1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the Programmes offered by theInstitution.

Curriculum, being the foundation of the institution, fosters the global competencies of the learners by nourishing their quest for new knowledge and skills by meeting the local, regional, national, and global needs as reflected in POs, PSOs and COs.

1. POs of programmes addressing local, regional, national and global needs are:

B.A, M.A & M.Phil. History - Regional, National and Global issues in social, religious, cultural, political and economic conditions.

B.A & M.A English & Tamil- Regional, National and Global issues in Arts, Language and Literature which enhance the individuality in the field of literature.

B.Sc. Zoology- Regional, National and Global issues is giving attention to ecological factors, environmental conservation processes, pollution control and biodiversity and protection of threatened species.

B.Com, M.Com (CA) & BBA- Entrepreneurial (Global), organisational developments and Industrial learning in Regional and National level.

B.Sc., M.Sc. & M.Phil. Mathematics-Frame Mathematical solutions and reason out logical terms in Research techniques nationally and globally.

B.Sc. Computer Science, B.Sc. IT & M.Sc. IT, BCA, MCA – Expertise in developing moderncomputing platforms and software in Implementation of world-wide networking.

B.Sc., M.Sc. Physics – Understand, analyze and solve advanced problems in society.
B.Sc. N& D- National and Global trends in Food, Social environment and dietary management.

B. Com (CA) & M.Com (CA) - Inculcate professionalism through innovative practices and essential skills demanded by the global software Industry.

B.Sc. Chemistry- Understand environmental issues and key issues facing chemistry in society at national and global levels.

PSOs addressing local, national, regional and global needs are:

B.A, M.A & M.Phil. History – updated knowledge on research methods through perusal of research oriented activities.

B.A, M.A English & Tamil- Holistic understanding of language, literature and the society.B.Sc. Zoology-. Applications of biological sciences in Biotechnology, Apiculture, Poultry, Fisheries, Aquaculture and Vermiculture.

B.Com, M.Com & BBA - Industrial learning and its impact on Business.

B.Sc. M.Sc. & M. Phil. Mathematics - Operations Research techniques, proficiency especially in the execution of any specific projects.

B.Sc. Computer Science, B.Sc. IT & M.sc IT, BCA, MCA – Effectively integrated IT-basedsolutions according to need of user environment.

B.Sc. Chemistry & M.Sc. Physics - Acquire the ability to identify and describe the principles in Industry, and environment.

B.Sc. Nutrition & Dietetics- Formulate innovative, nutritious and novel food products to become successful entrepreneurs.

B. Com & M.Com (CA) - Innovative opportunities and latest technologies that helps to support new business.

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DEPARTMENT OF HISTORY U.G.

DEPARTMENT OF HISTORY

Programme Code: H

Programme Name: B.A. History (Tamil Medium & English Medium- Aided)

Programme Outcomes

- 1. To understand the nature of Historical truth and learn how knowledge about the past is produced and revised.
- 2. To study the past of societies and obtain empirical knowledge of Indian and World History, with a specific focus on Tamilnadu.
- 3. Sound Knowledge of Different Historical Periods.
- 4. Knowledge of Development of Historical Perspective.
- 5. The study of History helps to impart moral education.

Programme Specific Outcomes

- 1. Analyzing the relationship between the past and the present is lively presented in History.
- 2. Understand the present existing the social, political, religious and economic conditions of the people.
- 3. Enhance practical skills helpful in this study and understanding of Historical maps and models.
- 4. Acquire interests in the study of History and activities relating to History: They Collect ancient Arts, old coins and other Historical Artifacts.
- 5. Visit places of Historical Interests, Archaeological sites and Museums.
- 6. History installs the feeling of patriotism in the hearts of the Pupils.

Course Outcomes

<u>SEMESTER – I</u>

Subject Code: 21H11 Course Name: HISTORY OF INDIA – I (UP TO 900 A.D)

Upon completion of the course, the students will be able to

- 1. Introduce the broader geographical features of India and connected
- 2. Grasp the histories among the linguistic and cultural traditions of India
- 3. Apply the Primary sources such as Archaeological and Texts such as Arthasasthra, Buddhacharitha, Harsha charita be used in classroom discussion.
- 4. Explore the important Social, