (Akhand Samaj), Universal Order (Sarvabhaum Vyawastha) , from family to world family, Practice exercises and case Studies will be taken up in Practices
2. Understanding the Harmony in the Nature
3. Interconnectedness and mutual fulfillment among the four orders of nature- recyclability and self-regulation in Nature

Unit – III: Whole Existence as Co-existence

1. Understanding Existence
2. Co-existence (Sah-astitva) of mutually interacting units in all pervasive space
3. Holistic perception of harmony at all levels of existence – Practice exercises and case studies will be taken up in practice sessions

Unit – IV: Holistic Understanding of Harmony and Human Values

1. Natural acceptance of Human values
2. Definitiveness of Ethical Human Conduct
3. Basis for Humanistic Education, humanistic Constitution and Humanistic Universal Order

Unit – V: Harmony on Professional Ethics

1. Competence in Professional Ethics: a) Ability to utilize the professional competence for augmenting universal human order b) Ability to identify the scope and characteristics of people friendly and eco- friendly production systems. c) Ability to identify and develop appropriate technologies and management patterns for above production system
2. Case studies of typical holistic technologies, management models and production systems
3. Strategy for transition from the present state to Universal Human Order: a) At the level of individual : as socially and ecologically responsible Engineers, technologists and managers b) At the level of Society : as mutually enriching institutions and organizations

Text Books

R R Gaur, R,Sangal, G.P Bagaria, 2009, A Foundation Course in Value Education(English)

Pradeep Kumar Ramancharla, 2013, A foundation course in value education (Telugu)

R R Gaur, R Sangal G P Bagaria, 2009, Teacher's Manual (English)

Pradeep Kumar Ramancharla, 2013, teacher's Manual (Telugu)

Reference Books

1. Ivan Illich, 1974, Energy& Equity, The Trinity Press, Worcester, and harper Collins, USA
2. E.F. Schumacher, 1973, small is Beautiful; a study of economics as if people mattered, Blond & Briggs, Bratain
3. A Nagraj, 1998, Jeevan vidya to Na Prayanam, Hyderabad
4. R.Pradeep Kumar, 2013, Jeevan Vidya to Na Prayanam, Hyderabad
5. Sussan George, 1076, How the other half Dies, Penguin Press, Peprinted 1986, 1991
6. PL Dhar, RR Gaur, 1990, science and humanism, common wealth publishers

[illegible] 2002, Human values, New Age International Publishers

8. Subhas Palekar, 2000, How to practice natural Farming, Pracheen (Vaidik) Krishi Anusandhan shodh, Amravati
9. Donella H. Meadows, Dennis L. Meadows,Jorgen Randers, William W. Behrens III,1972, Limits to Growth – club of Rome's report, universe Books
10. E.G. Seebauer & Robert, L BERRY, 2000, Foundationals of Ethics for Scientists & engineers, Oxford University Press
11. M. Govindrjran, S Natrajan & V.S. Senthi Kumar, Engineering Ethics (including human Values), Eastern Economy Edition, Prentice hall of India Ltd
12. B P Banerjee, 2005, Foundations of Ethics and Management, Excel books
13. B.L. Bajpai, 2004, Indian ethos and Modern Management , New Royal book Co; Lucknow, Reprinted 2008

Relevant CDs, Movies, Documentaries & Other Literature

1. Value Education Website, http://www.uptu.ac.in
2. Story of Stuff, http://www.storyofstuff.com
3. .AlGore, An Inconvenient Truth, paramount Classics, USA
4. Charlie Chaplin, Modern Times, United Artists, USA
5. IIT Delhi, Modern Technology – the untold Story

TO BE RETURNED

CODE NO. 1003 – II Year

THREE YEAR B.A ORIENTAL LEARNING DEGREE EXAMINATION

SECOND YEAR EXAMINATION

PART : III MAIN LANGUAGE : TELUGU

PAPER IV : CHANDOLANKARAMULU

SYLLABUS

1. Appakaaveeyamu – Third Adhyayamu (Ravuri Doraswami)
2. Narasabhupaaleeyam -2nd Aswasamu
3. Andhrachandralokamu – Sura Kavi (First 60 Alankaras)

24/12/05
Signature of the
Chairman (B.O.S.)

4/1/07
Signature of the
Chairman (B.O.S.)
for 2007 exams

II year

4004-1

CODE NO. 4004A

THREE YEAR B.A ORIENTAL LEARNING DEGREE EXAMINATION

SECOND YEAR EXAMINATION

PART III : MAIN LANGUAGE : TELUGU

PAPER VI : SANSKRIT : POETRY, PROSE AND GRAMMAR

SYLLABUS

1. Kiratarjuneeyamu : First Sarga (50 Marks)

2. Dandi – Dasakumara Charitra – First and Second Uchwasamulu (25 Marks)

3. Laghu Siddanta Koumudi – Stri Pratyaya karakamulu (25 Marks)

M. Lalitakumari 24/12/

Signature of the Chairman (B.O.S.)

4/1/07

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21/11/07

Signature of the Chairman (B.O.S.) (2008.....Exams)

Signature of the Chairman (B.O.S.) March 2009 Exams

TO BE RETURNED

CODE NO . 1032 – II year

PRE DEGREE EXAMINATION

SECOND YEAR EXAMINATION

PART III MAIN LANGUAGE : TELUGU

PAPER IV : DRAMA AND NONDETAILED

SYLLABUS

1. Srinivasa Kalyanamu – Nagaraju , Tirupati
2. Chaduvu – Kodava ganti Kutumba Rao

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24/1/07

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24/11/07

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TO BE RETURNED

II Year

CODE NO. 1033

PRE DEGREE EXAMINATION

SECOND YEAR EXAMINATION

PART III: MAIN LANGUAGE : TELUGU

PAPER V: ELEMENTS OF LITERARY CRITICISM AND LANGUAGE AND PROSODY AND POETICS

SYLLABUS

A ELEMENTS OF LITERARY CRITICISM (MARKS : 20)

1. కావ్య నిర్వచనము
2. కావ్య హేతువులు
3. కావ్య ప్రయోజనములు
4. కావ్యము - చరిత్ర
5. కావ్యము - శాస్త్రము.

B LANGUAGE (MARKS : 20)

1. తెలుగు - తెలుగు శబ్దములు వ్యుత్పత్తి
2. ప్రపంచ భాషల స్థూల వర్గీకరణం
3. ద్రావిడ భాషా కుటుంబము
4. ద్రావిడ భాషలలో తెలుగు స్థానము
5. తెలుగు వాక్య నిర్మాణము.

C. PROSODY (MARKS 30) (సులక్షణ సారము)

చంపక, ఉత్పల, మత్తేభ, శార్దూల, మత్తకోకిల, ధ్రువ శేఖర, మహాస్రగ్ధర, ఉత్సాహ, పంచ చామరము, సీసము, కందము, గీతము, ఆటవెలది, ద్విపద, తరువోజ, మాలిని, మానిని, మధ్యాక్షర, కవిరాజ విరాజితము, లయ గ్రాహి, లయ విభాతి, భుజంగ ప్రయాతము, మందాక్రాంతము.

D. POETICS : (MARKS 30)

శబ్దాలంకారములు స్థూలంగా - యమకము, ఉత్ప్రేక్ష, రూపకము, అతిశయోక్తి, అనన్వయ, ఉపమేయోపమ, పరిణామము, ఉల్లేఖ స్మృతి, సందేహ, భ్రాంతిమదపహ్నుతి, దీపక, దృష్టాంత, నిదర్శన, వ్యతిరేక, సమాసోక్తి, పరికర, పరికరాంకుర, శ్లేష, అప్రస్తుత ప్రశంస, వ్యాజస్తుతి, వ్యాజనిందా క్రమ, అర్థాంతర న్యాస శ్లేష భేదములు

Signature of the Chairman (B.O.S.) — Signature of the Chairman (B.O.S.) — Signature of the Chairman (B.O.S.)

TO BE RETURNED

II year

CODE NO. ~~10334~~ . 1033-1

PRE DEGREE EXAMINATION

SECOND YEAR EXAMINATION

PART III : MAIN LANGUAGE : TELUGU

PAPER VI : SANSKRIT POETRY AND GRAMMAR
SYLLABUS

1. Raghu Vamsamu – First Sarga (70 Marks)

2. Vyakaranamu - Sabdamanjari – Samasamulu, Dhatuvulu Sarvanama Sabdamulu (30 Marks)

24/12/05

Signature of the Chairman (B.O.S.) for 2007 Exams 4/11/07

Signature of the Chairman (B.O.S.) (2008.....Exams) 21/11/07

Signature of the Chairman (B.O.S.) March 2009 Exams

II year

CODE NO. 1212

TWO YEAR PRE DEGREE EXAMINATION

SECOND YEAR EXAMINATION

PART III : MAIN LANGUAGE : HINDI

SYLLABUS

PAPER IV : GENERAL ESSAYS, NOVEL AND SHORT STORIES

1. Nibandh Prakash (40 marks)
2. Nirmala (30 Marks)
3. Saptaratna (30 Marks)

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Chairman (B.O.S.)

4/1/07
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Chairman (B.O.S.)
for 2007 Exams

21/11/07
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Chairman (B.O.S.)
(2008.....Exams)

02/01/09
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Chairman (B.O.S.)

II year

CODE No. 1213

TWO YEAR PRE DEGREE EXAMINATION

SECOND YEAR EXAMINATION

PART III : MAIN LANGUAGE : HINDI

Paper –V : GRAMMAR AND TRANSLATION, ELEMENTRY KNOWLEDGE OF PRINCIPLES OF LITERARY CRITICISM AND PHILOLOGY

SYLLABUS

PART –A – GRAMMAR AND TRANSLATION (30 MARKS)

1. Vyakarana Pradeep (From Kriysviseshan to vakavichar) and the applied Grammar Anuvad Abhyas – Part -2

PART-B : ELEMENTARY KNOWLEDGE OF PRINCIPLE OF LITERACY CRITICISM (20 MARKS)

1. Kavya Paribhasha our kayya ke Bhedh
2. Kavya Aur Sastra
3. Kavya Ke Hethu
4. Kavya Ke Prayojen

PART –C : Philology

1. Bhasha Vignan and its divisions
2. Prabhandh Bhasha Om Ke Sthula Vargeekarana
3. Hindi Bhasha Ka Udbhav aur Vikas
4. Khadiboli Ki Visisth

02/01/09
Signature of the Chairman (B.O.S.)

24/12/05
Signature of the Chairman (B.O.S.)

4/1/07
Signature of the Chairman (B.O.S.)

21/11/07
Signature of the Chairman (B.O.S.)
(20.08....Exams)

TO BE RETURNED

CODE NO. 1214

II year

TWO YEAR PRE DEGREE EXAMINATION

SECOND YEAR DEGREE EXAMINATION

PART III : MAIN LANGUAGE : HINDI

PAPER : VI SANSKRIT TEXTS:

SYLLABUS

1. Raghuvamsam I can to
2. Sabdhamanjari (Samas, Dhatuvulu sarvanama Sabdha)

24/12/05
Signature of the Chairman (B.O.S.)

4/1/07
Signature of the Chairman (B.O.S.)
for 2007 Exams

Instructions to the paper setter :

Requested to set the question paper as per the enclosed question paper.
4/1/07

02/01/09
Signature of the Chairman (B.O.S.)

21/11/07
Signature of the Chairman (B.O.S.)
(2008.....Exams)

TO BE RETURNED

Code No. 1253

II year

TWO YEAR PRE DEGREE EXAMINATION

SECOND YEAR EXAMINATION

Part I : English

SYLLABUS

Paper II : The Same asfar the Second Year Intermediate examination of the Intermediate Board of Andhra Pradesh 2007 March-

~~Prescribed Present Syllabus~~ Prescribed present Syllabus

Signature of the Chairman (B.O.S.) 24/12/05

Signature of the Chairman (B.O.S.) 6/1/07

for 2007 Exams

II year

(Syllabus)

II year - 2009-10

(History)

56

Paper II History and Culture of India (1526 – 1950)

Unit – I : Survey of Sources

Establishment of Mugal Empire – Sur Interruanam – Brief Survey of Political History upto 1707 AD – Polity and administration – Society – Social Composition – Ulema – Nobility – Peasantry – artisans – Slaves – Status of Women – Economy: Agriculture – Industries, Trade and Commerce. Economic and Techonological developments.

Religion

Education, Literature, Art, Architecture and Fine Arts.

Decline and Disintegration of Mughal Empire – Rise of Regional Powers – Maratas – Sikhs

Unit – II: Advent of European powers – Portuguese, Dutch, English and French Expansion and consolidation of British Empire – Wars – Diplomacy – Policies pursued – Subsidiary Alliance – Doctrine of lapse

Economic policies and changes – Mercantilism and Free – trade policies – Land Revenue Settlement – Permanent – Ryotwari – Mahalwari System – Intrigation Commercialization of Agriculture – Condition of peasants – Famines – Deecline of Cottage industries (de-industrilisation)

Unit – III: Anti-Colonial Upsurge – Peasant and Tribal revolts – 1857 revolt – Causes – results and nature.

Unit – IV: Factors for social change – Christian Missionaries – westren Education –

Emergence of New Middle Classes – Growth of press – Socio – religious Reform movements – Brahma Samaj – Arya samaj – Theosophical Society – Ramakrishna mission – Aligarah Movement

Unit – V : Indian National Movement – Factors for the growth of Nationalism – Indian National

congress – Three Phases of Freedom struggle – revolutionary movements – Left – Wing movement – Peasant and workers movements.

Unit – VI : Emergence of Communal trends – partition of India – Integration of Princely States into Indian Union.

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SRI VENKATESWARA UNIVERSITY : TIRUPATI

II year. B.A.

ECONOMICS

(Revised from 2009-2010)

69

PAPER - II MACRO ECONOMICS

Module 1 : NATIONAL INCOME

Meaning, Definition and importance of Macro Economics – National Income, Meaning, Definitions: National Income, GNP & NNP, GDP & NDP, Personal Income (PI), Disposable Income (DI), Per Capita Income (PCI), Real National Income (RNI) – Methods of Estimation of National Income (NI) – Measurement of National Income in India.

Module 2: THEORIES OF EMPLOYMENT

Classical theory of employment – Say's law of markets – Keynesian theory of employment – Consumption function – APC, MPC, factors influencing consumption function – Investment function – MEC and Rate of Interest and the concept of Multiplier – Accelerator – Applicability of the Keynesian theory to the developing countries.

Module 3: MONEY AND THEORIES OF MONEY

Meaning, functions and classification of money – Gresham's law – R.B.I Classification of Money – M_1, M_2, M_3, M_4 Theories of Money – Fisher's quantity theory of Money, Cambridge approach (Marshal, Pigou, Robertson and Keynes)

Module 4 : TRADE CYCLES AND INFLATION

Trade cycles – meaning and definition – Phases of a trade cycle – Inflation – Definition – Types of inflation – Causes and effects of inflation – Measures to control inflation.

Module 5: BANKING, STOCK MARKET AND INSURANCE

Functions of Commercial banks – The process of credit creation - Concept of Non Banking Finance Companies (NBFCs) – Concept of SEBI Stock market – Meaning, functions and importance of Stock Market - primary and Secondary markets. Concepts of (a) Shares (b) Debentures, Insurance – Types of Insurance – Life Insurance and General Insurance – Functions of the reserve bank of India – methods of credit control – Quantitative and Qualitative Methods.

REFERENCES

1. G..Ackley – "Macro Economics Theory and Policy"' Collier Macmillian, 1978.
2. E.Shapiro – "Macro Economic Analysis"' Galgotia Publications, 1999
3. Central Statistical Organisatiions – "National Accounts Statiastics"'
4. R.Dornbush, S.Fisher and R.Startz – "Macro Economics"' Tata Mc. Graw Hill, 9/c, 2004
5. M.L.Seth – "Macro Economics", Lakshmi Narayan Agarwal, 2006.
6. K.P.M.Sundaram – "Money, banking & International Trade"' Sultan Chand 2006.
7. Dillard, D – "The Economics of John Maynard Keynes"' Crossby Lockwood & Sons,
8. Telugu Academy Publications
9. AUSDE – Study Material
10. M N Mish ra & S.B.Mishra – "Insurance Principles & Practice" S Chand 2007.
11. Bharati V. Pathak "The Indian Financial System Markets, Institutions & Services" Pearson 2008.

— X —

II year

91

SRI VENKATESWARA UNIVERSITY . TIRUPATI

(Syllabus)

SOCIAL WORK

II B.A

Paper II (Core – 2) **Social Work Intervention – Basic Methods**

(Revised from 2009-10)

Unit I **Working with individuals** – case work as a method of social work, definition, relevance; historical Development; Principles of case work; components of social case work – Person, Place, Problem, Professional and Process – study, diagnosis and treatment. Practice in different settings such as hospitals, schools, industry, correctional institutions and family.

Unit II **Techniques, Skills and recording** : Techniques of case work – communication, listening, use of self with awareness, and professional relationships. Qualities of a helping relationship and a helping professional; skills in working with individuals - rapport establishment, interviewing, enabling, facilitation, resource mobilization, training, reflective thinking and analysis. Recording - principles, types. Discussion of a case record.

Unit III **Groups**: Significance of group, group dynamics - Leadership, isolation, decision making, contagion, conflict, communication and relationships.

Unit IV **Working with the groups** – Group work as a method; historical development, values & Principles, skills in group work. Group work process, techniques of group work, use of group work in different fields of social work – hospitals, correctional settings, schools and communities, recording in group work. Discussion of a group record.

Unit V **Community** – Problems of Communities. Community organization – Definition and scope as a method in relation to other methods of social work.

Unit VI **Principles, Skills and use of Community Organization**: Principles of community organization; Skills of community organization practitioner - problem analysis, resource mobilization, conflict resolution, organizing meetings, writing and documentation and networking. Use of community organization in different settings - rural, urban, tribal and coastal..

(P.T.O)

References

Arora, R.K. (Ed/) 1979 : *People's Participation in Development Process: Essays in honour of B.Mehta*, Jaipur: The HCM State Institute of Public Administration.

Batten, T.R.., 1965 : *The Human Factor in Community Work*, London: Oxford University Press.

Biestek, F.B., 1957 : *The Case Work Relationship*, London: George Allen and Unwin Ltd.,

Brager, G. and Specht, H., 1969 : *Community Organisation*, New York: Columbia University Press.

Brandler, S. and Roman, C.P. 1991 : *Group Work: Skills and Strategies for Effective Intervention*, New York: The Haworth Press.

Compton, B.R. and Galaway, B. 1979 : *Social Work Processes*, Illinois: the Dorsey Press.

Davies, B., 1975 : *Use of groups in Social Work Practice*, London: Routledge and Kegan Paul

Dayal, R. 1960 : *Community Development Programmes in India*, Allahabad: Kitab Mahal Publishers.

Douglas Tom, 1976 : *Group Work Practice*, London: Tavistock,

Friedlander, W.A., 1978 : *Concepts and Methods of Social Work*, Englewood Cliffs: Prentice Hall

Gangrade, K.D. 1971 : *Community Organisation in India*, Bombay: Popular Prakashan.

Perlman, H.H., 1957 : *Social Case Work: a Problem Solving Process*, Chicago: University of Chicago.

Pippins, J. 1980 : *Developing Case Work Skills*, Caliph: Sage Publications.

Rose Murray, G. 1967 : *Community organization*, New York: Harper & Row.

Siddique, H.Y. 1997 : *Working with Communities: An Introduction to Community Work*, New Delhi: Hira Publications.

Timms, N.. 1972 : *Recording in Social Work*, London: Routledge and Kegan Paul.

Toselane, R.W. 1984 : *An Introduction to Group Work Practice*, New York: Macmillan Publication Co.

Trecker, H.P., 1990 : *Social Group Work – Principles and Practice*, New York: Association Press.

Weil Marie (Ed.) 2005 : *The Hand Book of Community Practice*, New Delhi: Sage.

Weil, M. (Ed.) 1996 : *Community Practice: Conceptual Models*, New York: The Haworth Press Inc.

(II year BA (2009-10)) 1991

Political Science

II year

PAPER – II GOVERNMENT AND POLITICS

1. Salient Features of Indian Constitution
2. Evolution of Indian Constitution – nationalist Movement and Philosophical Foundations
3. Indian Federation – Centre-State relations – recent Trends
4. Fundamental Rights and Duties, Constitutional remedies with special reference to Writs – Directive Principles of State Policy
5. President – election, Powers and Functions – Prime Minister and Council of Ministers
6. Parliament – Composition, Powers and Functions
7. Judiciary – Supreme Court, Composition, Powers, Functions and Judicial review – Judicial Activism.
8. Party System: national and regional parties, Coalitional Politics.
9. Election Commission – Electoral reforms and Voting behavior
10. State Government – Governor, Chief Minister and Council of Ministers – powers and Functions
11. The impact of Socio-Economic factors on Indian Politics
12. Challenges to National Integration – Communalism and Terrorism
13. Local Government Institutions – 73rd & 74th Constitutional Amendments

BOOKS RECOMMENDED

1. Politics in India : Rajini Kothari
2. Indian Constitution : M.V.Pylee
3. Indian Government and Politics: S.S.Awasti
4. .Introduction for Constitution of India : D.D.Basa
5. Indian Government and Politics : K.R.Acharya
6. Indian politics: Contemporary Issues and Concerns, Singh & Sexena
7. Introduction to the Constitution of India, 5th ed, Sharma.

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Secretary 20/10/2009.

Chairman (B.O.S.)
(20..10....Exam)

INDIAN CULTURE

TO BE RETURNED

Three Year BA

II year

Code No. 123

Second Year Exam!

INDIAN CULTURE

COMMON CORE SYLLABUS FROM 1988-89

2003

PAPER II : ELEMENTS OF ANCIENT INDIAN PHILOSOPHY

Time: 3 Hrs Marks: 100

Philosophical trends in the Rigveda (Theism - Polytheism, Monotheism and Monoism). The concept of Rta - The essential of the Upanisadic thought (Atma -Brahman) - The Bhagavadgita, Philosophy of action (Niskamakarma) - Carvaka materialism - Jaina relativism (Anekantavada, Syadvada, Buddhist non-mataphysical philosophy, four noble truths (Aryasatya), doctrins of dependent origination (Pratityasamutpada) - Introduction to Nyaya - Logic (Sixteen categories) - Vaisesika atomism (six catagories) - Sankhya, theory of evolution (Prakrti and purusa) - Purvamimamsa (the concept of sabda and apurva)

Schools of Vedanta:

i) Advaita - (Brahman, Atman, Jagat, Maya and Vivarta - Vada - Jnana - Moksha)

ii) Visistadvaita (Brahman, Atman, Jagat, Parinamavada - Prapatti - Moksha)

iii) Dvaita - (Brahman, Atman, Jagat - Philosophy of difference (Bheda) - Bhakti - Moksha)

BOOKS FOR REFERENCE:

1. Datta and Chatterjee : Introduction to Indian Philosophy
2. Hiriyanna : Outlines of Indian Philosophy
3. - do - : Essentials of Indian Philosophy
4. Sinha : Indian Philosophy, 2 Vols.
5. Radhakrishna : Indian Philosophy, 2 Vols.
6. Sri M.Rajagopala Rao Dr. P.C.Subbamma : 'Indian Philosophy' published by Telugu Academy.

