



SKR & SKR GOVT. COLLEGE FOR WOMEN, KADAPA.
(AUTONOMOUS)
Reaccredited with 'B' Grade by NAAC
Y.S.R. Kadapa District – 516001, Andhra Pradesh, India.
Affiliated to Yogi Vemana University



DEPARTMENT OF : English

Semester-I

Syllabus: 2017-18

1. Every unit shall state the objectives and expected deliverables.
2. Every lesson shall have
 - i) Questions on subject comprehension, paragraph, short note, single sentence answer types
 - ii) Exercises on vocabulary, syntax, and pronunciation
 - iii) Language exercises shall include exercises in paraphrasing, note-making and report writing wherever possible
 - iv) Pre-reading and post-reading activities.

Unit – I

PROSE

1. A.P. J. Abdul Kalam: The Knowledge Society (from Ignited Minds)
2. Ngugi Wa Thiong'o: The Language of African Literature (from Decolonizing the Mind)

Unit – II

POETRY

1. Robert Frost: The Road Not Taken
2. Nissim Ezekiel: Night of the Scorpion

Unit – III

SHORT STORY

1. Mulk Raj Anand : The Lost Child
2. Henry Lawson: The Loaded Dog

Unit – IV

ONE - ACT PLAY

William Shakespeare: The Merchant of Venice (Court Scene – Act IV Scene -1)

Unit – V

LANGUAGE ACTIVITY

1. Classroom and Laboratory Activities
 - i. Single Sentence Answer Questions on Vocabulary (spelling), sound (pronunciation), sense (meaning), and syntax (usage)
2. Classroom Activity
 - i. Exercises in Articles and Prepositions
 - ii. Exercises in Tenses, Interrogatives and Question tags



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DEPARTMENT OF : English

Semester-II

Syllabus: 2017-18

Unit-I Prose

1. J. B. S Haldane: The Scientific Point of View
2. A. G. Gardiner: On Shaking Hands

Unit-II Poetry

1. John Keats: Ode to Autumn
2. Kishwar Naheed : I am not that Woman (from An Anthology of Commonwealth Poetry edited by C.D. Narasimhaiah)

Unit-III Short Story

1. Ruskin Bond : The Boy Who Broke the Bank
2. R. K. Narayan : Half a Rupee Worth

Unit-IV

ONE ACT PLAY

1. Anton Chekhov: The Proposal

Unit-V

LANGUAGE ACTIVITY

1. Classroom and Laboratory Activities
 - i. Transformation of Sentences (Voice, Speech and Degrees)
 - ii. Dialogue Practice (Oral)
 - iii. Listening Comprehension
2. Classroom Activity
 - i. Guided Composition
 - ii. Dialogue Writing
 - iii. Reading Comprehension



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DEPARTMENT OF TELUGU
SYLLABUS 2017-2018
GENERAL TELUGU
COMMON FOR BA/B.COM/B.SC
Semester-I

I. PRACHEENA KAVITWAM:

A. NANNAYA: Gangashanthanulakatha

Andramahabharatham – adiparvam –nalgavaaswasam - (120-165)

“naravarudagushanthanunaku” nundi “divyabhushanalamkrutha” varaku

B. THIKKANA: Dropadiparidevanam

Andhramahabharatham – udyogaparvamtrutiyaswasam – (100 -125)

“dhrmanandunupalukulu” nundi ani yuradilagabalikina” varaku.

II. ADHUNIKA KAVITWAM:

A. Gurajada –Kanyaka

B. SreeSree - Deshacharitralu

III. KADHANIKALU:

A. Papinenisivashankar -Chinthalatopu.

B. Bandinarayanaswami – Savukudu.

IV. VYAKARANAM:

A. SANDHULU: Savarnadeerga, guna,vruddi, yanadesha, trika, ga.sa.da.da.vadesha, rugagama, tugagama, amreditha, athwa, ithwa, uthwa, sandhulu.

B. SAMASALU: Tathtpurusha, karmadaaraya, dvamdva, dvigu, bahuvreehee.

C. AKSHARADOSHALU: Doshalusarididdisaadhurupalurayali.

V. VIDYARTI KRUTYALU:

SreeSreekavithadeshacharitalakusambandichinaperadilannusekarinchandi

Mutyalasaraaluchandasularachanalucheseprayatnamcheyandi.

AanaatiDroupadiparisthithiprasthuthasamaajaparisthithikianvainchandi

(Painasuchinchinavidyaarthikruthyaalukonni vudaaharanalumaatrame,
ituvantivimarinniprayatninchagalaru).



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DEPARTMENT OF TELUGU
SYLLABUS 2017-2018
GENERAL TELUGU
COMMON FOR BA/B.COM/B.SC
SEMESTER - II

I. PRAACHEENA KAVITWAM:

- A. Durjati – Saayujyamu
SrikalahasthiMahatyam – Dwithiyaaswaasam (109 -139)
- B. Chemakura Venkatakavi – Subhadra Parinayam
Vijaya vilaasam – moodavaaswaasam (93 -139)

II. AADUNIKA KAVITWAM:

- A. Jaashuva – Piradousilekha (Aasulthan... nundi “Anuchulikinchē” varaku)
- B. Geddu Satyam – Chettukandika 1 – 25 padyaalu (KavithaaVaijayanthiPadyaSankalanamNundi)

III. KATHANIKALU:

- A. KethuViswanaathareddy - NammukunnaNela
- B. MuppalaRanganayakamma – AmmakuAadivaaramleda?

IV. NAVALA:

Dr. V.R. Raasaani – Bathukaata

V. VIDYAARTHI KRUTHYALU:

1. Subhadra VivaahaAachaarulu – EenaatiVivaahaAachaaruluThulanaathmakangaPariseelinchaali.
2. MeekuNachina Oka Chettukusambandinchinapurthisamaacharaannisekarinchandi.
3. Mee inti nepadyamloAmmalakuAadivaaramundoleedookasangatanaaadhaarangakatharaayandi.
4. NammukunnanelakathaloniRaithulagaadhanuchitraalathodinapatrikalaadhaarangasekarinchandi.



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GENERAL TELUGU
COMMON FOR BA/B.COM/B.SC
SEMESTER - III

I- PRAACHINA KAVITHWAM:

1. Pothana – Vaamanaavatharam
2. AandhraMahabagavatham 8 vaskandam (582 – 621)
3. Koravigoparaju – SalivaahanaVijayam
4. SimhaasanaDwaathrimsika – Iva Aaswaasam (115 -165)

II- AADHUNIKA KAVITHWAM:

1. Kusuma Dharmanna – HarijanaSathakamu (1 -20)
2. Rayaprolu Subbarao – SankraanthiSambaram – Misramanjarilonchi – “AiduLakshalaAravaDedulu” nundi “Mangalam SankraanthiSaamethi” varaku.

III- GADYA BHAAGAM (VYAASA SAMPUTI)

1. AcharyaGujjarlamudiKrupaachaari – Telugu Bhasha.
2. AcharyaRachapalyam Chandrasekhar Reddy VyakthithwaVikasam.

IV- CHANDASSU – ALANKAARAALU

1. Handassu – Uthpalamaala, Champakamaala, Saardulam, Mathebbam, Kandam, Tetageethi, Aataveladi.
2. Alankaaraalu – Upama, Rupaka, Uthpreksha, Swabhavokthi, Athisayokthi, Ardaantharanyaasa, Drustaantha, Sabdaalankaaralu.

V- VIDYAARTHI KRUTHAALU:

1. Telugu Vaaralu, Thidulu, Nakshathralu, SamvacharalaPerluNerchukondi.
2. Meevyakthitwaannimeeruyevidangameruguparuchukuntunnarovyasamrayandi.
3. Anthyanupraasaalankaramlookakavithanusonthangarayandi.



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DEPARTMENT OF HINDI
SYLLABUS 2017-2018
GENERAL HINDI
COMMON FOR BA/B.COM/B.SC
Semester -I

I – Gadyasandesh(Prose)

1. Sanskruthi Aur Sahitya Ka Paraspar Sambaundh
2. Bharath ek Hai
3. H.I.V (AIDS)
4. Katha Lok (Short Story)

II- Katha Lok (Short Story)

1. Zariya
2. BhookHadthal
3. Parmathma Ka Kutta

III- Vyakaran (Grammar)

1. Karyalayeen Hindi (Changing Administrative Terminology Hindi to English and English to Hindi)

IV- Vyakaran (Grammar)

1. AppnevakyonmeishabdhProyogkaryalayi Hindi (Hindi se English)
Sndivichedhi

V- Patralekhan (Letter writing)

1. Aavedan Patra



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DEPARTMENT OF HINDI
SYLLABUS 2017-2018
GENERAL HINDI
COMMON FOR BA/B.COM/B.SC
Semester -II

I- Gadyasandesh (Prose)

1. Sahitya ki Manatta
2. Sachi veeratha
3. Mitratha

II- Kathalok (Short Story)

1. Mukthidhan
2. Goodad Sai
3. UsneKahatha

III- Vyakaran (Grammar)

1. Ling, Vachan, Kal, Vachya, VakyonkiShuddi

IV- Vyakaran (Grammar)

1. ShabdhPrayug
2. Karyalayeen Hindi (ParibhashikShabdavali English se Hindi)
3. VilomeShabdh.

V- Patra lekhan (Letter Writing)

1. VyakthigathAurSarkari Patra.



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GENERAL HINDI
COMMON FOR BA/B.COM/B.SC
Semester -III

I- Kavyadeep 9 Ancient and Modern Poetry)

1. Kabardas-sakhee (1 to 10)
2. Soordas ka Bal Varnan
3. Mathra Bhoomi
4. ThodthiPaltav
5. GeethFarosh

II- Hindi Sabitya Ka Ethihis (History of Hindi Literature)

1. Bhakthikal

Gnanasrayi- Kabeer

Pvemasrayi-Jayasee

III- SadhavanNibandh (General Essays)

1. Samachar Patra
2. BearikiSamasya
3. Computer
4. ParyavaranAurPradooshan
5. Sahitya AurSamaj

IV- Anuvaad (Translation)

1. AnuvaadAbyas English se Hindi (Four or Five Lines)

V- Prayojanmoolak Hindi (Functional Hindi)

1. Paripalna
2. Gnapan
3. Soochana.



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DEPARTMENT OF URDU
SYLLABUS 2017-2018
DEPARTMENT OF: URDU

PART- 1 (B) URDU
SEMESTER - I
(Common to B. A/B. Com/B. Sc)

Paper I : POETRY

UNIT-I

1. GHAZAL

MEER –Uti ho gayeen sab tadbeeren

2. NAZM

IQBAL –NayaShivalah

UNIT –II

1. GHAZAL

GHALIB –Ye nathihamarikhismat

2. NAZM

Akbar Ilahabadi –Nasihath-e-Aqlaaqi

UNIT-III

1. GHAZAL

HALI –Uskejate hi ye kya ho gayeegharkisurat

2. NAZM

FAIZ –Mujhsepehlisimuhabbatmerimehboob

UNIT-IV

1. GHAZAL

YASEER KURNULI–Rafeeq-o-hamnafas

2. NAZM

AKHTARUL IMAAN –Khabr

UNIT-V

1. GHAZAL

RAHI FIDAYI–Apnitareeqkeraqimkeliye

2. NAZM

IQBAL QUSRO –Izn-e-Aam

Prescribed book: MUNTAKHAB ADAB –I



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DEPARTMENT OF URDU
SYLLABUS 2017-2018

PART- 1 (B) URDU
SEMESTER - II

(Common to B. A/B. Com/B. Sc)

Prose

Unit-I

Mazmoon 'Behas-o-Takrar' – SirSyed

Unit-II

Afsana' Toba Tek Singh' –Manto

Unit-III

Drama ' GudkiMakhiyan' – Kareen Romani

Unit-IV

Muraqqa'Ustad-e-MuhatarramZoreSahib'–SuleimanAthar Jawed

Unit-V

Inshaiya 'Padiye gar bee mar' – Mushtaq Ahmed Yusuf



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DEPARTMENT OF: HISTORY

2017-2018

B. A. HISTORY

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

Semester – I

Paper – I (Core Paper) **ANCIENT INDIAN HISTORY & CULTURE (from earliest times to 600**

A.D)(Indian History and Culture from Earliest Times to 647A.D)

Unit – I	Survey of Sources: Literary & Archaeological Sources; Influence of Geography on History; Unity in Diversity; Traces of Stone Age Cultures (Circa 3,50,000 B. C to 3,000 B. C); Indus Valley Civilization (Circa 3000 B. C to 1,500 B. C): Origin, Extent, Salient Features.
Unit – II	Vedic Age & Religious Reform Movements (Circa 1500 B. C to 600 B. C): Society, Polity, Economy, Culture during early and later Vedic period; Jainism and Buddhism: Causes, Doctrines, Spread, Importance and Impact.
Unit - III	Transition from Territorial States to Emergence of Empires (Circa 600to Century to 300 B. C): Rise of Mahajan padas – Causes for Magadha’s Success; Persian and Macedonian Invasions; Mauryan Empire: State, Imperial Administration, Economy, Ashoka’s Dhamma, Art & Architecture, Significance & Downfall.
Unit - IV	Conditions during 200 B. C to 300 A. D.: Central Asian Contacts – Kushans – Aspects of polity, society, Economy, Religion, Art& Architecture; The Age of Saravanan’s: Pattern of Administration – Social, Economic, Religious & Cultural Developments; Sangam Age: The Three Early Kingdoms (Cholla, Cheri& Pandya) – Society, Language & Literature.
Unit – V	India between 300 A. D & 600 A. D.: The Rise and Growth of Guptas: Administration, Society, Economy, Religion, Art, Literature and Science & Technology – Decline.

References:

1	A.L. Basham, The Wonder That Was India
2	D.N.Jha, Ancient India
3	D.D.Kosambi, An Introduction to the Study of Indian History
4	D.P.Chattopadhyay, Science and Society in Ancient India
5	B.N.Mukherjee, The Rise and Fall of the Kushan Empire
6	K.A. NilakanthaShastri, A History of South India
7	R.C.Majumdar, K.K.Dutta&H.C.Roy Chowdhury (ed.), Advanced History of India
8	Kumkum Roy, The Emergence of Monarchy in North India: eighth to fourth centuries BC



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DEPARTMENT OF: HISTORY

2017-2018

B. A. HISTORY

I Year B. A. Programme (UG) Courses – UnderCBCS
Semester – IIPaper – II (Core Paper)

EARLY MEDIEVAL INDIAN HISTORY & CULTURE (600 A.D to 1526 A. D.)

(Indian History and Culture from 647 to 1526 A.D)

Unit – I	Harsha & His Times: Administration, Religion – Hiuen Tsang -Polity, Society, Economy and Culture from 7 th to 11 th Century A. D. under Chalukyas of Badami& Eastern Chalukyas of Vengi.
Unit – II	Age of later Pallavas during 7 th & 8 th Centuries A. D.: Contribution to Cultural Development & Art & Architecture; The Chola Empire from 9 th to 12 Century A. D.: Rise of the Empire, Administration and Cultural Life.
Unit - III	Conditions in India on the eve of Turkish Invasions; Early Invasions: Traces of Arab Invasion, Ghazni&Ghori; Delhi Sultanate (1206 to 1290 A.D.) under Slave Dyanasty.
Unit - IV	Delhi Sultanate (1290 to 1526 A.D.): Khaljis: Expansion & Consolidation, Administrative & Economic Reforms - The Tughlaqs - Decline & Disintegration of the Delhi Sultanate; Administration, Society, Economy, Technology, Religion, Art & Architecture under the Sultanate.
Unit – V	Cultural Development in India between 13 th & 15 th Centuries A. D.: Impact of Islam on Indian Society and Culture – Bhakti and Sufi Movements – Emergence of Composite Culture.

References:

1	Basham, A.L (ed) A Cultural History of India
2	Champakalakshmi, R Trade, Ideology and Urbanization : South India 300 BC – AD 1300
3	Chandra, S History of Medieval India (800 – 1700)
4	Chattopadyay, B.D The Making of Early Medieval India. (Delhi, 1994)
5	Habib, Irfan, Medieval India: The Study of a Civilization
6	Habibullah, A.B.M, The Foundation of Muslim Rule in India
7	Kumar Sunil, The Emergence of the Sultanate of Delhi
8	Nizami, K.A. Some Aspects of Religion and Politics in India in the 13th c
9	K.A. NilakantaSastri, A History of South India from Prehistoric Times to the Fall of Vijayanagara



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DEPARTMENT OF: ECONOMICS

2017-2018

BA Economics Syllabus under CBCS

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

Semester – I

Paper – I (Core Paper)

Micro Economics – Consumer Behavior

Module -1

Nature, definition and scope of Economics - Wealth, Welfare, Scarcity and modern definitions.

Module -2

Methodology in Economics - Micro & Macro; Static and Dynamic analysis; Normative and positive science, Inductive & Deductive methods; Partial and general Equilibrium.

Module - 3

Utility analysis: - cardinal approach-The Law of diminishing Marginal utility- The Law of Equi-Marginal Utility- concept of consumer's surplus

Module - 4

Demand analysis - Law of Demand - Elasticity of Demand - Measurement of Elasticity of Demand - Price, Income & Cross Elasticities of Demand.

Module - 5

Ordinal Approach: Indifference Curve analysis - Properties of Indifference curves - Price or budget line - Equilibrium of the Consumer with the help of Indifference curves – Samuelson's Revealed preference theory.

REFERENCES:

1. R.G. Lipsey and K.A.Chrystal - "Economics", Oxford University Press, 10/e,2004.
2. P.A.Samuelson& W.D. Nordhaus-"Economics", Tata Mc.Graw Hill, 18/e,2005.
3. N.Gregory Mankiw-"Principles of Economics", Thompson 2015.
4. H.L.Ahuja-"Advanced Economic Theory""S.Chand.
5. M.L.Seth-"Micro Economics", Laxmi Narayana Agarwal,2015.
6. Bilas, A.-"Micro Economic Theory", International Student Edition, Mc.Graw Hill,1971.
7. Telugu AcademyPublications
8. D.M. Mithani& G.K. Murty - Business Economics, Himalaya Publishing,2

. ECONOMICS

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

Paper – II (Core Paper)

B Micro Economics - Production and Price Theory

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A

Production function-Concept of homogeneous production function-Cobb- Douglas Production function-Law of variable proportions-Law of Returns to Scale - Different Concepts of Costs – Explicit & Implicit, Opportunity, Total – fixed and Variable Costs, Marginal & Average Costs & its Relationship. Concept of Revenue – Total, Marginal & Average Revenue and Break –Even Point

Module - 2

Analyse different types of Market structures - Perfect Competition - Price determination and equilibrium of firm and industry under perfect competition - Monopoly - Price determination - Price discrimination.

Module - 3

Monopolistic competition - price determination - Oligopoly - Kinked demand curve approach.

Module - 4

Marginal Productivity theory of distribution - Theories of wage determination Subsistence theory of wages, Standard of living theory of wages, Modern theory of wages Wages and collective bargaining - concept of minimum wage.

Module - 5

Theory of Rent: Ricardian theory of rent - Quasi rent concept of Alfred Marshall. Theories of Interest - Classical, Neo-classical and Keynes Liquidity Preference theory - Profit - dynamic, innovations, Risk and Uncertainty theories.

REFERENCES:

1. R.G. Lipsey and K.A.Chrysal - "Economics", Oxford University Press, 10/e,2004.
2. P.A.Samuelson& W.D. Nordhaus-"Economics", Tata Mc.Graw Hill, 18/e,2005.
3. N.Gregory Mankiw-"Principles of Economics", Thompson2015.
4. H.L.Ahuja-"Advanced Economic Theory" S.Chand,2004.
5. M.L.Seth-"Micro Economics", Laxmi Narayana Agarwal,2015.
6. Bilas, A.-"Micro Economic Theory", International Student Edition, Mc.Graw Hill,1971.
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DEPARTMENT OF: POLITICAL SCIENCE

2017-2018

FIRST YEAR; SEMESTER – I

B.A. POLITICAL SCIENCE

PAPER-I: BASIC CONCEPTS OF POLITICAL SCIENCE

Unit-1: Explanatory Frameworks of Politics

What is Politics: Nature and Scope of Political Science

Approaches to the Study of Politics: Normative, Historical, Empirical Traditions Unit-2: What is the State

Origin and Evolution of the Modern State

Different Conceptions on the role of the Modern State: Social Democratic and Neo

Liberal conceptions Unit-3: Nations and Nationalism

Conceptual Distinction between Nationality and Nation

Varieties of Nationalism: Culture and Civic Nationalism Unit-4: Rights and Citizenship

Evolution of Rights: Civil and Social rights

Citizenship: Universal and Differential Citizenship Unit-5: Freedom, Equality and Justice

Freedom: Negative and Positive Freedom

Equality: Formal Equality, Equality of Opportunity, Equality of Outcome

Justice: Justice based on Needs, Deserts and Rights

Reference books:

Bhargava Rajeev and Acharya Ashok (eds) (2008) Political Theory: An Introduction, Pearson, New Delhi.

Andrew Heywood (2007) Politics 3rd edition, Palgrave Macmillan, New York.

Bellamy R (1993) (Ed) Theories and Concepts of Politics, Manchester University Press, New York.



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DEPARTMENT OF: POLITICAL SCIENCE

2017-2018

FIRST YEAR; SEMESTER – I

B.A. POLITICAL SCIENCE SEMESTER – II

POLITICAL INSTITUTIONS

(CONCEPTS, THEORIES AND INSTITUTIONS)

Unit-1: Constitutionalism

1. The Purpose of Constitutional law, Theory of Separation of Powers
2. Structural Forms of the Modern State: Basic features of Parliamentary and Presidential forms of Government

Unit-2: Territorial Division of Authority of the Modern State

1. Basic features of Federal form of Government
2. Basic features of Unitary form of Government

Institutional forms of the Modern State

1. Democracy: Basic features of Classical and Modern Representative Democracy
2. Models of Democracy: Procedural Democracy and Substantive Democracy

Judiciary and Democratic State

1. The nature, role and functions of the Judiciary
2. Judicial Review: Debates on the Supremacy of legislature or Judiciary in the protection of Constitutional law

Reference books:

1. Andrew Heywood (2007) Politics 3rd edition, Palgrave Macmillan, New York
2. Held, David (2006) Models of Democracy 3rd edition Oxford Polity Press
3. Birch A.H (2000) The Concepts and Theories of Democracy, London Routledge
4. Bogdanor, V (Ed) (1988) Constitutions in Democratic Politics Gower, Aldershot



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DEPARTMENT OF URDU

207-2018

I B.A. Part – II Urdu

First year Advance Urdu

SEMESTER - I

First year Advance Urdu
Paper - I URDU PROSE
Afsanavi Adabaur Drama

UNIT– I	Novel	-	TaarufaurIrteqa
UNIT– II	Novel 'Nirmala'		by Premchand
UNIT– III	Afsana	-	TaarufaurIrteqa
UNIT– IV	Urdu Afsane edited by Raziya Sajjad Zaheer. The following short stories only: 1. 'Woh' by BalrajMenra 2. 'Computer Isq' by JoginderPal 3. 'Lal aurPeela' byK.A.Abbas 4. 'Mom kiMariyam' by Jeelani Banu 5. 'Allah de Banda le' by Raziya SajjadZaheer		
UNIT– V	Drama 'DarwazeKhol Do' by KrishanChander		



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DEPARTMENT OF URDU

2017-2018

I B.A. Part – II Urdu

SEMESTER - II
First year Advance Urdu Paper -
II

URDU PROSE
GhairAfsanaviAdab

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|-----------|--|
| UNIT– I | SAFARNAMA - 'Bullet Train meinkabhinabaitho' by
Mujtaba Hussain |
| UNIT– II | KHAKA - TaarufaurIrteqa |
| UNIT– III | Khaka - ' Dr.AbdulHaqmarhoom' by Rasheed Ahmed
Siddiqui. |
| UNIT– IV | INSHAIYA - TaarufaurIrteqa |
| UNIT– V | Inshaiya – 'Jheengarka Janaza'by
Khwaja Hasan Nizami |



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DEPARTMENT OF ENGLISH

2017-2018

I B.A. Part – II
SEMESTER - I

First year
SPECIAL ENGLISH
Paper - I

Unit 1

1. Brief Survey of the English Language, word Formation, Influences (Latin, French & Scandinavian)
2. Understanding Comprehension
 - A. Of a Literary Prose Passage
 - B. Of a Poem

Unit 2

1. Forms of Poetry
2. Sonnet: On His having arrived at the age of twenty three - John Milton
3. Ode: Ode to the west wind - P. B. Shelley
4. Elegy: Elegy written in a country churchyard - Thomas Gray
5. Ballad: The Solitary Reaper - William Wordsworth

Unit 3

1. Knowledge and Wisdom - Bertrand Russell
2. Florence Nightingale - Lytton Strachey

Unit 4 - Elements / Fiction

The Last Leaf - O. Henry



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DEPARTMENT OF ENGLISH

2017-2018

I B.A. Part – II
SEMESTER - II
First year
SPECIAL ENGLISH
Paper - II

Unit 1

1. Methods of word Formation
2. Semantics

Unit 2

1. Allegory
2. Masque
3. Metaphor
4. Hyperbole
5. Personification
6. Irony
7. Farce
8. Simile

Unit 3

Drama: Macbeth – William Shakespeare

Unit 4

1. Paradise Lost Book II – John Milton
2. The Canonization – John Donne



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**DEPARTMENT OF TOURISM AND TRAVEL MANAGEMENT
2017-2018**

PAPER: -1 - BASICS OF TOURISM

SEMESTER - I

Unit: -1: - Tourism Definition - Nature and Scope - History of Tourism and its developments - Types of Tourism, domestic and International tourism- Causes of rapid growth of tourism.

Unit: -II: - Travel and travellers in Ancient India - growth and development of tourism in India-travel during medieval age- European trade links - tourism in independent India - Constitutional provision of Indian Tourism.

Unit: -III: Socio- Economic Significance of tourism, Tourism as an Industry ancillary industries in tourism- Tourism organizations, National and International- role of State and Central Governments in promotion and development of tourism.

Unit: -IV: Demand and supply in tourism - need for measuring tourism - general problems of measurement importance of tourist statistics - types of tourist-statistic-methods of measurement tourism demand.

Unit: -V: Structure of State and Central tourism department and tourism development corporation tourism promotion councils and etc., - district tourism promotion councils.



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DEPARTMENT OF TOURISM AND TRAVEL MANAGEMENT
2017-2018
Paper-II: PRINCIPLES AND PRACTICES OF TOURISM
SEMESTER – II

Module 1

Tourism development and state intervention National economic goals-political legislation, equity and social needs, social investment, regulation and government controls, regional development in Tourism-

Module 2

Tourist motivation Factors types Push and Pull factors - Determinants of tourism- Theories of Motivation - psychological, cultural, economic, personal and social barriers to travel

Module 3

Impact of tourism Meaning, positive and negative Social, cultural, economic and environmental impacts of tourism - Employment and Revenue generation Tourist impact analysis

Module 4

Components of Tourism- Types of transportation Railways, airways, waterways and roadways Role of railways in promoting tourism in India Accommodation and food

Module 5

Tourism finance Introduction, meaning, nature, scope and functions of finance Application of financial management in tourism industry Tourism Finance Corporation of India and other Organizations Aims, objectives and functions

References:

- 1. Pran Nath Seth (2006): Successful tourism Management, Sterling, New Delhi (Vol. 1 & 2)**
- 2. Mill and Morrison, (1992). The Tourism System: An Introductory Text, Prentice Hall. London**
- 3. Cooper. Fletcher et al. (1993). Tourism Principles and Practices. Pitman.**
- 4. Bhatia, A.K. (2010): International Tourism Management, Sterling, New Delhi**
- 5. Burkart and Medlik. (1981). Tourism: Past, Present and Future. Heinemann,**

ELBS.

- 6. Christopher.J. Hollway: Longman (2012): The Business of Tourism. Pearson,**



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DEPARTMENT OF COMMERCE

2017-2018

Semester - I

DSC 1A 1.1- Fundamentals of Accounting-I

Unit-I – Introduction to Accounting

Need for Accounting – Definition – Objectives, Advantages – Book keeping and Accounting– Accounting concepts and conventions - Accounting Cycle - Classification of Accounts and its rules - Double Entry Book-keeping - Journalization - Posting to Ledgers, Balancing of ledger Accounts (problems).

Unit –II: Subsidiary Books:

Types of Subsidiary Books - Cash Book, Three-column Cash Book- Petty cash Book (Problems).

Unit-III: Trail Balance and Rectification of Errors:

Preparation of Trail balance - Errors – Meaning – Types of Errors – Rectification of Errors (Problems)

Unit-IV- Bank Reconciliation Statement:

Need for bank reconciliation - Reasons for difference between Cash Book and Pass Book Balances- Preparation of Bank Reconciliation Statement- Problems on both favorable and unfavourable balances.

Unit -V: Final Accounts:

Preparation of Final Accounts: Trading account – Profit and Loss account – Balance Sheet – Final Accounts with adjustments (Problems).

Reference Books

1. T.S.Reddy & A. Murthy, Financial Accounting , Margham Publications
2. R L Gupta & V. K Gupta, Principles and Practice of Accounting, Sultan Chand & Sons
3. S.P. Jain & K.L Narang, Accountancy-I, Kalyani Publishers
4. Tulasian, Accountancy -I, Tata McGraw Hill Co.
5. V.K.Goyal, Financial Accounting, Excel Books
6. K. Arunjothi, Fundamentals of Accounting; Maruthi Publications

Unit-I – Introduction

Concepts of Business, Trade , Industry and Commerce – Features of Business -Trade Classification - Aids to Trade – Industry – Classification – Relationship of Trade, Industry and Commerce.

