

ST. CYRIL'S COLLEGE
ADOOR
ESTD. 1981



ST. CYRIL'S COLLEGE, ADOOR

Criteria 2

2.6.1

POS AND COS

PROGRAMME OUTCOMES OF BA ENGLISH

PO1 Critical Thinking: Critically and analytically read works of literature produced in many different cultures and historical periods.

PO2 Proficiency in Written Communication: Students enjoy literature and want to develop the essential skills of reading, independent critical thinking and polished writing and analysis.

PO3 Creative Writing: Through the different genres of writing, the students are polished for the competitive world of professional writing.

PO4 Effective Communication: To make the students proficient communicators. **PO5 Knowledge about World Literatures:** Students will gain knowledge of British, American and other Literatures.

PO6 Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

PO7 Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in a broadcast context socio-technological changes.

PROGRAMME OUTCOMES OF BA ECONOMICS

PO1 Analytical Skills: Acquire the ability to articulate and conceptualize or to solve problems by making decisions and use the critical thinking to evaluate every issue in the current social scenario.

PO2 Cross cutting Issues: Acquire the ability to have sufficient disciplinary knowledge, to engage in public discussions on related issues, be able to continue to learn outside school; and have the skills to enter careers of choice.

PO3 Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.

PO4 Effective Citizenship: Demonstrate empathetic social concern and equity centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

PO5 Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

PO6 Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio technological changes

PROGRAMME OUTCOMES OF BA HISTORY

PO1 Narrative skill: Demonstrate knowledge of the chronology, major events, personalities and turning points of the history and to learn the basic narrative structure of historians in writing in order to understand the value of diversity.

PO2 Critical reading: Distinguish primary and secondary sources, understand and evaluate historical ideas, arguments, interpretations and multiple narratives of the past. **PO3 Comparison:** To compare and contrast different processes, modes of thought and expression from different historical time periods and in different geographical area. **PO4 Research and evidence:** Gather and assess primary and secondary sources and to demonstrate ethical use of sources and provide accurate and properly formatted citations in research papers. Students will demonstrate the research skills required for methodology and historiography to explore various topics and themes, including social, economic, cultural, political, and technological history.

PO5 Oral and written communication skills: Students will demonstrate proficiency in oral and written communication skills.

PO6 Analysis: Learn to evaluate and draw information from the narratives of past events that participants and observers produced and to recognize differences in the methods and techniques of historians and learn how to compare and critique them.

PO7 Knowledge: Gain familiarity with a range of historical subjects that span distinct eras, recognize how different individuals, groups, organizations, societies, cultures, countries, and nations have interacted in the past and how those interactions have affected history, gain familiarity with the aims and achievements of different schools of historical thought, practice, and analysis, develop an appreciation of themselves and of others through the study the past in local, regional, national, and global contexts.

PROGRAMME OUTCOMES OF BCOM WITH COMPUTER APPLICATIONS

PO1 To build a strong foundation of knowledge in different areas of commerce. PO2 To integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students.

PO3 To expose student about entrepreneurship.

PO4 To develop numerical abilities of students.

PO5 To develop language abilities of students.

PO6 To develop an ability to effectively communicate both orally and verbally.

PROGRAMME OUTCOMES OF BSc CHEMISTRY

PO1 Offer the students with an in-depth understanding of and training in chemical sciences. PO2 Arouse the interest of the students in chemistry and prepare the students to contribute both in academic and industrial requirements.

PO3 The programme comprises of fourteen core courses, one project course, two elective courses, one core-specific foundation course in addition to one area-specific foundation course, the complementary courses and language courses. Among the two open/elective courses, the

one offered in the fifth semester is open to students from other Majors.

PO4 Provide a detailed understanding of the basic concepts of chemical sciences and enable them with tools needed for the practice of chemistry

PO5 Deliver a detailed knowledge of the terms, concepts, methods, principles and experimental techniques of chemistry.

PROGRAMME OUTCOMES OF MA ENGLISH

PO1 **Critical Thinking:** Critically and analytically read works of literature produced in many different cultures and historical Periods.

PO2 **New trends in Literature:** To familiarize the students with the current trends in literary research.

PO3 **Self- Confidence:** The students became very confident to use their communication skills in English in a wide range of professional contexts.

PO4 **Theoretical Knowledge:** Enable the students to analyze literary phenomena using the theoretical tools and have acquired knowledge of historical and cultural theories.

PO5 **Knowledge about World Literatures:** Students will gain knowledge of British, American, European, Australian, South Asian and other literatures.

PO6 **Historical Awareness of Different Genres:** Students develop the historical awareness of the evolution of Poetry, Drama, Prose, and Fiction.

PO7 **Effective Communication:** To make the students proficient and confident communicators.

PROGRAMME OUTCOMES OF MSc PHYSICS

PO1 A student with a Master's degree in Physics has in-depth and detailed functional knowledge of the fundamental theoretical concepts and experimental methods of Physics.

PO2 Graduates sustain intellectual curiosity and know how to continue to learn not only areas that are relevant to Physics, but also that are important to society

PO3 The students will have received training in research skills

PO4 To equip the students for seeking suitable careers in Physics.

PO5 To carry out professional responsibilities such as teaching and research in an ethical manner.

PO6 To integrate and apply key concepts, information, and methods of Physics into the work.

Course Outcomes

COURSE OUTCOME OF FIRST DEGREE PROGRAMME IN ENGLISH Semester 1

Language Course 1: Listening, Speaking and Reading (EN 1111.1) Credits: 4 CO 1 Describe

the process and barriers of listening, speaking and reading skills CO 2 Classify the skills and sub-skills of reading

CO 3 Classify the English sounds

CO 4 Describe 'Received Pronunciation'

CO 5 Describe the syllable, stress and intonation

CO 6 Classify the varieties of English

Foundation Course 1: Writings on Contemporary Issues (EN 1121) Credits: 2 CO 1 Describe

the major issues in contemporary world.

CO 2 Describe the problems posed by alcoholism.

CO 3 Examine the status of social justice and human rights in India.

CO 4 Identify the patriarchal social order and hypocrisy of male domination . CO 5 Describe the socio-cultural insecurities caused by globalization.

CO 6 Describe the etiology and epidemiology of substance abuse on adolescent lives. Core Course

1: Reading Poetry (EN: 1141) Credits : 4

CO 1 Classify the types of poetry

CO 2 Describe the poetic devices such as alliteration, simile, assonance, metaphor, rhyme and rhythm.

CO 3 Identify the various types of poetic meters.

CO 4 Describe strategies employed by the poets.

CO 5 Analyse and appreciate poems critically.

CO 6 Describe representative poetry from British, American, Irish, German, Russian, Australian and Indian literatures.

Complementary Course 1 – History of English Literature I (EN 1131) Credits: 4 CO 1

Describe the early history of England.

CO 2 Describe Old and Middle English Literature.

CO 3 Describe the beginning of English drama.

CO 4 Describe Renaissance, Reformation and Counter- reformation.

CO 5 Explain Elizabethan poetry with reference to Edmund Spenser.

CO 6 Introduce the University Wits.

Semester 2

Language Course 3: Environmental Studies (EN 1211.1) Credits: 4

CO 1 Define ecosystem, biodiversity and pollution.

CO 2 Explain In-situ and Ex-situ conservation.

CO 3 Describe disaster management.

CO 4 Describe the types, causes, effects and control measures of pollution. CO 5 Classify the various natural resources.

CO 6 Describe the various acts to protect the environment.

CO 7 Describe the role of Information Technology in environment and human health. Language

Course 4: Modern English Grammar and Usage (EN 1212.1) Credits: 3 CO 1 Classify the types of sentences, clauses and phrases.

CO 2 Describe the types, functions and use of parts of speech.

CO 3 Identify the common language errors and correct them.

CO 4 Explain the grammar of spoken and written language.

CO 5 Analyse and convert sentences from active to passive, and from direct to indirect and vice versa.

CO 6 Describe the degrees of comparisons, one form to the other.

Core Course 2: Reading Drama (EN 1241) Credits: 4

CO 1 Describe the origin of drama.

CO 2 Classify the various types of drama.

CO 3 Introduce William Shakespeare, the father of English drama.

CO 4 Describe the various dramatic devices such as irony, soliloquy, aside and chorus. CO 5

Introduce the modern drama and classify the various predominant forms. CO 6 Critically evaluate the one-act plays of eminent British and European dramatists.

Complementary Course 3: History of English Literature II (EN 1231) Credits :4 CO 1

Describe the rise of Puritanism and its impact on literature.

CO 2 Describe metaphysical poetry with reference to John Donne.

CO 3 Describe Restoration theatre.

CO 4 Introduce the coffee houses in London as the centres of social and political discussions.

CO 5 Write down the basic tenets of Romanticism and introduce Wordsworth, Coleridge, Shelley, Keats and Byron.

CO 6 Describe Imperialism and Orientalism.

Semester 3

Language Course 6: Writing and Presentation Skills (EN 1311.1) Credits: 4 CO 1 Describe the mechanism of academic and general writing.

CO 2 Identify the different modes of writing.

CO 3 Introduce the basics of academic presentation.

CO 4 Describe non-verbal communication.

CO 5 Explain the functional uses of writing.

CO 6 Describe the various writing techniques to meet professional and academic needs. **Core**

Course 3: Reading Fiction (EN 1341) Credits : 3

CO 1 Describe prose fiction -fable, short story and novel.

CO 2 Classify the types of novels.

CO 3 Describe the elements of fiction.

CO 4 Describe the narrative strategies such as stream of consciousness and meta fiction. CO 5

Introduce modern British fiction through a critical study of George Orwell's *Animal Farm*.

CO 6 Introduce modern European fiction through a critical study of Voltaire's *Candide*. **Core**

Course 4: 20th Century Malayalam Literature in English Translation (EN 1342) Credits: 3

CO 1 Describe the Malayalam Literature after independence.

CO 2 Describe the rise of Malayalam novel and drama.

CO 3 Describe the modernist phase in Malayalam poetry and introduce the major Romantics in Malayalam poetry.

CO 4 Describe the characteristics of Malayalam fiction and poetry in English translation. CO 5

Critically evaluate the major Malayalam poems and short stories in English translation.

CO 6 Introduce the Malayalam drama in English translation and the experimental works of Narendra Prasad and P. K. Venkuttan Nair.

Complementary Course 5: History of English Literature -III (EN 1331) Credits: 4 CO 1

Introduce the Victorian age and the spread of Science and Technology. CO 2 Identify the major Pre-Raphaelites and the aestheticians.

CO 3 Explain the consequences of First World War on Literature and introduce the war poets. CO 4 Describe the life and literature between two World Wars.

CO 5 Describe the concepts - modernism, post- modernism, feminism and environmentalism. CO 6 Describe the new trends in English theatre.

Semester 4

Language Course 8: Readings in Literature (EN 1411.2) Credits: 4

CO 1 Describe literature as a cultural and interactive phenomenon.

CO 2 Classify different types of poetry.

CO 3 Explain poetic diction and figurative language.

CO 4 Describe the scope and structure of drama.

CO 5 Classify the different types of prose.

CO 6 Classify the different types of fiction.