Signature of the Chairman (B.O.S.) for 2006

Signature of the Chairman (B.O.S.) for 2005 Exams

VSO 12.12.06

Signature of the Chairman (B.O.S.) for 2007 Exams

(Syllabus) II Year

II Year 2009-10

Psychology

127

PAPER – II: SOCIAL PSYCHOLOGY

Marks 75

Chapter – I: Nature and scope of Social Psychology

Definition, Nature and Scope. Methods of Social Psychology – Observation method, Survey method, Correlational method, Field study and Experimental method

Chapter – II: Social Perception – Understanding Others

Attribution – Errors in Attribution – Fundamental Attribution Error, Actor – Observer effect, Self Serving Bias

Chapter – III: Communication

Definition, nature and types of communication. Barriers to effective communication. Rumors and propaganda.

(P.T.O)

II year

Chapter – IV: Attitudes

Definition - Distinctive features of Attitudes, Formation of Attitudes. Measurement of Attitudes - Likert method of Summated ratings, Bogardus method of Social Distance, Thurstone's Equal appearing intervals method.

Chapter – V: Prejudice

Prejudice and Discrimination – Nature and Origin of Prejudice Techniques of reducing Prejudice

Chapter – VI: Aggression

Definition, Determinants of Human Aggression – Social, Personal, and Situational factors – Prevention and Control of Aggression.

Chapter – VII: Groups and Individuals

Definition and Types of Groups, Group functions – Roles, Status Norms, Cohesiveness and Conformity.

Chapter – VIII: Leadership

Definition – Traits of a Leader. Types of Leaders – Autocratic Democratic and Charismatic Leaders..

Reference Books:

1) Baron, R.A & Byrne, D. (2006) Social Psychology (10th Edition Pearson Education Inc., New Delhi.

2) R.A.Lippa. (1990) Social Psychology –Wardsworth Publishers California.

3) B.H.Raven & J.Z.Rubin. (1983) Social Psychology – John Wiley Sons. New York.

PSYCHOLOGY PRACTICAL

Marks 50

Learning

1. Insight learning (Step Maze)
2. Trial and Error learning (Finger or Slot Maze)
3. Associative learning (Letter-Digit substitution Test)
4. Bilateral transfer of training (Mirror Drawing/ Cup and Bal
5. Massed versus Spaced Learning
6. Part versus Whole Learning Method
7. Serial Learning – Position Effect
8. Habit Interference Test

Attention

9. Span of Attention for Visual Stimuli (Tachistoscope)
10. Effect of Auditory and Visual distraction on Attention
11. Division of attention with similar and dissimilar tasks

(P.T.O

II year

136

II year 2009-10

Syllabus.

B.A/ B.Sc. (Mathematics)

Paper – II ABSTRACT ALGEBRA AND REAL ANALYSIS

(Model paper w.e.f 2010-2011)

Unit – I (30 Hrs)

GROUPS

Binary operation – definition and properties, Groups – definition and elementary properties, finite groups and group composition tables

Sub groups, cosets, lagranges's theorem

Normal subgroups – factor groups and simple groups Homomorphism – Definition and elementary properties. Isomorphism – definition and elementary properties fundamental theorem of homomorphism's applications functions and permutations, groups of permutations cycles and cyclic notation, even and odd permutations. The alternating groups, cayley's theorem.

Cyclic groups – elementary properties. The classification and cyclic groups, sub groups of finite cyclic groups.

Unit – II (30 hrs)

RINGS

Definition of Ring and basic properties. Fields Integral domains, divisors of zero and cancellation laws. The characteristic of a ring, some non commutative rings, examples. Homomorphism of rings – Definition and elementary properties. Maximal and prime ideals. Prime fields.

Unit – III (35 hrs)

REAL NUMBERS

Completeness of R applications of supreme property

Sequences: Sequences and their limits. Monotonic sequences, sub sequences and the Bolzano weirstrass theorem. Cauchy's criterion property divergent sequences. Cauchy's first and second theorems on limits for sequences.

(no question is to be set from this portion)

Series: Introduction to series, convergence of series. Ceanchy's general principle for convergence tests for convergence of series

1. P-test
2. D "Alemberts" Ratio test
3. Cauchy's n^{th} root test
4. Leibnitz test

Alternating series. Absolute convergence, semi convergence

Limits: Limits of functions. Some extensions of the limit concept

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

(P.T.O)

Signature of the Chairman (B.O.S.)

(2009-10 Years)

Unit –IV (25 hrs)

DIFFERENTIATION & INTEGRATION

The Derivate the Mean value theorems, L' Hospital's Rules. Taylor's theorem. Expansion of functions.

Riemann Integration: Riemann Integral, Riemann integral functions, Darboux theorem. Necessary and sufficient condition for R – integrability. Fundamental theorem of integral calculus.

TEXT BOOKS

1. **ABSTRACT ALGEBRA**
   I) "First Course in Abstract Algebra" by J.FRALIEH Published by Narosa Publishing House
   (Chapters: 1 to 7, 11 to 13, 23, 24.1 to 24.3, 25.1, 25.4, 29 to 31)
2. **REAL NUMBERS**
   "Introduction to Real Analysis" by RABERT g BARTELY and D.R.SHERBART Published by John Wiley.
   (Chapters 3.1 to 3.7, 5.1 to 5.4, 6.1 to 6.4, 7.1 to 7.3, 9.1 to 9.3)

REFERENCE:

A Text Book of B.Sc mathematics by B.V.S.S Sarma and Published by S.Chand & Company.

IDENTIFIED TOPICS FOR PRACTICALS

Unit – I (Groups)

1. Groups and examples
2. Sub groups and Normal sub groups
3. Groups of permutations, Cycles and cyclic notation Even and Odd permutations
4. Cyclic groups

Unit – II (Rings)

1. Fields and Integral domains
2. Characteristic of a Ring
3. Homomorphism
4. Ideals

Unit – III (Real Numbers)

1. Series
2. Limits
3. Continuity

Unit – IV (Differentiation & Integration)

1. Derivative
2. Mean Value theorems
3. L' Hospital Rules
4. Riemann Sums, Integration as the limit of a sum.

Signature of the Chairman (B.O.S.)
(20...10.....Exams)

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Sylabus

149

B.Sc (Physics) II Year

Thermodynamics and Optics

(with maths combination)

(Revised from 2009-2010)

II Year

Unit – I **34 hrs**

1. **Kinetic theory of gases: (8)**
   Introduction – Deduction of Maxwell's law of distribution of molecular speeds, Experimental verification Toothed Wheel Experiment, Transport Phenomena – Viscosity of gases – thermal conductivity – diffusion of gases.
2. **Thermodynamics: (14)**
   Introduction – Reversible and irreversible processes – Carnot's engine and its efficiency – Carnot's theorem – Second law of thermodynamics, Kelvin's and Claussius statements – Thermodynamic scale of temperature – Entropy, physical significance – Change in entropy in reversible and irreversible processes – Entropy and disorder – Entropy of universe – Temperature- Entropy (T-S) diagram – Change of entropy of a perfect gas-change of entropy when ice changes into steam.
3. **Thermodynamic potentials and Maxwell's equations: (12)**
   Thermodynamic potentials – Derivation of Maxwell's thermodynamic relations – Clausius-Clayperon's equation – Derivation for ratio of specific heats – Derivation for difference of two specific heats for perfect gas. Joule Kelvin effect – expression for Joule Kelvin coefficient for perfect and Vanderwaal's gas.

Unit – II **26 hrs**

4. **Low temperature Physics: (10)**
   Introduction – Joule Kelvin effect – liquefaction of gas using porous plug experiment. Joule expansion – Distinction between adiabatic and Joule Thomson expansion – Expression for Joule Thomson cooling – Liquefaction of helium, Kapitza's method – Adiabatic demagnetization – applications of substances at low- temperature.
5. **Quantum theory of radiation: (16)**
   Black body-Ferry's black body – distribution of energy in the spectrum of Black body – Wein's displacement law, Wein's law, Rayleigh-Jean's law – Quantum theory of radiation - Planck's law – deduction of Wein's law, Rayleigh-Jeans law, from Planck's law - Measurement of radiation – Types of pyrometers – Disappearing filament optical pyrometer – experimental determination – Angstrom pyroheliometer - determination of solar constant, effective temperature of sun.

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7/1/10

Signature of the Chairman (B.O.S.)
(20..10.....Exams)

4.8.09

Dr. V. SOMASEKHARAM

C&S

Unit III **30 hrs**

6. **The Matrix methods in paraxial optics: (8)**
Introduction, the matrix method, effect of translation, effect of refraction, imaging by a spherical refracting surface. Imaging by a co-axial optical system. Unit planes. Nodal planes. A system of two thin lenses.

7 **Aberrations: (7)**
Introduction – Monochromatic aberrations, spherical aberration, methods of minimizing spherical aberration, coma, astigmatism and curvature of field, distortion. Chromatic aberration – the achromatic doublet – Removal of chromatic aberration of a separated doublet.

8 **Interference: (15)**
Principle of superposition – coherence – temporal coherence and spatial coherence – conditions for Interference of light
Interference by division of wave front: Fresnel's biprism – determination of wave length of light. Determination of thickness of a transparent material using Biprism – change of phase on reflection – Lloyd's mirror experiment.
Interference by division of amplitude: Oblique incidence of a plane wave on a thin film due to reflected and transmitted light (Cosine law) – Colours of thin films – Non reflecting films – interference by a plane parallel film illuminated by a point source – Interference by a film with two non-parallel reflecting surfaces (Wedge shaped film) – Determination of diameter of wire-Newton's rings in reflected light with and without contact between lens and glass plate, Newton's rings in transmitted light (Haidinger Fringes) – Determination of wave length of monochromatic light – Michelson Interferometer – types of fringes – Determination of wavelength of monochromatic light, Difference in wavelength of sodium D_1,D_2 lines and thickness of a thin transparent plate.

Unit IV: **30 hrs**

9 **Diffraction: (12)**
Introduction – Distinction between Fresnel and Fraunhoffer diffraction Fraunhoffer diffraction:- Diffraction due to single slit and circular aperture – Limit of resolution – Fraunhoffer diffraction due to double slit – Fraunhoffer diffraction pattern with N slits (diffraction grating)
Resolving Power of grating – Determination of wave length of light in normal and oblique incidence methods using diffraction grating.
Fresnel diffraction:-
Fresnel's half period zones – area of the half period zones –zone plate – Comparison of zone plate with convex lens – Phase reversal zone plate – diffraction at a straight edge – difference between interference and diffraction.

10 **Polarization (10)**
Polarized light : Methods of Polarization, Polarizatioin by reflection, refraction, Double refraction, selective absorption , scattering of light – Brewster's law – Mauls law – Nicol prism polarizer and analyzer – Refraction of plane wave incident on negative and positive crystals (Huygen's explanation) – Quarter wave plate, Half wave plate –Optical activity, analysis of light by Laurent's half shade polarimeter.

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Signature of the Chairman (B.O.S.)
(20...1.0...Exams)

11 **Laser and Holography: (10)**

Lasers: Introduction – Spontaneous emission – Stimulated emission – Population inversion . Laser principle – Einstein coefficients – Types of Lasers – He-Ne laser – Ruby laser – Applications of lasers.

Holography: Basic Principle of Holography – Gabor hologram and its limitations, Holography applications.

NOTE: Problems should be solved at the end of every chapter of all units.

Textbooks

1. **Optics** by Ajoy Ghatak. *The McGraw-Hill companies.*
2. **Optics** by Subramaniyam and Brijlal. *S. Chand & Co.*
3. **Fundamentals of Physics.** Halliday/Resnick/Walker.*C. Wiley India Edition 2007.*
4. **Optics and Spectroscopy**. R. Murugeshan and Kiruthiga Siva Prasath. *S. Chand & Co.*
5. **Second Year Physics** – *Telugu Academy.*
6. **Modern Physics** by R. Murugeshan and Kiruthiga Siva Prasath (for statistical Mechanics) *S. Chand & Co.*

Reference Books

1. **Modern Physics** by G. Aruldhas and P. Rajagopal, *Eastern Economy Education.*
2. Berkeley Physics Course. Volume-5. **Statistical Physics** by F. Reif. *The McGraw-Hill Companies.*
3. **An Introduction to Thermal Physics** by Daniel V. Schroeder. *Pearson Education Low Price Edition.*
4. **Thermodynamics** by R.C. Srivastava, Subit K. Saha & Abhay K. *Jain Eastern Economy Edition.*
5. **Modern Engineering Physics** by A.S. Vasudeva. *S.Chand & Co. Publications.*
6. **Feyman's Lectures on Physics** Vol. 1,2,3 & 4. *Narosa Publications.*
7. **Fundamentals of Optics** by Jenkins A. Francis and White E. Harvey, *McGraw Hill Inc.*

B.Sc SECOND YEAR PRACTICALS

90 Hrs
(3 Hrs/week)

1. Co-efficient of thermal conductivity of a bad conductor by Lee's method.
2. Measurement of Stefan's constant.
3. Specific heat of a liquid by applying Newton's law of cooling correction.
4. Heating efficiency of electrical kettle with varying voltages
5. Thickness of a wire-wedge method
6. Determination of wavelength of light – Biprism
7. Determination of Radius of curvature of a given convex lens – Newton's rings
8. Resolving power of grating
9. Study of optical rotation – polarimeter
10. Dispersive power of a prism
11. Determination of wavelength of light using diffraction grating minimum derivation method.
12. Wavelength of light using diffraction grating – normal incidence method.
13. Resolving power of a telescope
14. Refractive index of a liquid and glass (Boys Method)
15. Pulfrich refractometer – determination of refractive index of liquid
16. Refractive indices of quartz – double refraction method.
17. Refractive index of a liquid – hollow prism.

Signature of the Chairman (B.O.S.) 7/1/10
(20...L.O....Exams)

(Syllabus) II year

SRI VENKATESWARA UNIVERSITY : TIRUPATI

Second Year

PAPER II

153

THERMODYNAMICS AND OPTICS

(For Non-Mathematics Combination)

THERMODYNAMICS

(R. from 2010-2011)

UNIT I 20 hours

1.TEMPERATURE AND KINETIC THEORY OF GASES:

Zeroth law of thermodynamics, measurement of temperature –Resistance thermometry, Thermoelectric thermometers. Kinetic theory of gases-Assumptions. Pressure of an ideal gas-Molecular interpretation of temperature-Maxwell's law of distribution of molecular speeds (no derivation). Experimental verification.

2.THERMODYNAMICS:

The first law of thermodynamics- Work done in isothermal and adiabatic changes-The Carnot cycle-The Kelvin temperature scale- Carnot theorem-Refrigeration-The second law of thermodynamics-Order versus Disorder-Entropy-Latent heat equation. Thermodynamic function- Maxwells Thermodynamic relations.

UNIT II 20 hours

3.LOW TEMPERATURE PHYSICS:

The Joule-Kelvin effect- Porus plug experiment-production of low temperature-adiabatic demagnetization, liquefaction of Helium. Properties of substance at low temperature.

4.MEASURMENT, LAWS AND THEORIES OF RADIATION:

Total radiation Pyrometers-Optical Pyrometer. Statement and application of Stefans law, wein's displacement law-Black body radiation- Solar Constant and its determination-Pyroheliometer- Distribution of energy in the spectrum of black body radiation- Planck's radiation formula (no derivation).

UNIT III 20 hours

5.GEOMETRIC OPTICS:

Aberrations in lenses: Chromatic Aberration-Achromatic Combination of lenses-Monochromatic defects-Spherical aberration-Astigmatism-Coma-Curvature and Distortion-Minimizing aberration.

Lens system: Finding image positions-Equivalent lens-Cardinal points-Experiments and calculation to locate cardinal points.

6.INTERFERENCE:

The superposition principle. Conditions for Interference. classification of Interference methods-Young's double slit experiment-Theory. Interference with white light and appearance of Young's interference fringes-Intensity in Interference pattern. Optical path

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7.1.10

(Dr. V. SOMASEKHARAM)

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length. Lloyds single mirror – Phase change on reflection. Interference due to plane parallel wedge shaped films. Colours in thin films, Newton rings . Michelson's Interferometer.

UNIT IV

7.DIFFRACTION: 30hours

The Fresnel and Fraunhoffer diffraction phenomena-Fraunhoffer diffraction of single slit(Normal incidence and Oblique incidence)-Resolving power-limits of resolution for telescopes and microscope-Numerical aperture- Fraunhoffer diffraction by double slit-Intensity pattern-Missing orders-Diffraction grating -Dispersion-Absent spectra-resolvance- wavelength determination (Normal incidence and Minimum deviation).

8.POLARISATION:

Types of polarized light –Polarization by reflection. Brewster's law- Dichroism- the Polaroid film-double refraction- the calcite crystal- the principal plane-O and E rays- the Nicol Prism-Law of Malus-the quarter wave plate- Plane, Circularly , Elliptically Polarized light- Production and analysis-Optical activity-specific rotatory power- Fresnel theory- Polarimeter-Holography-Principles and applications

(Sylabus)

II year

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SRI VENKATESWARA UNIVERSITY : TIRUPATI

ELECTRONICS

B.Sc II Year- Electronics

PAPER-II Analog Circuits and Communications (120 hours)

(2009-10)

UNIT- I (30 hours)

Power Supplies: Rectifiers– Halfwave, fullwave and bridge rectifiers- Efficiency- Ripple factor- Regulation – Harmonic components in rectified output – Types of filters- Choke input (inductor) filter- Shunt capacitor filter- L section and π section filters – Block diagram of regulated power supply - Series and shunt regulated power supplies – Three terminal regulators (78XX and 79XX) – Principle and working of switch mode power supply (SMPS).

UNIT-II (30 hours)

RC Coupled Amplifier: Analysis and frequency response of single stage RC coupled CE amplifier.

Feedback: Positive and negative feedback- Effect of feedback on gain, band width, noise, input and output impedances, Barkhausen Criterisiion, Wein bridge oscillator, Hartley oscillator, Ideas about IC fabrication

Operational Amplifiers: Differential amplifier- Block diagram of Op-Amp- Ideal characteristics of Op-Amp- Op-Amp parameters- Input resistance- Output resistance- Common mode rejection ratio (CMMR)- Slew rate- Offset voltages – Input bias current- Basic Op-Amp circuits- Inverting Op-Amp- Virtual ground- Non-inverting Op-Amp- Frequency response of Op-Amp. Interpretation of Op-Amp data sheets.

UNIT-III (30 hours)

Applications of Op-Amps: Summing amplifier- subtractor- Voltage follower- Integrator-Differentiator - Comparator- Logarithmic amplifier- Sine wave [Wein Bridge] and square wave [Astable] generators- Triangular wave generator- Monostable multivibrator- Solving simple second order differential equation- Basic Op-Amp series regulator and shunt regulator.

UNIT-IV (30 hours)

Communications: Need for modulation-types of modulation- Amplitude, Frequency and Phase modulation.

Amplitude modulation-side bands- modulation index- square law diode modulator- Demodulation- diode detector.

Frequency modulation working of simple frequency modulator- Ratio detection of FM waves- Advantages of frequency modulation.

AM and FM radio receivers [block diagram approach]

(NOTE: Solving related problems in all the Units)

Reference Books:

1. Electronic Devices and Circuits-Millman and Halkias- Tata Mc Graw Hill (TMH)
2. Microelectronics- J. Millman and A. Grabel - TMH
3. Operational Amplifiers and Linear Integrated Circuits- Ramakant A. Gayakwad- Prentice Hall of India (PHI).

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Syllabus · II year

161

CHEMISTRY

B.Sc. II Year, Paper –II (CR. 2009-2010) 120 hrs (4 h / w)

UNIT – I (Inorganic Chemistry – II) 30 h (1h/w)

I. **Chemistry of d-block elements:** Characteristics of d-block elements with special reference to electronic configuration, variable valence, magnetic properties, catalytic properties and ability to form complexes. Stability of various oxidation Comparative treatment of second and third transition series with their 3d analogues.

9 h

II. **Chemistry of f-lock elements:** Chemistry of lanthanides – electronic structure, oxidation states, lanthanide contraction, consequences of lanthanide contraction, magnetic properties, spectral properties Chemistry of actinides – electronic configuration, oxidation states, actinide contraction, position of actinides in the periodic table, comparison with lanthanides in terms of magnetic properties, spectral properties and complex formation.

8 h

III. **Theories of bonding in metals:** Valence bond theory, Explanation of metallic properties and its limitations, Free electron theory, thermal and electrical conductivity of metals, limitations, Band theory, formation of bands, explanation of conductors, semiconductors and insulators.

6 h

IV. **Metal carbonyls and related compounds** – EAN rule, classification of metal carbonyls, structures and shapes of metal carbonyls of V, Cr, Mn, Fe, Co and Ni. Metal nitrosyls and metallocenes (only ferrocene).

7 h

UNIT-II (Organic Chemistry – II) 30hrs (1 h / w)

1. **Halogen compounds** 4 h

Nomenclature and classification of alkyl (into primary, secondary, tertiary), aryl, aralkyl, allyl, vinyl, benzyl halides.

Chemical Reactivity, formation of RMgX

Nucleophilic aliphatic substitution reaction- classification into S_N1 and S_N2.

Energy profile diagram of S_N1 and S_N2 reactions. Stereochemistry of S_N2 (Walden Inversion) S_N1 (Racemisation). Explanation of both by taking the example of optically active alkyl halide – 2bromobutane. Ease of hydrolysis – comparision of alkyl, benzyl, alkyl, vinyl and aryl halides

2. **Hydroxy compounds** 6 h

Nomenclature and classification of hydroxy compounds.

Alcohols: Preparation with hydroboration reaction, Grignard synthesis of alcohols.

Phenols: Preparation i) from diazonium salt, ii) from aryl sulphonates, iii) from cumene.

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Physical properties- Hydrogen bonding (intermolecular and intramolecular). Effect of hydrogen bonding on boiling point and solubilitiy in water.

Chemical properties:

a. acidic nature of phenols.
b. formation of alkoxides/phenoxides and their reaction with RX.
c. replacement of OH by X using PCl_5, PCl_3, PBr_3, $SOCl_2$ and with $HX/ZnCl_2$.
d. esterification by acids (mechanism).
e. dehydration of alcohols.
f. oxidation of alcohols by CrO_3, $KMnO_4$.
g. special reaction of phenols: Bromination, Kolb-Schmidt reaction, Riemer-Tiemann reaction, Fries rearrangement, azocoupling.

Identification of alcohols by oxidation with $KMnO_4$, ceric ammonium nitrate, lucas reagent and phenols by reaction with $FeCl_3$.

Polyhydroxy compounds: Pinacol-Pinacolone rearrangement.

3. Carbonyl compounds **10 h**

Nomenclature of aliphatic and aromatic carbonyl compounds, structure of the carbonyl group.

Synthesis of aldehydes from acid chlorides, synthesis of aldehydes and ketones using 1,3-dithianes, synthesis of ketones from nitriles and from carboxylic acids.

Physical properties: absence of hydrogen bonding, keto-enol tautomerism, reactivity of carbonyl group in aldehydes and ketones.

Nucleophilic addition reaction with a) $NaHSO_3$, b) HCN, c) RMgX, d) NH_2OH, e)$PhNHNH_2$, f) 2,4 DNPH, g) Alcohols-formation of hemiacetal and acetal.

Halogenation using PCl_5 with mechanism.