Unit II- Business Functions and Entrepreneurship

Functions of Business and their relationship - Factors influencing the choice of suitable form of organization – Meaning of Entrepreneurship – Characteristics of a good entrepreneur - Types – Functions of Entrepreneurship.

Unit –III – Forms of Business Organizations

Sole Proprietorship – Meaning – Characteristics – Advantages and Disadvantages – Partnership - Meaning – Characteristics- Kinds of partners – Advantages and Disadvantages – Partnership Deed – Hindu-undivided Family – Cooperative Societies.

Unit-IV- Joint Stock Company

Joint Stock Company – Meaning – Characteristics –Advantages – Kinds of Companies - Differences between Private Ltd and Public Ltd Companies.

Unit-V- Company Incorporation

Preparation of important Documents for incorporation of Company – Memorandum of Association – Articles of Association – Differences Between Memorandum of Association and Articles of Association - Prospectus and its contents.

Reference Books

1. C.D.Balaji and G. Prasad, Business Organization - Margham Publications, Chennai.
2. R.K.Sharma and Shashi K Gupta, Business Organization - Kalyani Publications.
3. C.B.Guptha, Industrial Organization and Management, Sultan Chand.
4. Y.K.Bushan, Business organization and Management, Sultan Chand.
5. Sherlekar, Business Organization and Management, Himalaya Publications.

Unit-I- Introduction

Meaning and Definitions of Business Economics - Nature and scope of Business Economics- Micro and Macro Economics and their differences.

Unit-II- Demand Analysis

Meaning and Definition of Demand - Determinants of Demand -- Demand function – Law of demand- Demand Curve - Exceptions to Law of Demand.

Unit –III- Elasticity of Demand

Meaning and Definition of Elasticity of Demand – Types of Elasticity of Demand – Measurements of Price elasticity of demand – Total outlay Method – Point Method – Arc Method.

Unit – IV- Cost and Revenue Analysis

Classification of Costs – Total - Average – Marginal and Cost function – Long-run – Short-run – Total Revenue - Average revenue – Marginal Revenue.

Unit-V- Break-Even Analysis

Type of Costs – Fixed Cost – Semi-variable Cost – Variable Cost– Cost behaviour - Breakeven Analysis - Its Uses and limitations.

Reference Books

1. S.Sankaran, Business Economics, Margham Publications, Chennai.
2. Business Economics - Kalyani Publications.
3. Business Economics – Himalaya Publishing House.
4. Aryasri and Murthy Business Economics, Tata McGraw Hill.
5. Business Economics, Maruthi Publications.



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DEPARTMENT OF COMMERCE

2017-2018

Semester - II

DSC 1B 2.1– Fundamentals of Accounting-II

UNIT-I:

Meaning of Depreciation - Methods of Depreciation: Straight line – Written down Value – Sum of the Years' Digits - Annuity and Depletion (Problems).

Unit-II: Provisions and Reserves

Meaning – Provision vs. Reserve – Preparation of Bad debts Account – Provision for Bad and doubtful debts – Provision for Discount on Debtors – Provision for discount on creditors - Repairs and Renewals Reserve A/c (Problems).

Unit-III: Bills of Exchange

Meaning of Bill –Features of bill – Parties in the Bill – Discounting of Bill – Renewal of Bill – Entries in the books of Drawer and Drawee (Problems).

Unit-IV: Consignment Accounts

Consignment - Features - Proforma invoice - Account sales – Del-credre Commission - Accounting treatment in the books of consigner and consignee - Valuation of closing stock - Normal and Abnormal losses (Problems).

Unit-V: Joint Venture Accounts

Joint venture - Features - Differences between Joint-venture and consignment – Accounting procedure - Methods of keeping records (Problems).

Reference Books:

1. R.L. Gupta & V.K. Gupta, Principles and Practice of Accounting, SultanChand
 2. T. S. Reddy and A. Murthy - Financial Accounting, Margham Publications.
 3. S.P. Jain & K.L. Narang, Accountancy-I, Kalyani Publishers.
 4. Tulsan, Accountancy-I, Tata McGraw Hill Co.
 5. V.K. Goyal, Financial Accounting, Excel Books
 6. T.S. Grewal, Introduction to Accountancy, Sultan Chand & Co.
 7. Haneef and Mukherjee, Accountancy-I, Tata McGraw Hill
 8. Arulanandam, Advanced Accountancy, Himalaya Publishers
- S.N. Maheshwari & V.L. Maheshwari, Advanced Accountancy-I, Vikas Publishers

DSC 2 B 2.2: Business Environment

Unit – I: Overview of Business Environment

Business Environment – Meaning – Macro and Micro Dimensions of Business Environment – Economic – Political – Social – Technological – Legal – Ecological – Cultural – Demographic – Changing Scenario and implications – Indian Perspective – Global perspective.

Unit – II: Economic Growth

Meaning of Economic growth – Factors Influencing Development – Balanced Regional Development.

Unit – III - Development and Planning

Rostow's stages of economic development - Meaning – Types of plans – Main objects of planning in India – NITI Ayog and National Development Council – Five-year plans.

Unit – IV: Economic Policies

Economic Reforms and New Economic Policy – New Industrial Policy – Competition Law – Fiscal Policy – Objectives and Limitations – Union budget – Structure and importance of Union budget – Monetary policy and RBI.

Unit – V -Social, Political and Legal Environment

Concept of Social Justice - Schemes - Political Stability - Leal Changes.

Suggested Readings:

1. Rosy Joshi and Sangam Kapoor: BusinessEnvironment.
2. FrancisCherunilam : BusinessEnvironment.
3. S.K. Mishra andV.K.Puri : Economic Environment ofBusiness.
K.Aswathappa : Essentials of BusinessEnvironment

Unit-I: Production and Costs: Techniques of Maximization of output, Minimization of costs and Maximization of profit - Scale of production - Economies and Dis-economies of Scale - Costs of Production – Cobb-Douglas Production Function.

Unit-II: Market Structure-I: Concept of Market - Market structure - Characteristics - Perfect competition - characteristics equilibrium price - profit maximizing output in the short and long run Monopoly- characteristics - Profit maximizing out-put in the short and long run - Defects of Monopoly – Distinction between Perfect competition and Monopoly.

Unit-III Market Structure-II: Monopolistic Competition - Characteristics - Product differentiation

- Profit maximization - Price and output in the short and long - run – Oligopoly - characteristics - Price rigidity - Kinked Demand Curve - Distribution - Concepts - Marginal Productivity - Theory of Distribution.

Unit-IV National Income And Economic Systems: National Income - Definition Measurement - GDP - Meaning Fiscal deficit - Economic systems - Socialism - Mixed Economic System - Free Market economy.

Unit-V Structural Reforms: Concepts of Economic liberalization, Privatization, Globalization - WTO Objectives Agreements - Functions - Trade cycles - Meaning - Phases - Benefits of International Trade - Balance of Trade and Balance of payments.

Reference Books:

1. Aryasri and Murthy, Business Economics, Tata McGrawHill
2. H.L Ahuja, Business Economics, Sultan Chand & Sons
3. KPM Sundaram, MicroEconomics
4. Mankiw, Principles of Economics, CengagePublications
5. Mithani, Fundamentals of Business Economics, Himalaya PublishingHouse
6. DAR Subrahmanyam & V Hari Leela, A Text Book on Business Economics, MaruthiPublishers.
7. A.V. R. Chary, Business Economics, Kalyani Publishers, Hyderabad.



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DEPARTMENT OF BIOCHEMISTRY

2017-2018

B.Sc. - BIOCHEMISTRY (CBCS) SYLLABUS

SEMESTER- I

Paper I: Biomolecules

Unit – I: Biophysical Concepts 12 hours

Water as a biological solvent and its role in biological processes. Biological relevance of pH, measurement of pH, pKa of functional groups in biopolymers such as proteins and nucleic acids. Importance of buffers in biological systems, ion selective electrodes, and oxygen electrode. Donnan membrane equilibrium. Significance of osmotic pressure in biological systems.

Unit – II: Carbohydrates 12 hours

Carbohydrates: Classification, monosaccharides, D and L designation, open chain and cyclic structures, epimers and anomers, mutarotation, reactions of carbohydrates (due to functional groups - hydroxyl, aldehyde and ketone). Amino sugars, Glycosides. Structure and biological importance of disaccharides (sucrose, lactose, maltose, isomaltose, trehalose), trisaccharides (raffinose, melezitose), structural polysaccharides (cellulose, chitin, pectin) and storage polysaccharides (starch, inulin, glycogen). Glycosaminoglycans, Bacterial cell wall polysaccharides. Outlines of glycoproteins, glycolipids and blood group substances.

Unit – III Lipids 12 hours

Lipids: Classification, saturated and unsaturated fatty acids, structure and properties of fats and oils (acid, saponification and iodine values, rancidity). General properties and structures of phospholipids, sphingolipids and cholesterol. Prostaglandins- structure and biological role of PGD₂, PGE₂ and PGF₂ α. Lipoproteins: Types and functions Biomembranes: Behavior of amphipathic lipids in water-formation of micelles, bilayers, vesicles, liposomes. Membrane composition and organization – Fluid mosaic model.

Unit-IV : Amino Acids and Peptides 12 hours

Amino Acids: Classification, structure, stereochemistry, chemical reactions of amino acids due to carbonyl and amino groups. Titration curve of glycine and pK values. Essential and non- essential amino acids, non-protein amino acids. Peptide bond - nature and conformation. Naturally occurring peptides – glutathione, enkephalin.

Unit-V : Proteins 12 hours

Proteins: Classification based on solubility, shape and function. Determination of amino acid composition of proteins. General properties of proteins, denaturation and renaturation of proteins. Structural organization of proteins- primary, secondary, tertiary and quaternary structures (Eg. Hemoglobin and Myoglobin), forces stabilizing the structure of protein. Outlines of protein sequencing

Practical -1: Qualitative Analysis

List of Experiments: 45 hrs

1. Preparation of buffers (acidic, neutral and alkaline) and determination of pH .
2. Titration curve of glycine and determination of pK and pI values.
3. Qualitative identification of carbohydrates- glucose, fructose, ribose/xylose, maltose, sucrose, lactose, starch/glycogen.
4. Qualitative identification of amino acids – histidine, tyrosine, tryptophan, cysteine, arginine.
5. Qualitative identification of lipids- solubility, saponification, acrolein test, Salkowski test, Lieberman-Burchard test.
6. Preparation of Osazones and their identification.
7. Absorption maxima of colored substances- p -Nitrophenol, Methylorange.
8. Absorption spectra of protein-BSA, nucleic acids- Calf thymus DNA.



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DEPARTMENT OF BIOCHEMISTRY

2017-2018

B.Sc - BIOCHEMISTRY (CBCS) SYLLABUS
SEMESTER- II

Paper-II Nucleic acids and Biochemical Techniques

Unit-I: Nucleic Acids 12 hours

Nature of nucleic acids. Structure of purines and pyrimidines, nucleosides, nucleotides. Stability and formation of phosphodiester linkages. Effect of acids, alkali and nucleases on DNA and RNA. Structure of Nucleic acids- Watson-Crick DNA double helix structure, introduction to circular DNA, super coiling, helix to random coil transition, denaturation of nucleic acids hyper chromic effect, T_m -values and their significance. Reassociation kinetics, cot curves and their significance. Types of RNA and DNA.

Unit-II: Porphyrins 9 hours

Structure of porphyrins; Protoporphyrin, porphobilinogen properties Identification of Porphyrins. Structure of metalloporphyrin – Heme, cytochromes and chlorophylls.

Unit-III: Biochemical Techniques I 15 hours

Methods of tissue homogenization: (Potter-Elsenham, mechanical blender, sonicator and enzymatic). Principle and applications of centrifugation techniques- differential, density gradient. Ultracentrifugation-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. Electrophoresis- principles and applications of paper, polyacrylamide (native and SDS) and agarose gel electrophoresis.

Unit-IV: Biochemical Techniques II 12 hours

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.

Unit- V : Techniques employed in metabolic studies 12 hours

Broad outlines of Intermediary metabolism, methods of investigation, Intermediary metabolism in vivo studies such as analysis of excretion, Respiratory exchange, Removal of organs and perfusion studies, in vitro studies such as tissue slice techniques; Homogenates and purified enzyme systems; isotope tracer studies, use of inhibitors and antimetabolites



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DEPARTMENT OF BIOTECHNOLOGY

2017-2018

B.Sc., SEMESTER I

PAPER-I : MICROBIOLOGY AND CELL BIOLOGY

UNIT-I History, Development and Microscopy

History and development of microbiology: contributions of Louis Pasteur, Robert Koch and Edward Jenner. Microscopy: Compound microscopy: Numerical aperture and its importance, resolving power, oil immersion objectives and their significance, principles and applications of dark field, phase contrast, fluorescent microscopy. Electron microscopy: Principle, ray diagram and applications, TEM and SEM, comparison between optical and electron microscope, limitations of electron microscopy. Stains and staining procedures: Acidic, basic and neutral stains, Gram staining, Acid fast staining, Flagella staining, Endospore staining.

UNIT II

Bacteria: Bacterial morphology and subcellular structures, general morphology of bacteria, shapes and sizes, generalized diagram of typical bacterial cell. Slime layer and capsule, difference between the structure, function and the position of the two structures. Cell wall of gram +ve and Gram -ve cells. General account of flagella and fimbriae. Chromatin material, plasmids; definition and kind of plasmids (conjugative and non-conjugative) F, R, and Col plasmids. Endospores: Detailed study of endospore structure and its formation, germination, basis of resistance.

Viruses: General characteristics of viruses, difference between virus and typical microbial cell, structure, different shapes and symmetries with one example of each type, classification of viruses on the basis of nucleic acids, phage and animal cell viruses, example of each and their importance. Brief idea of lytic cycle and lysogeny.

UNIT III

Microbial Nutrition: Basic nutritional requirements: Basic idea of such nutrients as water, carbon, nitrogen, sulfur and vitamins etc., natural and synthetic media, nutritional classification of bacteria. Selective and Differential media, Enriched media, Enrichment media.

UNIT IV:

Microbial growth and control: Growth: Growth rate and generation time, details of growth curve and its various phases. Concept of synchronous cultures, continuous and batch cultures (chemostat and turbidostatic). Measurement of growth. Physical conditions required for growth: Temperature (classification of microorganisms on the basis of temperature requirements), pH etc. Pure cultures and cultural characteristics. Maintenance of pure culture. Microbial Control: Terminologies - Sterilization, disinfection, antiseptic, sanitization, germicide, microbiotas, preservative and antimicrobial agents. Mechanism of cell injury: Damage to cell wall, cell membrane, denaturation of proteins, inhibition of protein synthesis, transcription, replication, other metabolic reactions and change in supercoiling of DNA. Physical methods of control: Temperature (moist heat, autoclave, dry heat, hot air oven and incinerators), desiccation, surface tension, osmotic pressure, radiation, UV light, electricity, ultrasonic sound waves, filtration. Chemical methods of control: Antiseptics and disinfectants (halogens, alcohol, gaseous sterilization. Concept of biological control.

UNIT V

Cell Biology: Eukaryotic Cell - Structure and function of the following: nucleus, nuclear membrane, nucleoplasm, nucleolus, Golgi complex, Mitochondria, Chloroplast, endoplasmic reticulum, lysosomes, peroxisomes, glyoxisomes and vacuoles.

Reference books:

1. Microbiology-Concept and applications, Pelzer M.J.J, E.C.S. Chang & N.R.Krieg, 1993. McGraw Hill company New York
2. Microbiology. Prescott L.M, J.D. Harley & D. A. Klein, 1999. McGraw Hill
3. General Microbiology, Stanier, 1986. McMillan Publishing Co
4. Microbiology - An Introduction, 4th Edition, Gerard J. Tortora, Bredell R. Funke, Christine L. Care, 1992. The Benjamin/Cummings Publishing Company, Inc



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DEPARTMENT OF BIOTECHNOLOGY

2017-2018

B. Sc. SEMESTER II

PAPER-II : MACROMOLECULES, ENZYMOLOGY AND BIOENERGETICS

UNIT I

Nucleic Acids and Chromosomes: Chemical structure and base composition of nucleic acids, Chargaff's rules, Watson Crick Model (B-DNA), deviations from Watson-Crick model, other forms of DNA (A- and Z-DNA), forces stabilizing nucleic acid structures, (hydrogen bonds and hydrophobic associations, basestacking)

UNIT II

Amino acids and Proteins: Structure of amino acids occurring in proteins, classification of amino acids (pH based, polarity based and nutrition based) physico-chemical properties of amino acids. Primary, Secondary, Tertiary & Quaternary structure of proteins.

UNIT III

Carbohydrates: Definition, classification, nomenclature of carbohydrates, structures of monosaccharides, disaccharides and polysaccharides. Concept and examples of heteropolysaccharides.

Lipid: Types of lipids, structures of saturated and unsaturated fatty acids, triglycerides, phospholipids, Concept of acid value, saponification value and iodine value. Chemistry of Porphyrins, Heme, Cytochromes, and Chlorophylls.

UNIT IV

Enzymes: Terminology: Active site, allosteric site, Holoenzyme, apoenzyme, coenzyme, substrate, inhibitor, activator, modulator etc. Classification and nomenclature of enzymes. Substrate Specificity (bond specificity, group specificity, absolute specificity,

stereospecificity), lock and key and induced fit models. Enzyme kinetics: Michaelis-Menten equation, effect of substrate concentration, effect of enzyme concentration, effect of p H and temperature, temperature. Enzyme inhibition kinetics (reversible inhibition types – competitive, uncompetitive and non-competitive), brief idea of irreversible inhibition.

UNIT V

Bioenergetics: Concept of free energy, Entropy, Enthalpy & Redox Potential. Concept of high energy bonds as related to the structure of ATP, Phosphoenolpyruvate, Creatine phosphate etc. Glycolysis (pathway, entry of other monosaccharides and disaccharides, regulation, inhibitors) Gluconeogenesis: Bypass reactions.

References:

1. Leininger, 2000. Principles of Biochemistry, CBSPublishers
2. Stryker, L., 2002. Biochemistry. W.H.Freeman
3. Harper, 2003. Biochemistry.McGraw-Hill
4. Vote, D. and Vote, J.G. 1995.Biochemistry



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DEPARTMENT OF BOTANY 2017-2018

I B.Sc. - SEMESTER- I: BOTANY SYLLABUS

Paper- I : Microbial Diversity, Algae and Fungi

Total hours of teaching 60hrs @ 4 hrs per week

UNIT- I: MICROBIAL WORLD (Origin and Evolution of Life, Microbial diversity (12hrs)

1. Discovery of microorganisms, origin of life, spontaneous, biogenesis, Pasteur experiments, germ theory of disease.
2. Classification of microorganisms – R.H. Whittaker's five kingdom concept, Carl Weiser's- Domain system.
3. Brief account of special groups of bacteria- Archaeobacteria, Mycoplasma, Actinomycetes and Cyanobacteria.

UNIT-II: VIRUSES

(12hrs)

1. Viruses- Discovery, general account, structure & replication of – T4 Phage (Lytic, Lysogenic) and TMV, Viroid's, Prions.
2. Plant diseases caused by viruses – Symptoms, transmission and control measures (Brief account only).
3. Study of Tobacco Mosaic, Bhindi Vein clearing and Papaya leaf curl diseases.

UNIT-III: BACTERIA

(12hrs)

1. Bacteria: Discovery, General characteristics, cell structure and nutrition.
2. Reproduction- Asexual and bacterial recombination (Conjugation, Transformation, Transduction).
3. Economic importance of Bacteria.

UNIT-IV: ALGAE

(12hrs)

1. General account - thallus organization and reproduction in Algae.
2. Fritsch classification of Algae (up to classes only) and economic importance.
3. Structure, reproduction and life history of *Oedogonium*, *Ectocarpus* and *Polysiphonia*.

UNIT-V: FUNGI

(12hrs)

1. General characteristics and outline classification (Ainsworth).
2. Structure, reproduction and life history of *Rhizopus* (Zygomycota), *Penicillium* (Ascomycota), and *Puccinia* (Basidiomycota).
3. Lichens- Structure and reproduction; ecological and economic importance.

Suggested activity: Seminar, Quiz, debate, collection of diseased plant parts – studying symptoms and identification of pathogen, collection and study of fresh and marine Algae available in local area.



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I B. Sc - SEMESTER- II: BOTANY THEORY SYLLABUS

Paper –II: Diversity of Archegoniate & Plant Anatomy

Total hours of teaching 60hrs @ 4 hrs per week

UNIT – I: BRYOPHYTES

1. Bryophytes: General characters, Classification (up to classes)
2. Structure, reproduction and Life history of *Marchantiid*, and *Funaria*.
3. Evolution of Sporophyte in Bryophytes.

UNIT - II: PTERIDOPHYTES

1. Pteridophytes: General characters, classification (up to classes)
2. Structure, reproduction and life history of *Lycopodium*, and *Marisela*.
3. Heterospory and seed habit.
4. Evolution of stele in Pteridophytes.

UNIT – III: GYMNOSPERMS

1. Gymnosperms: General characters, classification (up to classes)
2. Morphology, anatomy, reproduction and life history of *Pinus* and *Gentium*
3. Economic importance with reference to wood, essential oils and drugs

UNIT – IV: Tissues and Tissue systems

1. Meristems - Root and Shoot apical meristems and their histological organization.
2. Tissues – Meristematic and permanent tissues (simple, complex, secretory)
3. Tissue systems – Epidermal, ground and vascular.
4. systems – Epidermal, ground and vascular.

UNIT – V. Secondary growth Anomalous secondary growth in *Achyranthes*, *Boerhaavia* and *Dracaena*

1. Study of local timbers of economic importance - Teak, Rosewood, Red sanders and Arjun (Tella Maddi).

Suggested activity: Collection of *Marsilea* sporocarp, *Pinus* needles, male and female cones, study of *Pinus* pollen grain collection of locally available economically useful timbers.



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SEMESTER – I

Paper I - Inorganic & Organic Chemistry

60hrs (4h/w)

INORGANIC CHEMISTRY

30 hrs. (2h / w)

UNIT-I

p-block elements-I

15h

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

Group - 14: Preparation and applications of silanes and silicones. Group - 15: Preparation and reactions of hydrazine, hydroxylamine.

UNIT-II

1. p-block elements-II

8h

Group - 16: Classifications of oxides based on (i) Chemical behavior and (ii) Oxygen content. Group-17: Inter halogen compounds and pseudo halogens.

2. Organometallic Chemistry

7h

Definition - classification of Organometallic compounds - nomenclature, preparation, properties and applications of alkyls of Li and Mg.

ORGANIC CHEMISTRY

30hrs (2h /w)

UNIT-III

Structural theory in Organic Chemistry

10 h

Types of bond fission type of organic reagents (Electrophilic, Nucleophilic, and free radical reagents including neutral molecules like H_2O , NH_3 & $AlCl_3$).

Inductive effect. Application of inductive effect (a) Basicity of amines (b) Acidity of carboxylic acids (c) Stability of carbonium ions. Resonance or Mesomeric effect, application to (a) acidity of phenol, and (b) acidity of carboxylic acids. Hyperconjugation and its application to stability of carbonium ions, Free radicals and alkenes,

Types of Organic reactions : Addition - electrophilic, nucleophilic and free radical. Substitution - electrophilic, nucleophilic and free radical reactions. Elimination- Examples.

UNIT-IV

I. Acyclic Hydrocarbons

6 h

Alkenes - Addition of halogen. Addition of HX, Markonikov's rule (with mechanism), addition of H₂O, HOX, H₂SO₄ and addition of HBr in the presence of peroxide (anti - Markonikov's addition). Dienes - Types of dienes, reactions of conjugated dienes - 1,2 and 1,4 addition of HBr to 1,3 - butadiene and Dial's - Alder reaction.

Alkynes – Terminal and non terminal Alkynes, Properties; Acidity of acetylenic hydrogen (formation of Metal acetylides). Electrophilic addition of X₂, HX, H₂O (Tautomerism), Oxidation with KMnO₄, OsO₄, Metal Ammonia reduction and Polymerization reaction of acetylene.

2. Alicyclic hydrocarbons (Cycloalkanes)

4 h

Nomenclature, Preparation by Freund's method, Wislicenus method. Properties - Stability of cycloalkanes - Baeyer's strain theory, Sachse and Mohr predictions and Pitzer's strain theory.

UNIT-V

Benzene and its reactivity

10h

Concept of aromaticity - aromaticity (definition), Huckel's rule - application to Benzenoid (Benzene, Naphthalene) and Non - Benzenoid compounds (cyclopropanol cation, cyclopentadienyl anion and tropylium cation), Molecular structure of Benzene based on modern concepts (VBT and MOT).

Reactions - Mechanism of nitration, Friedel Craft's alkylation and acylation. Orientation of aromatic substitution - Definition of ortho, para and meta directing groups. Ring activating and deactivating groups with examples (i) Amino, methoxy and methyl groups (ii) Carboxy, nitro, nitrile, carbonyl and sulphonic acid groups (iii) Halogens

List of Reference Books

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



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SEMESTER - II

Paper II (Physical & General Chemistry) 60 hrs. (4h/w)

PHYSICAL CHEMISTRY 30 hrs (2h / w)

UNIT-I

Solid-state 10h

Symmetry in crystals. Law of constancy of interfacial angles. The law of rationality of indices. The law of symmetry. Definition of lattice point, space lattice, unit cell. Bravais lattices and crystal systems. X-ray diffraction and crystal structure. Bragg's law. Defects in crystals.

UNIT-II

1. Gaseous state 6 h

Deviation of real gases from ideal behavior. Vander Waal's equation of state. P-V Isotherms of real gases, Andrew's isotherms of carbon dioxide, continuity of state. Critical phenomena. The vander Waal's equation and the critical state. Law of corresponding states. Relationship between critical constants and vander Waal's constants. Joule Thomson effect.

2. Liquid state 4 h

Structural differences between solids, liquids and gases. Liquid crystals, the mesomorphic state. Classification of liquid crystals into Smectic and Nematic. Differences between liquid crystal and solid/liquid. Application of liquid crystals as LCD devices.

UNIT-III

Solutions 10h

Liquid-liquid - ideal solutions, Raoult's law. Ideally dilute solutions, Henry's law. Non-ideal solutions. Vapor pressure - composition and vapour pressure- temperature curves. Azeotropes- HCl-H₂O, ethanol-water systems and fractional distillation. Partially miscible liquids-phenol-water, trimethylamine-water, nicotine-water systems. Effect of impurity on consolute temperature. Immiscible liquids and steam distillation.

Nernst distribution law. Calculation of the partition coefficient. Applications of distribution law.

GENERAL CHEMISTRY 30 hrs (2h / w)

UNIT-IV

surface chemistry 8 h

Definition of colloids. SOLS- properties - kinetic, optical, electrical. Stability of colloids, Hardy-Schulze law, protective colloid.

Liquids in liquids (emulsions)-properties and uses. Liquids in solids (gels) uses. Adsorption:

Physical adsorption, chemisorption. Freundlich, Langmuir adsorption isotherms. Applications of adsorption

2. Chemical Bonding

7h

Valence bond theory, hybridization, VB theory as applied to ClF_3 , $\text{Ni}(\text{CO})_4$, Molecular orbital theory - LCAO method, construction of M.O. diagrams for homo-nuclear and hetero-nuclear diatomic molecules (N_2 , O_2 , CO and NO).

UNIT-V

Stereochemistry of carbon compounds

15 h

Optical isomerism: Optical activity- wave nature of light, plane polarised light, optical rotation and specific rotation.

Chiral molecules- definition and criteria (Symmetry elements)- Definition of enantiomers and diastereomers – Explanation of optical isomerism with examples Glyceraldehyde, Lactic acid, Alanine, Tartaric acid, 2,3-dibromopentane.

D,L and R,S configuration methods and E,Z- configuration with examples.

List of Reference Books

1. Principles of physical chemistry by Prutton and Marron
2. Solid State Chemistry and its applications by Anthony R. West
3. Text book of physical chemistry by K L Kapoor
4. Text book of physical chemistry by S Glasstone
5. Stereochemistry of Organic compounds by E L Eliel
6. Advanced Organic Chemistry by F A Carey and R J Sundberg
7. Stereochemistry by P. S. Kalsi
8. Stereochemistry of Organic compounds by D. Nasipuri
9. Advanced physical chemistry by Bahl and Tuli
10. Advanced Inorganic Chemistry Vol-I by Satyaprakash, Tuli, Basu and Madan



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Department of Computer Science

I YEAR 1 SEMESTER

Computer Fundamentals & Photoshop

Course Outcome

To explore basic knowledge on computers and Photoshop's beauty from the practical to the painterly artistic and to understand how Photoshop will help you create your own successful images.

UNIT-I:

Introduction to computers, characteristics and limitations of computer, Block diagram of computer, types of computers, uses of computers, computer generations. Number systems :binary, hexa and octal numbering system.

UNIT-II:

Input and output devices: Keyboard and mouse, inputting data in other ways, Types of Software: system software, Application software, commercial, open source, domain and free ware software, Memories: primary, secondary and cache memory. Windows basics: desktop, start menu, icons.