Foundation Course 2: Informatics (EN 1421) Credits: 3

CO 1 Describe the history and development of computers.

CO 2 Classify the types of computers.

CO 3 Describe cyber ethics and cyber crimes like hacking and morphing.

CO 4 Describe the various operating systems.

CO 5 Explain the nature of the emerging digital knowledge system.

CO 6 Describe the various search engines.

Core Course 5: Reading Prose (EN 1441) Credits: 3

CO 1 Classify the various types of prose writings.

CO 2 Describe the basic concepts of style and literary device in prose.

CO 3 Classify the types of essays.

CO 4 Critically analyse and appreciate the essays of Lamb, Hazlitt and Ruskin. CO 5 Describe Life Writing genres like biography, autobiography, memoir and diaries. CO 6 Describe the salient

features of 18th Century, 19th Century and Modern prose. **Complementary course 7: History of**

English Language and Phonetics (EN 1431) Credits: 4 CO 1 Describe the nature of language.

CO 2 Distinguish between human languages and animal communication systems. CO 3 Classify the language families.

CO 4 Describe the periods in the history of English language – Old English, Middle English and Modern English.

CO 5 Describe the development of dictionaries and introduce Dr. Johnson's dictionary. CO 6 Describe the evolution of English as a global language.

CO 7 Describe word formation and growth of vocabulary.

CO 8 Describe the present day trend in English language.

CO 9 Classify the varieties of dialects.

Semester 5

Core Course 6: Literary Criticism (EN 1541) Credits: 4

CO 1 Describe the nature and function of criticism.

CO 2 Describe the contributions of Plato and explain the concept of mimesis and inferiority of art.

CO 3 Describe the major concepts proposed by Aristotle.

CO 4 Define tragedy and explain the various parts of tragedy.

CO 5 Describe the concept of sublime put forward by Longinus.

CO 6 Describe Renaissance and Neo-classical criticism.

CO 7 Describe Romantic and Victorian criticism.

CO 8 Explain Twentieth century criticism.

Core Course 7: Indian Writings in English (EN 1542) Credits: 3

CO 1 Explain the development of Indian writing in English.

CO 2 Critically evaluate and appreciate Indian English poetry by focusing on selected poems by major Indian writers.

CO 3 Explain the Indianness in Indian Literature in English.

CO 4 Study the literary significance of Indian English novel with respect to Jayashree Mishra's *Ancient Promises*.

CO 5 Analyse the strength and constraints of Indian English as a literary medium. CO 6 Read and appreciate Girish Karnad's drama *Hayavadana*.

Core Course 8: Film Studies (EN 1543) Credits: 3

CO 1 Describe the key concepts in film studies.

CO 2 Describe the language and authorship of cinema and explain its hybrid nature. CO 3 Describe the adaptation and notions of fidelity in film.

CO 4 Distinguish between literary language and film language.

CO 5 Explain the narrative strategies and structures in film and fiction.

CO 6 Describe the various film movements and explain the contemporary trends in film. CO 7

Analyse and appreciate the films- *Rashomon*, *My Fair Lady* and *Chamma*. **Core Course 9:**

Linguistics and Phonetics (EN 1544) Credits: 4

CO 1 Explain the key concepts in linguistics.

CO 2 Classify the branches of linguistics.

CO 3 Classify the national and international varieties of language.

CO 4 Describe Phonetics and speech mechanism.

CO 5 Classify the speech sounds.

CO 6 Describe Indian exploration in language.

CO 7 Introduce the different systems of thought.

Core Course 10: Post Colonial Literatures in English (EN 1545) Credits: 4 CO 1 Describe Post

Colonial literature, life and culture.

CO 2 Critically read and appreciate major Post Colonial poems.

CO 3 Study the culture of indigenous people through the evaluation of Wole Soyinka's *The Strong Breed*.

CO 4 Describe the concepts like American dream and Jazz Age by in depth study of F.Scott Fitzgerald's novel *The Great Gatsby*.

CO 5 Describe the various modes of literary expression in Post Colonial literature. CO 6 Analyse

and appreciate Gabriel Garcia Marquez's *Chronicle of a Death Foretold*. **Open Course 1:**

Communicative Applications in English (EN 1551.1) Credits: 2 CO 1 Describe speech sounds,

stress, syllable and intonation.

CO 2 Classify the various varieties of modern English.

CO 3 Distinguish between verbal communication and non verbal communication. CO 4 Describe the various types of reading.

CO 5 Explain scientific writing and business writing.

CO 6 Describe the various writing techniques to meet professional and academic needs. [Semester](#)

[6](#)

[Core Course 11: World Classics \(EN 1641\) Credits: 4](#)

CO 1 Describe the definition and emergence of classics.

CO 2 Introduce the major Greek, Roman, Italian and Russian classic writers. CO 3 Critically analyse the Indian classic *Ritusamhara* by Kalidasa.

CO 4 Conduct a brief survey of prominent classics.

CO 5 Analyse and appreciate Sophocles' *Antigone*.

CO 6 Study Tolstoy's *The Death of Ivan Ilyich* and Kazantzakis' *Zorba the Greek*. [Core Course 12:](#)

[Methodology and Perspectives of Humanities \(EN 1642\) Credits: 4](#) CO 1 Introduce the methodological issues specific to the humanities.

CO 2 Describe the differences between natural, social and human sciences. CO 3 Provide a critical overview of literature from the perspectives of the Humanities. CO 4 Describe the impact of society on literature.

CO 5 Describe the various text oriented approaches like philology, rhetoric, stylistics new criticism and semiotics.

CO 6 Distinguish between objectivity and subjectivity.

[Core Course 13: English for the Media \(EN 1643\) Credits: 4](#)

CO 1 Explain the nature and scope of the communication media.

CO 2 Analyse news stories and features.

CO 3 Describe radio and TV programming.

CO 4 Explain the pre-production process and the role of an editor and output editor. CO 5 Describe the variety of language devices used in slogan and advertising campaigns. CO 6 Produce and present scripts and programmes for radio and TV.

CO 7 Design and write webs, blogs and advertisements.

[Core Course 14: Women's Writing \(EN 1644\) Credits: 3](#)

CO 1 Introduce the development of women's writing in various countries.

CO 2 Explain the plurality of female experiences through the works of Virginia Woolf, Alice

Walker and Jasbir Jain.

CO 3 Analyse the poems by major women writers to interrogate the biases in the construction of gender and patriarchal norms.

CO 4 Describe feminism as a social movement and critical tool.

CO 5 Describe the diverse concerns addressed by feminism.

CO 6 Analyse and appreciate the dramas- Sheila Walsh's "Molly and James" and Mamta G. Sagar's "The Swing of Desire".

Elective Course : Creative Writing (EN 1661.3) Credits : 2

CO 1 Describe the various aspects of Creative writing.

CO 2 Write book and film reviews.

CO 3 Describe the characteristics of poems and short stories in general.

CO 4 Critical appreciation of the short stories old Edgar Allan Poe, Chinua Achebe, A.C.Doyle and Kushwant Singh.

CO 5 Introduce writings for children with the help of illustrative examples. CO 6 Describe the characteristic features of Science Fiction.

COURSE OUTCOME OF FIRST DEGREE PROGRAMME IN ECONOMICS Semester: I

Core I: - Methodology and Perspectives Of Social Science (Ec 1141) Credits: 4 CO1 Identify the distinction between Science & Social Science.

CO2 Describe various Social Science Disciplines.

CO3 Describe the methodology of economics.

CO4 Explain the development of Economic Thought.

CO5 Describe the research process.

CO6 Identify the scope of ICT in research

Semester: II

Core II: - Micro Economics I (Ec 1241) Credits: 4

CO1 Describe the scope of Microeconomics

CO2 Distinguish between Micro Economics & Macroeconomics.

CO3 Explain the concept of demand including its determinants, types and law of demand. CO4 Describe the concept of elasticity of demand.

CO5 Explain the cardinal and ordinal approach to Utility analysis.

CO6 Explain the different cost concepts.

Semester: III

Core III: - Microeconomics II (Ec 1341) Credits: 4

CO1 Identify the market structures

CO2 Distinguish perfect competition and monopolistic competition.

CO3 Explain marginal productivity theory.

CO4 Distinguish Ricardian and Modern theory of rent

CO5 Understand theories of interest and theories of profit

CO6 Explain Pareto optimality criterion.

CO7 Note down linear programming.

Semester: IV

Core IV: - Basic Tools For Economics I (Ec 1441) Credits: 4

CO1 Understand the role of mathematics

CO2 Distinguish various equations

CO3 Explain the meaning of Differential Calculus

CO4 Understand optimization

CO5 To know about the economic applications of Integral calculus

CO6 Explain matrix

CO7 Understand Cramm's Rule

Core V: - Macro Economics I (Ec 1442) Credits: 3

CO1 To understand the basic concept of Macro Economics

CO2 To familiarize the basic concepts of Macro Economics

CO3 To understand the methods of National income Accounting

CO4 To study the difficulties in National Income Accounting

CO5 To make awareness about the Classical macro Economic System CO6 To make awareness about Keynesian macro Economic System

Semester: V

Core VI: - Money And Modern Banking (Ec 1541) Credits: 4

CO1 To enable the students to know about the role of money in the economy CO2 To understand the main functions of money

CO3 To familiarize the main functions of commercial bank

CO4 To know about the different types of accounts

CO5 To make awareness about modern banking system

CO6 To understand the innovative functions of bank like telephone banking, internet banking and mobile banking

CO7 To know about the Reserve Bank of India

Core VII: - Macro Economics II (Ec 1542) Credits: 4

CO1 Understand the components of Aggregate Demand in the Keynesian system CO2 Explain consumption function

CO3 Distinguish Gross and Net investment

CO4 Identify Friedman's Restatement of the Quantity theory

CO5 Explain real balance effect

CO6 Identify macroeconomic policy

CO7 Explain Philip's curve

Semester: V

Core VIII: - Economics Of Growth And Development (EC 1543) Credits: 2 CO1 Distinguish between Economic growth and Development CO2 Describe the tools for measuring development

CO3 Describes the approaches to development

CO4 Evaluate the theories of economic growth

CO5 Describe the issues and challenges of development

CO6 Identify the theories of development useful for Indian Economy **Core IX: - Indian Economy (EC1544) Credits: 4**

CO1 Understand demographic features

CO2 Explain economic development strategy since Independence CO3 Note down the critical assessment of Economic Reforms CO4 Distinguish land reforms and green revolution

CO5 Explain WTO and Indian agriculture

CO6 Understand economic planning and development issues CO7 Identify poverty alleviation schemes

Core X: - Public Economics (EC 1545) Credits: 4

CO1 Evaluate the scope of Public Finance

CO2 Identify the significance of government and its functions CO3 Identify the economic impact of

government finance CO4 Describe the budgetary process in India

CO5 Identify the tax structure in India

CO6 Evaluate the concept of fiscal federalism

Open I: - Human Resource Management (EC 1551) Credits: 2 CO1 Describe the nature and scope of HRM

CO2 Identify the trend of working age population in India CO3 Describe the methods of recruitment

CO4 Evaluate the collective bargaining in India

CO5 Write down the needs and benefits of training

CO6 Describe the concept of Human capital

Semester: VI

Core XI: - Kerala Economy (EC 1641) Credits: 4

CO1 To understand the structural change in the Kerala Economy

CO2 To analyse the basic features of Kerala Economy

CO3 To understand the basic demographic features

CO4 To determine the role and importance of Education Health and Tourism and IT sector in India

CO5 To know about the emerging trends and issues in Kerala Economy

CO6 To classify the contribution to GSDP (Gross State Domestic Product) CO7 To understand about various types of planning

Core XII: - Financial Economics (EC1642) Credits: 4

CO1 Describe the structure and functions of financial system

CO2 Identify the features and submarkets of Indian Money Market

CO3 Identify the features of capital market in India

CO4 Identify the organization and management of Indian Stock market

CO5 Describe the working of secondary market in India

CO6 Identify the role of finance in the operation of an economy

Core XII: - Basic Tools For Economics II (EC 1643) Credits: 4

CO1 Distinguish correlation and regression

CO2 Explain the construction of Index numbers

CO3 Identify the problems in the construction of index numbers

CO4 Describe set theory

CO5 Explain the approaches to the definition of probability

CO6 Describe random variable

CO7 Explain Binomial and Normal distribution

Semester: VI

Core XIV: -International Economics (EC 1644) Credits: 3

CO1 To understand the basic concepts and theories of international trade CO2 Distinguish mercantilism and physiocrats

CO3 Explain offer curve.