Base catalysed reactions: a) Aldol, b) Cannizzaro reaction, c) Perkin reaction, d) Benzoin condensation, e) Haloform reaction, f) Knoevenagel reaction.

Oxidation of aldehydes- Baeyer-Villiger oxidation of ketones.

Reduction: Clemmensen reduction, Wolf-Kishner reduction, MPV reduction, reduction with $LiAlH_4$ and $NaBH_4$.

Analysis of aldehydes and ketones with a) 2,4-DNT test, b) Tollen's test, c) Fehling text, d) Schiff test, e) Haloform test (with equation).

4. Carboxylic acids and derivatives **6 h.**

Nomenclature, classification and structure of carboxylic acids.

Methods of preparation by a) hydrolysis of nitriles, amides and esters.
b) carbonation of Grignard reagents.

Special methods of preparation of aromatic acids by
a) oxidation of side chain.
b) hydrolysis by benzotrichlorides.
c) Kolbe reaction.

Physical properties: Hydrogen bonding, dimeric association, acidity- strength of acids with examples of trimethyl acetic acid and trichloroacetic acid. Relative differences in the acidities of aromatic and aliphatic acids.

Chemical properties: Reactions involving H, OH and COOH groups- salt formation, anhydride formation, acid chloride formation, amide formation and esterification (mechanism). Degradation of carboxylic acids by Huns-Diecker reaction, decarboxylation by Schimdt reaction, Arndt-Eistert synthesis, halogenation by Hell-Volhard- Zelinsky reaction.

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5. Active methylene compounds **4 h**

Acetoacetic esters: preparation by Claisen condensation, keto-enol tautomerism. Acid hydrolysis and ketonic hydrolysis.

Preparation of a) monocarboxylic acids.
b) dicarboxylic acids.

Reaction with urea

Malonic ester: preparation from acetic acid.

Synthetic applications: Preparation of
a) monocarboxylic acids (propionic acid and n-butyric acid).
b) dicarboxylic acids (succinic acid and adipic acid).
c) α,ß-unsaturated carboxylic acids (crotonic acid).

Reaction with urea.

5. Exercises in interconversion

2 h

Unit - III (Physical chemistry – II) **30hrs (1h / w)**

1. **Phase rule** **5 h**

Concept of phase, components, degree of freedom. Derivation of Gibbs phase rule. Phase equilibrium of one component – water system. Phase equilibrium of two-component system, solid-liquid equilibrium. Simple eutectic diagram of Pb-Ag system, desilverisation of lead. Solid solutions- compound with congruent melting point (Mg-Zn) system, compound with incongruent melting point – NaCl- water system. Freezing mixtures.

2. **Dilute solutions** **8 h**

Colligative properties. Raoult's law, relative lowering of vapour pressure, its relation to molecular weight of non-volatile solute. Elevation of boiling point and depression of freezing point. Derivation of relation between molecular weight and elevation in boiling point and depression in freezing point. Experimental methods of determination. Osmosis, osmotic pressure, experimental determination. Theory of dilute solutions. Determination of molecular weight of non-volatile solute from osmotic pressure. Abnormal Colligative properties. Van't Hoff factor, degree of dissociation and association.

3. **Electrochemistry** **17 h**

Specific conductance, equivalent conductance, measurement of equivalent conductance. Variation of equivalent conductance with dilution. Migration of ions, Kohlrausch's law. Arrhenius theory of electrolyte dissociation and its limitations. Ostwald's dilution law. Debye-Huckel-Onsagar's equation for strong electrolytes (elementary treatment only). Definition of transport number, determination by Hittorf's method. Application of conductivity measurements-determination of dissociation constant (K_a) of an acid, determination of solubility product of sparingly soluble salt, conductometric titrations.

Types of reversible electrodes- the gas electrode, metal-metal ion, metal-insoluble salt and redox electrodes. Electrode reactions, Nernst equation, single electrode potential, standard Hydrogen electrode, reference electrodes, standard electrode potential, sign convention, electrochemical series and its significance. Reversible and irreversible cells, conventional representation of electrochemical cells. EMF of a cell and its measurements. Computation of cell EMF. Applications of EMF measurements – Potentiometric titrations.

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1.6.09

Unit IV (General chemistry-II) **30 hrs (1h/w)**

1. Molecular symmetry **8 h**

Concept of symmetry in chemistry-symmetry operations, symmetry elements. Rotational axis of symmetry and types of rotational axes. Planes of symmetry and types of planes. Improper rotational axis of symmetry. Inversion centre. Identity element. The symmetry operations of a molecule form a group. Flow chart for the identification of molecular point group.

2. Theory of quantitative analysis **10 hrs**

a) Principles of volumetric analysis. Theories of acid-base, redox, complexometric, iodometric and precipitation titrations, choice of indicators for these titrations.

b) Principles of gravimetric analysis: precipitation, coagulation, peptization, coprecipitation, post precipitation, digestion, filtration and washing of precipitate, drying and ignition, precipitation from homogenous solutions, requirements of gravimetric analysis.

3. Evaluation of analytical data. **6 h**

Theory of errors, idea of significant figures and its importance, accuracy – methods of expressing accuracy, error analysis and minimization of errors, precision – methods of expressing precision, standard deviation and confidence limit.

4. Introductory treatment to:

a) Asymmetric (Chiral) synthesis **6 h**

Definitions-Asymmetric synthesis, enantiomeric excess, diastereomeric excess. stereospecific reaction, definition, example, dehalogenation of 1,2-dibromides by I^-. stereoselective reaction, definition, example, acid catalysed dehydration of 1-phenylproponol

LABORATORY COURSE – II **90 hrs (3 h / w)**

Practical Paper – II (Inorganic Chemistry)

I. Titrimetric analysis:

1) Determination of carbonate and bicarbonate in a mixture
2) Determination of Fe(II) using $K_2Cr_2O_7$
3) Determination of Fe(II) using $KMnO_4$ with oxalic acid as primary standard.
4) Determination of Cu(II) using $Na_2S_2O_3$ with $K_2Cr_2O_7$ as primary standard
5) Determination of Zinc using EDTA
6) Determination of hardness of water
7) Determination of Zinc by ferrocyanide

II. Gravimetric analysis (any three of the following)

1) Determination of barium as barium sulphate
2) Determination of sulphate as barium sulphate
3) Determination of lead as lead chromate
4) Determination of nickel as Ni-DMG complex
5) Determination of magnesium as magnesium pyrophosphate.

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II year

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Syllabus

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II year 2009-10 Botany

Paper - II: Anatomy, Embryology, Taxonomy and Medicinal Botany

(Total Hours of Teaching: 120 @ 4 h/Week)

Unit - I: Anatomy (30 h)

1. **Meristems:** Types, histological organisation of shoot and root apices and theories. (4 h)
2. ***Tissues*** and ***Tissue Systems:*** Simple and complex. (6 h)
3. ***Leaf:*** Ontogeny, diversity of internal structure; stomata and epidermal outgrowths. (6 h)
4. ***Stem*** and ***root: Vascular cambium*** - Formation and function. Anamalous secondary growth-General account. Stem - *Boerhavia, Bignonia, Dracaena;* Root – *Beta* (8 h)
5. ***Wood structure:*** General account. Study of local timbers – Teak (*Tectona grandis*), Rosewood, (*Albergia latefolia*), Red sanders, (*Pterocarpus santalinus*) Nallamaddi (*Terminalia tomentosa* (*T. alata*)), Yegisa (*Pterocarpus marsupiun*) and Neem (*Azadirachta indica*). (6 h)

(P.T.O)

Unit - II: Embryology (24 h)

6. Introduction: History and Importance of Embryology. Anther structure, Microsporogenesis and development of male gametophyte. (5 h)
7. Ovule structure and types; Megasporogenesis; types and development of female gametophyte. (6 h)
8. Pollination - Types; Pollen - pistil interaction. Fertilization. (4 h)
9. Endosperm - Development and types. Embryo - development and types; Polyembryony - Apomixis - an outline. (5 h)
10. Palynology: Principles and applications. (4 h)

Unit - III: Taxonomy (36 h)

11. Introduction: Principles of plant systematics. Systematics vs Taxonomy. Types of classification: Artificial, Natural and Phylogenetic. (4 h)
12. Systems of classification: Salient features and comparative account of Bentham & Hooker and Engler & Prantle. An introduction to Angiosperm Phylogeny Group (APG). (6 h)
13. Current concepts in Angiosperm Taxonomy: Embryology in relation to taxonomy, Cytotaxonomy, Chemotaxonomy and Numerical Taxonomy. (4 h)
14. Nomenclature and Taxonomic resources: An introduction to ICBN, Vienna code - a brief account. Herbarium: Concept, techniques and applications. (6 h)
15. Systematic study and economic importance of plants belong to the following families: Capparaceae, Rutaceae, Fabaceae (Faboideae/papilionoideae, Caesalpinioideae, Mimosoideae), Cucurbitaceae, Apiaceae, Asteraceae, Asclepiadaceae, Lamiaceae, Euphorbiaceae, Orchidaceae and Poaceae. (16h)

Unit - IV: Medicinal Botany (30 h)

16. Ethnomedicine: Scope, interdisciplinary nature, distinction of Ethnomedicine from Folklore medicine. Outlines of Ayurveda, Sidda, Unani and Homeopathic systems of traditional medicine. Role of AYUSH, NMPB, CIMAP and CDRI. (8 h)
17. Plants in primary health care: Common medicinal plants – Tippateega (*Tinospora cordifolia*), tulasi (*Ocsimum sanctum*), pippalli (*Piper longum*), Karaka (*Terminalia chebula*), Kalabanda (*Aloe vera*), Turmeric (*Curcuma longa*). (4 h)
18. Traditional medicine vs Modern medicine: Study of select plant examples used in traditional medicine as resource (active principles, structure, usage and pharmacological action) of modern medicine: Aswagandha (*Withania somnifera*), Sarpagandha (*Rauvolfia serpentina*), Nela bili (*Phyllanthus amarus*), Amla (*Phyllanthus emblica*) and Brahmi (*Bacopa monnieri*). (6 h)
19. Pharmacognosy: Introduction and scope. Adulteration of plant crude drugs and methods of identification - some examples; Indian Pharmacopoeia. (6 h)
20. Plant crude drugs: Types, methods of collection, processing and storage practices. Evaluation of crude drugs. (6 h)

Suggested Readings:

Bhattacharya et. al. 2007. A textbook of Palynology, Central, New Delhi.

Bhojwani, S. S. and S. P. Bhatnagar. 2000. The Embryology of Angiosperms (4th Ed.), Vikas Publishing House, Delhi.

Davis, P. H. and V. H. Heywood. 1963. Principles of Angiosperm Taxonomy. Oliver and Boyd, London.

Esau, K. 1971. Anatomy of Seed Plants. John Wiley and Son, USA.

Heywood, V. H. 1965. Plant Taxonomy. ELDS, London.

Heywood, V.H. and D.M.Moore (Eds). 1984. Current Concepts in Plant Taxonomy. Academic Press, London.

Jain, S. K. and V. Mudgal. 1999. A Handbook of Ethnobotany. Bishen Singh Mahendra Pal Singh, Dehradun.

(P.T.O.)

Jeffrey, C. 1982. An Introduction to Plant Taxonomy. Cambridge University Press, Cambridge, London.
Johri, B. M. 1984. Embryology of Angiosperms. Springer-Verlag, Berlin.
Joshi, S. G. 2000. Medicinal Plants. Oxford and IBH, New Delhi.
Kapil, R. P. 1986. Pollination Biology. Inter India Publishers, New Delhi.
Kokate, C. and Gokhale. Pharmacognacy. Nirali Prakashan, New Delhi.
Lad, V. 1984. Ayurveda – The Science of Self-healing. Motilal Banarasidass, New Delhi.
Lewis, W. H. and M. P. F. Elwin Lewis. 1976. Medical Botany. Plants Affecting Man's Health. A Wiley Inter science Publication, John Wiley and Sons, New York.
Maheswari, P. 1971. An Introduction to Embryology of Angiosperms. McGraw Hill Book Co., London.
Pandey, B. P. 2007. Botany for Degree Students: Diversity of Seed Plants and their Systematics, Structure, Development and Reproduction in Flowering Plants. S. Chand & Company Ltd, New Delhi.
Rastogi, R. R. and B. N. Mehrotra. 1993. Compendium of Indian Medicinal Plants. Vol. I & Vol. II. CSIR, Publication and Information Directorate, New Delhi.
Sivarajan, V. V. and I. Balasubramaniyan. 1994. Ayurvedic Drugs and their Plant Sources. Oxford and IBH, New Delhi.
Stace, C. A. 1989. Plant Taxonomy and Biostatistics (2nd Ed.). Edward Arnold, London.
Singh, G. 1999. Plant Systematics: Theory and Practice. Oxford and IBH, New Delhi.

Practical - II: Anatomy, Embryology, Taxonomy and Medicinal Botany

(Total Hours of Laboratory Exercises: 90 @ 3 h / Week in 30 Sessions)

Suggested Laboratory Exercises:

1. *Demonstration of double staining technique.* (3 h)
2. Tissue organization in root and shoot apices using permanent slides (3 h)
3. Preparation of double staining slides
   - Primary structure: Root - *Cicer, Canna*; Stem – *Tridax, Sorghum* (6 h)
   - Secondary structure: Root – *Tridax* sp.; Stem –*Pongamia* (3 h)
   - Anomalous secondary structure: Examples as given in theory syllabus. (6 h)
4. *Stomatal types using epidermal peels.* (3 h)
5. Microscopic study of wood in T.S., T.L.S. and R.L.S. (6 h)
6. Structure of anther and microsporoganesis using permanent slides. (3 h)
7. Structure of pollen grains using whole mounts (*Catharanthus, Hibiscus, Acassia*, Grass). (3 h)
8. Pollen viability test using *in- vitro* germination (*Catharanthus*). (3 h)
9. Study of ovule types and developmental stages of embryosac. (3 h)
10. Structure of endosperm (nuclear and cellular); Developmental stages of dicot and monocot Embryos using permanent slides. (3 h)
11. Isolation and mounting of embryo (using *Symopsis / Senna / Crotalaria*). (3 h)
12. Systematic study of locally available plants belonging to the families prescribed in theory syllabus (Minimum of one plant representative for each family) (18 h)
13. Demonstration of herbarium techniques. (3 h)
14. Local field visits to study the vegetation and flora. (6 h)
15. Detailed morphological and anatomical study of medicinally important part(s) of locally available plants (a minimum 10 plants) used in traditional medicine. (12 h)
16. Field visits compulsory with report to identify and collect ethno medicinal plants used by local tribes/folklore. (3 h)
17. Preparation and submission of 25 herbarium specimens for evaluation during the practical examination.

II year (wef 2009-10) (Syllabus) II year

THEORY PAPER – II

BIOLOGY OF CHORDATES, EMBRYOLOGY, ECOLOGY AND ZC 120 hrs

(4 hrs/ week)

UNIT I

1.0. Protochordata to Amphibia

1.1. Protochordates: Salient features of Urochordata and Cephalochordata Structure and life-history of *Herdmania*, Significance of retrogressive Metamorphosis. **6 hours**

1.2. General Characters of Chordates **1 hour**

1.3. General characters of Cyclostomes **1 hour**

1.4. *General characters of fishes, classification up to sub-class level with* examples **2 hours**

1.4.1. Type study - *Scoliodon* : Morphology, respiratory system, circulatory system, excretory system, nervous system and sense organs. **9 hours**

1.4.2. Migration in fishes and types of scales

1.5. General characters and classification of Amphibia up to order level. **1 hour**

1.5.1. Type study - *Rana* : Morphology, digestive system, respiratory system, circulatory system, excretory system, nervous system and reproductive system. **9 hours**

1.5.2. Parental care in amphibians **1 hour**

UNIT II

2.0. Reptilia to Mammalia

2.1. *General characters and classification of Reptilia up to order level.* **3 hours**

2.2. General characters and classification of Aves up to sub class level with examples. **3 hours**

2.2.1. *Type study - Pigeon (Columbia livia) : Exoskeleton, respiratory system,* circulatory system and digestive system. **6 hours**

2.2.2. Significance of migration in birds **2 hours**

2.2.3. *Flight adaptation in birds* **2 hours**

2.3. General characters and classification of Mammalia up to sub class level with examples. **3 hours**

2.3.1. *Dentition in Mammals.* **2 hours**

UNIT III

3.0. Embryology

3.1. Spermatogenesis, Oogenesis and Fertilization. **3 hours**

3.2. Types of eggs **3 hours**

3.3. Development of frog up to gastrulation and formation of primary germ layers **9 hours**

3.4. Foetal membranes and their significance in chick **3 hours**

3.5. Placenta : types and functions **4 hours**

UNIT IV

4.0. Ecology and Zoogeography

4.1. Biogeochemical cycles or nutrient cycles - Gaseous cycles of Nitrogen and Carbon; Sedimentary cycle- phosphorus. **6 hours**

4.2. Definition of Community- Habitat and ecological niche **12 hours**

4.2.1. *Community interactions : Brief account on Competition, predation,* mutualism,commensalism and parasitism.

4.2.2. Ecological succession: Primary and secondary, seral stages, climax community with examples

4.3 1 Zoogeographycial Zones

a. Oriental Region Fauna

b. Ethiopian region fauna

PRACTICAL PAPER – I

90 hrs

INVERTEBRATES: **(3 hrs/ week)**

1. Observation of the following slides / specimens / models:
   Protozoa - *Elphidium. Paramoecium* – binary fission and Conjugation.
   Porifera - *Spongilla, Euspongia.*Sycon L.S & T.S
   Coelenterata - *Physalia, Velella, Corallium, Gorgonia, Aurelia, Pennatula, Obelia colony, Medusa.*
   Platyhelminthes and Nemathelminthes - *Planaria, Fasciola larval stages of Fasciola Redia, Cercaria, Echinococcus granulosus Ascaris Male & Female , Ancylostoma duodenale.*
   Annelida - *Nereis,* Hetero Nerius, *Aphrodite, Hirudo, Trochophore* larva.
   Arthropoda - *Sacculina, Limulus, Anopheles* mouthparts Nauplius, Mysis, Zoea (male and female), *Peripatus.*
   Mollusca - *Chiton, Murex, Sepia, Loligo, Octopus, Nautilus, Glochidium larva.*
   Echinodermata - *Ophiothrix, Echinus, Clypeaster, Cucumaria, Asterias Antedon, Bipinnaria* larva.
   Hemichordata – *Balanoglossus, Tornaria* larva.

2. DISSECTIONS:

Prawn: Nervous system, mounting statocyst and appendages or as an alternatively crab/Scorpion/ locust (digestive system).
Unio or *Pila*: Digestive system, Mounting radula of *Pila*.

CELL BIOLOGY:

1. Identification of stages from prepared slides showing Mitosis and Meiosis Polytine chromosomes

REFERENCE BOOKS

Biology of Invertebrates:

1. 'The Invertebrates' by L.H. Hyman. Vol I, II and V. – M.C. Graw Hill Company Ltd .
2. 'Invertebrate Zoology' - A functional Evolutionary approach. Ruppert, Fox and Barnes., Thomas publishers. Indian Edition.
3. 'Invertebrate Zoology' by E.L. Jordan and P.S. Verma., S.Chand and Company.
4. 'Invertebrate Zoology' by R.D. Barnes : W.B. Sauwonders CO., 1986.
5. 'Invertebrate structure and Function' by Barrington. E.J.W ., ELBS.
6. 'A student text book of Zoology' by Sedgwick, A., Vol-I, II and III – Central Book Depot, Allahabad.
7. 'A text book of Zoology' by Parker, T.J. and Haswell, W.A., Mac Millan Co. London.
8. 'Textbook of Invertebrates' by Kavita Juneja and H.S. Bhamrah.

Cell Biology:

1. 'Molecular Cell Biology' by Lodish, Berk, Kaiser, Scott.– Scientific American Books.
2. 'Cell and Molecular Biology' by De Robertis & De Robertis : Saunders College.
3. 'Cell Biology, Genetic Evolution and Ecology' by P.S.Varma and V.K. Agrawal; S. Chand and Company.
4. 'Molecular Biology' by Mohan P. Arora., Himalaya Publishing House Pvt.Ltd.
5. 'Manual of Laboratory Experiments in Cell Biology' – Edward Gasque: (W.C. Brouh Publishers.
6. 'Biomolecules' by Mohan P.Arora., Himalaya Publishing House Pvt.Ltd.
7. 'Cell and Molecular Biology' –P.K.Gupta.
8. 'Concepts of Cell Biology' - P.S.Verma and V.K.Agarwal
9. Biochemistry –U. Sathyanarayana and U. Chakrapani.
10. Biology –Campbell and Reece.
11. Molecular biology of the cell-Alberts et.,al
12. 'Cell Biology' by S.C. Rastogi

PRACTICAL PAPER – II

90 hrs

(3 hrs/ week)

CHORDATA, EMBRYOLOGY AND ECOLOGY

Observation of the following slides / specimens / models:

1. Protochordata : *Herdmania, Amphioxus, Amphioxus* T.S through pharynx.
2. Cyclostomata : *Petromyzon* .
3. Pisces : *Pristis, Torpedo, Channa, Pleuronectes, Hippocoampus* , *Exocoetus, Echeneis, Labeo, Catla, Clarius, Anguilla*. Scales of fishes, one available dipnoi fish.
4. Amphibia : *Ichthyophis, Amblystoma, Siren, Axolotl larva, Hyla, Rhacophorus*
5. Reptilia: *Draco, Chamaeleon, Uromastix, Russels viper, Naja, Krait, Enhydrina, Testudo, Trionyx, Crocodile.*
6. Aves : *Picus, Psittacula, Eudynamis, Bubo, Alcedo.*
7. Mammalia: *Ornithorhynchus, Tachyglossus, Hedgehog, pteropus,Funambulus, Manis.*

DISSECTIONS:

1. V, VII, IX and X cranial nerves of *Scoliodon* or locally available fish.
2. Arterial system of *Scoliodon* or *Calotes*.

OSTEOLOGY:

1. Appendicular skeletons of *Varanus*, Pigeon and Rabbit. Fore limbs, Hind limbs and Girdles

EMBRYOLOGY:

1. Observations of following slides / models
2. T.S. of testis and ovary (Rat / Rabbit / Human)
3. Different stages of cleavage (2-cell, 4- cell and 8- cell), Morula.
4. Blastula and gastrula of frog.

ECOLOGY:

1. Determination of pH in a given sample.
2. Estimation of dissolved oxygen in the given samples at different temperatures.
3. Estimation of salinity (chloride) of water in the given samples.
4. Estimation of hardness of water in terms of Carbonates , bicarbonates in the given samples

REFERENCE BOOKS

1. 'Chordate Zoology' - E.L.Jordan and P.S. Verma. S. Chand Publications.
2. 'Cell biology, Genetics, Evolution and Ecology' . by P.S. Verma and V.K. Agarwal., S.Chand Publishers.
3. 'Chordata – I' by Mohan P.Arora., Himalaya Publishing House Pvt.Ltd.
4. 'Text book of Zoology – Vertebrates'., by Parker and Haswell.
5. 'Text book of Chordates' - Kavita Juneja and H.S.Bhamrah.
6. 'A text book of Embryology' - N. Arumugam.
7. 'Chordate Embryology' by P.S. Verma and V.K. Agarwal., S. Chand and Company.
8. 'Developmental Biology - Scott. F. Gilbert.
9. 'Developmental Genetics – G.S. Miglani.
10. 'Embryology' – Mohan P.Arora.
11. 'Elements of Ecology' – Odum.
12. ' Environmental Biology' by H.R.Singh., S.Chand Publications.
13. 'Ecology' - M.P.Arora
14. 'Environmental Biology' – P.D.Sharma.
15. 'Environmental Ecology' – P.R.Trivedi and Gurdeep Raj.
16. 'Ecology – Principles and Applications' – J.L Chapman and M.J.Reiss.
17. 'Biology' by Campbell & Reece.

(Syllabus)
(II year) (2009-10) II Year 190

B.A / B.Sc.

120 hrs

Paper - II: Statistical Methods and Inference

(4 hrs/ week)

(with Maths Combination)

Unit – I

Population correlation coefficient and its properties. Bivariate data, scattered diagram, sample correlation coefficient, computation of correlation coefficient for grouped data.

Correlation ratio, Spearman's rank correlation coefficient and its properties. Principle of least squares, simple linear regression, correlation verses regression, properties of regression coefficients. Fitting of quadratic and power curves. Concepts of partial and multiple correlation coefficients (only for three variables). Analysis of categorical data, independence and association of attributes, various measures of association (Yule's) for two way data and coefficient of contingency (Pearson and Tcherprow), coefficient of colligation.

(30 L)

Unit – II

Concepts of population, parameter, random sample, statistic, sampling distribution and standard error. Standard error of sample mean(s) and sample proportion(s). Exact sampling distributions- Statement and properties of $\chi 2$, t and F distributions and their interrelationships.

Point estimation of a parameter, concept of bias and mean square error of an estimate. Criteria of good estimator- consistency, unbiasedness, efficiency and sufficiency with examples. Statement of Neyman's Factorization theorem, Estimation by method of moments, Maximum likelihood (ML), statements of asymptotic properties of MLE. Concept of interval estimation. Confidence intervals of the parameters of normal population

(30 L)

Unit – III

Concepts of statistical hypotheses, null and alternative hypothesis, critical region, two types of errors, level of significance and power of a test. One and two tailed tests, test function (non-randomized and randomized). Neyman-Pearson's fundamental lemma for Randomized tests. Examples in case of Binomial, Poisson, Exponential and Normal distributions. Large sample tests and confidence intervals for mean(s), proportion(s), standard deviation(s) and correlation coefficient(s).

(30 L)

Unit – IV

Tests of significance based on $\chi 2$, t and F. $\chi 2$-test for goodness of fit and test for independence of attributes.

Non-parametric tests- their advantages and disadvantages, comparison with parametric tests. Measurement scale-nominal, ordinal, interval and ratio. One sample runs test, sign test and Wilcoxon-signed rank tests (single and paired samples). Two independent sample tests: Median test, Wilcoxon –Mann-Whitney U test, Wald Wolfowitz's runs test.

(30 L)

List of Reference Books:

1. V.K.Kapoor and S.C.Gupta: Fundamentals of Mathematical Statistics, Sultan Chand&Sons, New Delhi
2. Gooh AM, Gupta MK,Das Gupta B : Outlines of Statistics , Vol-II, the World Press Pvt.Ltd., Kolakota.
3. Hoel P.G: Introduction to matehematical statistics, Asia Publiushing house.
4. Sanjay Arora and Bansi Lal:.New Mathematical Statistics Satya Prakashan , New Delhi
5. Hogg and Craig :Introduction to Mathematical statistics. Printis Hall
6. Siegal,S.,and Sidney: Non-param etric statistics for Behavioral Science. McGraw Hill.
7. Gibbons J.D and Subhabrata Chakraborti: Nonparametric Statistical Inference. Marcel Dekker.
8. Parimal Mukhopadhyay: Mathematical Statistics. New Central Book agency.
9. Conover : Practical Nonparametric Statistics. Wiley series.

(P.T.O)

Signature of the
Chairman (B.O.S.)
(20..10.....Exams)

10.V.K.Rohatgi and A.K.Md.Ehsanes Saleh: An Introduction to probability and statistics. Wiley series.
11.Mood AM,Graybill FA,Boe's DC. Introduction to theory of statistics. TMH
12. Paramiteya mariyu aparameteya parikshalu. Telugu Academy.
13.K.V.S. Sarma: Statistics Made simple do it yourself on PC. PHI
14.Gerald Keller: Applied Statistics with Microsoft excel. Duxbury. Thomson Learning
15.Levin, Stephan, Krehbiel, Berenson: Statistics for Managers using Microsoft Excel.4th edition. Pearson Publication.
16.Hogg, Tanis, Rao: Probability and Statistical Inference. 7th edition. Pearson Publication.

Practical Paper – II.

1.Fitting of straight line and parabola by the method of least squares. **90 hrs**
2. Fitting of straight line and parabola by the method of least squares using (3 hrs/week)
3.Fitting of power curves of the type $y= a x^b$, $y=a b^x$ and $y=a e^{bx}$ by the m... squares.
4. Fitting of power curves of the type $y= a x^b$, $y=a b^x$ and $y=a e^{bx}$ by the method of least squares using MS Excel.
5.Computation of Yule's coefficient of association.
6.Computation of Pearson's, Tcherprows coefficient of contingency.
7.Computation of correlation coefficient and regression lines for ungrouped data.
8 Computation of correlation coefficient, forming regression lines for grouped data.
9. Computation of correlation coefficient, forming regression lines using MS Excel.
10.Computation of multiple and partial correlation coefficients.
11 Computation of multiple and partial correlation coefficients using MS Excel.
12.Large sample tests for mean(s), proportion(s), Standard deviation(s) and correlation coefficient.
13.Small sample tests for single mean and difference of means and correlation coefficient.
14.Paired t-test.
15.Small sample tests for mean(s), paired t-test and correlation coefficient using MS Excel.
16.Small sample test for single and difference of variances.
17.Small sample test for single and difference of variances using MS Excel.
18. $\chi 2$ – test for goodness of fit and independence of attributes.
19. $\chi 2$ – test for goodness of fit and independence of attributes using MS Excel.
20.Nonparametric tests for single and related samples (sign test and Wilcoxon signed rank test) and one sample runs test.
21. Nonparametric tests for two independent samples (Median test,Wilcoxon Mann Whitney U test, Wald - Wolfowitz's runs test)

Note: Practicals through MS Excel are exempted from the question paper 2010-2011

Signature of the
Chairman (B.O.S.)
(20.10.....Exams)

(Syllabus) II year

II year 2009-10

Paper-II: Statistical Methods

(for Non Maths Combination)

120 hrs

(4 hrs/week)

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Unit- I

Attributes- Classification of data- double and manifold class, class frequencies and ultimate class frequencies- Contingency tables-Concept of Association and Independence- Types of association - Consistency of data- Various Measures of Association- Yule's Coefficient of Colligation.

Importance of moments, central and non-central moments, and their interrelationships, Sheppard's corrections for moments for grouped data. Measures of skewness based on quartiles and moments and kurtosis based on moments with real life examples. 30 L

Unit- II

Probability: Basic concepts in probability—deterministic and random experiments, trail, outcome, sample space, event, and operations of events, mutually exclusive and exhaustive events, and equally likely and favourable outcomes with examples– Classical, statistical and axiomatic definitions – addition and multiplication theorems – conditional probability – Statement of Baye's theorem – simple examples of their direct applications.

Definitions of random variable – discrete random variable, probability function of a discrete random variable – probability mass function (p.m.f) – continuous random variable – probability density function (p.d.f) – definition of a distribution function for both discrete and continuous random variable – Concept of mathematical expectation statements of its basic results and some simple problems. 30L

Unit- III

Definition, properties and applications of Bernoulli, Binomial, Poisson, Negative binomial, geometric, Hyper Geometric, Rectangular, Normal, Exponential distributions – Simple problems relating to the above distributions.

Need and meaning of Interpolation, Methods of Interpolation – Graphic method – Finite difference – Binomial expression method – Newton's and Lagrange's formula for interpolation. 30 L

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Signature of the Chairman (B.O.S.)

(20..10.....Exams)

Unit – IV

Curve fitting: Principles of lease squares-fitting of straight line, parabola, exponential and logarithmic curves- concept of correlation- Types of correlation- Scatter Diagrams – Karl Pearson's Correlation Coefficient–Spearman's rank correlation with repeated ranks– Simple Linear regression–Lines of Regression–Regression Coefficients and their properties.

30L

Reference Books:

1. Saha Sambandham – Vibhajana Siddhantamu Vol.-I & Vol. – II .Telugu Academy
2. V.K.Kapoor and S.C.Gupta: Fundamentals of Mathematical Statistics. Sultan Chand.
3. Sambavyata - Telugu Academy
4. Sankyka Vislashanamu – Telugu Academy
5. S.P.Gupta: Statistical Methods . Sultan Chand
6. Arora ,Sumeet Arora,S.Arora: Comprehensive Statistical Methods. S.Chand
7. Levine Stephan, Krehbiel, Berenson:Statistics for Managers Using Microsoft Excel. Pearson publication.
8. Goon, Gupta and Das Gupta: Fundamentals of Statistics . Volume I .World Press.
9. K.V.S. Sarma: statistics Made Simple: do it yourself on PC. PHI
10. Gerald Keller :Applied Statistics with Microsoft excel . Duxbury, Thomson Learning.

Practical Paper-II

(Statistical Methods)

90 hrs

(3 hrs/ week)

1). Computation of Yule's Coefficient of Association and Colligation.
2). Computation of Confingency and Tschprow's Coefficient of Associatior
3). Computation of first four central moments.
4). Computation of first four central moments using MS Excel
5). Computation of Coefficient of Skewness.
6). Computation of Coefficient of Skewness using MS Excel.
7). Fitting of $Y = ab^x$ and $Y = ax^b$
8). Fitting of $Y = ax^b$.
9). Computation of Correlation coefficient and forming lines of regression for ungrouped data.
10). Computation of Correlation coefficient and forming lines of regression for ungrouped data, using MS Excel.
11). Computation of Rank Correlation Coefficient with and without ties in ranking.
12). Binomial distribution- Calculation of expected frequency
13) Binomial distribution- Calculation of expected frequency using MS excel
14). Poisson distribution - Calculation of expected frequency
15). Poisson distribution - Calculation of expected frequency using MS excel
16). Problems based on Normal tables
17). Interpolation by Binomial Expansion method.

Note: Practicals through MS Excel are exempted from the question paper 2010-2011

Signature of the Chairman (B.O.S.)
(20...10....Exams)

(Syllabus) II year

II B.Sc

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SRI VENKATESWARA UNIVERSITY : TIRUPATI

Computer Science

Paper II Object Oriented Programming with Java and Data Structures.

(2009-10)

Unit – 1: Java Fundamentals **24 hrs.**

Fundamentals of Object Oriented programming : Object Oriented paradigm – Basic concepts of Object Oriented Programming – Benefits of OOP – Applications of OOP.
Java Evolution : Java Features – How Java differs from C and C++ – Java and Internet – Java and World Wide Web – Web Browsers – Hardware and Software Requirements – Java Environment.
Overview of Java Language: Simple Java Program – Java Program Structure – Java Tokens- Java Statements – Implementing a Java Program – Java Virtual Machine – Command Line Arguments.
Constants, Variables and Data types: Constants – Variables – Data types – Declaration of Variables-Giving Values to variables- Scope of Variables-Symbolic Constants-Type Casting.
(Chapters : 1,2,3,4)

Unit – 2: Oops Concepts in Java **24 hrs**

Operators and Expressions: Arithmetic Operators – Relational Operators- Logical Operators – Assignment Operators – Increment and Decrement Operators – Conditional Operators – Bitwise Operators – Special Operators – Arithmetic Expressions – Evaluation of Expressions – Precedence of Arithmetic Operators – Operator Precedence and Associativity.

Decision Making and Branching: Decision Making with If statement – Simple If Statement-If else Statement-Nesting If Else Statement-The Elself Ladder-The switch Statement – The ?: operator.

Decision Making and Looping: The while statement – The do statement – The for statement – Jumps in Loops.

Class , Objects and Methods: Defining a Class – Fields Declaration – Methods Declaration – Creating Objects – Accessing class members – Constructors – Methods Overloading – Static Members – Nesting of Methods – Inheritance – Overriding Methods – Final Variables and Methods – Final Classes – Abstract Methods and Classes – Visibility Control.
(Chapters : 5,6,7,8)

Unit – 3: Packages and Interfaces in Java **24 hrs**

Arrays, Strings and Vectors: One-dimensional Arrays-creating an Array – Two dimensional Arrays – Strings – Vectors – Wrapper Classes – Enumerated Types.

Interfaces: Multiple Inheritance : Defining Interfaces – Extending Interfaces – Implementing Interfaces – Accessing Interface Variables.

Packages: Java API Packages – Using system Packages – Naming Conventions – Creating Packages – Accessing a Package – Using a Package – Adding a Class to a Package – Hiding Classes – Static Import.
(CHAPTERS : 9,10,11)

UNIT – 4: Multithreaded programming and Applets. **24 hrs**

Multithreaded Programming: Creating Threads – Extending the Thread Class – Stopping and Blocking a Thread – Life Cycle of a Thread – Using Thread Methods – Thread Exceptions – Thread Priority – Synchronization.
Managing Errors and Exceptions: Types of Errors – Exceptions – Syntax of Exception Handling Code – Multiple Catch Statements – Using Finally Statement – Throwing our own Exceptions – Using Exceptions for debugging.
Applet Programming: How Applets differ from Applications – Preparing to write Applets – Building Applet Code – Applet Life Cycle – Creating an executable Applet – Designing a WebPage – Applet Tag – Adding Applet to HTML file – Running the Applet – More about Applet Tag – Passing parameters to Applets – Aligning the display – More about HTML tags – Displaying Numerical Values – Getting Input from the user.
(Chapters : 12, 13, 14)

(P.T.O)

Unit – 5: Data Structures **24 hrs**

Sorting: Bubble Sort – Selection Sort – Insertion Sort – Quick Sort Stacks and Queues: Stacks – Queues – Circular Queue – Deques – Priority Queue – Parsing Arithmetic Expressions – Linked List: Simple Linked List – Finding and Deleting Specified Links – Double Ended Lists – Abstract Data types – Sorted Lists – Doubly Linked Lists – Advanced Sorting :Quick Sort - Binary Trees: Tree Terminology – Finding a Node – Inserting a Node – Traversing the Tree – Finding Maximum and Minimum values – Deleting a Node – Efficiency of Binary Trees – Trees Represented as Arrays – Graphs: Introduction to Graphs – Searches – Minimum Spanning Tree – Topological Sorting with Directed Graphs – Connectivity in Directed Graphs.
(Chapters : 3,4,5,7 (Only Quick Sort), 8,13)

Prescribed books :

1. E.Balaguruswamy, Programming with Java, A primer, 3e, TATA McGraw-Hill Company (2008) (Chapters : 1 to 14)
2. Robert Lafore, Data Structures & Algorithms in Java, Second Edition, Pearson Education(2008).
   (Chapters: 3,4,5,7 (Only Quick Sort),8,13)

Reference Books :

1. John R. Hubbard, Programming with Java, Second Edition, Schaum's outline Series, Tata McGrawhill (2007).
2. Timothy Budd, Understanding Object Oriented Programming with Java, Pearson Education (2007).
3. Adam Drozdek, Data Structures and Algorithms in Java, Second Edition, Cengage Learning(2008).
4. John R. Hubbard, Anita Huray, Data Structures with Java, Pearson Education (2008).
5. Jana, Java and Object Oriented Programming Paradigm, PHI (2007).
6. Deitel & Deitel, Java TM: How to Program, 7th Edition, PHI (2008).
7. Samatha, Classic Data Structures, PHI (2005).

90 hrs
(3 hrs/ week)

PRACTICAL PAPER – II

Java and Data structures Lab

Java Lab Cycle

1. Write a java program to determine the sum of the following harmonic series for a given value of 'n'.
   1+1/2+1/3+. . . 1/n
2. Write a program to perform the following operations on strings through interactive input:
   a) Sort given strings in alphabetical order.
   b) Check whether one string is sub string of another string or not.
   c) Convert the strings to uppercase.
3. Write a program to simulate on-line shopping.
4. Write a program to identify a duplicate value in a vector.
5. Create two threads such that one of the thread print even no's and another prints odd no's up to a given range.
6. Define an exception called "Marks Out Of Bound" Exception, that is thrown if the entered marks are greater than 100.
7. Write a JAVA program to shuffle the list elements using all the possible permutations.
8. Create a package called "Arithmetic" that contains methods to deal with all arithmetic operations. Also, write a program to use the package.
9. Write an Applet program to design a simple calculator.
10. Write a program to read a text and count all the occurrences of a given word. Also, display their positions.
11. Write an applet illustrating sequence of events in an applet.
12. Illustrate the method overriding in JAVA.
13. Write a program to fill elements into a list. Also, copy them in reverse order into another list.
14. Write an interactive program to accept name of a person and validate it. If the name contains any numeric value throw an exception "InvalidName".
15. Write an applet program to insert the text at the specified position.
16. Prompt for the cost price and selling price of an article and display the profit (or) loss percentage.
17. Create an anonymous array in JAVA.
18. Create a font animation application that changes the colors of text as and when prompted.
19. Write an interactive program to wish the user at different hours of the day.
20. Simulate the library information system i.e. maintain the list of books and borrower's details.

(P.T.O)

(Syllabus) II year (2009)

(Revised from 2009-2010)

II Year B.Sc.

120 hrs
(4 hrs/week)

Paper II: MICROBIAL PHYSIOLOGY AND GENETICS

UNIT – I Nutrition, Growth and Enzymes 30 Hrs

Microbial nutrition - nutritional requirements and uptake of nutrients by cells. Nutritional groups of microorganisms - autotrophs, heterotrophs, mixotrophs, methylotrophs.

Growth media - synthetic, nonsynthetic, selective, enrichment and differential media. Microbial growth - different phases of growth in batch cultures.

Factors influencing microbial growth.

Synchronous, continuous, biphasic growth.

Methods for measuring microbial growth – Direct microscopy, viable count estimates, turbiodometry, biomass.

Enzymes - properties and classification, enzyme unit.

Biocatalysis - induced fit, and lock and key model, coenzymes, cofactors, factors affecting catalytic activity of enzymes.

Inhibition of enzyme activity - competitive, noncompetitive, uncompetitive and allosteric.

UNIT – II Intermediary Metabolism 30 Hrs

Aerobic respiration - Glycolysis, HMP pathway, ED pathway, TCA cycle, electron transport, oxidative and substrate-level phosphorylation. Anaplerotic reactions. β-Oxidation of fatty acids.

Glyoxylate cycle. Anaerobic respiration (nitrate, sulphate respiration).

Fermentation - Common microbial fermentations with special reference to alcohol and lactic acid fermentations.

Photosynthetic apparatus in prokaryotes. Outlines of oxygenic and anoxygenic photosynthesis in bacteria.

UNIT – III Microbial Genetics 30 Hrs

Fundamentals of genetics - Mendelian laws, alleles, crossing over, and linkage. DNA and RNA as genetic materials.

Structure of DNA – Watson and Crick model.

Extrachromosomal genetic elements – Plasmids and transposons.

Replication of DNA – Semiconservative mechanism.

Outlines of DNA damage and repair mechanisms.

Mutations – spontaneous and induced, base pair changes, frame shifts, deletions, inversions, tandem duplications, insertions.

(P.T.O)

P. GOPAL Ph.D.

Various physical and chemical mutagens.

Brief account on horizontal gene transfer among bacteria – transformation, transduction and conjugation.

UNIT – IV Gene Expression and Recombinant DNA Technology 30 Hrs

Concept of gene – Muton, recon and cistron. One gene-one enzyme, one gene-one polypeptide, one gene-one product hypotheses.

Types of RNA and their functions.

Outlines of RNA biosynthesis in prokaryotes.

Genetic code. Structure of ribosomes and a brief account of protein synthesis.

Types of genes – structural, constitutive, regulatory.

Operon concept. Regulation of gene expression in bacteria – *lac* operon.

Basic principles of genetic engineering - restriction endonucleases, DNA polymerases and ligases, vectors.

Outlines of gene cloning methods.

Genomic and cDNA libraries.

General account on application of genetic engineering in industry, agriculture and medicine.

TEXT AND REFERENCE BOOKS:

Gottschalk, G. (1986). **Bacterial Metabolism**, Springer-Verlag, New-York.

Caldwell, D.R. (1995). **Microbial Physiology and Metabolism**, W.C. Brown Publications, Iowa, USA.

Moat, A.G. and Foster, J.W. (1995). **Microbial Physiology**, John-Wiley, New York.

White, D. (1995). **The Physiology and Biochemistry of Prokaryotes**, Oxford University Press, New York.

Reddy, S.R. and Reddy, S.M. (2004). **Microbial Physiology**, Scientific Publishers, Jodhpur India.

Reddy, S.M. and Reddy, S.R. (2005). **A Text Book of Microbiology Vol-II. Microbial Metabolism and Molecular Biology**. Himalaya Publishing House, Mumbai.

Lehninger, A.L., Nelson, D.L. and Cox, M.M. (1993). **Principles of Biochemistry**, 2nd Edition, CBS Publishers and Distributors, New Delhi.

Elliot, W.H. and Elliot, D.C. (2001). **Biochemistry and Molecular Biology**, 2nd Edition, Oxford University Press, U.S.A.

Prof. D. V. R. SAI GOPAL, Ph.D.,
Chairman BoS

Verma, P.S. and Agarwal, V.K. (2004) **Cell Biology, Genetics, Molecular Biology, Evolution and Ecology.** S. Chand & Co. Ltd., New Delhi.

Freifelder, D. (1997). **Essentials of Molecular Biology**. Narosa Publishing House, New Delhi.

Crueger, W. and Crueger, A. (2000). **Biotechnology: A Text Book of Industrial Microbiology,** Prentice-Hall of India Pvt. Ltd., New Delhi.

Glick, B.P. and Pasternack, J. (1998). **Molecular Biotechnology**, ASM Press, Washington D.C., USA.

Freifelder, D. (1990). **Microbial Genetics**. Narosa Publishing House, New Delhi.

Strickberger, M.W. (1967). **Genetics**. Oxford & IBH, New Delhi.

Sinnot E.W., L.C. Dunn and T. Dobzhansky. (1958). **Principles of Genetics**. 5th Edition. McGraw Hill, New York.

Glazer, A.N. and Nikaido, H. (1995). **Microbial Biotechnology – Fundamentals of Applied Microbiology,** W.H. Freeman and company, New York.

Old, R.W. and Primrose, S.B. (1994) **Principles of Gene Manipulation**, Blackwell Science Publication, New York.

Smith, J.E. (1996). **Biotechnology**, Cambridge University Press.

Snyder, L. and Champness, W. (1997). **Molecular Genetics of Bacteria**. ASM press, Washington, D.C., USA.

Maloy, S.R., Cronan, J.E. and Freifelder, D. (1994). **Microbial Genetics**, Jones and Bartlett Publishers, London.

Lewin, B. (2000). **Genes VIII.** Oxford University Press, England

Turner, P.C., Mclennan, A.G., Bates, A.D. and White, M.R.H. (1998). **Instant Notes in Molecular Biology,** Viva Books Pvt., Ltd., New Delhi.