Unit –III

Introduction to Adobe Photoshop, Getting started with Photoshop, creating and saving a document in Photoshop, page layout and back ground, Photoshop program window-title bar, menu bar, option bar, image window, image title bar, status bar, ruler, palettes, tool box, screen modes, saving files, reverting files, closing files.

Unit –IV

Images: working with images, image size and resolution, image editing, colour modes and adjustments, Zooming & Panning an Image,, , Rulers, Guides & Grids- Cropping & Straightening an Image, image backgrounds ,making selections.

Working with tool box: working with pen tool, save and load selection-working with erasers-working with text and brushes-Colour manipulations: colour modes- Levels – Curves - Seeing Colour accurately - Patch tool – Cropping-Reading your palettes - Dust and scratches- Advanced Retouching- smoothing skin

Unit-V

Filters: The filter menu, Working with filters- Editing your photo shoot, presentation –how to create adds, artistic filter, blur filter, brush store filter, distort filters, noise filters, pixel ate filters, light effects, difference clouds, sharpen filters, printing.

Reference Books:

1. Fundamentals of Computers by Reema Thareja from Oxford University Press
2. Adobe Photoshop Class Room in a Book by Adobe Creative Team.
3. Photoshop: Beginner's Guide for Photoshop - Digital Photography, Photo Editing, Colour Grading & Graphic...19 February 2016 by David Maxwell

Student Activity:

1. **Design a poster for technical paper presentation.**
2. **Create a digital scrap book.**

Photo Shop Lab

1. Create your Visiting card
2. Create Cover page for any text book
3. Create a Paper add for advertising of any commercial agency
4. Design a Passport photo
5. Create a Pamphlet for any program to be conducted by an organization
6. Create Broacher for your college
7. Create Titles for any forthcoming film
8. Custom shapes creation
9. Create a Web template for your college
10. Convert color photo to black and white photo
11. Enhance and reduce the given Image size
12. Background changes
13. Design Box package cover
14. Design Texture and patterns
15. Filter effects & Eraser effects



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Department of Computer Science

I YEAR II SEMESTER

Paper-II : PROGRAMMING IN C

Course Objectives

1. Learn how to solve common types of computing problems.
2. Learn data types and control structures of C
3. Learn to map problems to programming features of C.
4. Learn to write good portable C programs.

Course Outcomes

Upon successful completion of the course, a student will be able to:

1. Appreciate and understand the working of a digital computer
2. Analyse a given problem and develop an algorithm to solve the problem
3. Improve upon a solution to a problem
4. Use the 'C' language constructs in the right way
5. Design, develop and test programs written in 'C'

UNIT I

Introduction to Algorithms and Programming Languages: Algorithm – Key features of Algorithms, Flow Charts.

Introduction to C: Introduction – Structure of C Program – Writing the first C Program – File used in C Program – Compiling and Executing C Programs – Using Comments – Keywords – Identifiers – Basic Data Types in C – Variables – Constants – I/O Statements in C- Operators in C- Programming Examples – Type Conversion and Type Casting

UNIT II

Decision Control and Looping Statements: Introduction to Decision Control Statements – Conditional Branching Statements – Iterative Statements – Nested Loops – Break and Continue Statement – Go to Statement

UNIT III

Arrays: Introduction – Declaration of Arrays – Accessing elements of the Array – Storing Values in Array, Operations on Array: One dimensional array, Two dimensional Arrays, Multidimensional Arrays.

Strings: Introduction, Characters, String handling functions.

Functions: Introduction – using functions – Function declaration/ prototype – Function definition – function call – return statement – Passing parameters – Scope of variables – Storage Classes – Recursive functions.

UNIT IV

Pointers: Understanding Computer Memory – Introduction to Pointers – declaring Pointer Variables - - Passing Arguments to Functions using Pointer – Pointer and Arrays – Passing Array to Function.

Structure, Union, and Enumerated Data Types: Introduction – Nested Structures – Arrays of Structures – Structures and Functions – Unions – Enumerated Data Types

UNIT V

Files: Introduction to Files – Using Files in C – Reading Data from Files – Writing Data from Files – Detecting the End-of-file – Error Handling during File Operations – Accepting Command Line Arguments.

REFERENCE BOOKS

1. Introduction to C programming by REEMA THAREJA from OXFORD UNIVERSITY PRESS
2. E Balagurusamy: —COMPUTING FUNDAMENTALS & C PROGRAMMING – Tata McGraw-Hill, Second Reprint 2008, ISBN 978-0-07-066909-3.
3. Ashok N Kamthane: Programming with ANSI and Turbo C, Pearson Edition Publ, 2002.
4. Henry Mullish&HuubertL.Cooper: The Spirit of C An Introduction to modern Programming, Jaico Pub. House,1996.

Student Activity:

1. **Write a program for preparing the attendance particulars of students of your college at the end of semester according to following guidelines**
 - a. **Above 75 % promoted**
 - b. **Above 65% condoned**
 - c. **Below 65% detained**
2. **Write a program for creating timetable or your class taking work load of faculty into consideration.**



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B.Sc. Electronics Syllabus under CBCS
w.e.f. 2015-16 (revised in April 2016)

SEMESTER-1

PAPER – I

BASIC CIRCUIT THEORY

UNIT- 1: (12Hrs)

SINUSOIDAL ALTERNATING WAVEFORMS:

Definition of current and voltage. The sine wave, general format of sine wave for voltage or current, phase relations, average value, effective (R.M.S) values. Differences between A.C and D.C. **Basic elements and phasors:** Basic Response of R, L & C elements, frequency response of basic elements. **(problems)**

UNIT-II: (12hrs)

PASSIVE NETWORKS: (D.C)

Kirchhoff's current and Voltage Law's ,Resistor, Capacitor, and Inductor, series and parallel networks-L and R-L-C Circuits with DC inputs. Branch current method, Mesh Analysis, Nodal Analysis, star to delta & delta to star conversions.

UNIT-III: (14hrs)

NETWORKS THEOREMS: (D.C)

Superposition Theorem, Thevenin's Theorem, Norton's Theorem, Maximum Power, Milliman and Reciprocity theorems **(problems)**.

UNIT-IV: (12hrs)

RC AND RL CIRCUITS:

Transient response of RL and RL circuits with step input, Time constants, Frequency response of RC and RL circuits, their action as low pass, high pass and Band pass filters. Passive differentiating and integrating circuits. **(problems)**

UNIT-V: (10hrs)

SERIES AND PARALLEL RESONANCE CIRCUITS:

Series resonance and parallel resonance circuits, Q - Factor, Selectivity and band width, Comparison of series and parallel resonance, Tank circuit-LC oscillations

TEXT BOOKS:

1. Introductory circuit Analysis (UBS Publications) ---- **Robert L.Boylestad.**
2. Electronic Devices and Circuit Theory --- **Robert L. Boylston& Louis Nashelsky.**

3. Circuit Analysis by P.Gnanasivam- Pearson Education

REFERENCE BOOKS:

- 1. Engineering Circuit Analysis By: Hayt & Kemmerly -MG.**
- 2. Networks and Systems – D.Roy Chowdary.**
- 3. Unified Electronics (Circuit Analysis and Electronic Devices) by Agarwal-**

Arora

- 4. Electric Circuit Analysis- S.R. Paranjothi- New Age International.**

ELECTRONICS LAB-1 (CIRCUIT LAB)

Demonstration of C.R.O: Demonstration using CRO Kit - Block diagram concepts etc., in lab session (Using slides.)

(Assignments are to be given-Marks shall be allotted to this work as internal part.)

LAB LIST:

1. Measurements of D.C & A.C voltage, frequency using CRO
2. Verification of Kirchhoff's laws
3. Thevenin's Theorem-verification
4. Norton's Theorem-verification
5. Maximum Power Transfer Theorem-verification
6. RC circuit-Frequency response (low and Highpass)
7. RL circuit-Frequency response (low and Highpass)
8. LCR series resonance circuits-Frequency response-Determination of Q and Band Width. 9. LCR parallel resonance circuits-Frequency response-Determination of Q and Bandwidth

Lab experiments are to be done on breadboard and simulation software (using Multisim) and output values are to be compared and justified for variation.



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B.Sc. Electronics Syllabus under CBCS

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Semester-2

PAPER –2

Electronic Devices and Circuits

UNIT 1:(12Hrs)

PN JUNCTION DIODES:

P-N junction Diode, Depletion region, Barrier Potential, Working in Forward and Reverse bias condition – Junction capacitance, Diode current equation– Effect of temperature on reverse saturation current – construction, working, V-I

characteristics

and simple applications of varactor diode, Zener diode and Tunnel diode.

UNIT –II:(12hrs)

BIPOLAR JUNCTION TRANSISTOR AND ITS BIASING: (D.C)

Introduction, Transistor Construction, Operation, and characteristics of CB, CE, and CC – Configurations. Complete hybrid equivalent model, Transistor as a switch

BJT Biasing: Fixed-Bias Circuit, Emitter-Stabilized Bias Circuit, Voltage-Divider Bias, Bias Stabilization.

UNIT-III:(16hrs)

FIELD EFFECT TRANSISTORS, UJT & SCR:

Introduction, Construction, Operation and Characteristics of FET/JFET, Drain and Transfer characteristics, Depletion-type, and Enhancement-Type MOSFETs.

FET Biasing: Fixed-Bias Configuration, Self-Bias Configuration, Voltage-Divider Biasing, UJT construction-working, V-I characteristics, UJT as a Relaxation oscillator.

UNIT IV: (08hrs)

PHOTO ELECTRIC DEVICES:

Light-Emitting Diodes (LEDs), IR Emitters, Photo diode, Photo transistors, Structure and operation of LDR, and Opto-Isolators.

UNIT-V:(12hrs)

POWER SUPPLIES:

Rectifiers::Half wave ,full wave and bridge rectifiers-Efficiency-ripple factor-Regulation, Types of filter-choke input(inductor) filter,shunt,L-section& π -section filters.Three terminal fixed voltage I.C.regulators(78XX and &79XX)-Principle

and

working of SMPS (switch mode power supplies)

TEXT BOOKS:

1. Electronic Devices and Circuit Theory --- **Robert L. Boylestad& Louis Nashelsky.**
2. Electronic Devices and Circuits I – **T.L.Floyd- PHI FifthEdition**

REFERENCE BOOKS:

1. Integrated Electronics – **Millmam&Halkias.**
2. Electronic Devices & Circuits –**Bogart.**
3. Sedha R.S., A Text Book Of Applied Electronics, S.Chand& CompanyLtd

ELECTRONICS LAB-2 (ELECTRONIC DEVICES AND CIRCUITS LAB)

LAB LIST:

1. V-I Characteristics of junctiondiode
2. V-I Characteristics of Zenerdiode
3. Regulated power supply using Zenerdiode
4. BJT input and outputcharacteristics
5. FET input and outputcharacteristics
6. UJTcharacteristics
7. LDRcharacteristics
8. IC regulated power supply (IC-7805)
9. V-I characteristics ofSCR.

Lab experiments are to be done on breadboard and simulation software (using mutism) and output values are to be compared and justified for variation.



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B.A./B.Sc. MATHEMATICS SYLLABUS
SEMESTER –I
PAPER – I: DIFFERENTIAL EQUATIONS

60 Hrs

UNIT – I (12 Hours), Differential Equations of first order and first degree:

Linear Differential Equations; Differential Equations Reducible to Linear Form; Exact Differential Equations; Integrating Factors; Change of Variables.

UNIT – II (12 Hours), Orthogonal Trajectories.

Differential Equations of first order but not of the first degree:

Equations solvable for p ; Equations solvable for y ; Equations solvable for x ; Equations that do not contain x (or y); Equations of the first degree in x and y – Clairaut's Equation.

UNIT – III (12 Hours), Higher order linear differential equations-I :

Solution of homogeneous linear differential equations of order n with constant coefficients; Solution of the non-homogeneous linear differential equations with constant coefficients by means of polynomial operators.

General Solution of $f(D)y=0$

General Solution of $f(D)y=Q$ when Q is a function of x .

$\frac{1}{f(D)}$ is Expressed as partial fractions.

P.I. of $f(D)y = Q$ when $Q = be^{ax}$

P.I. of $f(D)y = Q$ when Q is $b \sin ax$ or $b \cos ax$.

UNIT – IV (12 Hours), Higher order linear differential equations-II:

Solution of the non-homogeneous linear differential equations with constant coefficients.

P.I. of $f(D)y = Q$ when $Q = bx^k$

P.I. of $f(D)y = Q$ when $Q = e^{ax}V$

P.I. of $f(D)y = Q$ when $Q = xV$

P.I. of $f(D)y = Q$ when $Q = x^mV$

UNIT – V (12 Hours), Higher order linear differential equations-III:

Method of variation of parameters; Linear differential Equations with non-constant coefficients; The Cauchy-Euler Equation.

Reference Books :

1. Differential Equations and Their Applications by Zafar Ahsan, published by Prentice-Hall of India Learning Pvt. Ltd. New Delhi-Second edition.
2. A text book of mathematics for BA/BSc Vol 1 by N. Krishna Murthy & others, published by S. Chand & Company, New Delhi.
3. Ordinary and Partial Differential Equations Raisinghania, published by S. Chand & Company, New Delhi.

4. Differential Equations with applications and programs – S. Balachandra Rao & HR Anuradha-universities press.

Suggested Activities:

Seminar/ Quiz/ Assignments/ Project on Application of Differential Equations in Real life

B.A./B.Sc. MATHEMATICS SYLLABUS
SEMESTER – II
PAPER – II : SOLID GEOMETRY

60 Hrs

UNIT – I (12 hrs): The Plane:

Equation of plane in terms of its intercepts on the axis, Equations of the plane through the given points, Length of the perpendicular from a given point to a given plane, Bisectors of angles between two planes, Combined equation of two planes, Orthogonal projection on a plane.

UNIT – II (12 hrs): The Line :

Equation of a line; Angle between a line and a plane; The condition that a given line may lie in a given plane; The condition that two given lines are coplanar; Number of arbitrary constants in the equations of straight line; Sets of conditions which determine a line; The shortest distance between two lines; The length and equations of the line of shortest distance between two straight lines; Length of the perpendicular from a given point to a given line;

UNIT – III (12 hrs): Sphere:

Definition and equation of the sphere; Equation of the sphere through four given points; Plane sections of a sphere; Intersection of two spheres; Equation of a circle; Sphere through a given circle; Intersection of a sphere and a line; Power of a point; Tangent plane; Plane of contact; Polar plane; Pole of a Plane; Conjugate points; Conjugate planes;

UNIT – IV (12 hrs): Sphere & Cones:

Angle of intersection of two spheres; Conditions for two spheres to be orthogonal; Radical plane; Coaxial system of spheres; Simplified form of the equation of two spheres.

Definitions of a cone; vertex; guiding curve; generators; Equation of the cone with a given vertex and guiding curve; Enveloping cone of a sphere; Equations of cones with vertex at origin are homogenous; Condition that the general equation of the second degree should represent a cone; Condition that a cone may have three mutually perpendicular generators;

UNIT – V (12 hrs) Cones & Cylinders:

Intersection of a line and a quadric cone; Tangent lines and tangent plane at a point; Condition that a plane may touch a cone; Reciprocal cones; Intersection of two cones with a common vertex; Right circular cone; Equation of the right circular cone with a given vertex; axis and semi-vertical angle.

Definition of a cylinder; Equation to the cylinder whose generators intersect a given conic and are parallel to a given line; Enveloping cylinder of a sphere; The right circular cylinder; Equation of the right circular cylinder with a given axis and radius.

Reference Books:

1. Analytical Solid Geometry by Shanti Narayan and P.K.Mittal, Published by S. Chand & Company Ltd. 7th Edition.
2. A text book of Mathematics for BA/B.Sc. Vol 1, by V Krishna Murthy & Others, Published by S. Chand & Company, New Delhi.
3. A text Book of Analytical Geometry of Three Dimensions, by P.K. Jain and Khaleel Ahmed, Published by Wiley Eastern Ltd., 1999.
4. Co-ordinate Geometry of two and three dimensions by P. Balasubramanian, K.Y. Subrahmanyam, G.R. Venkataraman published by Tata-MC Gran-Hill Publishers Company Ltd., New Delhi.

Suggested Activities:

Seminar/ Quiz/ Assignments/ Project on Application of Solid Geometry in Engineering



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B.Sc. MICROBIOLOGY (CBCS) SYLLABUS FIRST YEAR –
SEMESTER- I

PAPER-I : INTRODUCTION TO MICROBIOLOGY AND MICROBIAL DIVERSITY TOTALHOURS:4

CREDITS:4

UNIT-I No. of hours: 12

History and mile stones in microbiology. Contributions of Anton von Leeuwenhoek, Edward Jenner, Louis Pasteur, Robert Koch, Ivanowsky. Importance and applications of microbiology. Classification of microorganisms – Haeckel's three Kingdom concept, Whittaker's five kingdom concept, three domain concept of Carl Woese. Outline classification of bacteria as per the second edition of Bergey's Manual of Systematic Bacteriology.

UNIT – II No. of hours: 10

General characteristics of Bacteria, Archaea, Mycoplasmas and Cyanobacteria. Ultra structure of Prokaryotic cell- Variant components and invariant components. General characteristics of viruses. Morphology, Structure and replication of TMV and HIV.

UNIT-III No. of hours: 10

General characteristics and outline classification of Fungi, Algae and Protozoa. Principles of microscopy - Bright field and Electron microscopy (SEM and TEM).

UNIT-IV No. of hours: 8

Staining Techniques –Simple and Differential (Gram Staining and Spore Staining). Sterilization and disinfection techniques - Physical methods – autoclave, hot- air oven, pressure cooker, laminar air flow, filter sterilization, Radiation methods – UV rays, Gamma rays. Chemical methods – alcohols, aldehydes, fumigants, phenols, halogens and hypochlorites.

UNIT –V No. of hours: 8

Isolation of Microorganisms from natural habitats. Pure culture techniques – dilution-plating, Streak-plate, Spread-plate, Pour-Plate and micromanipulator. Enrichment culturing. Preservation of microbial cultures – subculturing, overlaying cultures with mineral oils, Lyophilization, sand cultures, storage at low temperature.

PRACTICAL-I: INTRODUCTION TO MICROBIOLOGY AND MICROBIAL DIVERSITY

TOTALHOURS:48

CREDITS:2

1. Microbiology Good Laboratory Practices and Biosafety.
2. Preparation of culture media for cultivation of bacteria
3. Preparation of culture media for cultivation of fungi
4. Sterilization of medium using Autoclave
5. Sterilization of glassware using Hot Air Oven
6. Light compound microscope and its handling

7. Microscopic observation of bacteria (Gram +ve bacilli and cocci, Gram-ve bacilli), Cyanobacteria, Algae and Fungi.
8. Simple staining
9. Gram's staining
10. Hanging-drop method.
11. Isolation of pure cultures of bacteria by streaking method.
12. Preservation of bacterial cultures by various techniques.
13. Diagrammatic or Electron photomicrographic observation of TMV, HIV, T4 phage and Adenovirus

SUGGESTED READING

- Alexopoulos, C.J., Mims, C.W. and Blackwell, M. (1996). **Introductory Mycology**, Wiley, New York.
- Atlas, R.A. and Bartha, R. (2000). **Microbial Ecology. Fundamentals and Application**, Benjamin Cummings, New York.
- Dimmock, N.J., Easton, A.J. and Leppard, K.N. (2001). **Introduction to Modern Virology**, Blackwell Science Ltd, U.K.
- Dube, R.C. and Maheswari, D.K. (2000) **General Microbiology**. S Chand, New Delhi. Edition), Himalaya Publishing House, Mumbai.
- Frobisher, H., Hinsdill, R.D., Crabtree, K.T. and Goodhart, D.R. (2005). **Fundamentals of Microbiology**, Saunders and Company, London.
- Jaya Babu (2006). **Practical Manual on Microbial Metabolisms and General Microbiology**. Kalyani Publishers, New Delhi.
- Madigan, M.T., Martinko, J.M. and Parker, J. (2010). **Brock Biology of Microorganisms**, 9th Edition, MacMillan Press, England.
- Moore-Landecker, E. (1996). **Fundamentals of Fungi**, Prentice-Hall, NJ, USA.
- Niclin, J. et al. (1999). **Instant Notes in Microbiology**. Viva Books Pvt. Ltd., New Delhi. Pelczar, M.J., Chan, E.C.S. and Kreig, N.R. (1993). **Microbiology**. 5th Edition, Tata Mc Graw Hill Publishing Co., Ltd., New Delhi.
- Gopal Reddy et al **Laboratory Experiments in Microbiology**
- Power, C.B. and Dagainawala, H.F. (1986). **General Microbiology Vol I & II** (2nd Edition), Prescott, M.J., Harley, J.P. and Klein, D.A. (2010). **Microbiology**. 5th Edition, WCB Mc Graw Hill, New York.
- Ram Reddy, S. and Reddy, S.M. (2007). **Essentials of Virology**. Scientific Publishers India, Jodhpur.
- Rao, A.S. (1997). **Introduction to Microbiology**. Prentice-Hall of India Pvt Ltd., New Delhi. Black, J.G. (2005).
- Reddy, S.M. (2003). **University Microbiology .I**. Galgotia Publications New Delhi. Reddy, S.M. and Reddy, S.R. (1998). **Microbiology – Practical Manual**, 3rd Edition, Sri Padmavathi Publications, Hyderabad.

Singh, R.P. (2007). **General Microbiology**. Kalyani Publishers, New Delhi.

Stanier, R.Y., Adelberg, E.A. and Ingram, J.L. (1991). **General Microbiology**, 5th Ed., Prentice Hall of India Pvt. Ltd., New Delhi.

Sullia, S.B. and Shantaram, S. (1998). **General Microbiology**, Oxford & IBH Publishing Pvt. Ltd., New Delhi.

Talaro, K. and Talaro, A. (1996). **Foundations in Microbiology**. 2nd Edition. UMC Brown Publications.

Webster, J. (1980). **Introduction to Fungi**, Cambridge University Press, Cambridge

Wilson, K. and Walker, J. (1994). **Practical Biochemistry**. 4 th Edition, Cambridge University Press, England.

Zubay, G. (1998). **Biochemistry** WCB. Mc GrawHill, Iowa.

B.Sc. MICROBIOLOGY (CBCS) SYLLABUS FIRST YEAR –
SEMESTER- II

PAPER-II: MICROBIAL BIOCHEMISTRY & METABOLISM

TOTALHOURS:48

CREDITS:4

UNIT-I No. of hours: 10

Outline classification and general characteristics of carbohydrates (monosaccharides, disaccharides and polysaccharides). General characteristics of amino acids and proteins. Structure of nitrogenous bases, nucleotides, nucleic acids. Fatty acids (saturated and unsaturated) lipids (spingolipds, sterols andphospholipids).

UNIT-II No. of hours: 8

Principle and applications of – Colorimerty Chromatography (paper, thin-layer and column), Spectrophotometry (UV & visible), Centrifugation and Gel Electrophoresis.

UNIT-III No. of hours: 10

Properties and classification of Enzymes. Biocatalysis- induced fit and lock and key models. Coenzymes and Cofactors. Factors affecting catalytic activity. Inhibition of enzyme activity- competitive, noncompetitive, uncompetitive and allosteric.

UNIT-IV No. of hours: 10

Microbial Nutrition –Nutritional requirements and uptake of nutrients by cells. Nutritional groups of microcroorganisms- autotrophs, heterotrophs, mixotrophs. Growth media- synthetic, complex, selective, enrichment and differential media. Microbial Growth- different phases of growth in batch cultures, Synchronous, continuous, biphasic growth. Factors influencing microbial growth. Methods for measuring microbial growth – Direct microscopy, viable count estimates, turbidometry andbiomass.

UNIT-V No. of hours: 10

Aerobic respiration -Glycolysis, HMP path way, ED path way, TCA cycle, Electron transport, oxidative and substrate level phosphorylation. Anaerobic respiration (Nitrate). Fermentation - Alcohol and lactic acid fermentations. Outlines of oxygenic and anoxygenic photosynthesis in bacteria.

PRACTICAL-II : MICROBIAL BIOCHEMISTRY & METABOLISM

TOTALHOURS:48

CREDITS:2

1. Qualitative Analysis ofCarbohydrates
2. Qualitative Analysis ofAminoacids
3. Colorimetric estimation DNA by diphenylaminemethod
4. Colorimetric estimation of proteins by Biuret/Lowrymethod

5. Paper chromatographic separation of sugars and aminoacids
6. Preparation of different media- Synthetic and Complex Media
7. Setting and observation of Winogradsky column.
8. Estimation of CFU count by spread plate method/pour plate method.
9. Bacterial growth curve.
10. Factors affecting bacterial growth –pH.
11. Factors affecting bacterial growth –Temperature.
12. Factors affecting bacterial growth –Salts

SUGGESTED READING

- Berg JM, Tymoczko JL and Stryer L (2011) **Biochemistry**, W.H. Freeman and Company Caldwell, D.R. (1995). **Microbial Physiology and Metabolism**, W.C. Brown Publications, Iowa, USA.
- Campbell, PN and Smith AD (2011) **Biochemistry Illustrated**, 4th ed., Published by Churchill Livingstone
- Elliot, W.H. and Elliot, D.C. (2001). **Biochemistry and Molecular Biology**, 2 nd Edition, Oxford University Press, U.S.A.
- Gottschalk, G. (1986). **Bacterial Metabolism**, SpringerVerlag, New York.
- Lehninger, A.L., Nelson, D.L. and Cox, M.M. (1993). **Principles of Biochemistry**, 2 nd Edition, CBS Publishers and Distributors, New Delhi.
- Madigan, M.T., Martinkl, J.M. and Parker, J. (2010). **Brock Biology of Microorganisms**, 9th Edition, MacMillan Press, England.
- Moat, A.G. and Foster, J.W. (1995). **Microbial Physiology**, John Wiley, New York.
- Nelson DL and Cox MM (2008) **Lehninger Principles of Biochemistry**, 5th Edition., W.H. Freeman and Company.
- Prescott, M.J., Harley, J.P. and Klein, D.A. (2010). **Microbiology**. 5th Edition, WCB Mc GrawHill, New York.
- Reddy, S.R. and Reddy, S.M. (2004). **Microbial Physiology**, Scientific Publishers, Jodhpur, India.
- Sashidhara Rao, B. and Deshpande, V. (2007). **Experimental Biochemistry: A student Companion**. I.K. International Pvt. Ltd.
- Stanier, R.Y., Adelberg, E.A. and Ingram, J.L. (1991). **General Microbiology**, 5th Ed., Prentice Hall of India Pvt. Ltd., New Delhi.
- Tymoczko JL, Berg JM and Stryer L (2012) **Biochemistry: A short course**, 2nd ed., W.H. Freeman
- Voet, D. and Voet J.G (2004) **Biochemistry** 3rd edition, John Wiley and Sons
- White, D. (1995). **The Physiology and Biochemistry of Prokaryotes**, Oxford University Press, New York.
- Willey MJ, Sherwood, LM & Woolverton C J (2013) Prescott, Harley and Klein's **Microbiology** by. 9th Ed., McGrawHill



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B.Sc. PHYSICS SYLLUBUS UNDER CBCS
w.e.f. 2015-16 (Revised in April 2016)
For Mathematics Combinations
B.Sc. 1st Semester Physics
Paper I: Mechanics & Properties of Matter

Work load:60 hrs per semester

4 hrs/week

UNIT-I (10 hrs)

1. Vector Analysis

Scalar and vector fields, gradient of a scalar field and its physical significance. Divergence and curl of a vector field with derivations and physical interpretation. Vector integration (line, surface and volume), Statement and proof of Gauss and Stokes theorems.

UNIT-II (10 hrs)

2. Mechanics of particles

Laws of motion, motion of variable mass system, Equation of motion of a rocket. Conservation of energy and momentum, Collisions in two and three dimensions, Concept of impact parameter, scattering cross-section, Rutherford scattering-derivation.

UNIT-III (16 hrs)

3. Mechanics of Rigid bodies

Definition of rigid body, rotational kinematic relations, equation of motion for a rotating body, angular momentum, Euler equations and its applications, precession of a top, Gyroscope, precession of the equinoxes.

4. Mechanics of continuous media

Elastic constants of isotropic solids and their relations, Poisson's ratio and expression for Poisson's ratio in terms of ν , n and k . Classification of beams, types of bending, point load, distributed load.

UNIT-IV (12hrs)

5. Central forces

Central forces, definition and examples, characteristics of central forces, conservative nature of central forces, conservative force as a negative gradient of potential energy, equation of motion under a central force, Derivation of Kepler's laws. Motion of satellites.

UNIT-V (12 hrs)

6. Special theory of relativity

Galilean relativity, absolute frames. Michelson-Morley experiment, negative result. Postulates of special theory of relativity. Lorentz transformation, time dilation, length contraction, addition of velocities, mass-energy relation.

REFERENCE BOOKS:

1. B. Sc. Physics, Vol.1, Telugu Academy, Hyderabad
2. Fundamentals of Physics Vol. I - Resnick, Halliday, Krane ,Wiley India 2007
3. Unified Physics, Vol. 1, S.L. Gupata& S. Guptha, Jai Prakash Nath & Co, Meerut.
4. College Physics-I. T. Bhimasankaram and G. Prasad. Himalaya Publishing House.
5. University Physics-FW Sears, MW Zemansky& HD Young,Narosa Publications, Delhi
6. Mechanics, S.G.Venkatachalapathy, Margham Publication, 2003.