CO4 Identify balance of payments

CO5 Explain absorption approach

CO6 Describe exchange rate determination

CO7 Explain IMF and international liquidity management CO8 Distinguish free trade and protection

Open II: - Agricultural Economics (EC 1661.1) Credits: 2

CO1 Describe the nature and scope of Agricultural Economics CO2 Explain the role of agriculture in economic development CO3 Explain various models of agricultural development

CO4 Identify the sources and features of agricultural credit CO5 Explain agricultural marketing in India

CO6 Identify the objectives of Agricultural Price Policy.

COMPLEMENTARY

Semester: I

Complementary I: - Foundations of Economic Theory (EC 1131) Credits: 2

CO1 To understand the basic economics

CO2 To make awareness about the basic economic problems CO3 Differentiate between Micro Economics and Macro Economics. CO4 To make awareness about the significance of the study of Economics CO5 To understand how Demand and Supply affect the market economy CO6 To study about various types of costs and revenues

CO7 To understand the different types of markets

Semester: II

Complementary II: - Money And Banking (EC.1231) Credits: 2

CO1 To understand the concepts of money

CO2 To study the main functions of money

CO3 To know about different types of indices

CO4 To understand about the construction of index numbers and its limitations CO5 To study about the functions of commercial banks

CO6 To give an idea about Indian Banking system

CO7 To study about the main functions of Reserve Bank of India

Semester: III

Complementary III: - Public Finance and Trade (EC1331) Credits: 3

CO1 To inculcate the students about the significance of Public finance

CO2 To understand about the Taxable and non-taxable sources of income in India CO3 To study the different types of taxation

CO4 To know about the Indian tax system

CO5 To understand the reasons for the growth of public expenditure in India CO6 To understand about India's public Debt.

CO7 To study about India and International Trade

Semester: VI

Complementary VI: - Indian Economy Since Independence (EC 1431) Credits: 3

CO1 To provide basic understanding of the features of Indian Economy

CO2 To understand the concept of poverty and poverty line

CO3 To make awareness about Human development index

CO4 To familiarize the student about the various concepts of National Income CO5 To create an idea about the significance of Agriculture in Indian Economy CO6 To understand the importance of small scale industries and its problems CO7 To make awareness about the significance of Industry and service sector in Indian Economy

COURSE OUTCOME OF FIRST DEGREE PROGRAMME IN HISTORY Semester I

Core I HY 1141 Methodology and Perspectives of Social Sciences Credit 4

CO1 Identify the main concerns of Social Science disciplines

CO2 Articulate the basic terminologies and theories prevalent in concerned disciplines CO3

Critically read popular and periodical literature from a Social Science perspective CO4 Describe

methodologies, theories, and concepts, currently in use within the historical discipline CO5 Identify history as a scientific discipline

CO6 Analyze the ideologies of Subaltern historians

CO7 To know about the uses of statistics in social science research

CO8 Critically evaluate the problems of objectivity in social science

Complementary HY 1131.1 History of Modern India (1857-1900) Credit 2

CO1 Discuss the various interpretations regarding the nature of the revolt of 1857 CO2 Evaluate the socio-religious reform movements of the 19th century

CO3 Factors responsible for the growth of nationalism in India

CO4 Examine the strategies adopted by the moderate nationalist to achieve their aims CO5 Discuss the formation of Indian National Congress

CO6 Outline the Programmes and policies of INC

Semester II

Core II HY 1241 Cultural Formation of the Pre-Modern World Credit 4

CO1 Classify nature of pre historic societies

CO2 Identify Paleolithic and Neolithic settlements

CO3 Demonstrate the idea that humankind as a whole has a history to be investigated and that a world history course may be more than study of various “cultures,” each disconnected from the others.

CO4 Bring out the progress of democracy

CO5 Analyze the cause for the rise and growth of civilizations

CO6 Identify the causes and results of crusades

CO7 Trace out the achievements of Ancient Egyptians

CO8 Account on the causes for the decline of feudalism in Europe

Complementary II HY 1231.3 History of Modern India (1901-1920) Credit 3

CO1 Discuss the causes for the growth of extremism in Indian national movement CO2 Assess the significance of boycott and swadeshi movements

CO3 Examine the international factors that influenced Indian awakening CO4 Discuss the ideologies of satyagraha movements

CO5 Formation of Muslim League

CO6 Discuss the role of Hindustan Socialist Republican Association in the struggle for freedom

Semester III

Foundation course II HY 1321 Informatics Credit 3

- CO1 Acquiring basic knowledge of the contribution of Information technology to history CO2 Classify digital resources for learning and research in history
- CO3 Discuss briefly a computer network and its various applications
- CO4 Analyze the various social issues associated with information technology CO5 Explain the importance of search engines in academics
- CO6 Discuss the issues and concerns in IT and society

Core III HY 1341 Evolution of Early Indian Society and Culture Credit 4

- CO1 Analyze the salient Features of Prehistoric and Proto Historic Cultures in India
- CO2 Trace the evolution of India Culture with special reference to the society and polity of Ancient period
- CO3 Familiarize the students with the heritage of India
- CO4 Write in detail about state, society and economy during the Mughal period CO5 What were the features of second urbanization?
- CO6 Describe the administrative system of the Mauryas
- CO7 Whether the Gupta period was a golden age
- CO8 Illustrate how the Bhakti movement of 14th century helps in promoting the unity of all religions

Complementary II HY 1331.5 History of Modern India (1921-1947) Credit 3

- CO1 Examine the significance of non co-operation movement
- CO2 Discuss the emergence of leftist ideas in Indian national movement CO3 Illustrate the major features of Indian constitution
- CO4 Explain the revolutionary movements after 1922
- CO5 Point out the salient features of Government of India Act, 1935 CO6 Formation of INA

Semester IV

Core IV HY1441 Selected Themes and Issues in the Socio- Cultural Processes Credit 4

- CO1 Highlight the Social Cultural and Administrative Features of Medieval Period CO2 Understanding of Delhi Sultanate

CO3 Analyze the features of administration, art, and architecture of Mughal period CO4 Identify cultural synthesis

CO5 Explain the development of vernacular languages in Medieval India CO6 Important sufi centre's of Medieval India

CO7 Role of slaves in Sultanate polity

CO8 Describe briefly the life of nobility in Medieval India

Core V HY1442 History Modern World – Part 1 Credit 3

CO1 Analyze the Socio- Cultural and Administrative Features of Medieval Period CO2 Describe the process of socio-cultural specialties

CO3 Analyze the dynastic history of this period

CO4 Point out the significance of the Declaration of independence

CO5 Trace the growth of Reformation and its effect on Catholic religion CO6 Critically examine the role of UNO in combating terrorism and nuclear armament Complementary II HY 1431.7

History of Contemporary India (After 1948) Credit 3

CO1 Explain the role of Sardar Vallabhai Patel in the integration of princely states CO2 Examine the impact of information technology in contemporary Indian society CO3 Describe the main features of Indian constitution

CO4 Briefly sketch the impact of globalization on Indian economy

CO5 Examine the impact of green revolution on Indian economy

CO6 Analyze the new economic policy

Semester V

Core VI HY1541 Major Trends in Historical thoughts and writings Credit 4

CO1 Incorporate the relevance of historiography along with the theory CO2 Evaluate the works in the light of new theories and concepts

CO3 Examine the importance of objectivity in history

CO4 Narrate the features of Greco-Roman historiography

CO5 How historical materialism affected a paradigm shift in historical studies CO6 Discuss the recent trends in historiography

CO7 Contributions of St. Augustine

CO8 Examine the influence of Descartes on modern historiography

Core VII HY1542 Colonialism and Resistance movements in India Credit 4 CO1 Evaluate

consolidation of English Power in India

CO2 Analyze the emergence of socio-religious consciousness in India CO3 Examine the nature of tribal revolts in India

CO4 Describe the after effects of British domination

CO5 Examine the various interpretations on the nature of the revolt of 1857

CO6 Account on the role played by various socio-religious movements of the 19th century towards the social awakening in India

CO7 Analyze the features of land revenue policies introduced by the British in India CO8 Role of Christian missionaries in the development of education in India

Core VIII HY1543 History of Modern World – Part II Credit 2 CO1 Describe rise of modern

world

CO2 Analyze the factors responsible for the growth of capitalism

CO3 Examine the role of Democracy

CO4 Examine the role of Mustapha Kamal Pasha as reformer

CO5 Assess the role of Count Cavour in the unification of Italy

CO6 Trace the growth of Nazism in Germany

CO7 Synthesize the development of 20th century world

Core IX HY1544 History of Pre- Modern Kerala Credit 4

CO1 Identify geographical features of Kerala

CO2 Examine the significance and salient features of megalithic culture of Kerala CO3 Analyze early human settlements –Paleolithic and Neolithic

CO4 Describe Polity and society of Perumal Era

CO5 Discuss the contributions of Elamkulam Kunjan Pillai to Kerala historiography CO6 Examine the rise and growth of nadus and swaroopams in Kerala

CO7 Discuss the various art forms of Kerala

CO8 Highlights the advent of Europeans

Core X HY1545 Making of Indian Nation Credit 2

CO1 Describe the characteristics of Indian nationalism

CO2 Analyze the nature of the diverse social movements of the time

CO3 Compare the ideals of different political groups and individuals

CO4 Illustrate the importance of Quit India movement

CO5 Explain the integration process of Indian states

CO6 Examine the major developments in Post- Gandhian Era

Open course HY1551.3 History of Human Rights Movement Credit 2 CO1 Define human rights

CO2 Point out some examples on the violation of basic human rights

CO3 What is the role of civil society in protecting human rights?