Twynan, R.M. (2003). **Advanced Molecular Biology**. Viva books Pvt. Ltd. New Delhi.

Kannan, N. (2003). **Hand Book of Laboratory Culture Medias, Reagents, Stains and Buffers**. Panima Publishing Co., New Delhi.

Nicholl, D.S.T. (2004). **An Introduction to Genetic Engineering.** 2nd Edition. Cambridge University Press, London.

Ram Reddy, S., Venkateshwarlu, K. and Krishna Reddy, V. (2007) **A text Book of Molecular Biotechnology**. Himalaya Publishers, Hyderabad.

(P.T.O)

07/8/09

Prof. D. V. R. SAI GOPAL, Ph.D.,
Chairman Board of Studies (PG)
MICROBIOLOGY
S. V. UNIVERSITY

(Syllabus) II year 273

SRI VENKATESWARA UNIVERSITY : TIRUPATI

II year B.Sc

BIOCHEMISTRY

Paper-II: Metabolism and Biochemical Techniques

(Revised from 2009 -10)

Unit- I : Bioenergetics and Biological Oxidations **30 hours**

Energy transformations in the living system, Free energy concept. Exergonic and endergonic reactions. High energy compounds. Phosphate group transfer potential. Substrate level phosphorylation.

Biological oxidations: Definition, enzymes involved- oxidases, dehydrogenases and oxygenases.

Redox reactions: Redox couplers. Reduction potential ($\mathcal{E}$, $\mathcal{E}_0$, $\mathcal{E}'_0$). Standard reduction potential ($\mathcal{E}'_0$) of some biochemically important half reactions.

Ultra structure of mitochondria. Electron transport chain, and carriers involved. Oxidative phosphorylation, theories of oxidative phosphorylation- Mitchell's chemiosmotic theory.

F_0 F_1- ATPase. Inhibitors of respiratory chain and oxidative phosphorylation, uncouplers. Formation of reactive oxygen species and their disposal through enzymatic reactions.

Ultra structure of chloroplast, Cyclic and non-cyclic photophosphorylation.

Unit- II : Carbohydrate and Lipid Metabolism **30 hours**

Concept of anabolism and catabolism. Glycolytic pathway, energy yield. Fate of pyruvate- formation of lactate and ethanol, Pasteur effect. Citric acid cycle, regulation, energy yield, amphipathic role. Anaplerotic reactions. Glycogenolysis and glycogenesis. Pentose phosphate pathway. Gluconeogenesis. Photosynthesis- Light and Dark reactions, Calvin cycle, C_4 Pathway.

Catabolism of fatty acids (β- oxidation) with even and odd number of carbon atoms, Ketogenesis, *de novo* synthesis of fatty acids, elongation of fatty acids in mitochondria and microsomes, Biosynthesis and degradation of triacylglycerol and lecithin. Biosynthesis of cholesterol.

Unit-III : Metabolism of Nitrogen Compounds **30 hours**

General reactions of amino acid metabolism- transamination, decarboxylation and deamination. Urea cycle and regulation, Catabolism of carbon skeleton of amino acids- glycogenic and ketogenic amino acids. Metabolism of glycine, serine, aspartic acid, methionine, phenylalanine and leucine. Biosynthesis of creatine. Inborn errors of aromatic and branched chain amino acid metabolism.

Biosynthesis and regulation of purine and pyrimidine nucleotides, *de novo* and salvage pathways. Catabolism of purines and pyrimidines. Biosynthesis of deoxyribonucleotides- ribonucleotide reductase and thymidylate synthase and their significance. Disorders of nucleotide metabolism- Gout, Lesch- Nyhan syndrome.

Biosynthesis and degradation of heme.

Unit-IV : Biochemical Techniques **30 hours**

Methods of tissue homogenization: (Potter-Elvejham, mechnical blender, sonicator and enzymatic).

Principle and applications of centrifugation techniques- differential, density gradient. Ultra-centrifugation- preparative and analytical..

Principle and applications of chromatographic techniques- paper, thin layer, gel filtration, ion-exchange and affinity chromatography. Elementary treatment of an enzyme purification.

(P.T.O)

Signature of the Chairman (B.O.S.)
(20.....Exams)

Controller of Examinations
Sri Venkateswara University
TIRUPATI

Electrophoresis- principles and applications of paper, polyacrylamide (native and SDS) and agarose gel electrophoresis.

Colorimetry and Spectrophotometry- Laws of light absorption- Beer-Lambert law. UV and visible absorption spectra, molar extinction coefficient, biochemical applications of spectrophotometer. Principle of fluorimetry.

Tracer techniques: Radio isotopes, units of radio activity, half life, β and γ- emitters, use of radioactive isotopes in biology.

2nd Year Practical – Paper-II: Quantitative Analysis and Biochemical Techniques

90 hrs
(3 hrs/week)

List of Experiments:

1. Estimation of amino acid by ninhydrin method.
2. Estimation of protein by Biuret method.
3. Estimation of protein by Lowry method.
4. Estimation of glucose by DNS method.
5. Estimation of glucose by Benedict's titrimetric method.
6. Estimation of total carbohydrates by anthrone method.
7. Isolation of egg albumin from egg white.
8. Isolation of cholesterol from egg yolk.
9. Isolation of starch from potatoes.
10. Isolation of casein from milk.
11. Separation of amino acids by paper chromatography.
12. Determination of exchange capacity of resin by titrimetry.
13. Separation of serum proteins by paper electrophoresis.
14. Separation of plant pigments by TLC.

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Signature of the
Chairman (B.O.S.)
(20.....Exams)

II year

II year.

(w.e.f (2009-10) (Syllabus) 317

(B.Sc. Bio-Technology)

Paper II – Biological Chemistry and Microbiology

UNIT- I Biomolecules 35 hours

1.1 Carbohydrates : Importance, classification and properties

1.2 Structure, configuration and biochemical importance of glucose, sucrose, cellolose and hyaluronic acid

1.3 Proteins : Classification. structure and properties amino acids

1.4 Primary, secondary, tertiary and quaternary structures of proteins

1.5 Lipids : Fatty acids : (Saturated and unsaturated) Phospholipids (phosphatidic acid, phosphatidylcholine)

1.6 Enzymes : Classification and nomenclature of enzymes

1.7 Factors influencing enzymatic reactions
(a) pH (b) Temperature (c) Substrate concentration (d) Enzyme concentration

1.8 Enzyme Inhibition – Competitive and non-competitive

Unit II Intermediary Metabolism 30 hours

2.1 Glycolysis

2.2 Citric acid cycle

2.3 Gluconeogenesis and its significance

2.4 Mitochondrial electron transport
Chemiosmotic theory of ATP synthesis

2.5 β-Oxidation of fatty acid

2.6 Deamination, decarboxylation and transamination reactions of amino acids

Unit III Fundamentals of Microbiology 25 hours

3.1 Outlines of classification of microorganisms

3.2 Structure and general characters of Viruses, Bacteria, Fungi and Micro Algae (one example from each group)

3.3 Disease causing pathogens and their symptoms (examples: Typhoid, HIV only)

3.4 Isolation, identification and preservation of microorganisms (Bacteria)

3.5 Methods of sterilization

3.6 Bacterial reproduction and growth kinetics (Batch and continuous cultures)

UNIT – IV Principles and Applications of Biophysical Techniques 30 hours

4.1 Microscopy – Light, Inverted, Fluorescent and Electron microscopy

4.2 Colorimetry – Beer – Lambert's Law

4.3 Chromatography
(a) Paper (b) Thin Layer (c) Ion-exchange (d) Gel-filtration

4.4 Electrophoresis – Native gels and SDS-PAGE, Agarose

4.5 Basic Principles of centrifugation

(P.T.O)

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Practical Paper - II — 2 — 90 hrs (3 hrs/ week)

Practicals

1. Preparation of Normal, Molar and Molal solutions
2. Preparation of Buffers (Acidic, Neutral and Alkaline Buffers)
3. Qualitative tests of sugars, amino acids and lipids
4. Estimations of protein by Biuret method
5. Estimation of total sugars by anthron method
6. Separation of amino acids by paper chromatography
7. Electrophoretic separation of proteins (SDS-PAGE)
8. Enzyme assay – Catalase or Invertase (or any other enzyme)
10. Preparation of routine microbiological media
11. Isolation of common non-pathogenic bacteria
12. Staining and identification of bacteria – *E.coli, and Bacillus*
13. Observation of micro organisms of biotechnical importance (permanent slides)

Recommended Books

1. Biochemistry - By Dr. U. Satyanarayana, U. Chakrapani
2. Biochemistry - By J.L. Jain
3. Biochemistry - By Conn and Stumpf
4. Biochemistry - By Lehninger
5. Textbook of Medical Biochemistry - By S. Ramakrishnan, R. Rajan, and K.G. Prasannan (Orient Longman)
6. Biochemistry - By Stryer
7. Biochemistry - By Voet and Voet
8. Biochemistry (Jaypee) - By Vasudevan
9. Biochemistry - By David Rawn
10. General Biochemistry - By J.H. Well
11. Biochemistry - By K. Trehan
12. Biochemical Methods - By S. Sadasivam and A. Manickam
12. An introduction to Practical Biochemistry - By T. Plummer
13. Experimental Biochemistry - A Student Companion - By V. Deshpande and B. Sasidhar Rao
14. Practical Biochemistry – By Upadhayay, Wilson and Wilson, Wilson & Walker
15. Biochemistry – Viva Series
16. Text Book of Microbiology - By Ananthanarayan and Paniker
17. Microbiology - By Cappuccino (Pearson Education)
18. Microbiology - By Tortora (Pearson Education)
19. Microbiology - B.J. Pelczar, E.S.N. Cfan and N.R. Kreig, McGraw Hill Publ.
20. General Microbiology – By Stanier, R.Y. J.L. Ingrahm, M.L. Wheel is & P.R. Painter
21. General Microbiology – By Powar (Vol. I and Vol. II).
22. Practical Microbiology - By Aneja.

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(Syllabus) 11 90 362

SRI VENKATESWARA UNIVERSITY

II Year

Part – III Non – Computer Theory paper
(For all BA/B.Sc programs with no computer course as core subject)

Introduction to Computers and Office Automation Tools
(CR from 2010-2011)

Unit – I: Introduction to Computers: Definition – Types of computers – Logical Organization of a digital computers – Memory: Main memory , RAM, ROM and Cache Memory – Secondary Memory: Magnetic tape , Floppy Disc , Hard disk , Compact disk – Input Devices – Output Devices

Unit – II: Operating systems: Definition – Functions of operating system – types of operating systems, Brief details of Batch processing, multi programming, multi tasking, time sharing , real time operating systems – Introduction to DOS , Internal and External Commands .

Introduction Windows(GUI), Desktop, File , folder, My computer, My Documents, Recycle Bin, Internet Explorer, windows explorer – Types of programming languages.

Unit – III: MS-Word: Basics – starting word, creating a new document, opening a documents, saving a documents, parts of word window, Editing operations – Formatting text and documents: Auto format , line spacing, margins, borders and shading – Headers and footers – working with pictures and graphics - Spell & Grammar checking - Mail Merge – Macros – Templates – Tables : all the operations on table data.

Unit – IV: MS-Excel : Basics – Overview of excel features , creating and opening , saving and protecting a worksheets and work books, Printing a worksheets. – Editing operations – cell references – formatting – charts or Graph options – Working with built-in Functions – Data menu options

UNIT –V: MS-Access & MS- Powerpoint:

MS-Access: Basics: creating databases, tables, queries, forms, reports, macros, modules

MS-Power point: Basics, Design slides, Adding slides, import the images from outside world, drawing power point , transitions and build effects, deleting a slide, numbering a slide, save, print , closing presentation

Text Book: 1) Introduction to computers, sixth edition Tata Mc Graw Hill (2007)
2) Ron Mansfield, working to Microsoft office, Tata Mc Graw Hill
3) MS – Office 2000 by Sanxena

Reference Books:
1. Michael Miller, Absolute Beginners Guide to computers basics.

Syllabus.

II year 377

SGS ARTS COLLEGE : TIRUPATI

2ND YEAR B.Sc. (CATERING) SYLLBUS

FOOD AND BEVERAGE SERVICE – II (R.f.2010-2011)

OBJECTIVE: To develop in the student the knowledge of various alcoholic beverages and their service

UNIT – I

- **Alcoholic Beverages:** Introduction, Definition, Classification and glossary of alcoholic beverages

UNIT – II

- **WINE:** History, definition, types and classification of wines; wine producing countries of the World; manufacturing of wine, bottling, labeling and storage of wine; service of wine-equipment needed, types of wine glasses and service of wine.
- **BEER:** History, definition, classification, manufacturing, bottling and storage of beer.
- **WHISKY:** History, definition, classification, manufacturing, bottling and storage of whisky.
- Production, bottling, storage and service of Rum, Gin, Brandy, Vodka, Tequila.

UNIT – III

- **Liquors and Aperitifs:** Definition, Types, manufacture, storage and service.
- **Mock tails and Cocktails:** Definition, Rules of making.
- **Mock tails and Cock tails:** Methods of making Mock tails and Cock tails.
- Introduction of recipes of Whisky,, Gin, Rum, Vodka Brandy Cock tails.

FOOD AND BEVERAGE PRODUCTION – II

UNIT – IV

- **FOOD PRODUCTION:** Principles of cooking, Quantity cooking, Costing, Time and Temperatures, Menu planning, Cooking methods, Importance of hygiene in the kitchen.

UNIT – V

- Introduction to Indian and popular cuisines – Culinary terms, Cooking Styles, Ethnic eating and regional cooking styles – Equipment – Used in different cuisines.

(P.T.O)

CHAIRPERSON, BOS
Dept. of Homescience
S.V.U. College of Biological and Earth Sciences
S.V. University, Tirupati - 517 502

3507

II Year

BCA-202 : INTRODUCTION TO DISCRETE MATHEMATICS

UNIT-1:

SET THEORY AND LOGIC: Basic concepts - Venn Diagrams-Operations on Sets - Power set - Equivalent-Logical Sets - Logical Connectives and Bi-Conditionals-Tautologies - Logical Equivalences-Duality Law.

UNIT-2:

RELATIONS AND FUNCTIONS: Relations and Ordering - Properties of Relations - Equivalence Relations - Using Matrices - Classes and Partitions - Functions - Types of Functions

UNIT-3:

PERMUTATIONS AND COMBINATIONS & MATHEMATICAL INDUCTION: Introduction - Basics of Counting - Permutations and Combinations-Pigeonhole Principal-Mathematical Induction.

UNIT-4:

RECURRENCE RELATIONS: Introduction - Recurrence Relation-Solving Recurrence Relations - Fibonacci Relations-Linear Non-Homogeneous Recurrence Relations - Solving Recurrence Relations by substitutions Method

UNIT-5:

GRAPH THEORY: Introduction - Operations on Graphs - Paths and Connections - Representating graphs - Adjacency matrix.

PRESCRIBED BOOK:

DISCRETE STRUCTURES AND GRAPH THEORY By T.V.Rajinikanth, K.Vijayalakshmi. The HI-TECH Publishers

UNIT 1: Section 2.1 to 2.3 And 1.1 to 1.7

UNIT 2: Section 2.4 to 2.9, 2.13 to 2.16

UNIT 3: Section 5.1 to 5.3

UNIT 4: Section 5.4 to 5.7, 5.9

UNIT 5: Section 3.1 to 3.4

Note: Questions must be set in the prescribed book only.

REFERENCE BOOKS:

1. Discrete Mathematics and It's Applications By ROSEN; 5th Edition, TMH Publications
2. Discrete Mathematics for computer scientists and mathematicians by JOE.L.MOTT, ABRAHAM KANDEL, THEODORE P.BAKER; 2nd Edition, PHI

TO BE RETURNED

3510 ② II year

BCA-205: PROBABILITY AND STATISTICS

UNIT – I: CORRELATION AND REGRESSION

CORRELATION AND REGRESSION: -

Correlation:-

Positive Correlation. Negative Correlation, scatter diagram. Coefficient of Correlation.

Rank Correlation

Methods of Calculation: -

a. Direct Method. b. Step Deviation Method.

Regression:

Lines of regression.

Line of regression of Y on X .

Line of regression of X on Y.

UNIT – II: BASIC PROBABILITY

BASIC PROBABILITY:

Introduction: Sample Space and events.

Mutually exclusive, equally likely events.

Addition law of probability statement only and simple applications.

Independent events and conditions probability:

Introduction , Definition. Applications

Multiplication law of probability statement only and simple applications

Random Variable:

Introduction:

Discrete variable, continuous variable, Discrete probability distribution. Distribution function. Continuous Probability distribution.

Distribution function – Expectation of a Random Variable.

Random Variable – Variance and standard deviation moment generating function.

UNIT – III: DISTRIBUTIONS:

BINOMIAL DISTRIBUTION:

Definition, Applications and Properties. Binomial Distribution mean and variance.

Poisson distribution:

1. Definition of Poisson Distribution.
2. Application of Poisson Distribution and Properties of Poisson Distribution.

Normal Distribution:

1. Properties of the Normal Distribution mean and variance.
2. Applications of normal distribution: problems only ordinates method.

UNIT – IV SAMPLING DISTRIBUTION

SAMPLING DISTRIBUTION:

Introduction – Sampling, Random Sampling. Objectives of sampling. Sampling distribution.

Testing of hypothesis:-

Introduction – Null hypothesis, Level of significance.

Test of significance for Large samples for mean variance and proportions both one sample and two sample tests.

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UNIT – V: SMALL SAMPLES

SMALL SAMPLES:

t – Distribution and its properties

1. significance test of a sample mean.
2. Significance of difference between sample means

Chi-Square Test and F – Test

Chi – Square distribution. Chi – Square test for good ness of fit.

F – Distribution and its properties, significance test for the variance two samples.

Note:

1. **Proofs of theorems and derivations of expressions are omitted.**
2. **Simple numerical problems are to be set in the examination, not theoretical problems.**

Prescribed Book:

Higher Engineering Mathematics by B.S.Grewal, Kanna Punlishers 34th Edition

UNIT-I:

21.8 (1) 21.8 (2)
21.9
21.1
21.12

UNIT-II:

21.13 21.14 21.15 21.17 21.18 21.19
21.2 (1) 21.2 (2) 21.2 (3) 21.2 (4)

UNIT-III:

21.23 (1) 21.23 (2) 21.23 (3) 21.23 (4)
21.24 (1) 21.24 (2) 21.24 (3)
21.25 (1) 21.25 (2) 21.25 (5)

UNIT-IV:

21.28 (1) 21.28 (2) 21.28 (3) 21.28 (4)
21.29 (1) 21.29 (2) 21.29 (3) 21.29 (4) 21.29 (5) 21.29 (6)
21.30 (1) 21.30 (2) 21.30 (3)
21.31 (1) 21.31 (2) 21.31 (3)

UNIT-V:

21.32 21.33 21.33 (1) 21.33 (2) 21.33 (3) 21.33 (4)
21.34 (1) 21.34 (3) 21.31 (4)
21.35 (1) 21.35 (2)

Reference Books:

1. Statistical Methods by S.P. Gupta
2. Mathematical Statistics by S.C. Gupta and V.K. Kapoor
3. Probability and Statistics. Schaum series

II year

221-1

TO BE RETURNED.

TO BE RETURNED

[illegible]TIAL CODE NO. [redacted]

S Y L L A B U S

COURSE AND SUBJECT : ~~[illegible]~~ B.A

YEAR OF EXAMINATION : II Year Exam ~~1997~~ ~~2001~~ 2002

~~PART I~~ / PART II : Revised CCS from 1995 ✓

PAPER ~~V~~ II Accountancy - II ~~([illegible])~~

TIME : 3 Hrs. MARKS : 100

x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x

Paper-V : Accountancy-II

Unit - I

Accounts from incomplete records (single entry) - Features - Ascertainment of profit - Statement of Affairs Method - Conversion Method.

Unit - II

Non profit organizations and Accounts of Non-trading concerns - Features - Preparation of Receipts and Payments Account, Income and Expenditure Account and Balance Sheet from any information given.

Unit - III

Partnership Accounts - Definition of partnership - Features of Partnership - Legal provisions in the absence of partnership deed - Fixed and Fluctuating capitals - Profit and Loss Appropriation Account - Final Accounts.

Contd : P.2

x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x

NOTE : 1. Paper Setters are requested to return the syllabus sheets along with the Question Paper(s) set by them to the Chairman of the Board of Paper Setters, who will consolidate all the syllabus sheets and transmit to the Controller of Examinations, S.V. University, after the Question Papers are finalised by the Board.

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3. Remuneration bills for setting the question papers have to be sent by the Paper Setters to the Chairman, Board of Paper Setters along with the Question papers. He/She will transmit them to this office with his/her counter signature.

Signature of the

Unit - IV

Admission of a partner - Treatment of Goodwill - Revaluation of Assets and Liabilities - Adjustment regarding accumulated profits and losses - Calculation of Sacrificing Ratio and New Profit sharing ratio - Adjustment regarding capitals.

Unit - V

Retirement and Death of a Partner - Accounting treatment relating to Goodwill - Ratio of Gain - Settlement of the amount due to Retiring partner and to the Executors of the deceased partner (excluding Joint Life Policy).

Unit - VI

Dissolution of Firms - Legal aspects - Settlement of accounts (excluding realisation and piece-meal distribution) - Insolvency of a partner - Amalgmation of firms.

Unit - VII

Royalties - Explanation of terms - Accounting treatment in the books of both the parties - Sub-lease.

Unit - VIII

Hire-purchase and Instalment purchase system - Features - Accounting treatment in the books of Hire purchaser and Vendor - Default and Repossession - Instalment Purchase System - Accounting treatment in the books of purchaser and Vendor.

Contd. P 3

Signature of the Chairman (B.O.S.)

UNIT - IX

Self balancing system - Meaning - Advantages - Accounting treatment - Transfers from one ledger to another - Contra balances.

Unit - X

Insolvency accounts of individuals - Preparation of Statement of Affairs and Deficiency Accounts.

Suggested Readings

1. Grewal, T.S. : An Introduction to Accountancy
2. Gupta, R.L. & Gupta, V.K. : Principles and Practice of Accountancy
3. Pantil & Korlahalli : Principles and Practice of Accounting
4. Jain, S.P. & Narang, K.L. : Advanced Accountancy
5. Shukla, M.C. & Grewal, T.S. : Advanced Accountancy

Additional reference books

1. Arulanandam, M. (Himalaya) : Advanced Accountancy
2. Ratnam Kitab Mahal : Theory & Practice of Costing

Director of the Institute (D.O.S.)

CODE NO: 245

SYLLABUS

SUBJECT: : B.COM
YEAR OF EXAMINATIONS :SECOND YEAR EXAMINATIONS
PART II- : Revised syllabus from 2001-2002)
Paper : :Banking and Financial Systems

II year

Time : 3 Hours Marks 100 Marks

(Common to II B.Com Computer Applications)

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SECOND YEAR B.COM
PAPER –V BANKING AND FINANCIAL SYSTEMS

The objective of this paper is to introduce the students to the Banking and its activities with an emphasis on financial instruments and services.

UNIT –I : INTRODUCTION TO BANKING

Types of Banks – Banking systems – Branch Banking - Unit Banking Group Banking – Correspondent Banking - Deposit Banking -Mixed Banking - Investment Banking.