Practical paper 1: Mechanics & Properties of Matter

Work load: 30 hrs per semester

2 hrs/week

Minimum of 6 experiments to be done and recorded

1. Viscosity of liquid by the flow method (Poiseuille's method)
2. Young's modulus of the material of a bar (scale) by uniform bending
3. Young's modulus of the material a bar (scale) by non- uniform bending
4. Surface tension of a liquid by capillary rise method
5. Determination of radius of capillary tube by Hg thread method
6. Viscosity of liquid by Searle's viscometer method
7. Bifilar suspension – moment of inertia of a regular rectangular body.
8. Determination of moment of inertia using Fly-wheel
9. Determination of the height of a building using a sextant.
10. Rigidity modulus of material of a wire-dynamic method (torsion pendulum)

Suggested student activities

Student seminars, group discussions, assignments, field trips, study project and experimentation using virtual lab

Examples

- Seminars - A topic from any of the Units is given to the student and asked to give a brief seminar presentation.
- Group discussion - A topic from one of the units is given to a group of students and asked to discuss and debate on it.
- Assignment - Few problems may be given to the students from the different units and asked them to solve.
- Field trip - Visit to Satish Dhawan Space Centre, Sriharkota / Thermal and hydroelectric power stations / Science Centres, any other such visit etc.
- Study project - Web based study of different satellites and applications.

Domain skills:

Logical derivation, experimentation, problem solving, data collection and analysis, measurement skills

*** Documental evidence is to be maintained for the above activities.

Paper II: Waves & Oscillations
(For Maths Combinations)
II SEMESTER

Work load: 60 hrs per semester

4 hrs/week

UNIT-I (12 hrs)

1. Simple Harmonic oscillations

Simple harmonic oscillator and solution of the differential equation-Physical characteristics of SHM, torsion pendulum-measurements of rigidity modulus, compound pendulum- measurement of 'g', combination of two mutually perpendicular simple harmonic vibrations of same frequency and different frequencies. Lissajous figures.

UNIT-II (12 hrs)

2. Damped and forced oscillations

Damped harmonic oscillator, solution of the differential equation of motion of damped oscillator, logarithmic decrement, relaxation time and quality factor, differential equation of motion of forced oscillator and its solution, amplitude resonance and velocity resonance.

UNIT-III (10 hrs)

3. Complex vibrations

Fourier theorem and evaluation of the Fourier coefficients, analysis of periodic wave functions-square wave, triangular wave, saw tooth wave, simple problems on evolution of Fourier coefficients.

UNIT-IV (17hrs)

4. Vibrating strings: 8 hrs

Transverse wave propagation along a stretched string, general solution of wave equation and its significance, modes of vibration of stretched string clamped at ends, overtones and harmonics.

5. Vibrations of bars: 9 hrs

Longitudinal vibrations in bars-wave equation and its general solution. Special cases (i) bar fixed at both ends (ii) bar fixed at the midpoint (iii) bar fixed at one end. Tuning fork.

UNIT-V (9 hrs)

6. Ultrasonics:

Ultrasonics, properties of ultrasonic waves, production of ultrasonics by piezoelectric and magnetostriction methods, detection of ultrasonics, determination of wavelength of ultrasonic waves.Applications of ultrasonic waves.

REFERENCE BOOKS:

1. BSc Physics Vol.1, Telugu Academy, Hyderabad.
2. Waves and Oscillations. N. Subramanyam and Brijlal, Vikas Publications.
3. Unified Physics Vol., Mechanics, Waves and Oscillations, Jai Prakash Nath&Co.Ltd.
4. Fundamentals of Physics. Halliday/Resnick/Walker ,Wiley India Edition 2007.
5. Waves & Oscillations. S.Badami, V. Balasubramanian and K.R. Reddy,Orient Longman.
6. College Physics-I. T. Bhimasankaram and G. Prasad. Himalaya Publishing House.
7. Science and Technology of Ultrasonics- Baldevraj, Narosa, New Delhi,2004
8. Introduction to Physics for Scientists and Engineers. F.J. Buche. McGraw Hill.

Practical Paper II: Waves & Oscillations

Work load: 30 hrs per semester

2 hrs/week

Minimum of 6 experiments to be done and recorded

1. Volume resonator experiment
2. Determination of 'g' by compound/bar pendulum
3. Simple pendulum normal distribution of errors-estimation of time period and the error of the mean by statistical analysis
4. Determination of the force constant of a spring by static and dynamic method.

5. Determination of the elastic constants of the material of a flat spiral spring.
6. Coupled oscillators
7. Verification of laws of vibrations of stretched string –sonometer
8. Determination of frequency of a bar –Melde’s experiment.
9. Study of a damped oscillation using the torsional pendulum immersed in liquid-decay constant and damping correction of the amplitude.
10. Formation of Lissajous figures using CRO.

Suggested student activities

Student seminars, group discussions, assignments, field trips, study project and experimentation using virtual lab

Examples

- | | |
|------------------|--|
| Seminars | - A topic from any of the Units is given to the student and asked to give a brief seminar presentation. |
| Group discussion | - A topic from one of the units is given to a group of students and asked to discuss and debate on it. |
| Assignment | - Few problems may be given to the students from the different units and asked them to solve. |
| Field trip | - Visit to Satish Dhawan Space Centre, Sriharikota / Thermal and hydroelectric power stations / Science Centres, any other such visit etc. |
| Study project | - Web based study of different satellites and applications. |

Domain skills:

Logical derivation, experimentation, problem solving, data collection and analysis, measurement skills

***** Documental evidence is to be maintained for the above activities.**



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STATISTICS CBCS SYLLABUS

Semester – I (CBCS With Maths Combination Common to BA/BSc)

Paper - I: Descriptive Statistics and Probability

No. of Hours/week:04

credits3

UNIT-I

Introduction to Statistics: Concepts of Primary and Secondary data. Methods of collection and editing of primary data, Secondary data. Designing a questionnaire and a schedule. Diagrammatic and graphical representation of data. Measures of Central Tendency - Mean, Median, Mode, Geometric Mean and Harmonic Mean.

UNIT-II

Measures of dispersion: Range, Quartile Deviation, Mean Deviation and Standard Deviation. Central and Non-Central moments and their interrelationship. Sheppard's correction for moments. Skewness and kurtosis.

UNIT-III

Introduction to Probability: Basic Concepts of Probability, random experiments, trial, outcome, sample space, event, mutually exclusive and exhaustive events, equally likely and favorable outcomes. Mathematical, Statistical, axiomatic definitions of probability. Conditional Probability and independence of events,

UNIT-IV

Probability theorems: Addition and multiplication theorems of probability for 2 and for n events. Boole's inequality and Baye's theorem and problems.

UNIT-V

Random variable: Definition of random variable, discrete and continuous random variables, functions of random variable. Probability mass function. Probability density function, Distribution function and its properties. Bivariate random variable - meaning, joint, marginal and conditional Distributions, independence of random variables.

Text Books:

1. V.K.Kapoor and S.C.Gupta: Fundamentals of Mathematical Statistics, Sultan Chand & Sons, New Delhi.
- 2 BA/BSc I year statistics - descriptive statistics, probability distribution - Telugu Academy - Dr M.Jaganmohan Rao, Dr N.Srinivasa Rao, Dr P.Tirupathi Rao, Smt.D.Vijayalakshmi.
3. K.V.S. Sarma: Statistics Made Simple: Do it yourself on PC. PHI

Reference books:

1. Willam Feller: Introduction to Probability theory and its applications. Volume –I, Wiley
2. Goon AM, Gupta MK, Das Gupta B : Fundamentals of Statistics , Vol-I, the World Press

Pvt.Ltd.,Kolkata.

3. Hole P.G: Introduction to mathematical statistics, Asia Publishinghouse.
4. M. JaganMohan Rao and Papa Rao: A Text book of StatisticsPaper-I.
5. Sanjay Arora and Bansilal: New Mathematical Statistics: Satya Prakashan , NewDelhi
6. Hogg Tanis Rao: Probability and Statistical Inference. 7thedition.Pearson.

Practicals - Paper – I

1. Basics of Excel- data entry, editing and saving, establishing and copying a formulae, built in functions in excel, copy and paste and exporting to MS word document. (Not for TheExamination).
2. Graphical presentation of data (Histogram, frequency polygon,Ogives).
3. Graphical presentation of data (Histogram, frequency polygon, Ogives) using MSEXcel
4. Diagrammatic presentation of data (Bar andPie).
5. Diagrammatic presentation of data (Bar and Pie) using MSEXcel
6. Computation of measures of central tendency (Mean, Median andMode)
7. Computation of measures of dispersion (Q.D, M.D andS.D)
8. Computation of non-central, central moments, β_1 and β_2 for ungroupeddata.
9. Computation of non-central, central moments, β_1 and β_2 for groupeddata.
10. Computation of central moments – Sheppard's corrections for groupeddata.
11. Computation of Karl Pearson's coefficients of Skewness and Bowley's coefficients ofSkewness.
12. Computation of measures of central tendency, dispersion and coefficients of Skew -ness,Kurtosis using MSEXcel.

Note: Training shall be on establishing formulae in Excel cells and derive the results. The excel output shall be exported to MS word for writing inference.

STATISTICS SYLLABUS

Semester – II (CBCS With Maths Combination Common to BA/BSc) Paper - II: Mathematical Expectation and Probability Distributions (Scientific calculators are allowed)

No. of Hours/week:04

credits3

UNIT-I

Mathematical expectation: Mathematical expectation of a random variable and function of a random variable. Moments and covariance using mathematical expectation with examples. Addition and Multiplication theorems on expectation. Definitions of M.G.F, C.G.F, P.G.F, C.F and their properties. Chebyshev and Cauchy - Schwartz inequalities.

UNIT-II

Discrete Distributions: Binomial and Poisson distributions, their definitions, first four central moments, β_1 and β_2 . M.G.F, C.F, C.G.F, P.G.F, mean, variance, additive property if exists. Poisson approximation to Binomial distribution.

UNIT-III

Negative Binomial, Geometric, Hyper-geometric distributions - Definitions, means, variances, M.G.F, C.F, C.G.F, P.G.F, reproductive property if exists. Binomial approximation to Hyper Geometric Distribution, Poisson approximation to Negative binomial distribution.

UNIT-IV

Continuous Distributions: Rectangular, Exponential, Gamma, Beta Distributions of first and second kind. Other properties such as mean, variance, M.G.F, C.G.F, C.F, and reproductive property if ex

| UNIT - V

Normal Distribution: Definition, Importance, Properties, M.G.F, CF, additive property, Normal distribution as a limiting case of Binomial and Poisson distribution. Cauchy Distribution definition, CF and reproductive property.

Text Books:

1. V.K Kapoor and S.C Gupta: Fundamentals of Mathematical Statistics, Sultan Chand & Sons, New Delhi.
2. BA/BSc I year statistics - descriptive statistics, probability distribution - Telugu Academy - Dr M Jaganmohan Rao, Dr N Srinivasa Rao, Dr P Tirupathi Rao, Smt D Vijayalakshmi
3. K.V.S. Sarma: Statistics Made Simple: Do it yourself on PC. PHI.

Reference books:

4. Willam Feller: Introduction to Probability theory and its applications. Volume –I, Wiley
5. Goon AM, Gupta MK, Das Gupta B: Fundamentals of Statistics, Vol-I, the World Press Pvt Ltd., Kolakota.
6. Hoel P.G: Introduction to mathematical statistics, Asia Publishing house.
7. M. JaganMohan Rao and Papa Rao: A Text book of Statistics Paper-I.
8. Sanjay Arora and Bansi Lal: New Mathematical Statistics: Satya Prakashan, New Delhi
9. Hogg Tanis Rao: Probability and Statistical Inference. 7th edition Pearson.

Practical Paper – II

1. Fitting of Binomial distribution – Directmethod.
2. Fitting of Binomial distribution – Direct method using MSEXcel.
3. Fitting of binomial distribution – Recurrence relationMethod.
4. Fitting of Poisson distribution – Directmethod.
5. Fitting of Poisson distribution – Direct method using MSEXcel.
6. Fitting of Poisson distribution - Recurrence relationMethod.
7. Fitting of Negative Binomialdistribution.
8. Fitting of Geometricdistribution.
9. Fitting of Normal distribution – Areasmethod.
10. Fitting of Normal distribution – Ordinatesmethod.
11. Fitting of Exponentialdistribution.
12. Fitting of Exponential distribution using MSEXcel
13. Fitting of a Cauchydistribution.
14. Fitting of a Cauchy distribution using MSEXcel

Note: Training shall be on establishing formulae in Excel cells and derive the results. The excel output shall be exported to MS word for writing inference.



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ZOOLOGY SYLLABUS FOR SEMESTER ZOOLOGY -

PAPER - I

ANIMAL DIVERSITY - NONCHORDATES

Periods: 60

Max. Marks: 100

Brief history, Significance of Diversity of Non-Chordates

Protozoa

General characters

Classification of Protozoa up to classes with examples

Elphidium (type study)

Porifera

General characters

Classification of Porifera up to classes with examples

Sycon – External Characters, Types of cells,

Skeleton in Sponges

Canal system in sponges

Unit - II

Coelenterata

General characters

Classification of Coelenterata up to classes with examples

Obelia - External Characters, Structure of Polyp and Medusa

Polymorphism in coelenterates

Corals and coral reef formation

Platyhelminthes

General characters

Classification of Platyhelminthes up to classes with examples

Fasciola hepatica, Reproductive System, Life History and pathogenicity

Unit - III

Nemathelminths

General characters

Classification of Nemathelminths up to classes with examples

Annelida

General characters

Classification of Annelida up to classes with examples

Hirudinaria granulosa, Digestive System, Reproductive System

Coelom ducts

Vermiculture - Scope, significance, earthworm species, processing, Vermicompost, economic importance of vermicompost

Unit - IV

Arthropoda

General characters
Classification of Arthropoda up to classes with examples
Prawn, Appendages, Respiratory system
Peripatus - Structure and affinities

Mollusca

General characters
Classification of Mollusca up to classes with examples
Pearl formation in Pelecypoda
Torsion in gastropods

Unit - V

Echinodermata

General characters
Classification of Echinodermata up to classes with examples
Water vascular system in starfish

Hemichordata

General characters
Classification of Hemichordata up to classes with examples
Balanoglossus - Structure and affinities

Non-Chordata larval forms

Amphiblastula
Nauplius
Bipinnaria

Tornaria



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ZOOLOGY SYLLABUS FOR II SEMESTER

ZOOLOGY - PAPER - II

ANIMAL DIVERSITY - CHORDATES

Periods:60

Max. Marks:100

Unit - I

General characters of Chordata Prochordata

Salient features of Cephalochordate

Affinities of Cephalochordate

Salient features of Urochordata

Structure and life history of Herd mania

Significance of Retrogressivemetamorphosis

Unit - II

Cyclostomatous

General characters of Cyclostomatous

Comparison of the Petromyzon and Myxine

Pisces

General characters of Fishes

Classification of fishes up to sub - class level with examples

Scolion, Digestive system, Heart, Brain

Migration in Fishes

Types of Scales

Dipnoid

Unit - III

3.1 Amphibia

General characters of Amphibian

Classification of Amphibia up to orders with examples.