CO4 Discuss the various movements fought against human rights violation CO5 Explain the role of UNO in protecting human rights

CO6 Discuss the various constitutional laws enacted in India for the protection of human rights

Semester VI

Core XI HY1641 Making of Modern Kerala Credit 4

CO1 Describe Early Resistance against British East India Company

CO2 Examine the nature of Scio- religious movement of Kerala

CO3 Analyze the Political and cultural activities of Kerala

CO4 Give an account of the memorials and the struggles for civil rights in Travancore CO5

Educational Reforms of Joseph Mundassery

CO6 Illustrate the factors led to the formation of Aikya Kerala

CO7 Account on the nature of coalition experiments in Kerala

CO8 First Communist Ministry of Kerala

Core XII HY 1642 Major trends in Indian Historical thought & writings Credit 4 CO1

Analyze the origin and development of historical writings in India

CO2 Locate major historical works in Indian history

CO3 Describe the influence of ideas and theories in historiography

CO4 Examine the major trends and concepts in Indian historical writings.

CO5 Account on the characteristic features of historical writing during the Mughal period CO6

Elucidate the contributions of Max Muller to the understanding of Ancient Indian history CO7

Account on the contributions of Zia-ud-din Barani to the study of Medieval Indian history CO8

Account on how James Mill periodised Indian history

Core XIII HY1643 Contemporary India Credit 4

CO1 Provide a graphic account of the circumstances that led to the formation of India Union

CO2 Illustrate the challenges faced by independent India and the bold measures initiated after independence

CO3 Assess the role of Five Year plans in the economic development of India CO4 Critically examine the foreign policy of India during the Nehruvian Era

CO5 Evaluate the achievements of contemporary India with special reference to Science Information Technology

CO6 Account on the strategies of Green revolution and its impact on Indian agriculture CO7

Comment on the environmental movements in India against deforestation CO8 Role of Sardar

Vallbhai Patel in the integration of princely states to Indian Union [Core XIV HY1644 Twentieth Century Revolutions Credit 3](#)

CO1 Describe the students four major revolutions of the 20th century, i.e. Russian, Chinese, Vietnamese and Cuban

CO2 Analyze the legacy of these revolutions

CO3 Estimate the scope and significance of the revolutions in the present context

CO4 Critically analyze the new economic policy of Lenin

CO5 Evaluate the status of China in the era of globalization CO6 Examine the circumstances that led to the Vietnam War

[Elective HY1651.6 History of Human Rights Movement Credit 2](#) CO1 Analyze the various type of human rights violations in the present world

CO2 Examine the works of Wangari Muta Maathai

CO3 Critically analyze the works of Desmon Tutu as a human rights activist CO4 Describe the women movements in India

CO5 Dalit movements in India

CO6 Role of Mahatma Gandhi in the human rights movements of South Africa

[HY1645 Project/Dissertation Credit 4](#)

CO1 To know about the techniques and methods of writing projects in History CO2 Selection of topic

CO3 Identification and collection of data

CO4 Analysis of datas

CO5 Preparation of hypothesis

CO6 Importance of citations, glossary, list of abbreviations and appendices CO7 Evaluate the importance of bibliography

CO8 Presentation of findings and drafting the project

COURSE OUTCOME OF FIRST DEGREE PROGRAMME IN COMMERCE WITH COMPUTER APPLICATION

Semester 1

Foundation Course I: Co 1121 – Environmental Studies Credits: 2

CO-I Explain key concepts from environment studies, regarding the scope and importance of environmental studies.

CO-II Describe ecosystem, Food Chains, Food web

CO-III Explain environmental Pollutions – air pollution, water pollution, thermal pollution. Also they get an idea about the causes and effects of solid waste, and re-use and re cycling methods of solid waste management.

CO-IV Identify the social issues of the environment.

CO-V Elaborating about human health, human rights, value education and Women and child welfare.

CO-VI Explain the need and importance of environmental protection

Core Course I: Co 1141 - Methodology And Perspectives Of Business Education CO-I Explain the concept of Economic systems.

CO-II Explain the role of Business in economic development, company, industry and economy.

CO-III Critically analyse sources of funds.

CO-IV Explain the role of human resources management problems in small, medium and large organizations.

CO-V Explain methods and techniques of collecting and learning business information. CO-VI Differentiate between capitalism, socialism, communalism.

Core Course II: CO 1142 - Functional Application of Management Credits: 3 Co I Explain evolution of management thoughts

CO II Explain the concept of finance.

COIII Explain sources of finance- short term and long term.

CO –IV Describe production function in an organization.

CO-V Explain the concept of Marketing and selling, Marketing mix, Product, price, place and promotion.

CO –VI Explain recruitment process and stages in selection.

Complementary Course I: Co 1131 – Managerial Economics Credits: 3 CO - I Explain scope of managerial economics aspects.

CO– II Explain the law of demand.

CO – III Explain the laws of production.

CO-IV State the methods of pricing.

CO – V Explain the major phases of a business cycle.

CO-VI Describe the methods of demand forecasting.

Semester - II

Foundation Course II: CO 1221-INFORMATICS AND CYBER LAWS Credits: 3 CO-I

Explain informatics.

CO-II Explain the key concepts like Computer networks & Internet, wireless technology, cellular wireless networks, guarantee, and warranty.

CO-III Describe the Internet access methods.

CO-IV Explain the major IT applications.

CO-V Explain Cyber space, cyber ethics, cyber addictions, and cybercrimes. CO-VI Explain cyber laws, IT Act 2000, cyber related Provisions under IPC.

Core Course III: Co 1241 - Business Communication And Office Management Credits: 3

CO-I Explain steps in preparation of resume.

CO-II State principles of effective communication.

CO-III Differentiate intra personal and inter personal communication. CO-IV Emphasise on importance of electronic media in communication. CO-V Explain role of Office Manager.

CO-VI Explain the steps in Record Keeping.

Core Course IV: Co 1242 - Financial Accounting No. of credits: 3

CO-I Explain the Generally Accepted Accounting Principles.

CO-II Explain the Fixed and reducing balance with adjustments

CO-III Explain the procedure in the preparation of Depreciation Account. CO-IV Differentiate Sectional and Self Balancing System.

CO-V Differentiate Hire Purchase and Instalment purchase system. CO-VI Explain accounting treatment of voyage accounts.

Complementary Course II: Co 1231 - Business Regulatory Framework Credits: 3 CO-I

Explain contract and explain the various types of contracts. CO-II Explain capacity of parties.

CO-III Explain the concept of sale of goods .

CO-IV Describe the difference between bailment and pledge.

CO-V List kinds of agents.

CO-VI Explain the duties and responsibilities of Regulatory Authorities. **Semester – III**

Core Course V: Co 1341- Entrepreneurship Development Credits: 3

CO-I Classify different types of entrepreneurs.

CO-II Describe and summarize the latest programs of the government authorities in promoting small and medium industries.

CO-III Explain the Entrepreneurship Development Programmes.

CO-IV Explain project feasibility.

CO-V Explain and classify industrial estates.

CO- VI Explain and list feature of a good report.

Core Course VI Co 1342: Company Administration credits : 3

CO-I Describe and classify types of Companies

CO-II Explain the Management and Administration of companies.

CO-III Explain company's Disclosure and Transparency

CO-IV Describe the Compliances, Governance and CSR with respect to companies CO-V Explain

Winding up, Winding Up by National Company Law CO-VI Explain Responsibilities and

Challenges of Company Secretary **Core Course VII: Co 1343 - Advanced Financial Accounting credits : 4**

CO-I Explain the major steps in preparation of Realisation Account. CO-II Differentiate between consignment and sales.

CO-III Describe Prepare Stock Account.

CO-IV Differentiate between joint venture and partnership.

CO-V Classify branch accounts .

CO-VI Describe the steps in preparation of departmental trading and profit and loss account.

Complementary Course IV: Co 1331- Information Technology In Business Credits: 3 CO-I

Describe the basic concepts in the field of IT

CO-II Describe E-Commerce and describe the opportunities and challenges offered by E Commerce

CO-III Explain electronic payment technology and requirements for internet based payments

CO-IV Describe the categories of E-Commerce and also the different applications of Ecommerce

CO-V Explain the main issues of E-Commerce

CO-VI Explain WEB Based Business and M-Commerce applications

Elective Course I: Stream 5 -Computer Application CO 1361.5 - Computer Application for Publications Credits : 4

CO-I What are free software briefly explain.

CO-II Explain the steps to prepare a document in MS Word.

- CO-III Explain the basics of MS Excel
- CO-IV Explain are the feature of MS- Word
- CO-V How to create a page in Pagemaker
- CO-VI How are presentation made in MS- Power Point

Semester - IV

Core Course VIII Co 1441 Capital Market Credits: 3

- CO-I Explain the functioning of Indian Capital Market.
- CO-II Elucidate banking and financial system in India .
- CO-III Explain Methods of floatation of capital.
- CO-IV Differentiate Investment Vs Speculation
- CO-V Explain derivatives.
- CO-VI Explain Role and functions of SEBI

Core Course IX CO 1442 Banking Theory and Practice Credits: 4

- CO-I Explain the changing scenario of Indian Banking
- CO-II Explain the major types of Banks in India
- CO-III Explain modern banking services.
- CO-IV Explain commercial banks and its products provided by them
- CO-V Explain relationship between banker and customer
- CO-VI Identify Banking sector reforms.

Core Course X: CO 1443 - Corporate Accounting credits: 4

- CO-I Explain about corporate accounting in conformity with the provisions of Companies Act and IFRS.
- CO-II Explain and interpret financial statements of joint stock companies in different situations.
- CO-III Describe the main features of Shares and Debentures.
- CO-IV Explain about redemption of Shares and Debenture and its types CO-V Prepare the company's final accounts
- CO-VI Explain internal reconstruction and procedure to be followed Complementary Course III:

Co 1431 - Business Statistics Credits: 3 CO-I Explain the objectives and importance of statistics.

- CO-II Describe the methods to Calculate of measures of average CO-III Describe the measures of correlation and regression.
- CO-IV Explain how to calculate value of trend .

CO-V Explain and classify methods of index numbers.

CO-VI Explain and analyse application in business.

Elective Course III: Stream 5 - Computer Application Co 1461.5 - Software For Data

Management Credits: 4

CO-I Explain the basics of Software for data management.

CO-II Explain Spreadsheet Application.

CO-III Explain about SPSS

CO-IV Describe how to create tables in MS- Access

CO-V Explain how to create Report Preparation in Access

CO-VI Explain how to create forms in Access

Semester - V

Core Course: XI: CO – 1541: Fundamentals of Income Tax Credits: 4 CO-I Explain the concepts of Income Tax

CO-I Compute the income from salary and income from house property. CO-III State the deductions in income from business or profession. CO-IV Differentiate long term capital gain and short term capital gain. CO-V Explain income from other source.

CO-VI Explain set-off and carry forward of losses.

Core Course XII: CO 1542 - Cost Accounting Credits: 4

CO – I Explain the importance of cost accounting.

CO- II Explain the elements of cost sheet.

CO- III Explain the meaning of material control with pricing methods. CO- IV Explain systems of wage payment.

CO- V Differentiate over absorption and under absorption .

CO- VI Explain the Reconciliation of cost and financial accounts.