Banking system in India - Organized and unorganized sectors - Commercial Banks - Types functions and credit creation – Nationalization and achievements after nationalization - Banking sector reforms – Impact of reforms - Innovations in Banking Electronic Banking - On line and off-shore banking - Credit cards

UNIT –II TYPES OF BANKING

Indigenous Banking – Operations – Defects – Indigenous Banks and RBI – Banking Commission (1972) and the indigenous Bankers Futures of indigenous Bankers - Co- Operative Banking Institutions - Regional Rural Banks - Functions and Problems and activities Exchange Banks : Functions and Problems and activities - Exchange Banks Functions and Problems - Role of Exchange banks in Financing Foreign Trade Development Financial Institutions: Functions and structure growth – Emerging Financial Intermediaries – Public sector Development - Financial Institutions functioning of IECT IDBI ICICI SIBI and SFCS

UNIT –III FINANCIAL SERVICES

Indian money market- structure Composition, Characteristics and weaknesses – The reforms of the Indian Money Market – Bill market and RBI - Indian capital Market - Composition and Growth - Primary and secondary markets – capital market reforms in Indian – Non- Banking Finance companies (NBFCS) in the capital Market merchant Banking and Financial services

UNIT –IV

Banker and Customer ; Definition and relationship between banker and Customer – special types of Banker's customers- Customers Deposit Account Dormant Account - Insurance of Bank Deposits – Pass Book - Its features – Legal Position of entries in the Pass Book - - Negotiable instruments Act 1981 . The Negotiable instruments – Types and Features – Cheques Classification and characteristics of cheques – crossing of cheques – Types of crossing Endorsement – Types and Essential Features of endorsement - Forged Endorsement - payment of cheques – Liabilities of paying Banker – Consequences of wrongful dishonor: collection of cheques Liabilities of collection Banker – statutory protection to the collecting banker.

UNIT V

Loans and advances : lending policies procedure for appraisal of credit – Proposal – Modes of Creating charge – Pledge Hypothecation – Lien – Assisgment - Mortagage: precautions to be taken while advancing loans against goods - Life insurance policies – Stock Exchange securities – Fixed deposit Receipts -Book Debts – Real Estates – Supply of bills

SUGGESTED READINGS:

1.Sundharam & Varshenery Banking Theory , Law & Praction
2. Tannan's Banking Law and Practice in india
3.Maheswari and paul R R Banking Theory and Law & Practice
4. Dr. K N Prasad and T. Chandradass : Banking and Financial system
5.Ruddar Datt and K.P.M Sundaram Indian Economy

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CODE NO: 246

II year

SYLLABUS

SUBJECT: : B.COM
YEAR OF EXAMINATION : IIND YEAR EXAMINATIONS
PART-II : : (REVISED SYLLABUS FROM 2001-2002)
PAPERVI :FINANCIAL ACCOUNTING –II
TIME :3 HOURS MARKS:100
(Common to II B.Com Restructured courses : OM & SP /Corporate Secretaryship Taxation & Tax procedures /Advertising /Computer Applications)

PEPER-VI FINANCIAL ACCOUNTING-II

The objective of this paper is to introduce the students to accounting procedures applicable to various forms of organizations

UNIT –I : ROYALITIES – HIRE PURCHASE AND INSTALMENT PURCHASE SYSTEM ROYALITES

Explanation of terms – Accounting Treatment in the books of both the parties – sub lease Hire purchase and Installment system – Features – Accounting treatment in the Book of Hire purchases and vendor – Default and Repossession – Installment purchase system – Accounting Treatment in the books of purchaser and vendor.

UNIT –II SINGLE ENTRY AND ACCOUNTS OF NON TRADING CONCERNS

Single Entry – Features.– Ascertainment of Profit – statement of affairs – Conversion method

Accounts of Non-trading concern – Features – preparation of receipts and payment account – Income and Expenditure Account and Balance Sheet forms the Information

UNIT-III – PARTNERSHIP ACCOUNTS

Legal provisions in the absence of partnership deed Fixed and Fluctuating capital – Profit and Loss appropriation Accounts- Treatment of Goodwill

Admission Retirement and Death of a partner Dissolution of Firm (excluding sale to a firm company Amalganation)

UNIT –IV BRANCH AND DEPARTMENTAL ACCOUNTS

Department Branches – Stock and Debtors system – Distinction between wholesale profits and Retail Profits - Independent Branche (Excluding Foreign Branches)

Departmental Accounts – Basics for allocation of expenses - Inter departmental transfer at cost of selling price – Treatment of expenses which cannot be allocated.

UNIT V COMPANY ACCOUNTS

Issue of shares – issue at Premium and Issue at Discount – Forfeiture and Re—Issue of shares – Debentures – Issue of Debentures - Preparation of Final Accounts.

BOOK RECOMMENDED

Same book as Recommended for Paper II Financial Accounting –I B.Com First Year

II Year

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TO BE RETURNED

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SYLLABUS

CODE NO. [redacted]

SUBJECT : B.Com

YEAR OF EXAMINATION : II Year Exam.

PART ~~I~~/II (Revised Syllabus from 2001 - 2002)

PAPER VII : Quantitative Techniques - II

TIME : 3 Hours

MARKS : 100

(Common to II B.Com Restructured Courses : OM & SP / Corp. Secretaryship / Taxation & Tax Procedure / Advertising / Computer Applications)

PAPER-VII QUANTITATIVE TECHNIQUES - II

The objective of this paper is to impart knowledge on the application of quantitative Techniques in Business decision making.

UNIT-I: ANALYSIS OF TIME SERIES.

Meaning and utility of time series Analysis - Components of Time Series - Measurement of Trend and seasonal Variations - utility of decomposition of time series - Deseasonalisation of data -

UNIT-II: INDEX NUMBERS.

Meaning, definition and importance of Index Numbers - Methods of construction of Index Numbers - Price Index Numbers - Quantity Index Numbers - Tests of adequacy of Index Numbers - Cost of Index Numbers - Limitation of Index Numbers.

(PTO)

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for 2005

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UNIT-III: PROBABILITY:

Theories of probability - Additional Multiplication and conditional laws of probability - Binomial, Poisson and Normal distribution.

UNIT-IV: CALCULUS:

Differentiation and Integration - Elementary knowledge and Simple problems - Maxima and Minima

UNIT-V: LINEAR PROGRAMMING:

Meaning Definition and importance of Linear programming - Graphic Method and Simplex Method of Linear Programming.-

BOOKS RECOMMENDED:

1.	Reddy, C.R.	Business Statistics, Deep & Deep Publication New Delhi
2.	Kapoor, V.K.	Statistics (Problems and Solutions)
3.	Elhance D.N.	Fundamentals of Statistics
4	Gupta, S.P.	Statistical Methods
5	Gupta, B.N	Statistics
6	Gupta S.C	Fundamentals of Statistics
7	Sancheti, D.C. & Kapoor, V.K.	Statistics (Theory, Methods and Application.)
8	Croxton & Crowdon	Practical Business Statistics
9	Boddington	Statistics and their applicative to Commerce
10	Reddy C.R.	Quantitative Methods for Management Decision, Himalaya Publishing House
11	Sivayya, K.V. & Satya Rao, K	Business Mathematics
12.	Sanghil, D.C. & Kapoor, V.K.	Business Mathematics.
13	Raghavachary, M	Mathematics for Management
14.	Digambara Patric	Quantitative Techniques
15	Satyanarayana, M & Lalitha Raman	Management of Operation Research.

28-11-02

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TO BE RETURNED

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SYLLABUS

CODE NO. 2146-B II Year

SUBJECT : B.Com

YEAR OF EXAMINATION : II Year Exam

PART ~~I~~/II (Revised Syllabus from 2001-2002)

PAPER VIII (a) : Fundamentals of Computers (Optional Paper)

TIME : 3 Hrs

MARKS : 100

(Common to II B Com Restructured Courses : OM & SP/Corp. Secretaryship/ Taxation & Tax Procedure / Advertising)

PAPER-VIII FUNDAMENTALS OF COMPUTERS

(Objective: To impart the basic knowledge about the Computers evolution of Computers, operating systems, word processing and elements of programming in BASIC languages)

UNIT-I

Elements of computers - Hardware - Central processing unit - Main memory unit-arithmatic and logic unit - Control unit - Random Access Memory (RAM) - Read only memory (ROM) - PROGRAMMABLE Read only Memory (PROM) - Erasable Programmable Read only Memory (EPROM) - INPUT/OUTPUT Devices - Magnetic tape - Magnetic Disk - Floppy Disk etc - Monetor - Terminals - Printer - Plotter - CD ROM - Multimedia devices etc

Characteristics of Computer - Speed - Accuracy - Reliability - Memory Capability - Vegatality - Deligence - Networking Capacity

Signature of the
Chairman (B.O.S.) for 2006 Examinations

(PTO)

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UNIT-II

Brief History of Computers - Evolution of the computing machines - Generations of Computers - Impact of Computers on Business and society.

UNIT-III Disk Operating Systems (DOS) - Meaning and purpose of DOS - DOS Directory structure - File Management with DOS - File types - Data Files - Program Files - File names and wildcards - DOS Versions - Logging into different disk drives - Formatting a floppy disk - Making, Using And Removing Subdirectories - Path specifications - DOS Command set

UNIT-IV

Word processing - Meaning and purpose of word processing - Advantages of using computers for word processing - Features of word processing under DOS - Word Star Package - Opening Menu - Edit Menu Block and Save Menu - Quick Menu - Report generation

UNIT-V

Computer Languages - Machine codes - Assembly codes - High Level Languages Developing of a computer program - Algorithm - Flow chart - Code into a high level language - Compilation - Corrections - Testing Process.

Elements of Beginners All-purpose Symbolic Instruction Code (BASIC) Language - Number - Strings - Variables - Hierarchy of operations - Assigning values - Reading input - Printing Output - Set of important commands in BASIC - Branching and looping - Read - Data - Restore statements - Writing and running simple Programmes in BASIC

REFERENCES:

1. John Shelly and Roger Hunt, Computer Studies A first Course, PHI
2. Al Steyens, Illustrated Word Star, BPB
3. Stulz, Illustrated Word Star, BPB
4. Byron S. Gottfried, Theory and Problems of Programming with BASIC, Mc Grawhill
5. Sanders, Computers Today, Mc Grawhill

25/12/02

Signature of the Chairman (B.O.S.)

28.11.02

2/1/03

4/1/03

Code No; 281

SYLLABUS

Part-II B.Com Computer Applications
Year Second Year Degree Examinations
Paper II – Oriented Programming
(Revise syllabus from 2003-2004) (B.Com 2009-2010)

PAPER II COMPUTER APPLICATIONS

OBJECT ORIENTED PROGRAMMING IN VISUAL BASIC II YEAR COMPUTER APPLICATION STREAM (TO BE OFFERED IN II B.Com AND II B.A COURSES) WITH EFFECT FROM THE ACADEMIC YEAR 2003 – 2004.

LECTURE PERIODS/ WEEK : 4
UNIVERSITY EXAM : 3 hrs UNIVERSITY EXAM MARKS : 100 70

UNIT - I

OBJECT ORIENTED PROGRAMMING :

Introduction to OOPS – Basic Concepts – Objects and Classes – Concepts O Inheritance, Encapsulation and Polymorphism (Two questions to be set)

UNIT - II

FUNDAMENTALS OF VISUAL BASIC:

What is VB? – Features of VB – VB Editions – Controls – Properties – Events – Methods.

CREATING AN APPLICATION:

Objectives – Tools for Building An Application – The tool box – Project Explorer – the Properties Window – Customising the toolbar – Text Box Control – Different Boxes – Command Button – Check Box – The drive, Director and File List Controls – The Line and shape Controls – The Image Control OLE – Menu Bar – Context Menus – Tool Bars – Tool Box – Project Explorer Window – Properties Window – Object Browser – Form Designer – Code Editor Window – Form Layout Window – Immediate, Locals and watch Windows.

2nd LOOK OUT AT IDE, FORMS AND CONTROLS:

Setting Form Properties – Working with Properties Window – Name – Caption – Picture – The Control Box – Min Button and Max Button – Movable – Border Style - Font Properties – Form Methods – Move Graphic Methods – Show Method – Different Events – Working with a Control – Opening the Code Window.

UNIT III

VARIABLES IN VB:

Declaring Varibles – Data Types – Scope – Module Level – Constants – Conversion - Arrays.

WRITING CODE IN VB

The Code Window – Subroutine – Various control structures in VB – Performing Loops in VB.

WORKING WITH FILES:

The Drive list Box Control – The Dir List Box Control – The File List Box – Types of Files – Working with Files – Sequential File and Random Files – Binary Files.

UNIT IV

MENUS

Building the User Interface – Consistency – Fronts – Usuability – Usability – Menu Convention – Tool Bar Convention.

MULTIPLE DOCUMENT INTERFACE APPLICATIONS

Features of MDI – Active Form Property – Unloading MDI Forms with Query Unload.

DEBUGGING TIPS:

Types of Bugs – The Debugging Methods – Error Handling .

THE COMMON DIALOGUE CONTROL:

The File Open Dialogue Box – Rich Text Box Control.

UNIT V

ACTIVE X:

Introduction to Active X – The OLE 2. The Next Step – OLE Automation.

AN INVOICE PROGRAM:

An Invoicing Application.

DEVELOPING AN APPLICATION:

General Steps involved in any Applications Development Life Cycle – Data Flow Diagrams – Input Requirements – Output Requirements – Developing the Output Format – Creating Tables and Fields – Designing User Interface – Need for MDI Form – Developing the Customer Master Form.

NOTE: QUESTIONS ON WRITING THE [illegible]

REFERENCE BOOKS :

1. 'VISUAL BASIC 6.0N PROGRAMMING' – Content Development Group , - Tata McGraw-Hill Publishing Company Limited – 2002 – New Delhi.
2. INTRODUCTION TO OOP AND VB' - V.K.JAIN – Vikas Publishing House – New Delhi.
3. ' VISUAL BASIC 6' – PAUL SHERIEF – PRENTICE HALL OF INDIA Pvt Ltd – New Delhi.
4. 'TEACH YOURSELF VISUAL BASIC 6' – SCOTT WARNER – Tata McGraw – Hill Publishing Company Ltd. – New Delhi.
5. 'USING VISUAL BASIC 6' – Brain Siler and Jeff Spotts – Pentice Hall of India Limited – New Delhi Eleventh Edition (2002).
Delhi

PRACTICAL – II

VISUAL BASIC AND FINANCIAL ACCOUNTENCY PACKAGES II YEAR COMPUTER APPLICATION SCHEME (TO BE OFFERED FOR THE II B.COM AND II B.A COURSES) (WITH EFFECT FROM THE ACADEMIC YEAR 2003 – 2004)

Practicals Week : 3 periods
University Exam 3 Hrs

Sessional Marks : 10
University Exam Marks : 40

Each student is expected to do at least 10 programs in the VISUAL BASIC PART and at least 5 programs in using an appropriate FINANCIAL ACCOUNTENCY PACKAGE (making a total of 15) and document them in his/her record (suggested list of sample programs is given below). In the University Practical Examination each student has to do one practical either in VISUAL BASIC or in FINANCIAL ACCOUNTENCY using an appropriate package.

SUGGESTED LIST OF PROGRAMS IN VB:

Write a VB program for generating Mathematical Tables.

1. Develop a code in VB for sorting a set of records by using Bubble Sort.
2. Develop a form for simulating simple function in a calculator
3. Develop a code in VB for displaying a given text in different styles, sizes and fonts by using check
   Box controls.
5. Write a program for demonstrating the use of list box and combo box controls.
6. Design and develop a form for processing students results using DAO concepts.
7. Design and develop a form for generating pay slip using DAO concepts.
8. Design and develop a form for performing bank transactions using ADO concepts
9. Design and develop a form for generating electricity bill interactively.
10. Creat three forms and place them under MDI form for manipulation by using main menu.
11. Write a code in VB for demonstrating the following financial functions;
    PV; Nper; FV; NPV; Rate; SLN; DDB; IRR; MIRR; Impt.
12. Design a data report for employee pay slip
13. Demonstrate the use of DB – combo and DB – grid controls.
14. Develop a hospital management system by using ADO concepts.
15. Develop a library management system by using ADO concepts.

Suitable programs in financial accountancy may be adopted depending on the package that is used.

TO BE RETURNED -- II year

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TO BE RETURNED

SYLLABUS

CODE No. 309

SUBJECT : B.Com. (Taxation & Tax Procedure)

YEAR OF EXAMINATION : II Year Exam

PART ~~I~~ / II (Revised Syllabus from 2001-2002)

PAPER V : Sales Tax Laws & Practice

TIME : 3 Hrs

MARKS : 100

Paper-V: Sales Tax Laws and Practice

Unit-I : A.P.G.S.T. Act:- Definitions - Assessing Authority. Business, Casual Trader, Dealer, Declared Goods, Goods, Licence, Miller, Place of Business, Registered Dealer, Retail Dealer. Sale, Tax Total Turnover, Turnover, Wholesale Dealer.

Unit-II : Levy of Tax on Sales and purchases of Goods - Levy of additional tax on turnover - Levy of Concessional tax in respect of component parts - Tax in respect of declared goods - Levy of tax on turnover relating to purchase of certain goods - Stage of levy of taxes in respect of imported and exported goods - Exemption from tax in respect of certain goods - Liability to tax of dealers not observing conditions of licence etc. - Liability of Resident, Principal and his agent to pay tax, collection of tax at check post on goods.

Registration of dealers - submission of return of turnover by dealers (Monthly/Annual Returns) - Assessment of Tax - Payment of Tax - Recovery of tax - appeals and revision.

Unit-III: Maintenance of accounts and records by dealer - Offences and penalities - Refunds.

Powers of Officers.

(PTO)

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2005

Unit- IV: C.S.T. Act - Defintions - Business - Dealer, Declared goods. Goods - Place of business - Registered dealer - Sales price - Turnover.

CST

Unit- V: Inter-State Sales Tax - Liability to tax on Inter-State Sales - Registration of dealers - Determination of turnover.

Levy and Collection of tax penalities.

List of Books

1. Wealth-Tax and Central Sale-Tax Act 1956
   V.P. Gaur and D.B. Narang
   Kalyani Publishers - Ludhiana, New-Delhi, Hyderabad.
2. The mCentral Sales-Tax Act 1956 (Act No.74 of 1948)
   Central Law Agency - Allahabad.
3. Sales and Excise Taxation in India.
   Walter R. Mehler, JR.
   Orient Longman Ltd., Bombay, Madras etc.
4. Agarwal S.K. Law and Practice relting to Central Sales-Tax Act.
   Central Law Agency, Allahabad.
5. Ghosh A.D. ... Sales-Tax in India ... Ranjit Printers and Publishers, Delhi.
6. Sales-Tax Systems in A.P. ... National Council for Applied Economics Research, New-Delhi.

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II year

With effect from the academic year 2010-11

(Syllabus)

SRI VENKATESWARA UNIVERSITY :: TIRUPATI

FOR COURSES WITH COMPUTER COMBINATIONS AND ALL SECOND B.COM COURSES

Part - III.

II YEAR

ENTERPERENEURSHIP

PRNCIPLES AND CONCEPT

Maximum Marks 100
Minimum Marks 35

Unit 1 Entrepreneur:

Concept of Entrepreneur – Functions and classification of Entrepreneurs – Characteristics of Entrepreneur – Nature and importance of Entrepreneur – Entrepreneurs Vs professional manager – Women Entrepreneur

Unit II Entrepreneurship :

Concept of Entrepreneurship – Entrepreneurship and environment – Policies governing Entrepreneurs – Entrepreneurial development programes.

Unit III Institutions for Entrepreneurship development – Entrepreneurial Development training - Entrepreneurship development in other countries.

Unit IV : Promotional Agencies:

Institutions and organizations – Role of consultancy organizations – Role of financial intuitions – Bank Finance of Entrepreneur – Entrepreneurship development, Role of development Financial Institutions.

BOOKS RECOMMENDED :

1. Entrepreneurship Development by Rudra Saibaba, Kalayani Publishers.
2. Entrepreneurship Development by V.V. Subrahmanya Sarma, Himalaya Publishing House
3. Entrepreneurship Development by Vasanta Desai, Telugu Academy.
4. Entrepreneurship of Small Scale Industries MV Deshpande, Telugu Academy.
5. Entrepreneurship Financing of Small Scale Industries G. Balakrishnan,
6. Entrepreneurship Development by Dr. P.C. Saibaba, Telugu Academy.
7. Entrepreneurship Development by Dr. C. Suravinda, Telugu Acedemy.

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SCHEME OF MODEL QUESTION PAPER

Time: 3 Hrs

Maximum Marks : 100
Minimum Marks: 35

Part A: 4 Question out of 8 with 15 marks each 4 x 15 = 60 Marks
Part B : 5 Questions out of 10 5 x 8 = 40 Marks

II Year

Syllabus. 354

B. Com. II year
(Revised from 2009-2010)

Modified syllabus from the academic year 2009-10

ADVANCED ACCOUNTING

Paper : 201
Period : (5 + 1=6 Hours)

Max. Marks: 70+ 30

Objectives:

1. To appraise the students about the application of accounting knowledge in special business activities
2. To impart the skills of preparation of final accounts of non-trading concerns, partnership, organizations
3. To develop the skills of recording of transactions relating to issue of shares and debentures, manually and using computers.

UNIT – I : **Royalties accounts & Hire purchase and installment purchase system.**
Royalties – Preparation of Minimum rent Account, Royalties Account, Short workings Account and Land Lord Account.
Hire Purchase System – Features – Accounting Treatment in the Books of Hire Purchaser and Hire Vendor – Installment Purchase System – Difference between Hire purchase and Installment purchase systems – Accounting Treatment in the books of purchaser and Vendor.

UNIT – II : **Branch Accounts & Insolvency Accounts**
Branch Accounts – Dependent Branch Features – Books of Accounts, Methods of Accounting of dependent branches – Debtors systems, Stock and Debtor system and Recording of transactions relating to branch accounts using computers..
Insolvency Accounts of Individuals – Preparation of Statement of Affairs & Deficiency Account.

UNIT – III : **Accounting of Non-Profit Organizations & Accounts from Incomplete Records:**
Non-Profit entries – Features of non-profit entries – Accounting process – Preparation of summaries – Receipts and payments Account meaning and special features – Procedure for preparation – uses and limitations. Income and Expenditure Account – features – procedure for preparation – preparation of Balance Sheet

Single Entry: Features – books and accounts maintained – Recording of transactions – Ascertainment of Profit – (Statement of Affairs method only)

(P.T.O)

30/07/08

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UNIT – IV: Partnership Accounts:

Legal provisions in the absence of Partnership Deed – Fixed and Fluctuating Capitals – preparation of final accounts – Accounting Treatment of Goodwill and Admission of a partner.

Accounting treatment of Retirement and Death of a Partner – Dissolution of Firm (Excluding Sale to Firm, Company and Amalgamation) – recording of partnership transaction and preparation of final accounts using computers (24 hours)

UNIT – V: Company Accounts

Issue of share as par, Premium and at discount – forfeiture and Reissue of Shares Rights issue (Simple problems) - Recording of Transactions relating to issue of share using computers.

Issue and redemption of Debentures – Redemption out of profits – sinking fund method. Recording of transaction relating to issue and redemption of debentures using computers (Simple Problem)

Suggest Readings:

1. Principles and Practice of Accounting R.L.Gupta & V.K.Gupta Sulthan Chand & Sons.
2. Accountancy – 1 Tulasian TATA Mcgraw Hill Co
3. Accountancy - 1 S.P.Jain & K.L.Narang Kalyani Publishers
4. Financial Accountancy – Dr V.K.Goyal Excel Books
5. Introduction to Accountancy – T.S.Grewal S.Chand and Co
6. Accountancy – 1 - Haneef and Mukherjee Tata Mcgraw Hill Co
7. Advanced Accountancy – Arunlanandam Himalaya publishers
8. Advanced Accountancy – 1 – S.N.Maheswari & V.L.Maheswari Vikash Publishing Co

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IN Commerce (Pass)

Syllabus

II year B.Com

(Revised from 2009-2010)

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II year

Modified syllabus from the academic year 2009-10

BUSINESS STATISTICS

Paper 202
P.P.W: 5(4+1)

Max.Marks : 100 (70+30)

The objective of this paper is to impart knowledge on the application of statistical tools and techniques in business decision-making & use of MS-Excel in interpretation of statistical data.

UNIT 1 : Introduction of Statistics
Meaning, definition, importance and limitations of statistics. Collection of data – Primary and Secondary data – (Sampling – Random-Non Random-Census) – Schedule and questionnaire – Frequency distribution – Tabulation – Diagrammatic and graphic presentation of data using Computers (Excel)

UNIT 2: Measures of Central Tendency.
Definition Objectives and Characteristics of measures of Central Tendency – Types of Averages – Arithmetic Mean, Geometric Mean, Harmonic Mean, Median, Mode, Deciles, Percentiles, Properties of averages and their applications. Calculation of averages using computers.

UNIT 3 : Measures of dispersion and Skewness and Correlations :
Meaning, definitions, Properties of dispersion-Range-Quartile Deviation – Mean Deviation-Standard Deviation – Coefficient of Variation-Skewness definition-Karl Pearson's and Bowley's Measures of skewness-Normal Distribution Calculation of Dispersion and skewness using Computers.

Measures of Relation :
Meaning, definition and use of correlation – Types of correlation-Karlpearson's correlation coefficient – Spearman's Rank correlation-probable error-Calculation of Correlation by Using Computers.

UNIT 4: Analysis of Time Series:
Meaning and utility of time series Analysis – Components of Time series – Measurement of trend and Seasonal Variations – Utility of Decomposition of Time Series – Calculation of trend and seasonal variations using computers.

UNIT 5 : Index Numbers: Meaning, Definition and Importance of Index Numbers – Methods of Construction of Index Numbers – Price Index Numbers – Quantity Index Numbers – Tests of Adequacy of Index Numbers – Deflating Index Numbers – Cost of Index Numbers – Limitation of Index Numbers. Calculation of index numbers using computers.

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Suggested Readings :

1. Business Statistics — Reddy, C.R. Deep Publications, New Delhi.
2. Statistics – Problems and Solutions — Kapoor V.K.
3. Fundamentals of Statistics — Elhance. D.N.
4. Statistical Methods — Gupta S.P
5. Statistics — Gupta B.N.
6. Fundamentals of Statistics — Gupta S.C
7. Statistics – Teory, Methods and Applications. — Sancheti, D.C. & Kapoor V.K.
8. Practical Business Statistics — Croxton & Crowdorv.
9. Statistics and their applications to Commerce — Borddigtion.
10. Statistics Concepts & Applications — Nabendu Pal & Sahadeb Sarkar
11. Business Statistics, An Applied Orientation — P.K. Viswanathan
12. Business Statistics — J.K. Sharma.
13. Business Statistics — Bharat Jhunjhunwala
14. Business Statistics — R.S. Bharadwaj

BUSINESS STATISTICS

(Common for B.Com – Corporate Secretaryship , B.Com – Taxation, B.Com – Office Management & Secretarial Practice, B.Com–Advertising, Sales preparation & Sales Management, B.Com–General & B.Com - Computers Applications.)

II B.Com

Paper : 202 — Practical Model Paper – 2010 April — Max. Marks : 30

Practical written Examination:10 Marks; Practical Record:10 Marks;Viva-voce:10 Marks (Total: 30 Marks)

Practical written Examination (Or) Practical Record Questions

1. Prepare frequency distribution table
2. Prepare a tabulation
3. Prepare a percentage bar diagram and pie diagram
4. Calculate Median by Graphic Method
5. Calculate Mode by Graphic Method
6. Calculate Mean, Median, Mode Quartails, Deciles and Percentage
7. Calculate Mean deviation from Mean
8. Problem on Correlation
9. Prepare fixed base and chain base index numbers
10. Conversion of fixed to chain base and chain base to fixed base?

Viva-voce

1. Define Statistics
2. Primary and Secondary Data
3. Different types of averages
4. Different types of disperson
5. Coefficient of variation
6. Symetrical and asymetrical distribution
7. Probable Error
8. Components of Time Series
9. Price Index Numbers
10. Quantity Index Numbers
11. Consumer Price Index Numbers

CHAIRMAN
BOARD OF STUDIES
IN Commerce (Pass)

(Syllabus) II year

356

II year.

(B.Com General & Taxation)

Modified syllabus from the academic year 2009-10

FINANCIAL SERVICES – BANKING & INSURANCE

(Revised from 2009-2010)

Paper:203 Max.Marks: 70+30

Objective: To impart knowledge on Banking and Insurance concepts and to gain An insight on Financial Services.

UNIT I : Introduction to Financial Services

a. Meaning of Financial Services, Structure of Indian Financial System Importance of Financial system for the economic development. (Financial and Banking system charts)

b. Financial intermediaries and services : Merchant bankers, Mutual funds, Leasing companies, Venture Capital Funds, Forfeiting, Loan Syndication, Factoring, Custodial Services, Depository Services, and Depository Participants. (Documentation).

c. Definition of Bank, Functions of Commercial Banks and Reserve Bank of India. (Forms of various accounts and deposits)

UNIT II : Banking systems and its Regulation

a. Banking systems – Branch banking, Unit Banking, Correspondent banking, Group banking, Deposit banking, Mixed banking and Investment banking – Innovations in Banking – ATMs, E-Banking, Credit cards, Online & Offshore Banking, etc (working and operations)

Regional Rural Banks, Cooperative banks, Micro Finance, Priority Sector Lending, Indigenous banking, Role of NABARD.

UNIT III : Banker and customer, loans and advances :

a. banker and customer definition and their relationship, types of customers and model 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 shlips for withdrawals and deposits, bank statements, etc)

b. Promissory Note and Bills of Exchange and Cheque, differences between them, types of crossing the cheque, payment of cheque and consequences of wrongful dishonor, collection of local and upcountry cheques, responsibilities and liabilities of collecting banker and statutory protection to the collecting banker (Promissory note, B/E. Crossed Cheques – various modes)

c. Types of loans and advances, principles of sound lending policies, credit appraisals of various forms of loans and advances – (Documents required for sanction of loans and advances).

(P.T.O)

Signature of the

money, market, treasury bills market, CDs, CPs, short term bill market, and DFHI, problems and reforms in Indian money markets (CDs, CPs, Treasury Bills)

b. Indian capital market – composition and growth of primary and secondary markets, differences between primary and secondary markets, Stock Exchanges, NSE, OTCEI,
Online Trading and role of SEBI.

Signature of the
Chairman (B.O.S.)
(20...10....Exams)

II year

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(Syllabus)

II year.
B. Com. General

Modified syllabus from the academic year 2009-10

TAXATION

(Revised from 2009-2010)

Paper : 204
Periods per week : 4

Max. Marks : 70 + 30

(Model paper changed on 2010-2011)

Objectives: To equip the students with the working knowledge of both direct and indirect taxes

UNIT – 1 : INTRODUCTION

Taxes – Meaning – Direct and indirect Taxes – Union List – Tax Rates – Blanket Rate Method – Slab Rate Method – Surcharge – Cess – Progressive v/s Regressive Taxes – An Overview of Taxation System in India. Income Tax Act 1961 – Important Definitions – Income – Person – Assesses – Assessment year – Previous year – Residential Status – Incidence of Tax – Agricultural Income – Exemption.

UNIT II: INCOME FROM SALARIES – INCOME FROM HOUSE PROPERTY

Computation of Income under the head 'Salaries' – Different types of Rental Values – Determination of Annual Value of let out House Property – Self occupies Houses – Adjustments out of Annual Rental Value for let Out House Property – Deductions u/s 24 (Simple problems)

UNIT – III : PROFTS AND GAINS OF BUSINESS AND PROFESSION, CAPITAL GAINS, INCOME FROM OTHER SOURCE

Calculation of Income from Business – Calculation of Professional Income of Doctor, Lawyer – Accountant – Gain or Loss on Transfer of capital Assets – Types of Capital Assets – Short Term capital Asset – Long Term Capital Asset – Indexing of Cost of Long Term Capital Asset – Income from other Sources – Assessment of total income of individual – Computation of tax – Income – Preparation of returns of income – self assessment – set-off and carry forward of losses, Computation of taxable income – Deductions Given out of Gross Total Income U/S 80 (Simple problems)

UNIT – IV: WEALTH TAX

Wealth Tax Act 1957 – Charge of Wealth Tax – Valuation Date – Location of Assets – Assets – Meaning – Deemed Assets – Exempted Assets – Net Wealth – Computation of Net Wealth – Valuation of Assets – Return of Wealth and procedure of Assessment – Time Limit for Completion of Assessment (Including Problems) (Simple problems).

Lab Work : Computation of Tax liability

(P.T.O)

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(20...10...Exams)

UNIT - V : SALES TAX & SERVICE TAX

Central Sales Tax – Definitions – Dealer, Declared Goods, Place of Business, Sale, Sale Price, Turnover – Inter State Trade or Commerce – Computation of Taxable Turnover – Assessment and Returns under CST Act (Including Simple Problems0

APVAT Act, 2005 – Statement of Objectives and Reasons – Definitions, Business Casual Trader, Dealer, Input Tax, Output Tax, Place of Business, Tax Invoice, Total Turnover, Turnover Tax – Computation of Taxable Turnover – Registration Procedure (only theory)

References

Direct taxes law & practice – Vinod K Singhania, Kapil Singhania, Taxmann,s
Direct taxes law & practice – Girish Ahuja, Dr. Ravi Gupta, Bharat's
Direct taxes law & Practice – BB Lal - Pearson's
Indirect taxes law & Practice – V.S.Dately, Taxmann's
Indirect taxes – V.Nagaragan Asia Law house
Central Excise ,manual – law& Procedure - P.Verra Reddy, Asia Law house
Andhra Pradesh VAT Act & Rules – N K Acharya, Asia Law House
Elements of Income tax – Dr. P.V.Ramana Rao, Dr A.Sudhakar, Dr S.Krishnaiah Goud, National Publishing House
Income Tax Law & Practice – Gaur & Narang, Kalyani Publishers
Income Tax – Tata Mograw Hill
Income Tax Law and Practice – N.Hariharan, Tata
Income Tax and Central Sales Tax Lal Vashist, Pearson
Direct Taxes : Lal Vashist, pearson.

Signature of the
Chairman (B.O.S.)
(20..10....Exams)

(Syllabus) II year

202 : Business Economics

(R.f. 2011-2012)

Unit - I

Economics: Meaning, Micro-Macro economics, Relationship to other subjects, theories of profit.

Objectives of the firm: Profit maximization, firm's value maximization, sales revenue maximization, size maximization, long-run survival, management utility maximization, satisfying theory.

Unit - II

Demand: Meaning, demand function, determinates of demand, types of demand, elasticities of demand.

Forecasting Demand: Need, survey methods, statistical methods.

Unit -III

Cost Concepts: direct costs, indirect costs, fixed and variable costs, short-run and long-run costs, book costs, sunk costs, incremental costs, marginal costs, etc.

Production function: Production theory, returns to scale, least cost input combinations.

Unit - IV

Pricing: Pricing and output decisions under various market structures and pricing practices.

Books Recommended:

1. Thomas C.R, Maurice S.C and Sarkar S: "Managerial Economics", Mc Graw Hill.
2. Mc Guigan, Moyer R.C, and Harris F.H.D: "Managerial Economics", Thomson.
3. G.S.Gupta: "Managerial Economics", Tata McGraw Hill.

Prof. D.V. RAMANA
CHAIRMAN BOS
MANAGEMENT STUDIES
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TIRUPATI-517 502, A.P.

BBM - IInd year Syllabus.

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II year

203 : Business Statistics

(R.f. 2010-2012)

Unit – I

Introduction: Meaning and definition of statistics, nature and scope of statistics-Importance of statistics in Business.
Collection of Data: Sources of data-Types of data, methods of collection of data-preparation of Questionnaire and Schedule.
Methods of survey: Census Method, Sample method, types of sampling, sampling and non-sampling errors.

Unit - II

Classification and Tabulation: Objects of classification and Tabulation-Types of classification-Types of tables-general rules of classification and tabulation - Frequency distribution-Frequency curves-Class intervals.
Graphic and Diagrammatic Representation of Data: Importance of graphs and diagrams in statistical analysis-different kinds of graphs and diagrams.

Unit - III

Measures of Central Tendency: Mean, Arthimatic mean, Geomentric Mean, Weighted and Harmonic Mean-Median-Mode.
Measures of Variation: Range-Quartile deviation-Mean deviation-Standard deviation-Co-efficient of variation.
Skewness-Moments-Kurtosis: Definition of skewness, measures of skewness, Meaning of Moments, types of moments, difference between skewness and Kurtosis, Measures of Kurtosis.

Unit - IV

Correlation Analysis: Meaning of correlation, Types of correlation, Methods of studying correlation, coefficient of determination.
Regression: Lines of Regression, Regression lines of Yon x, Regression line of X on Y, angle between two regression lines.

Books Recommended:

1. S.C.Gupta & V.K.Kapoor: "Fundamentals of Mathematical statistics"by S.Chand Publications; New Delhi.
2. S.P.Gupta "Statistical Methods", S.Chand Publications, New Delhi.
3. Amir D Aczel and Jangavel Sanderapandian, "Complete Business Statistics" McGraw-Hill.

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Syllabus

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II year

204 : Business Law

(Ref. 2011-2012)

Unit- I

Law of Contract: Definition of contract, nature and essential of contract – Different types of contracts – Offer and acceptance – Consideration – Capacity to contract, free consent, legality of objects – performance of contract – discharge of contract – Quasi contract.

Unit - II

Indemnity and Guarantee contracts: Distinction, kinds of guarantee, rights, liabilities and discharge of surety

Bailment and Pledge: Definition, classification of bailment, Duties and rights of bailor and bailee, Termination of bailment

Contract of Agency: Creation of Agency, classification of Agents, relations of Principal and Agent, Termination of agency.

Unit -III

Sale of goods: Sale in relation to Hire purchase agreements, Barter and Bailment. Conditions and warranties: Meaning, express and implied, Caveat Emptor, rights and duties of seller and buyer.

Law of Partnership: Formation, Registration, Rights and duties of partners, types of partners, dissolution and settlement of accounts.

Unit – IV

Company Law: Definition of company, kinds of companies, formation of a company, Memorandum of Association, Articles of Association, Prospectus, membership, Shares and debentures, Directors and duties, General meetings of shareholders, methods of winding up.

Books Recommended:

1. N.D. Kapoor: "Elements of Mercantile Law" Sultan Clans & Sons, New Delhi.
2. Venkatesan, E.: "Hand Book of Mercantile Law".
3. M.C Kuchhal: "Business Law" Vikas Publisher, New Delhi..

Syllabus

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4

II year

205 : Human Resource Management

(CR f -2011-2012)

Unit – I

Human Resource Management: Concept, nature, evaluation – Human Resource Management Functions, Human Resource Management manager - Job satisfaction – Strategic Human Resource management.

Unit – II

Acquisition: Human Resource Planning – Recruitment – Selection – Placement – Induction – Job Evaluation.

Unit – III

Development: Performance appraisal, methods, errors - Potential appraisal – Career planning and development – Employee training – Management development – Determing T & D needs, Evaluation of T & D programme - Organisation Development.

Unit – IV

Maintenance: Reward and Compensation Management – Grievance and discipline – Quality of Work life and empowerment– Human Resource Information System.

Books Recommended:

1) D E Cenzo Robbins: "Personnel / Human Resource Management", Prentice Hall, of India, New Delhi.
2) Aswathappa: "Human Resources and Personnel Management", Tata McGraw Hill, New Delhi.
3) A. Subba Rao: "Personnel and Human Resource Management", Himalaya Publication House, Mumbai.

BBM - IInd year.
Syllabus II year 581

206 : Marketing Management

(R + 2011 - 2012)

Unit – I

Basic concepts – Definition and functions of marketing – Marketing orientation concept – Concept of consumerism – Consumerism in India – Marketing management, definition and process – Marketing mix – Marketing environment.

Unit – II

Marketing segmentation – Targeting – Marketing strategy – Differentiation strategies – Product positioning – Product decisions – Classification of line, width, product strategies – Packaging – Product life cycle – Pricing decisions – Types of pricing techniques – Pricing strategies.

Unit – II

Concept of consumer behaviour – Buying process – Concept of promotion – Promotional mix – Personal selling – Advertising – Sales promotion techniques – Publicity.

Unit – IV

Distribution – Direct marketing – Indirect marketing – Concept of intermediaries – Distribution strategies – Channel decisions – Marketing information system, concept, components – Market research, scope, process.

Books Recommended:

1. Philip Kotler "Marketing management", Prentice Hall Publications, New Delhi.
2. S.A. Sherlekar "Marketing Management", Himalaya Publications, Mumbai

Prof. D.M. BASSAWA

Syllabus II year 582

207 : Business Finance

(R.f. 2011-2012)

Unit – I

Financial Management: Scope, importance, objectives, and functions - Relationship with other business functions - Sources of short-term and long-term finance - Ration analysis.

Unit – II

Cost of capital: Cost of debt - performance share capital, equity, and convertible debentures - weighted average cost of capital.

Capital structure: Definition, optimum capital structure

Unit – III

Capital Budgeting: significance, traditional and modern methods and their merits, demerits and assumptions.

Unit – IV

Working capital management: Cash receivables and inventory management, estimation of working capital.

Dividend Policy: forms of dividend, dividend policies in practice, buy back of shares.

Books Recommended:

1. M. Pandey: "Fundamentals of Financial Management", Vani Vikas Publishing House, Bombay.
2. Srivastava R., Misra A; "Financial Management", Oxford Publishers.

208: Communication Lab and Viva Voce

The year ending Viva-Voce will examine the students oral, interactive and knowledge competencies in various courses of study of IInd year of the BBM programme. Detailed instructions will be communicated separately. The course carries a marks of 50 marks.

BACHELOR OF COMPUTER APPLIC TIONS (BCA) II YEAR SYLLABUS
EFFECTIVE FPOM THE AC. DEMIC YEAR 2009 - 2010.
BCA 201: INTRODUC TION TO DA A BASE MANAGEMENT SYSTEMS

UNIT – I

Introduction. Database Manager nt Systems - File oriented approach – characteristics of database – DBA - Types of Database syste – Data modelling - Traditional Data modelling – Overall system struct e.

UNIT – II

Relational Database: Relational Databas Manager ent System (RDBMS) – Introduction - RDBMS – terminology - The Relational Data Structure - Relational Data Integrity - Relational Data Manipulation - Codd's ules - Entity – Relationship (ER) modelling – Introduction - E-R model - Compon ts of E-R model - E-R modelling symbols - Database Design for Banking Enterprise.

UNIT – III

Normalisation – Introduction - First Normal Form (1NF) - Second Normal Fo NF) - Third Normal Form (3NF) - Boyce-Codd Normal Form (BCNF) - Fourth Norm n (4NF) - Fifth Normal Form (1NF) - Domain-Key Normal Form (DKNF, Denormalization

UNIT – IV

Structured Query Language (SQL) – Introduction - Characteristics of SQL - Advantages of SQL - SQL data types - SQL literals - SQL operators - Arithmetic Operators - Comparison Operators - Logical Operators - Set Operators - Operator Precedence
Types of SQL commands – DDL, DML, TCL, DCL - Tables – Views – Indexes – Queries and Subqueries - Joins and Unions

UNIT – V

Transaction management and concurrency control – Introduction – Transaction properties – Transaction states – concurrency control – serializability – recoverability – concurrency control schemes – Backup and Recovery – Introduction – Database backups – causes of failures – recovery techniques and facilities – recovery in multi-database systems

TEXT BOOK:

Database management Systems, Alexis Leon and Mathews Leon, Vikas Publications 2002

Unit-1: Chapter 5
Unit-2: Chapters 7, 9
Unit-3: Chapter 11
Unit-4: Chapters 14, 15, 17, 21
Unit-5: Chapters 29, 30

REFERENCE BOOKS:

1. Database System Concepts by Silberschatz, Korth and S.Sudarsanam, McGraw Hill
2. Database Management Systems by Er. V.K. Jain, Dreamtech Press
3. Database Management Systems by Pannerselvam R, Prentice Hall of India, New Delhi
4. A guide to Oracle by John Morrison and Mike Morrison, Galgotia Publishers
5. Modern Database Management Systems by Jeffery A Hoffer, Prescott &

T.T. DEVASTHANAMS, S.V.COLLEGE OF MUSIC & DANCE, TIRUPATI
THREE YEARS B.MUSIC DEGREE & SANGEETHA VISARADA SYLLABUS
3 సంవత్సరముల బి.మ్యూజిక్ డిగ్రీ/సంగీత విశారద టైటిల్ కోర్సు
2011-2012 నుండి నూతన సిలబస్
(గాత్రం, వీణ, వయొలిన్, గోటు వాద్యం (చిత్రవీణ), వేణువు, నాదస్వరము శాఖలు)
రెండవ సంవత్సరం పేపర్-II థియరీ-సంగీత శాస్త్రము (Musicology)
Part - II Theory Paper II - II Year - 3 hours Max. Marks - 100

II Year

1. సోదాహరణముగా తాళదశ ప్రాణములు గూర్చి వ్రాయుము.
2. చాపు తాళములు, మిశ్రచాపు-రకాలు, దేశాది మధ్యాది తాళములు ఉదాహరణలు.
3. సంగీత రచనల లక్షణాలు - తానవర్ణము, కీర్తన, కృతి, కృతి అలంకారికములు.
4. సంగీత వాద్యముల నిర్మాణము, శ్రుతి చేయు విధానము, వాయించు పద్ధతి - వయొలిన్, ఫ్లూటు (వేణువు), మృందంగము.
5. వివిధ కళారూపములందు ఉపయోగించు సంగీత రచనలు - వైదిక గానము, నృత్యము, నృత్యనాటకము, గేయ నాటకము, కథాకాలక్షేపము.
6. సంపూర్ణ, అసంపూర్ణ మేళ పద్ధతి, వివాది మేళములు.
7. సంగీత ఛందస్సు శాస్త్రము.
8. సంగీత లిపి, స్వరపరచు విధానము.
9. వాగ్గేయకారుల జీవిత చరిత్రలు, సంగీత సేవ.