Rana hexadactyl, Digestive system, Respiratory system, Heart

Reptilian

General characters of Reptilian

Classification of Reptilian upto orders with examples

Identification of Poisonous snakes and Skull in reptiles

Unit - IV

Aves

General characters of Aves

Classification of Aves up to subclasses with examples.

Columba Livia, Digestive system, Respiratory system, Heart.

Migration in Birds

Flight adaptation in birds

Unit - V

Mammalia

General characters of Mammalia

Classification of Mammalia up to sub - classes with examples

Comparison of Prototherians, Metatheria's and Eutherians

Dentition in mammals

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AUTONOMOUS SYLLABUS

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2017-2018



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2017-2018

DEPARTMENT OF ENGLISH

FIRST SEMESTER

With effect from 2017 - 18 (Under CBCS Pattern)

SUB : POETRY-I

UNIT – I Background Study

Literary History – Genres – Movements – Ideas – Trends - Concepts

UNIT – 2

- 1) 1. Chaucer : Good Friday, Nativity, Crucifying
- 2) 2. John Donne : The flee, The Canonization

UNIT – 3

- 1) John Milton : Paradise Lost, Book IV
- 2) Alexander Pope : The Rape of the Lock (canto I and II),” The Happy Man”
- 3) Thomas Gray : Elegy Written in a Country Church Yard
- 4) Tennyson : Wheezes

UNIT – 4

- 1) William Wordsworth : The Tables turned, Tintern Abbey.
- 2) John Keats : Bright Star, Endymion, Ode to Nightingale
- 3) P.B. Shelley : To a Skylark, Ozymandias.



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2017-2018

DEPARTMENT OF ENGLISH

FIRST SEMESTER

SUB : DRAMA-I:

UNIT – 1 Background Study

- 1) Literary History – Genres – Movements – Ideas – Trends – Concepts

UNIT – 2

- 1) Christopher Marlowe : Dr Faustus
- 2) Ben Jonson : Volpone

UNIT – 3

- 1) William Shakespeare : Julius Caesar, Romeo and Juliet, Macbeth

UNIT – 4

- 1) Sheridan : The Rivals
- 2) Oscar Wilde : The picture of Dorian Gray



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2017-2018

DEPARTMENT OF ENGLISH

FIRST SEMESTER

SUB : FICTION-I

UNIT – I Background Study

- 1) Literary History – Genres – Movements – Ideas – Trends – Concepts

UNIT – 2

- 1) Daniel Defoe : Moll Flanders
- 2) Henry Fielding : Joseph Andrews

UNIT – 3

- 1) Jane Austen : Emma
- 2) George Eliot : The Mill on the Floss

UNIT – 4

- 1) Charles Dickens : A Tale of Two Cities
- 2) Thomas Hardy : Tess of the D Urbarvillas



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2017-2018

DEPARTMENT OF ENGLISH

FIRST SEMESTER

SUB : PROSE-I:

UNIT – 1 Background Study

Literary History – Genres – Movements – Ideas – Trends – Concepts

UNIT – 2

- 1) Francis Bacon : Of Truth, Of Death
- 2) Joseph Addison : The Coverley Papers (Selected Essays)
 1. Mischief's of party spirit
 2. Labour and Exercise
 3. Rural Manners

UNIT – 3

- 1) Charles Lamb : Dream Children, The South-Sea House

UNIT – 4

- 1) John Milton : Of Education
- 2) Bertrand Russell : Man's Peril



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2017-2018

DEPARTMENT OF ENGLISH

FIRST SEMESTER

Paper V

SUB : ENGLISH LANGUAGE

UNIT – 1

Language – Definition – features – Human Language vs. Animal

Language - Definition and Scope of Linguistics - Dimensions of Study

UNIT – 2

Origin and Growth of English Language – Influences (Latin, French, and

Indian) – Standard English – British and American English

UNIT – 3

Sounds – Speech Mechanism – Stress/ Rhythm – Intonation – Phones – Phonemes – Allophones.

UNIT – 4

Morphology – Morphs – Allomorphs – Word formation processes – Simple, Complex and Compound Words.



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2017-2018

Department of English

Non-Core Syllabus

CBSC-1: Introduction to Computers and MS-Office

Unit -1

Exploring Computers and their Uses

Types of Storage Devices

Operating System Basics

Unit -2

Word Basics

Header and Footer

Tables

Graphics

Macros

Mail Merge

Unit- 3

Excel Basics

Formatting

Introduction to Functions

Excel Charts

Unit - 4

Power Point Basics



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2017-2018

DEPARTMENT OF ENGLISH

SECOND SEMESTER

ENGLISH 201: POETRY – II

UNIT – I Background Study

Literary History – Genres – Movements – Ideas – Trends - Concepts

UNIT – 2

1. Robert Browning : My Last Duchess, The Last Ride Together
2. G.M. Hopkins : Wind Hover, Pied Beauty

UNIT – 3

3. W.B. Yeats : The Second Coming, Byzantium,
A Prayer for my daughter
4. T.S. Eliot : The Waste Land

UNIT – 4

5. W.H. Auden : The Unknown Citizen,
The Shield of Achilles
6. Ted Hughes : God's Granduer



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2017-2018

DEPARTMENT OF ENGLISH

SECOND SEMESTER

ENGLISH 202: DRAMA – II

UNIT – I Background Study

Literary History – Genres – Movements – Idea – Trends – Concepts

UNIT – 2

- | | |
|--------------|-------------------------------|
| 1. G.B. Shaw | : St. Joan |
| 2. T S Eliot | : The Murder in the Cathedral |

UNIT – 3

- | | |
|------------------|----------------------|
| 3. John Osborne | : Look Back in Anger |
| 4. Harold Pinter | : The Birthday Party |

UNIT – 4

- | | |
|-------------------|---------------------|
| 5. Samuel Beckett | : Waiting for Godot |
| 6. J.M. Synge | : Riders to the Sea |



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2017-2018

DEPARTMENT OF ENGLISH

SECOND SEMESTER

ENGLISH 203: FICTION – II

UNIT – I Background Study

Literary History – Genres – Movements – Ideas – Trends – Concepts

UNIT – 2

1. Virginia Woolf : Mrs. Dalloway
2. James Joyce : The Portrait of the Artist as a Youngman

UNIT – 3

3. D.H. Lawrence : The Rainbow
4. William Golding : Lord of the Flies

UNIT – 4

5. Graham Greene : The Power and the Glory
6. Kingsley Amis : Lucky Jim



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2017-2018

DEPARTMENT OF ENGLISH

SECOND SEMESTER

ENGLISH 204: PROSE – II

UNIT – I Background Study

Literary History – Genres – Movements – Ideas – Trends – Concepts

UNIT – 2

1. Bertrand Russell : Knowledge and wisdom
2. John Ruskin : Sesame and Lilies

UNIT – 3

3. Virginia Woolf : A Room of One's own
4. George Orwell : Politics and English Language

UNIT – 4

5. Winston Churchill: Blood, Toil, Tears and Sweat
6. G.K. Chesterton: The worship of Wealthy.



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DEPARTMENT OF ENGLISH

SECOND SEMESTER

ENGLISH 205: ENGLISH LANGUAGE TEACHING

UNIT – 1

1. Language Acquisition and Language Learning
2. Problems of Teaching / Learning English as a Second Language in the Indian Context
3. Current Trends of Teaching English in India.

UNIT – 2

Teaching of English Language – Theories, - Concepts- Methods – Direct, Grammar Translation – Bilingual – Audio lingual – Desuggestopedia.

UNIT – 3

Teaching poetry & Prose from Language Perspective

Teaching LSRW Skills

UNIT – 4

Materials and tools – Development of Sources for Teaching – News Papers- Advertisements – Magazines – Utility of Language lab for teaching English.



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2017-2018

DEPARTMENT OF ENGLISH

THIRD SEMESTER

ENGLISH 301: INDIAN ENGLISH LITERATURE – I

UNIT – 1

Background Study

Literary History – Genres – Movements – Ideas – Trends - Concepts

UNIT – 2

1. Rajmohan's Wife : Bunkum Chandra Chatterjee
2. The Vendor of Sweets : R. K. Narayan

UNIT – 3

3. Toru Dutta : Sita, Our Casuarina Tree, the Lotus
4. Sarojini Naidu : Coromandel Fishers,
Palanquin Bearers

UNIT – 4

5. Mahesh Dattani : Tara
6. Ananda Coomaraswamy : The Dance of Siva



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2017-2018

DEPARTMENT OF ENGLISH

THIRD SEMESTER

ENGLISH 302: AMERICAN LITERATURE-1

UNIT – 1

Background Study

Literary History – Genres – Movements – Ideas – Trends - Concepts

UNIT – 2

1. Emerson : The American Scholar
2. H.D. Thoreau : Walden

UNIT – 3

3. Walt Whitman : Song of Myself,
When Lilacs last in the Dooryard Bloomed
4. Emily Dickinson : Because I Could not Stop for Death,
Success is Counted Sweetest

UNIT – 4

5. Mark Twain : The Adventures of Huckleberry Finn
6. Nathaniel Hawthorne : The Scarlet Letter



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DEPARTMENT OF ENGLISH

THIRD SEMESTER

303: NEW LITERATURES IN ENGLISH-I (Excluding Indian English Literature)

UNIT – 1 Background Study

Literary History – Genres – Movements – Ideas – Trends – Concepts

UNIT - 2

1. A.D. Hope : Australia, The Death of the Bird
2. Judith Wright : Fire at the Murdering Hut, Bullock

UNIT -3

3. Gabriel Okra : The Mystic Drum
4. Wole Soyinka : The Lion and the Jewel

UNIT – 4

5. Chinua Achebe : Things Fall Apart
6. V.S. Naipaul : A House for Mr. Biswas



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DEPARTMENT OF ENGLISH
THIRD SEMESTER

ENGLISH 304: LITERARY CRITICISM-I

UNIT – I Background Study:

Literary History – Genres – Movements – Idea – Trends – Concepts

UNIT – 2

1. Aristotle : Poetics
2. Dr. Johnson : A Preface to Shakespeare

UNIT -3

3. Coleridge : Biographia Literary, Chapter XIV
4. Matthew Arnold : A Study of Poetry

UNIT – 4

5. T.S. Eliot : Tradition and Individual Talent
6. Calanthe Brooks : Irony as a Principle of Structure



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DEPARTMENT OF ENGLISH

THIRD SEMESTER

ENGLISH 305: WORLD CLASSICS IN ENGLISH TRANSLATION

UNIT – I Background Study:

Literary History – Genres – Movements – Idea – Trends – Concepts

UNIT – 2

1. Sophocles : Oedipus Rex
2. Kalidasa : Shakuntala

UNIT – 3

1. Kafka : The Castle
2. Homer : The Iliad (Canto I)
3. Dante : The Inferno (From the Divine Comedy)

UNIT – 4

4. Dostoevsky : Poor Folk (novella)



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DEPARTMENT OF ENGLISH
FOURTH SEMESTER
ENGLISH 401: INDIAN ENGLISH LITERATURE – II

UNIT – I Background Study

Literary History – Genres – Movements – Ideas – Trends - Concepts

UNIT – 2

1. Mulk Raj Anand : Untouchable

2. Amitav Ghosh : The Shadow Lines

UNIT – 3

3. Nissim Ezekiel : (From Ten Twentieth Century Poets, OUP)

4. A.K. Ramanujam : (From Ten Twentieth Century Poets, OUP)

1. Night of the Scorpion
2. Poet, Lover, Birdwatcher.
3. The Visitor

1. Looking for a cousin on a Swing.
2. A River
3. Of Mothers, Among Other Things.

UNIT – 4

5. Sri Aurobindo : The Soul of Poetic Delight and Beauty

6. Jawaharlal Nehru : Discovery of India (some extracts)



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DEPARTMENT OF ENGLISH
FOURTH SEMESTER
ENGLISH 402: AMERICAN LITERATURE – II

UNIT – I Background Study

Literary History – Genres – Movements – Ideas – Trends - Concepts

UNIT – 2

1. Robert Frost : Mending Wall, Home Burial
2. Wallace Stevens : Sunday Morning, Anecdote of a Jar

UNIT – 3

3. Eugene O'Neill : The Hairy Ape
4. Tennessee William's : A Streetcar Named Desire

UNIT – 4

5. Saul Bellow : Seize the Day
6. Alice Walker : The Color purple



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DEPARTMENT OF ENGLISH

FOURTH SEMESTER

ENGLISH 403: NEW LITERATURES IN ENGLISH – II
(EXCLUDING INDIAN ENGLISH LITERATURE)

UNIT – I Background Study

Literary History – Genres – Movements – Ideas – Trends - Concepts

UNIT – 2

1. Derek Walcott : Far Cry Africa, Ruins of Great House
2. Katherine Mansfield : Bliss and other stories

UNIT – 3

3. Margaret Laurence : The Stone Angle
4. Margaret Atwood : Surfacing

UNIT – 4

5. Cyprian Ekwensi : People of the City
6. Ngugi WaThiong'o : A Grain of Wheat

DEPARTMENT OF ENGLISH
FOURTH SEMESTER
ENGLISH 404: LITERARY CRITICISM – II

UNIT – I Background Study

Literary History – Genres – Movements – Ideas – Trends - Concepts

UNIT – 2

1. Edmund Wilson : Marxism and Literature
2. Lionel Trilling : Freud and Literature

UNIT – 3

3. Northrop Frye : The Archetypes of Literature
4. Jacques Derrida : Sign, Structure and Play

UNIT – 4

5. Elaine Showalter : Towards Feminist Poetics

6. Ananda Vardhan : Dhvanyaloka (Essay: The First Flash)
Translated by K. Krishna Moorthy

DEPARTMENT OF ENGLISH

FOURTH SEMESTER

ENGLISH 405: INDIAN LITERATURE IN ENGLISH TRANSLATION – II

UNIT – I Background Study

Literary History – Genres – Movements – Ideas – Trends - Concepts

UNIT – 2

1. Rabindranath Tagore : Geetanjali (Selections)
2. B. Tilak (Tr. S.S. Prabhakar) : As Ambrosia Dripped, Modernism & Poesy, Song Immorta

UNIT – 3

3. GurajadaAppa Rao : Kanyasulkam (Macmillan)
4. Vijay Tendulkar : Silence! The Court is in Session

UNIT – 4

5. Chandu Menon : Indulekha
6. U.R. Ananta Murrthy : Samskara