Core Course XIII: CO 1543- Accounting for Specialised Institutions Credits : 4 CO – I Explain

the accounting practices prevailing in various specialized institutions. CO- II Describe how to prepare final accounts of Banking companies. CO- III Explain the procedure to be followed in preparation of insurance companies accounts. CO- IV Explain how accounts of electricity companies prepared

CO- V Explain how the accounts of insurance companies prepared

CO- VI Explain the functions of Stock Exchanges in India

Open Course I: CO 1551.1- Fundamentals Of Financial Accounting Credits : 2 CO – I Explain the meaning, objectives of accounting.

CO- I Explain Journal.

CO- III Explain Bank Reconciliation Statement

CO- IV Explain Rectification of errors.

CO- V Explain cash book.

CO- VI Explain Balance Sheet.

CO 1561.5 -Web Designing and Production for Business Credits: 4

CO – I Explain the steps to develop a website .

CO- II Explain the steps to develop Form & Table .

CO- III Explain the steps to develop Frames

CO- IV Explain webhosting.

CO- V Explain steps to develop CSS

CO- VI Explain the concept of XML

Semester – VI

Core Course XIV: CO 1641 – Auditing Credits: 4

CO – I Explain the principles and procedure of auditing.

CO- II Explain the duties of an auditor in connection with internal check. CO- III Differentiate between vouching and verification

CO- IV Qualifications and Disqualifications of an Auditor.

CO- V Explain Powers and Duties of an Auditor

CO- VI Classify Types of Investigation

Core Course XV: CO 1642 - Applied Costing Credits: 4 CO – I Differentiate between job costing and batch costing .

CO- II Explain Abnormal gain and their treatment.

CO- III Explain features of Service Costing

CO- IV Differentiate between marginal costing and absorption costing. . CO- V Explain Break Even Analysis

CO- VI Explain Components of standard cost

Core course XVI: CO 1643 - Management Accounting Credits: 4 CO-I Interpret financial

statements with specific tools of management accounting. CO-II Explain financial statement analysis in practical point of view CO-III Explain the concept of fund flow and cash flow statement CO-IV Explain budget control keeping in mind the scope of the concept CO-V Differentiate between Cash Flow Statement and Fund Flow Statement CO-VI Explain methods and types of reports.

Open Course II: Co 1661.7 - Management of Foreign Trade Credits: 2 CO-I Explain regional economic groupings.

CO-II Explain role of state trading in India's foreign trade.

CO-III Explain role of clearing and forwarding agents.

CO-IV State Free Trade Zones in India.

CO-V Explain balance of payments

CO-VI Explain marketing strategy.

Elective Course Iv: Stream 5 -Computer Application Co 1661.5 - Computerised Accounting Credits: 4

CO-I Explain Company creation.

CO-II Classify Vouchers. CO-III Explain Inventory vouchers. CO-IV Explain Cash book . CO-V

Explain Cost centre. CO-VI Explain ratio analysis .

COURSE OUTCOME OF FIRST DEGREE PROGRAMME IN CHEMISTRY

Semester – I

Core Course - 1 CH1141 Inorganic Chemistry I Credit-4

CO1 Familiarizes the plus-two level introductory chemistry and theoretical aspects of atomic structure and periodicity.

CO 2 Develops the principles of acids, bases and non-aqueous solvents. CO 3

Understand the chemistry of hydrogen as well as s-block elements. CO 4 Develop an idea about environmental chemistry and different types of pollution. CO 5 How the elements are arranged in the periodic table.

CO6 Explain the properties and application of s -block elements, hydrogen and their compounds.

Semester- II

Foundation Course – II COURSE CODE- CH1221 Methodology and Perspectives of Sciences and General Informatics Credit-2

CO 1 Describe the methodology and perspectives of Science and the importance of Science in the development of culture.

- CO 2 Understand the history of evolution of chemistry as a major branch of science.
- CO 3 Identify the various elementary aspects of research in chemistry.
- CO 4 Describe the contents of informatics in understanding Chemistry and to learn computer based application in analysis and presentation of experimental data.
- CO 5 Understand the various elementary aspects of analytical principles and safety measures in the laboratory.
- CO 6 Understand how Science or in special Chemistry works and get a basic understanding to do self-directed experimentation work and research in chemistry under the guidance and supervision of a mentor.

Semester-3

Course-II CH1341 Inorganic Chemistry- II Credit-3

- CO 1 Understand the fundamental to detailed knowledge in chemical bonding and compounds of non-transition elements.
- CO 2 Identify the fundamental knowledge of the nano materials.
- CO 3 Describes the various applications of nuclear chemistry.
- CO 4 Provide a necessary foundation for inorganic chemistry.
- CO 5 Builds a knowledge in chemical bonding and compounds of non-transition elements and gives an elementary idea about nanomaterials.
- CO 6 Develop a strong foundation in the area of nuclear chemistry.

SEMESTER – IV

Core Course – 3 CH1441 Organic Chemistry Paper – I Credit – 3

- CO 1 Understand the classification, nomenclature, mechanism of reactions, aromaticity.
- CO 2 Describe the chemistry of aliphatic and aromatic substituted compounds.
- CO 3 Describes the stereochemistry of organic compounds.
- CO 4 Identify the behavior of aliphatic and aromatic compounds
- CO 5 Describe the concept of reaction mechanism.
- CO 6 Understand the mechanism photochemical reactions and aromaticity.

Semester – V

Course V CH1541 Physical Chemistry – I Credit – 3

- CO 1 Identify the different states of matter
- CO 2 Understand the physical principles that govern chemical systems. CO 3 Describe

the principles of chemical thermodynamics and group theory.

CO 4 Identify the areas of physical chemistry which include gas and liquid properties.

CO 5 Identify the group theory behind various molecules.

CO 6 Describe the concept of thermodynamics and understand the chemistry of bulk systems.

Course – V CH1542 Inorganic Chemistry – III Credit 4

CO 1 Identify the multidisciplinary areas of bioinorganic chemistry and organometallic chemistry.

CO 2 Identify the fundamental concepts needed to understand transition metal chemistry, including transition metal ions in biological systems and about the inner transition elements and the principles of coordination chemistry.

CO 3 Describes about the general principles of isolation and purification of elements and instrumental methods of analysis.

CO 4 Describe the areas of inorganic chemistry which include coordination chemistry, transition and inner transition elements.

CO 5 Identify the role of organometallic compounds in organic synthesis.

CO 6 Understand about the experimental techniques used in chemistry and how the elements are isolated from their ores.

Core Course -VII CH1543 Organic Chemistry- II Credit-4

CO 1 Identify the organic compounds like alcohols, aldehydes, ketones, ethers, acids and their properties.

CO 2 Understand the principles of spectroscopy and spectral applications to organic molecules.

CO 3 Describe the fundamentals of green chemistry and supramolecular chemistry.

CO 4 Get the idea about the preparation and properties, mechanism of reactions of many organic conversions and of organic compounds.

CO 5 Get the sufficient knowledge to interpret spectrum of organic compounds

CO 6 Identify the novel areas of organic chemistry – the supramolecular and green chemistry.

Open Course -CH1551.1 Essential of Chemistry Credit-2

CO 1 Understand the structure of atom, periodicity

CO 2 Learn the basics of nuclear chemistry and polymer chemistry

CO 3 Identify the chemistry in biological process,

CO 4 Identify the application of chemistry and the major impacts in environment.

Semester – VI

Course VIII CH1641 Physical Chemistry – II Credit-4

CO 1 Explains the chemical and physical properties and dynamics in the thermodynamic limit.

CO 2 Understand the microscopic properties of the constituent atoms and molecules of a bulk system.

CO 3 Understand the concepts of quantum mechanics and spectroscopy which provide a complete description of chemistry at the microscopic level, form the basis for the course.

CO 4 Explain the concepts of thermodynamics, quantum mechanics, and spectroscopy to chemical, physical, and biochemical systems.

CO 5 Able to derive essential mathematical relationships in thermodynamics, quantum mechanics, and spectroscopy.

CO 6 Evaluate the physical and chemical systems by non spectroscopic techniques.

Core Course IX CH1642 Organic Chemistry Paper – III Credit – 4

CO 1 Identify the properties of various organic compounds carbohydrates, amino acids, proteins, nucleic acids, oils, fats, detergents, vitamins, terpenes, alkaloids, and polymers and their properties.

CO 2 Describe the preparation, synthesis and reactions of Heterocyclic compounds and Drugs.

CO 3 Classification, Synthesis, structure and stereochemistry of amino acids.

CO 4 Classification, Extraction and structural elucidation of Natural products.

CO 5 Get an interesting idea about the preparation and properties mechanism of reactions of many organic conversions and of organic compound.

CO 6 Understand various organometallics, active methylene compounds and reagents in organic synthesis.

Core Course –X CH1643 PHYSICAL CHEMISTRY- PAPER III Credit 4

CO 1 Provides an insight into the thermodynamic and kinetic aspects of chemical reactions and phase equilibrium.

CO 2 Give an insight to the various electrochemical systems.

CO 3 Study the basics of electrochemistry and its importance to modern industry and technology.

CO 4 Determine the rate of chemical changes of various types of reactions.

CO 5 Study the phase diagrams of one, two and three component systems and elementary ideas of photochemistry.

Elective Course CH1651 .1 Supramolecular, Nano Particles and Green Chemistry
Credit-2

- CO 1 Identify the role of Chemical Industries in polluting the environment.
- CO 2 Design for energy efficiency-principle of microwave oven and microwave assisted organic syntheses.
- CO 3 Classifications of nanostructured materials, nano particles; quantum dots, nanowires, ultra –thin films multi layered materials.
- CO 4 Preparation and properties of self-assembled monolayers, core shell nanoparticles and quantum dots.
- CO 5 The concepts of molecular recognition, host, guest and receptor systems.
- CO 6 Introduction to molecular receptors-design principles.

Semester V and VI

Chemistry Project and Factory visit CH1646

- CO 1 To develop an aptitude for research in chemistry, to learn research methodology and literature search.
- CO 2 To inculcate proficiency to identify appropriate research topic and presentation.
- CO 3 Study tour and Factory/ research institute visit
- CO 4 Encourage the team spirit to achieve a common research goal.
- CO 5 Use ICT tools to write project reports and Power point presentation.
- CO 6 Familiarize the use of various instrumental methods.

Semster I, III& IV

Core Course-II CH1442 (Lab Course I) Core Course-IV Three hours examination in semester IV Credit 2

- CO 1 Study the reactions of the various radicals with a view to their identification and confirmation
- CO 2 Systematic qualitative analysis by microscale methods of a mixture containing two acidic and two basic radicals.
- CO 2 Inorganic Preparations.

Semester V & VI

Core Course- VIII CH1544 Inorganic Volumetric Analysis (LabCourse Number II)and Core Course-IX physical Chemistry Experiments Course code 1545(Lab Course Number III) Credit 3 Inorganic Volumetric analysis- one burette titration only

- CO 1 Acidimetry and alkalimetry
- CO 2 Permanganometry

- CO 3 Dichrometry
- CO 4 Cerimetry
- CO 5 Iodometry
- CO 6 Precipitation titration
- CO 7 Complexometry (using EDTA)

Semester VI

Organic Chemistry Experiments Core Course-XIII Credit-3
Course Code CHI644 (Lab Course IV),
Course Code CHI645 Gravimetry Core Course-XIII
(LabCourse V) Six hours examination in semester VI.