   1. క్షేత్రయ్య 2. భద్రాచల రామదాసు, 3. శ్యామశాస్త్రి, 4. త్యాగరాజు, 5. ముత్తుస్వామి దీక్షితులు, 6. సుబ్బరాయశాస్త్రి, 7. స్వాతితిరునాళ్, 8. పట్నం సుబ్రహ్మణ్యయ్యర్
10. రాగలక్షణాలు:

1. వసంత	2. బౌళి	3. భైరవి	4. కీరవాణి
5. ముఖారి	6. పూర్వీకల్యాణి	7. గౌరీమనోహరి	8. హరికాంభోజి
9. కేదారగౌళ	10. నాట	11. లతాంగి	12. షణ్ముఖ ప్రియ
13. వాచస్పతి	14. హిందోళ	15. రామప్రియ	

11. గాత్ర సాధన గాయక గుణ దోషములు.

K. Devendra Pillai 14-3-14
Dr. K. Devendra Pillai
M.A., Ph.D
H.O.D. Dept. of Bharathanatyam,
S.V. College of Music & Dance,
Board of Studies Chairman,
(Performing Arts) PASS
S.V. University, TIRUPATI - 517 502.

Dr. K. Devendra Pillai,
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Board of Studies Chairman,
(Performing Arts)
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T.T. DEVASTHANAMS, S.V.COLLEGE OF MUSIC & DANCE, TIRUPATI

THREE YEARS B. DANCE DEGREE/ NATYA VISARADA REVISED SYLLABUS

3 సంవత్సరముల బి.డ్యాన్స్ డిగ్రీ/నాట్య విశారద కోర్సుల నూతన సిలబస్ 2011-2012 నుండి

రెండవ సంవత్సరము పార్టు-II పేపర్-II నాట్య సిద్ధాంతము - నాట్య చరిత్ర

II Year - Part - II, Paper-II Theory & History of Bharathanatyam - 3 hours Max. Marks - 100

భరతనాట్యము

1. నాట్యము యొక్క గొప్పతనము, నాట్యము పుట్టుక - వివిధ కథనాలు.
2. చతుర్విధ అభినయములు.
3. రంగపూజ.
4. విభావ, అనుభావ, సాత్త్విక భావ, సంచారి భావములు - సోదాహరణ వివరణ.
5. నవరసములు - స్థాయి భావములు - వాని సంచారిభావములు - దశావస్థలు.
6. 35 తాళములు ఏర్పడు పద్ధతి, దేశాది మధ్యాది తాళములు, చాపుతాళములు అందలి రకములు, షడంగములు.
7. భరతనాట్యమునందు ఉపయోగించు వాద్యములు - వివరణ.
8. నాయికా, నాయక బేధాలు - లక్షణములు. స్వీయాది బేధముల - అష్టవిధ నాయికలు.
9. భరతనాట్య చరిత్ర అభివృద్ధి క్రమము.
10. ప్రస్తుత భరతనాట్య ప్రదర్శనలోని అంశముల అమరిక - అందలి నిగూఢ భావము.
11. అరంగ్రేటం గూర్చి వివరించి, అరంగేట్రమునకు కావలసిన అంశములను వివరించుము.
12. భరతనాట్య రంగంలో ప్రఖ్యాతి గాంచిన వారి జీవిత చరిత్రలు.

    1. శ్రీమతి రుక్మిణీదేవి 2. శ్రీ ఇ.కృష్ణయ్యర్
    3. తంజూవూరు సోదరులు 4. శ్రీ ఉదయశంకర్

K. Devendra Pillai 14-3-14

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(414-SP)

II year

T.T. DEVASTHANAMS, S.V.COLLEGE OF MUSIC & DANCE, TIRUPATI

TWO YEARS SANGEETHA PRAVEENA TITLE COURSE EXAMINATIONS

Revised Syllabus w.e.f. 2011-2012

2 సంవత్సరముల సంగీత ప్రవీణ టైటిల్ కోర్సు నూతన సిలబస్ 2011-2012 నుండి

(గాత్రం, వీణ, వయొలిన్, గోటు వాద్యం (చిత్రవీణ), వేణువు, నాదస్వరము శాఖలు)

రెండవ సంవత్సరం పార్టు-I పేపర్-II - థియరీ-సంగీత శాస్త్రము (Musicology) మార్కులు-100

PART - I - II YEAR - THEORY - PAPER - II, Maximum Marks: 100

1. రాగలక్షణములు - 20

1. గౌళిపంతు	2. కాఫీ	3. భూపాలం	4. కల్గడ
5. నవరసకన్నడ	6. బిందుమాలిని	7. కన్నడగౌళ	8. అభేరి
9. పూర్ణచంద్రిక	10. లలిత	11. కళ్యాణ వసంతం	12. చింతామణి
13. మణిరంగు	14. సరస్వతి మనోహరి	15. ద్విజావంతి	16. సామ
17. కురంజి	18. వరాళి	19. నాటకురంజి	20. సారమతి

2. త్యాగరాజుకు పూర్వీకులు, సమకాలీనులు, త్యాగరాజు అనంత వాగ్గేయకారులు సంగీతమునకు చేసిన సేవలు.
3. దేవాలయముల యందు సంగీతము.
4. గ్రామ మూర్ఛన జాతి పద్ధతి. షడ్జ, మధ్యమ, గాంధార గ్రామముల గూర్చి వ్రాయుము.
5. జనకజన్య పద్ధతి మేళ పద్ధతి.
6. గ్రహభేదము, సంగీతములో దాని ప్రాముఖ్యత.
7. వీణ పుట్టుక - క్రమ పరిణామం.
8. వివిధ కాలములో సంగీతంలో ఏర్పడిన విశేషాలు.
9. ప్రాచీన మధ్యయుగములందు రచించబడిన కొన్ని గ్రంథముల సారాంశము సంగ్రహముగా
   1. సంగీత రత్నాకరం 2. స్వరమేళకళానిధి 3. చతుర్దండి ప్రకాశిక
   4. సంగీత సారామృతం 5. సంగీత పారిజాతం
10. శాస్త్రీయ కర్ణాటక సంగీత కచ్చేరీలలో ఉపయోగించు ముఖ్యమైన రెండు లయవాద్యముల గూర్చి వ్రాయుము మరియు రెండు ఉపతాళ వాద్యములు నిర్మాణము, వాయించు విధానము, పద్ధతులు.

T.T. DEVASTHANAMS, S.V.COLLEGE OF MUSIC & DANCE, TIRUPATI

2 సంవత్సరముల సంగీత ప్రవీణ టైటిల్ కోర్సు నూతన సిలబస్ 2011-2012 నుండి

(గాత్రం, వీణ, వయొలిన్, గోటు వాద్యం (చిత్రవీణ), వేణువు, నాదస్వరము శాఖలు)

రెండవ సంవత్సరం పార్టు-I పేపర్-III - సంగీత శాస్త్రము (Musicology) మార్కులు-100

PART - I - II YEAR - THEORY - PAPER - III, Maximum Marks: 100

గేయనాటకములు (OPERA)

1. శ్రీ త్యాగరాజస్వామి నౌకా చరిత్రము (గేయ నాటకం) - పూర్తి విశేషాంశాలు
2. ప్రహ్లాద భక్త విజయం గేయ నాటకం - పూర్తి విశేషాంశాలు

K. Devendra Pillai 12-3-14

Dr. K. Devendra Pillai.
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415-SP
II Year

T.T. DEVASTHANAMS, S.V.COLLEGE OF MUSIC & DANCE, TIRUPATI
TWO YEARS SANGEETHA PRAVEENA TITLE COURSE EXAMINATIONS
Revised Syllabus w.e.f. 2011-2012
2 సంవత్సరముల సంగీత ప్రవీణ టైటిల్ కోర్సు నూతన సిలబస్ 2011-2012 నుండి
(గాత్రం, వీణ, వయొలిన్, గోటు వాద్యం (చిత్రవీణ), వేణువు, నాదస్వరము శాఖలు)
రెండవ సంవత్సరం పార్టు-I పేపర్-III - సంగీత శాస్త్రము (Musicology) మార్కులు-100
PART - I - II YEAR - THEORY - PAPER - III, Maximum Marks: 100
గేయనాటకములు (OPERA)

1. శ్రీ త్యాగరాజస్వామి నౌకా చరిత్రము (గేయ నాటకం) - పూర్తి విశేషాంశాలు
2. ప్రహ్లాద భక్త విజయం గేయ నాటకం - పూర్తి విశేషాంశాలు

ఆకర గ్రంథాలు: (Reference Books)
(సంగీత విశారద/ బి.మ్యూజిక్/ సంగీత ప్రవీణ కోర్సుల వారికి)

ప్రాచీన గ్రంథాలు:

1. నాట్యశాస్త్రము - భరతుడు
2. దత్తిలము - దత్తిలముని
3. సంగీత సుధ - గోవిందాచార్య
4. సంగీత సారామృత - తులజ
5. సంగీత రత్నాకరము - సారంగదేవ
6. సంగీత సమయసార - పార్శ్వదేవ
7. చతుర్దండి ప్రకాశిక - వేంకటమఖి
8. సంగ్రహ చూడామణి - గోవింద దీక్షిత
9. సంగీత పారిజాత - అహోబిల
10. సంగీత మకరందం - నారద

ఇతర సంప్రదాయ గ్రంథములు:

11. సంగీత సాంప్రదాయ ప్రదర్శిని - ఆంధ్రప్రదేశ్ నాటక అకాడమీ ప్రచురణలు (1,2,3,4 భాగాలు)
12. సంగీత సౌరభము - శ్రీపాద పినాకపాణి, తి.తి.దే. ప్రచురణలు (1,2,3,4 భాగాలు)
13. సంగీత శాస్త్రసారము - శ్రీ యస్.ఆర్.జానకీరామన్ (1,2 భాగాలు)
14. సంగీత స్వరప్రస్తార సాగరము - నాదముని పంతతర్ - 1962
15. గానకళా బోధిని - శ్రీ యన్.పి.పార్థసారధి దంపతులు
16. సంగీత శాస్త్ర సంగ్రహము - పి.కె.ఇంద్రాణి
17. రాగలక్షణ సంగ్రహము - డా॥ నూకల చినసత్యనారాయణ
18. సంగీత కళాప్రదర్శిని - అలిపిరాల సత్యనారాయణ (1,2,3,4 భాగాలు)
19. South Indian Music - Prof. P. Sambamurthy (1, 2, 3, 4 Volumes)
20. Great Composers - Prof. P. Sambamurthy
21. Nowkacharitham - Prof. P. Sambamurthy
22. Prahalada Bhakthavijayam - Prof. P. Sambamurthy (1,2,3,4 volumes)
23. మృదంగ తత్త్వము - ధర్మాల రామమూర్తి.
24. లయ వాద్యములు - ప్రొ॥ పి.సాంబమూర్తి
25. సంగీత సౌరభము - 4 వాల్యుములు - డా॥ పాద పినాకపాణి
26. మనోధర్మ సంగీతము
27. రాగలక్షణము, సంగీత సుధ డా॥ నూకల చిన్న సత్యనారాయణ, ఆధునిక లక్షణకారులు, విద్వాంసులచే అనేక నూతన గ్రంథములు మరియు
28. భారతీయ సంగీత శాస్త్రము - ఆదినారాయణీయము - శ్రీ ఆదినారాయణ రావు.

Music Academy, Chennai Journals, Souvernirs other publications (old & new)
Krishnagnana Sabha, (old & new) Sovernirs
'SHANUMUKHA' Bombay Souvenir (old & new)
'PERCUSSIVE ARTS CENTRE', Bangalores Souvenirs
'SHRITHI' Magazines
'Layam' Magazines
Ganakala Magazines and other latest magazines, books.

K. Devendra Pillai 14-3-14
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71/72

II year (531-NP)

T.T. DEVASTHANAMS, S.V.COLLEGE OF MUSIC & DANCE, TIRUPATI
TWO YEARS NATYA PRAVEENA TITLE COURSE EXAMINATIONS
Revised Syllabus w.e.f. 2011-2012
2 సంవత్సరముల నాట్య ప్రవీణ టైటిల్ కోర్సు నూతన సిలబస్ 2011-2012 నుండి
రెండవ సంవత్సరం పార్టు-I పేపర్-II - నాట్య సిద్ధాంతం మార్కులు-100
PART - I - II YEAR - NATYA THEORY - PAPER - II, Maximum Marks: 100
భరతనాట్యము

అభినయము - అందలి రకములు విపుల వివరణ.
భావములు - రకములు.
నవరసములు - స్థాయి భావములతో.
భారతరస ప్రకారణము గూర్చి వివరణ.
నాయికా నాయకుల గూర్చి విపుల వివరణ.
భాగవతములోని శ్రీ కృష్ణుని రాసక్రీడల గూర్చి వివరణ.
కుమార సంభవంలోని శివపార్వతుల నృత్య విశేషములు.
అన్నమాచార్య కీర్తనలు - క్షేత్రయ్య పదముల మధ్య సంబంధము - తులనాత్మక అధ్యయనము.
నీవు నేర్చుకున్న పదమునందలి నాయికను నిరూపించి, ఎట్లు అభినయింతువో వివరించుట.

- 79 -

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K. Devendra Pillai 14-3-14

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1255

B.A. Oriental Learnings Degree Exams

~~ఇంటర్మీడియట్ రెండవ సంవత్సరం~~ II year

పాఠ్యప్రణాళిక సిలబస్

పేపర్ - 2 History

(2010-2011 విద్యాసంవత్సరం నుంచి అమలు)

యూనిట్ - I: భౌగోళిక పరిశోధనలు (10 పీరియడ్లు)

భౌగోళిక పరిశోధనలకు దారి తీసిన పరిస్థితులు - పోర్చుగీసు నావికుల పరిశోధనలు - కొలంబస్ అమెరికా ఖండం కనిపెట్టుట - భౌగోళిక ఆక్రమణలు, భౌగోళిక పరిశోధనల ఫలితాలు - ఇతర ఫలితాలు యుద్ధాలకు దారితీసిన పోటీ

యూనిట్ - II: యూరప్‌లో సాంస్కృతిక పునరుజ్జీవనం (10 పీరియడ్లు)

సాంస్కృతిక పునరుజ్జీవనానికి దారితీసిన పరిస్థితులు - ఐరోపాలో సాంస్కృతిక పునరుజ్జీవనం, సాహిత్యం, కళలు, శిల్పకళ, సంగీతం

యూనిట్ - III: మతసంస్కరణోద్యమం (8 పీరియడ్లు)

పోప్‌ల పతనం - రాజ్యం, మతం - జాతీయరాజ్యాల ఆవిర్భావం - లౌకిక బానాల ఆవిర్భావం - చర్చివ్యతిరేక ఉద్యమాలు. ఇంగ్లాండ్‌లో మతసంస్కరణోద్యమం - ప్రతిమతసంస్కరణోద్యమం, ట్రెంట్ పరిషత్ (1545-63), జీసస్ సమాజం - ఇగ్నేయేషన్/లయోలా, సెయింట్ ఫ్రాన్సిస్ జేవియర్ (1506-1552)

యూనిట్ - IV: ఐరోపాలో జాతీయ రాజ్యాల ఆవిర్భావం (10 పీరియడ్లు)

ఐరోపాలో మొదటి జాతీయ రాజ్యం - రాజరిక నిరంకుశత్వం - రాజరిక అధికారంపై పరిమితులు - నమూనా పార్లమెంట్ (1295), ట్యూడర్ వంశ రాజులు - ఫ్రాన్స్‌లో బోర్బన్‌ల పాలన - స్పెయిన్‌లో ప్రాజ్ఞ నిరంకుశత్వం - ఆస్ట్రియాలో హాబ్స్‌బర్గ్ రాజులు - రష్యాలో పీటర్ ది గ్రేట్, (1689-1725), పీటర్ కాలంలో పాశ్చాత్యీకరణ - విదేశీ విధానం - రెండవ క్యాథరిన్ - (ది గ్రేట్) టర్క్‌లతో యుద్ధాలు, ప్రష్యాలో ఫ్రెడరిక్ ది గ్రేట్.

యూనిట్ - V: అమెరికా స్వాతంత్ర్య సమరం (1776) (8 పీరియడ్లు)

13 వలసల స్థాపన - బ్రిటీష్ వాణిజ్యవిధానం - వాణిజ్య నిబంధనల అమలు - బోస్టన్ టీ పార్టీ - మొదటి ఖండాంతర సమావేశం (1774) - లెగ్జింటన్‌లో విభేదాలు - యుద్ధానికి దారితీసిన పరిస్థితులు, స్వాతంత్ర్య ప్రకటన (జూలై 4, 1776) యుద్ధ గమనం, ఫలితాలు.

యూనిట్ - VI: ఫ్రెంచి విప్లవం (1789) (10 పీరియడ్లు)

కారణాలు - రాజకీయ కారణాలు, సామాజిక కారణాలు, ఆర్థిక కారణాలు, మత కారణాలు, తత్వవేత్తల ప్రభావం, అమెరికా విప్లవ ప్రభావం - రాజాల పాత్ర - విప్లవం తీరు - ఫలితాలు - మొదటి కాన్సులేట్

నెపోలియన్ బోనాపార్టే (1799-1814). కాంకర్డాట్. బ్యాంక్ ఆఫ్ ఫ్రాన్స్, పబ్లిక్ వర్క్స్ - నూతన విద్యావిధానం - లీజియన్ ఆఫ్ హానర్ - నెపోలియన్ యుద్ధాలు - కేంద్రీకృత పరిపాలన - నెపోలియన్ యుగం - ప్రాధాన్యత - వియన్నా కాంగ్రెస్ (1815) - మెటర్నిక్ పాత్ర

యూనిట్ - VII: పారిశ్రామిక విప్లవం (8 పీరియడ్లు)

పారిశ్రామిక విప్లవం ఆవిర్భావం - అభివృద్ధి, ఆవిరి యంత్రం కనుక్కోవడం బ్రిటన్‌లో ఫ్యాక్టరీ విధానం - రవాణా, ప్రసార రంగాలలో విప్లవం - ప్రభావం - పారిశ్రామిక విప్లవం ఫలితాలు

యూనిట్ - VIII: ఐరోపాలో జాతీయవాదం (8 పీరియడ్లు)

ఇటలీ ఏకీకరణ - ఇటలీలో జాతీయవాదం - జోసఫ్ మాజిని (1805-72) - గారిబాల్డి (1807-1862) పాత్ర "యంగ్ ఇటలీ" ఉద్యమం - 1848 విప్లవం - కవూర్ (1810-61) ఇటలీతో వెనీస్ విలీనం (1866) - రోమ్‌నగర్ విముక్తి (1870)

జర్మనీ ఏకీకరణ : జాతీయవాదం ఆవిర్భావం - జొవెల్లరిన్ సుంకాలు - ఫ్రాన్స్‌లో 1848 విప్లవం - విప్లవం - విఫలం, మొదటి విలియం రాజు - బిస్మార్క్, బిస్మార్క్ రక్తపాత విధానం - డెన్మార్క్‌తో యుద్ధం (1864) ఆస్ట్రియా - ప్రష్యా యుద్ధం 1866 - ఫ్రాంక్ ఫర్ట్ సంధి, 1871 ఫ్రాన్స్ - ప్రష్యా యుద్ధం (1870)

యూనిట్ - IX: చైనా, జపాన్‌లో జాతీయ వాదం (9 పీరియడ్లు)

చైనాలో జాతీయవాదం - నల్లమందు యుద్ధాలు, నాన్‌కింగ్ సంధి - ఇంగ్లాండ్ - జపాన్ సంధి - చైనాలో సంస్కరణ ఉద్యమాలు - డా॥ సన్ - ఎట్ - సేన్, చైనా విప్లవం (1949) - జపాన్ జాగృతి - కమడోర్ పెర్రి రాయబారం -- మెయిజీ పునరుద్ధరణ - జపాన్ ఆంతరంగిక పునర్నిర్మాణం, జపాన్‌లో పాశ్చాత్యీకరణ - మన్రో సిద్ధాంతం - నౌకా స్థావరంపై జపాన్ దాడి, జపాన్, అమెరికా సంయుక్త రాష్ట్రాలు - పేరల్ - నౌకాస్థావరంపై జపాన్‌దాడి అమెరికా సంయుక్త రాష్ట్రాలతో యుద్ధం - జపాన్ ధ్వంసం - అమెరికా సంయుక్త రాష్ట్రాలు సంధి.

యూనిట్ - X: రష్యా విప్లవం (12 పీరియడ్లు)

నిరంకుశులైన జార్ చక్రవర్తుల నిరంకుశత్వం - రెండవ అలెగ్జాండర్ (1855-1881) - మూడవ అలెగ్జాండర్ (1881-1894) ప్రజావ్యతిరేక పాలన - పారిశ్రామికీకరణ - జార్ రెండవ నికోలస్ పాలన - (1894-1917) - 1905 రష్యా విప్లవం - రెండవ నికోలస్ పతనం (మార్చి 1917) నికోలాయ్ లెనిన్ (1870-1924)బోల్షివిక్ విప్లవం (నవంబర్ 7, 1917)

యూనిట్ - XI: మొదటి ప్రపంచ యుద్ధం (1914-1918) (8 పీరియడ్లు)

కారణాలు, ఫలితాలు (1914-1918) - వర్సైల్స్ సంధి (1919) - నానాజాతి సమితి (1920)

యూనిట్ - XII: ముస్తఫా కెమాల్ పాషా (10 పీరియడ్లు)

ముస్తఫాకెమాల్ పాషా - ఆటోమన్ సామ్రాజ్యం క్షీణత - సేవర్స్ సంధి, ఆసియామైనర్ - కెమాల్ సంస్కరణలు, టర్కీలో ఆధునీకీకరణ

యూనిట్ - XIII: ఫాసిజం, నాజిజం (8 పీరియడ్లు)

ఫాసిజం దాని కారణాలు - ముస్సోలినీ విజృంభణ - అతని సాధనాలు

జర్మనీలో నాజిజం : హిట్లర్ ఆధ్వర్యంలో నాజీల విజృంభణ - అంతరంగిక విధానం, విదేశీ విధానం - సానాజాతి సమితి

యూనిట్ - XIV: రెండవ ప్రపంచ యుద్ధం (1739-1945) (10 పీరియడ్లు)

కారణాలు - జర్మనీ విదేశీవిధానం - రెండవ ప్రపంచ యుద్ధంలో అమెరికా ప్రవేశం - త్రైరాజ్య కూటమి ఓటమి. ఐక్యరాజ్య సమితి స్థాపన అక్టోబర్ 24, 1945

యూనిట్ - XV: ఆధునిక ప్రపంచంలో శాస్త్ర, సాంకేతిక పరిజ్ఞానం (10 పీరియడ్లు)

విజ్ఞానశాస్త్రంలో అభివృద్ధి, సాంకేతిక పరిజ్ఞానం, కళలు, సాహిత్యం - వివిధ రకాల నూతన శక్తి వనరులు - రవాణా, సమాచారరంగం సమాచార, రంగంలో పరిజ్ఞానం, సమకాలీన ప్రపంచంలో సాహిత్యం, కళలు, మాస్ మీడియా, వార్తా పత్రికలు సినిమా, టెలివిజన్, కంప్యూటర్స్.

ముఖ్యమైన పటాలు (5 పీరియడ్లు)

1. అమెరికాలోని 13 వలస ప్రాంతాలు
2. జర్మనీ ఏకీకరణ
3. ఇటలీ ఏకీకరణ