- CO 1 Organic Chemistry Practicals
- CO 2 Determination of physical constants.
- CO 3 Studies of the reactions of common functional groups using known organic compounds.
- CO 4 Qualitative analysis with a view to characterization of the functional groups.
- CO 5 Chromatography
- CO 6 Organic estimation
- CO 7 Colorimetry

COURSE OUTCOME OF M.A. DEGREE IN ENGLISH LANGUAGE AND LITERATURE

Semester 1

Core Paper 1: Chaucer to Elizabethan Age (EL 211)

- CO 1 Describe the socio-political background of Chaucer's age.
- CO 2 Introduce Chaucer and his contemporaries.
- CO 3 Describe the rise of English drama and introduce University Wits.
- CO 4 Explain Elizabethan Romantic drama and Jacobean drama.
- CO 5 Describe Renaissance in England.
- CO 6 Study in detail the selected poems of Donne and Spenser and the selected prose works of Bacon and Sidney.
- CO 7 Analyse and appreciate the dramas – Christopher Marlowe's Dr. Faustus and Thomas Kyd's The Spanish Tragedy.

Core Paper 2: Shakespeare (EL 212)

CO 1 Introduce William Shakespeare- his age, life and works.

CO 2 Explain Folios and quartos.

CO 3 Describe Shakespeare's language, particularly his use of blank verse. CO 4

Study Shakespeare's characters – heroes, women, villains, fools and clowns. CO 5

Study Shakespearean criticism of pre 1950s and post 1950s.

CO 6 Describe the supernatural elements in the works of Shakespeare with respect to The Tempest.

CO 7 Study the songs and sonnets of Shakespeare.

CO 8 Study the major plays of Shakespeare- Hamlet, As You Like It and Antony and Cleopatre.

Core Paper 3 – The Augustan Age (EL 213)

CO 1 Describe Reformation and Restoration.

CO 2 Introduce the poetry of Dryden and Pope, particularly MacFlecknoe and An Epistle to Dr. Arbuthnot.

CO 3 Describe the rise of modern prose and novel.

CO 4 Describe Dr. Johnson and his circle.

CO 5 Explain Restoration drama, Comedy of Manners, Heroic drama and Anti-sentimental comedy.

CO 6 Study in detail Milton's Paradise Lost, Gray's Elegy Written in a Country Churchyard and Sheridan's The Rivals

CO 7 Introduce the periodical essays of Addison and Steele.

Core Paper 4: The Romantic Age (EL 214)

CO 1 Describe the Romantic revival.

CO 2 Introduce the poetry of Wordsworth, Coleridge, Byron and Shelley.

CO 3 Classify the various types of novels – historical novel, gothic novel and domestic novel.

CO 4 Study in detail the prose works of Lamb, Coleridge and Mary Wollstonecraft.

CO 5 Read and appreciate the novels- Walter Scott's Ivanhoe, Jane Austen's Persuasion and Mary Shelley's Frankenstein.

CO 6 Describe the significance magazines, essays and critical works of the era.

Semester 2

Core Paper 5: The Victorian Age (EL 221)

CO 1 Describe the social and political background of the Victorian age.

CO 2 Explain Victorian Compromise and politics of colonization.

CO 3 Study the drama of Oscar Wilde – The Importance of Being Earnest.

CO 4 Introduce Pre- Raphaelites.

CO 5 Classify the various types of novels.

CO 6 Describe the decline of drama and the evolution of problem play.

Core Paper 6 – The Twentieth Century (EL 222)

CO 1 Describe the socio-political background of the 20th century.

CO 2 Introduce the concept of liberal humanism with respect to literature and media.

CO 3 Describe the recent trends in British writing.

CO 4 Describe the major dramatic movements – poetic drama, Abbey theatre, kitchen sink drama and the Theatre of Absurd.

CO 5 Critically evaluate the major works of 20th century.

CO 6 Describe the major movements in poetry .

Core Paper 7 : Indian Writing in English (EL 223)

CO 1 Describe the historical context for the rise of Indian Writing in English.

CO 2 Describe Indian Renaissance and rise of Indian nationalism.

CO 3 Describe the contributions of Nissim Ezekeil, Dom Moraes, Ramanujan, Parthasarathy and Kamala Das to Indian English Poetry.

CO 4 Introduce the major women novelists and their contributions.

CO 5 Describe the recent trend in Indian English Writing.

CO 6 Explain the major concerns in the fictional works of Salman Rushdie, Vikram Seth, Amitav Ghosh, Arundhati Roy and Shashi Tharoor.

Core Paper 8: Literary Theory (EL 224)

CO 1 Describe language as a system of signs.

CO 2 Describe ‘Unconscious’ as a storehouse of painful and repressed emotions.

CO 3 Describe that ‘Unconscious’ is structured like a language.

CO 4 Describe Reader Response theory as pivotal in the analysis of literary texts.

CO 5 Study Feminist theories with respect to Elaine Showalter’s essay “Towards a Feminist Poetics”.

CO 6 Study the theories of deconstruction with respect to that of Jacques Derrida’s “Structure, Sign and Play in the Discourse of Human Sciences”.

Semester 3

Core Paper 9: Linguistics and Structure of the English Language (EL 231)

CO 1 Describe the latest trends in 20th century linguistic theory.

CO 2 Describe linguistics as the scientific study of language.

CO 3 Study language acquisition and linguistic behavior.

CO 4 Describe Sociolinguistics, Psycholinguistics, Semantics and Pragmatics. CO 5

Explain the Structural Phonology, Structural Morphology and Structural Syntax. CO 6

Describe TG Grammar with reference to the theories of Noam Chomsky.

Core Paper 10: Literary Theory (EL 232)

CO 1 Describe Marxist theories with respect to Raymond Williams' essay, Literature.

CO 2 Analyse racism and ethnocentrism in texts.

CO 3 Study the theories of New Historicism with the help of Michel Foucault's "What is an Author?".

CO 4 Examine the reciprocal relationship between media and its audience.

CO 5 Introduce the theories of New Media and analyse the effect of media on society and culture.

CO 6 Conduct a textual analysis of race, ethnicity and postcoloniality.

CO 7 Study the association of print and digital media with consumerism and commercialism.

Elective Paper 1: European Drama (EL 233.1)

CO 1 Describe the origin of drama in Europe.

CO 2 Introduce the major dramatic movements of 19th and 20th centuries.

CO 3 Distinguish between Old Comedy and New Comedy.

CO 4 Critically evaluate and appreciate the dramas- Sophocles' Oedipus Rex, Henrik Ibsen's Ghosts and Bertolt Brecht's Mother Courage and her Children.

CO 5 Study French classical tragedy and comedy and in particular the contributions of Racine.

CO 6 Describe the Christian elements in medieval theatre.

CO 7 Describe Renaissance Italian drama.

Elective Paper 2: South Asian Fiction (EL 233.4)

CO 1 Describe the growth of National Literatures in South Asian countries.

CO 2 Read and appreciate Shyam Selvadurai's Funny Boy and Tahmima Anam's A Golden Age.

CO 3 Study the impact of National Cultures and decolonization upon literature and society.

CO 4 Critically evaluate Michael Ondaatje's *The English Patient*, Muktar Mai's *In the Name of Honour*, Bapsi Sidhwa's *Cracking India* and Hanif Kureishi's *The Buddha of Suburbia*.

CO 5 Study the impact of partition on literature.

CO 6 Analyse and appreciate Monica Ali's *Brick Lane*, Taslima Nasreen's *The Homecoming* and Mohsin Hamid's *The Reluctant Fundamentalist*.

Semester 4

Core Paper 11: English Language Teaching (EL 241)

CO 1 Describe the basic principles and concepts of language teaching. CO 2

Study the role of sociolinguistics and psychology in language teaching. CO 3

Introduce the manifold classroom strategies and teaching aids.

CO 4 Distinguish between communicative competence and linguistic competence.

CO 5 Describe the psychological approaches to language learning- behaviourism, cognitivism and constructivism.

CO 6 Describe in detail the various methods of language teaching.

Core Paper 12: Introduction to Cultural Studies (EL 242)

CO 1 Describe the historical context for the rise of Cultural Studies.

CO 2 Revise the concept of 'Culture' and define Cultural Studies.

CO 3 Study in detail the essay "Encoding, Decoding" by Stuart Hall.

CO 4 Describe the concept "popular culture".

CO 5 Describe Cultural Studies by analyzing the selected works of Toby Miller, Simon During, Horkheimer, Adorno, Raymond Williams and Pail du Guy.

CO 6 Analyse the relation between Culture and Power, Culture and Discourse and Culture and Representation.

Elective Paper 3: European Fiction (EL 243.1)

CO 1 Describe the beginnings of fiction in Europe.

CO 2 Study the contributions of Boccaccio, Rabelias and Cervantes.

CO 3 Describe modernism in European fiction, particularly 20th century German novel and 20th century French novel.

CO 4 Analyse and appreciate the major European novels- Herman Hesse's *Sidhartha*, Thomas Mann's *Death in Venice*, Boris Pasternak's *Doctor Zhivago*, Gustave Flaubert's *Madame Bovary*, Marcel Proust's *Swan's Way* and Emile Zola's *Nana*.

CO 5 Describe contemporary Greek fiction with the help of Nikos Kazantzakis' *Zorba the Greek*.

CO 6 Introduce postmodernism with a detail study of Milan Kundera's *The Joke*.

Elective Paper 4: American Literature (EL 243.2)

CO 1 Describe the Americanness of American Literature.

CO 2 Describe the contributions of Dickinson, Whitman, Hawthorne, Melville and Mark Twain.

CO 3 Explain Transcendentalism, Puritanism, Harlem Renaissance and Modernism.

CO 4 Analyse and appreciate the drama Emperor Jones by Eugene O'Neill. CO 5

Critically evaluate the major works of prominent American writers. CO 6 Explain the contributions of New Critics.

CO 7 Describe the recent trends in American Literature.

COURSE OUTCOME OF MSC DEGREE IN PHYSICS

Title of paper: Classical Mechanics

Course code: PH 211

CO1 Derive the equations of for complicated mechanical systems using the lagrangian and Hamiltonian formulation of classical mechanics.

CO2 Describe the essential features of a problem (like motion under central force, rigid body dynamics, and periodic motions), use them to set up and solve the appropriate mathematical equations.

CO3 Explain the theory of small oscillations which is important in several areas of physics e.g., molecular spectra, acoustics, vibrations of atoms in solids, coupled mechanical oscillators and electrical circuits.

CO4 Describe the rigid body dynamics.

CO5 Describe the foundations of chaotic motion.

Title of paper: Mathematical Physics

Course code: PH 212

CO1 Describe the utility and limitations of a variety of powerful calculational techniques.

CO2 Describe the application of *mathematical* methods in *physics*.

CO3 Describe various techniques to solve differential equations.

CO4 Explain how to use special functions in various physics problems.

CO5 Describe the theory of probability in detail.

CO6 Discuss tensor analysis and group theory in detail.

Title of paper: Basic Electronics

Course code: PH 213E

CO1 Describe fundamental designing concepts of different types of Logic Gates.

CO2 Explain semiconductor physics for intrinsic and extrinsic materials.

CO3 Explain the theory and application of diodes, transistors, silicon controlled rectifiers, digital logic gates, operational amplifiers, digital devices and optoelectronic devices.

CO4 Detail the sequential digital circuits and Arithmetic and data processing digital circuits.

Title of paper: General Physics Practicals

Course code: PH 251

CO1 Determine the elastic constants by Cornu's method (elliptical and hyperbolic fringes).

CO2 Analyse the absorption spectra of liquids using spectrometer.

CO3 Study the ultrasonic waves in liquids.

CO4 Determine e/k using Ge and Si transistors employing Anderson Bridge.

CO5 Determine of self inductance and mutual inductance

CO6 Carry out the Michelson Interferometer experiments.

Title of paper: Modern Optics & Electromagnetic theory

Course code: PH 221

CO1 Describe development of modern physical optics, with particular attention to the wave properties of light and optic application.

CO2 Explain the *Electromagnetic field theory* to have a solid *theoretical* foundation to be able in the future to design emission, propagation and reception of electro- magnetic wave system.

CO3 Derive the electromagnetic wave equation and Relativistic electrodynamics to have an understanding of Radio wave propagation.

CO4 Describe the basics of Transmission lines, Wave guides and antennas.

Title of paper: Thermodynamics, Statistical Physics & Basic Quantum

Mechanics Course code: PH 222

CO1 Describe the *fundamentals* of classical and *quantum statistical mechanics*;

CO2 Explain relation between macroscopic *thermodynamics* and microscopic *statistical mechanics* by using mathematical methods and *fundamental physics* for individual.

CO3 Describe the *basic* principles of equilibrium statistical mechanics and their application to the *thermodynamics* of a wide variety of physical systems.

CO4 Describe the different ensemble theories to explain the behavior of the systems.

CO5 Describe the importance of quantum mechanics compared to classical mechanics at microscopic level.

CO6 calculate Eigen values and total angular momentum of particles.

Title of paper: Computer Science & Numerical Techniques

Course code: PH 223

CO1 Explain the necessity of numerical *methods* to make reliable and efficient simulations

of technical and *scientific* processes based on mathematical models.

CO2 Describe the fundamentals of microprocessor.

CO3 Explain the python programming and programming with C++.

CO4 Explain the computer architecture and internet basics.

Title of paper: General Physics Practicals

Course code: PH 251

CO1 Carry out the BH curve-anchor ring experiment.

CO2 Conduct the photoelectric effect experiment and determine the Planck's constant

CO3 Determine Stefan's constant.

CO4 Carry out the experiments using Laser.

CO5 Determine Young's modulus of different materials using strain gauge.

Title of paper: Electronics & Computer Science Practicals

Course code: PH 252

CO1 Design and study of frequency response of Single stage CE amplifier

CO2 Study the RC Phase shift oscillator circuits using Transistors.

CO3 Construct and study the Astablemultivibrator and VCO circuits using Transistors.

CO4 Study the OP Amp circuits (a) summing amplifier (b) difference amplifier (c) zero cross detector etc.

CO5 Study the Schmitt trigger circuits.

CO6 Execute C++ programming for the following:

1. Least square fitting
2. Numerical integration (Trapezoidal rule and Simson method)
3. Solution of algebraic and transcendental equations using Newton-Ralphson method.
4. Monte Carlo simulation
5. Evaluation of Bessel and Legendre functions
6. Matrix addition,multiplication ,trace,transpose and inverse
7. Fourier series analysis
8. Study of motion of projectile in a central force field.
9. Study of Planetary motion and Kepler's laws

Title of paper: Advanced Quantum Mechanics

Course code: PH 231

CO1 Describe the time-dependent perturbation theory and the Born series for non *relativistic* scattering.

CO2 Describe the importance of relativistic quantum mechanics compared to non relativistic quantum mechanics.

CO3 Explain the various tools to understand field quantization and related concepts.

CO4 Detail the quantum field theory and universal interactions.

CO5 Explain the non-*relativistic* and *relativistic quantum mechanics*.

Title of paper: Advanced Spectroscopy

Course code: PH 232

CO1 Explain atomic spectroscopy of one and two valence electron atoms.

CO2 Explain the change in behavior of atoms in external applied electric and magnetic field.

CO3 Explain the rotational, vibrational, electronic and Raman spectra of molecules.

CO4 Describe the electron spin and nuclear magnetic resonance spectroscopy. CO5

Explain the use of instrumentation; analysis of experimental *spectroscopic* data.

Title of paper: Advanced Electronics I

Course code: PH 233E

CO1 Explain the various methods in communication systems, optical fibre communication.

CO2 Explain the basics of mobile cellular communication.

CO3 Detail the signal analysis using Fourier analysis and Z-transforms.

CO4 Explain the theory of analog radio frequency communications and microwave radio communications.

CO6 Explain the basics of digital communication and optical fibre communication.

Title of paper: Advanced Physics Practicals

Course code: PH 261

CO1 Determine e/m of an electron by Thompson's method

CO2 Determine charge of an electron-Millikan's method

CO3 Determine the Fermi energy of Copper.

CO4 Carry out the Electrical characterization of a solar cell

CO5 Carry out Studies using UV visible spectrophotometer

CO6 Determine refractive index of liquids and liquid mixtures using Abbe's refractometer

CO6 Carry out the optical activity studies using Polarimeters.

CO7 Analyze the given band spectrum

CO8 Carry out analysis of given rotation-vibration spectrum.

Title of paper: Advanced Electronics Practicals

Course code: PH 262

CO1 Study the active filters using OP amps (a) low pass (b) high pass (c) band pass for

- both first order and second order-gain/ roll off determination
- CO2 Construct the following op-amp circuits to generate waveform (a) astable and monostable multivibrators (b) square, triangular and saw-tooth wave generation
- CO3 Carry out the IC 555 timer experiments (a) monostable and astable multivibrators (b) VCO
- CO4 Study the IF tuned amplifier and Amplitude modulation (generation and detection) using transistor, diode etc.
- CO5 Construct frequency modulator and detector circuits.
- CO6 Construct Shift register and ring counter circuits using flip flops.

Title of paper: Condensed Matter Physics

Course code: PH 241

- CO1 Describe the crystal lattice and how the main lattice types .
- CO2 Describe the structures in solids and their determination using XRD.
- CO3 Describe the behavior of electrons in solids including the concept of energy bands and effect of the same on material properties.
- CO4 Explain the electrical, thermal, magnetic and dielectric properties of solids.
- CO5 Describe the electrical, optical, thermal and mechanical properties of solids and condensed matter.

Title of paper: Nuclear & Particle Physics

Course code: PH 242

- CO1 Explain the fundamental principles and concepts governing nuclear and particle physics.
- CO2 Describe the basic properties of nucleus and nuclear models to study the nuclear structure properties.
- CO3 Explain the various aspects of nuclear reactions will give idea how nuclear power can be generated.
- CO4 Explain the subatomic *physics* and the structure of nuclei and *particles*, scattering theory and *nuclear* models, radioactivity, symmetries and conservation laws,
- CO5 Describe the standard model (strong and electro-weak interactions), *nuclear* astrophysics and cosmology.

Title of paper: Advanced Electronics II

Course code: PH 243E

- CO1 Give an introduction to microprocessor 8086 and programming using 8086.
- CO2 Explain the basics of microprocessor interfacing devices and advanced microprocessors
- CO3 Give a general introduction to artificial intelligence.

CO4 Detail the basics of television, RADAR and satellite communications.

CO5 Describe elements of embedded systems.

Title of paper: Advanced Physics Practicals

Course code: PH 261

CO1 Measure Magnetic Susceptibility of a liquid using Quincke's method.

CO2 Demonstrate Hall effect in a semiconductor.

CO3 Interpret the vibration spectra of simple molecules using Raman and IR spectra.

CO4 Determine dielectric constant of materials.

CO5 Calculate the dissociation energy of diatomic molecules.

CO6 Carry out the analysis of powder XRD data.

Title of paper: Advanced Electronics Practicals

Course code: PH 262

CO1 Construct D/A convertor circuits using OP Amp 741

CO2 Construct Differential amplifier circuits using transistors

CO3 Design the series pass voltage regulators using (a) transistors with load and line regulation (b) OP Amp

CO4 Construct Pulse modulation circuits using 555 timer (a) PAM (b) PWM

CO5 Construct Shift register and ring counter circuits using flip flops. CO6

Write programmes for the following Microprocessor Based Experiments: 1 8086 program to convert binary to ASII and ASII to BCD.

2.8086 program to arrange a given data in ascending and descending order

3.8086-simple traffic light controller

4.8086 program for binary to BCD conversion and vice versa

5. Program of Fibonacci series using 8086.

Title of paper: Project

Course code: PH 201

CO All the M.Sc. Physics Students will do a supervised Physics Project in IV Semester. Department considers it an important culmination of training in Physics learning and research. The project will aim to introduce student to the basics and methodology of research in physics, which is done via theory, computation and experiments either all together or separately by one of these approaches. It is intended to give research exposure to students at M.Sc. level itself.

Title of paper: Viva Voce

Course code: PH 202

CO1 Demonstrate that the thesis is student's own work.

CO2 Confirm that the student understands what he/she have written and can defend it verbally.

CO3 Establish whether the thesis is of sufficiently high standard to merit the award of the degree for which it is submitted.

COURSE OUTCOME OF FIRST DEGREE PROGRAMME IN MATHEMATICS

Semester I

Mathematics-I (Differentiation and Matrices) MM 1131.2 Credits: 3

CO 1 Identify the functions and graphs of functions with examples from Chemistry.

CO 2 Understand the power series and their convergence.

CO 3 Understand elementary row operations and their applications

CO 4 Understand the basic concepts about differential equations and their solutions.

CO5 Classification of conics into ellipse, parabola and hyperbola based on the value of eccentricity.

CO 6 Find the eccentricity of an ellipse as a measure of flatness.

Semester II

Mathematics-II(Integration, Differential Equations and Analytic Geometry) MM 1231.2 Credits: 3

CO 1 Understand the integration from the view point of differential equations. CO 2 Analyze rectilinear motion, Displacement in rectilinear motion.

CO3 Identify the use of definite integrals in finding area under curves, area between two curves.

Semester III

Mathematics-III (Vector Analysis and Theory of Equations) MM 1331.12 Credits: 4

CO 1 Analyze the limit of a vector function and evaluation of limit in Cartesian representation.

CO 2 Understand the derivative of a vector function and its geometric significance.

CO 3 Able to compute the work done by a force.

CO 4 Get an idea of flux of a vector field over a surface in 3-space.

CO 5 Learn the fundamental theorem of Algebra

CO 6 Find the nature of roots of polynomials without solving-Des Cartes' rule of signs.

Semester IV

Mathematics-IV (Abstract Algebra and Linear Transformations) MM 1431.2

Credits: 4

CO 1 Learn the groups–definition and examples

CO 2 Learn the elementary properties of groups.

CO 3 Identify cyclic groups.

CO 4 Learn linear independence of vectors

CO 5 How to perform Matrix transformations and Linear transformations.

CO 6 How to perform the matrix of a linear transformation.

COURSE OUTCOME OF FIRST DEGREE PROGRAMME IN POLITICS

SEMESTER -1

Introduction to Political Science PS – 1131 Credits: 2

CO1 classify the major principles of political science

CO 2 Identify about traditional and modern meaning of political Science

CO3 Classify major concepts of political science and its principles

CO4 Identify various approaches in political science

CO5 Describe the relationship between man and society

CO6 Write down the interdisciplinary study of political science

SEMESTER -2

Indian Government and Politics P S -1231 Credits: 3

CO1 Classify various forms of Government with classification

CO2 Describe the fundamental Rights and fundamental duties

CO3 Write down the various principles of Indian constitution using examples of borrowed principles

CO 4 Familiarize the various organs of Government with examples from various countries

CO 5 Identify the role of various political parties in democratic system and its role in Indian Democracy.

SEMESTER - 3

Public Administrations P S – 1331 Credits: 3

CO1 To equip the students with some theoretical understanding about public administration

CO2 Identify organization, personnel administration and financial administration CO3 Write down the various principles of organization and management in the Indian Administration

CO4 Familiarize the development Administration and role of District Collector

CO5 Financial administration and budgetary process in India

Semester - 4

International Politics P S -1431 Credits : 3

CO1 Classify the major principles of political science

CO2 Identify about meaning and scope of International politics

CO3 Classify major concepts of International political science & its challenges

CO4 Write down various approaches in International politics

CO5 Describe global issues in world scenario

CO6 Write down the classification of international and regional organizations.

(ADDL LANGUAGE)

Semester I

HN111.1 : PROSE AND GRAMMER CREDIT:3 CO1: Explain parts of speech and grammatical gender of nouns. CO2: Evaluate the cultural aspect of India on the basis of holy aur Onam. CO3: Describe the different aspects of tense and its uses.

CO4: Analyse the life and literature of Suryakanth TripattiNirala.

CO5: Explain Noun and its different forms.

CO6: Evaluate the different forms of prose.

Semester II:

HN1211.1:FICTION,CREATIVE WRITING AND COMMUNICATION SKILL CREDIT : 3

CO1: Evaluate the story of Premchand.

CO2: Analyse the novel ABCD of RaveendraKaliya.

CO3: Explain the socio cultural aspect of migrant society.

CO4: Describe the struggles of dalit community as depicted by Yashpal.

CO5: Describe the parameters used for analyzing poetry.

CO6: Describe the various types of prose writing.

Semester III:

HN1311.1:DRAMA ,ONE ACT PLAY AND TRANSLATION CO1:

Explain the life of an actor by analyzing the drama KaalKotari. CO2: Evaluate Reed kihaddi and explain the feministic elements present in it. CO3: Explain the importance of translation in different areas.

CO4: Describe the process of translation.

CO5: Evaluate the different types of translation.

CO6: Write the principles of drama and evaluate Kaal Kotari.

Semester IV:

HN1411.1 : POETRY, LONG POEMS AND CULTURE

CO1: Explain the principles of poetry and evaluate Pralay Ki Chaaya.

CO2: Evaluate the poets of different eras of Hindi Literature.

CO3: Evaluate the socio – political – economical conditions of Indian society in different eras.

CO4: Evaluate the socio – political aspects of Rajasthan in Parvaad Parv.

CO5: Explain the contribution of Raja Ram Mohan Roy, Swami Vivekanand, B R Ambedkar and Mahatma Gandhi.

CO6: Explain the different aspects of Kerala Culture.

COURSE OUTCOME OF FIRST DEGREE HINDI LITERATURE FOR BA/ BSC (ADDL LANGUAGE)

Semester I

HN1111.2 : PROSE, COMMERCIAL HINDI AND LETTER WRITING

CREDIT:4

CO1: Explain the adverse effect of advertisement.

CO2: Evaluate the writings of Premchand on the basis of Kafan.

CO3: Explain the different parts of a letter.

CO4: Describe the different types of letters and state its uses.

CO5: Explain the characteristics of Commercial Letter Writing.

CO6: Evaluate Ramachandra Shukla's prose writing.

Semester II

HN1212.2: POETRY, TRANSLATION, TECHNICAL TERMINOLOGY AND COMMUNICATION

CREDIT : 4

CO1: Describe the characteristics of Writings of Kabeerdaas and Soordaas.

CO2: Evaluate the Chayyavaadhi Poets of Hindi Literature.

CO3: Describe Electronic Media.

CO4: Explain the process of mass media.

CO5: Describe Mass media technology.

CO6: Explain the process of translation.

**COURSE OUTCOME OF FIRST DEGREE MALAYALAM LITERATURE FOR BA/
BSC (ADDL LANGUAGE)**

Semester I

ML1111.1 മലയാള കവിത

CO:1 മലയാള കവിതാ ചരിതം വിശദീകരിക്കുക

CO:2 ത്രാചീന കവിത്തയം , അവരുടെ കൃതികൾ , സമാനതകൾ കാലഘട്ടം എന്നിവ വിശകലനം ചെയ്യുക

CO:3 കാവയാ ത്രസ്ഥാനങ്ങൾ, കിളിപ്പാട്ട് എന്നിവ വിവരിക്കുക

CO: 4 ആധുനിക കവിത്തയം, കൃതികൾ എന്നിവ വിശകലനം ചെയ്യുക CO: 5 കാലന്ദ്രിക

ത്രസ്ഥാനത്തിന്റെ വളർച്ച അരത്രുമിടക്കുക

CO:6 മലയാള കവിതയിലെ െിയലിസം വയലാർ, ഓ എൻ വി സുരതകുമാരി തുങ്ങിയവരുടെ കവിതകളെ അടിസ്ഥാനമാക്കി വിവരിക്കുക

Semester II

ML1211.1 ഗദ്യസാഹിത്യം

CO:1 മലയാള രദയസാഹിത്യത്തിന്റെ വിവിധ മാതൃകകൾ വിശകലനം ചെയ്യുക CO: 2 രദയസാഹിത്യകൃതികളുടെ

സൗന്ദരയാത്മകമായ സവിശേഷതകൾ വിവരിക്കുക CO: 3 ചെച്ചകഥ, ഉരനയാസം എന്നീ ഭിന്നരൂരങ്ങളുടെ ആശയതലങ്ങൾ

അരത്രുമിടക്കുക CO: 4 ചെച്ചകഥ സാഹിത്യ ചരിത്തം ത്രതിരാദിക്കുക

CO:5 ഗനാവൽ ചരിത്തം വിശദമാക്കുക.

CO:6 ദളിത് സാഹിത്യ ചരിത്തം വിശദീകരിക്കുക.

Semester III

ML1311.1 ദ്ശ്യകലാസാഹിത്യം

CO:1 ദൃശ്യകലകൾക്കു ആധാരമായ സാഹിത്യരാനങ്ങൾ അരത്രുമിടക്കുക

CO: 2 കഥകളി എന്ന കലാരൂരത്തിന്റെ ഉരുവം , ചരിത്തം, ഗവഷം, വാദയം, ചെങ്ങു എന്നിവ വിശകലനം ചെയ്യുക

CO: 3 തുള്ളൽ ത്രസ്ഥാനത്തിന്റെ ഉരുവം, ചരിത്തം, എന്നിവ വിശദീകരിക്കുക

CO: 4 തിരക്കഥ സാഹിത്യരൂരം എന്ന നിലയിൽ മലയാളത്തിലെ ത്ശശേയമായ തിരക്കഥകൾ നിരൂരണം നെത്തുക

CO:5 നൊകം, സിനിമ എന്നിവ താരതമയം ചെയ്യുക

CO:6 മലയാള നൊക ത്രസ്ഥാനത്തിലെ ആദയകാല വിവർത്തന നൊകങ്ങൾ സംസ്കൃത നൊകങ്ങൾ സംരീത നൊകങ്ങൾ രാത്രീയ നൊകങ്ങൾ എന്നിവ വിശകലനം ചെയ്യുക

Semester IV

ML1411.1 വിനിമയം സർഗ്ഗാത്മകരചന ഭാഷാവബ്ധ ായം co:1

വിനിമശയാരാധികളായ മാധയമങ്ങളെ വിശകലനം ചെയ്യുക CO: 2 മാധയമങ്ങളുടെ അനന്ത

സോയതകൾ ചിത്തീകരിക്കുക

CO: 3 നവീന മാധയമങ്ങളെ വിലയിരുത്തുക

CO: 4 ഭരണഭാഷ ജനകീയ ഭാഷ ആശകങ്ങളിന്റെ ആവശയകത ത്രതിരാദിക്കുക CO:5 സാംസ്കാരിക വിനിമയത്തിൽ

വിവർത്തനത്തിന്റെ ത്രാധാനയം വിശദമാക്കുക

CO:6 ആധുനിക സാമൂഹിക വിദഗ്ദ്ധരുടെ വളർച്ചയിലൂടെ സമൂഹത്തിന് കൈവന്ന സംസാരിക്കാനാകുന്ന മനത്തിന് കൈച്ച് ത്രിരാദിക്കുക

COURSE OUTCOME OF FIRST DEGREE MALAYALAM LITERATURE FOR BCOM (ADDL LANGUAGE)

Semester I

ML1111.2 ബനാവൽ നാടകം സഞ്ചാരസാഹിത്യം

CO:1 മലയാള ഗനാവൽ ത്രാമംഭരങ്ങൾ ആദയകാല എഴുത്തുകാർ എന്നിവ വിശദീകരിക്കുക

CO: 2 ഗനാവൽ വികാസഘട്ടങ്ങൾ വിശകലന ചെയ്യുക

CO: 3 നൊക സാഹിത്യചരിതം. കൃതികൾ, സാഹിത്യകാരന്മാർ എന്നിവ അരത്രമിക്കുക **CO: 4** മലയാളത്തിലെ ആദയകാല

സഞ്ചാരകൃതികളെക്കുറിച്ച് ത്രിരാദിക്കുക **CO:5** സഞ്ചാരസാഹിത്യ ചരിതം അവശലാകനം ചെയ്യുക

CO:6 സഞ്ചാര അനുഭവം സർഗ്ഗാത്മകമാക്കിയ എഴുത്തുകാടരയും കൃതികളെയും വിവരിക്കുക

Semester II

ML1211.2 കവിത കഥ ഉപനയാസം വിവർത്തനം

CO:1 മലയാള കവിതചരിതം വിവരിക്കുക

CO: 2 മലയാള കവിതയിലെ ഐതിഹ്യം വിശദീകരിക്കുക

CO: 3 ചൈതന്യസമാഹാരം അഭിനയിക്കുക

CO: 4 ചൈതന്യ ഉപന്യാസം എഴുതുന്നതിന് ആവശ്യമായ തലങ്ങൾ വിശദീകരിക്കുക **CO:5** സാഹിത്യ കൃതികളിലെ

സാഹിത്യചരിത്ര സവിശേഷതകൾ തിരിച്ചറിയുക **CO:6** വിവർത്തനം വിനിയോഗം എന്നിവ താരതമ്യം ചെയ്യുക'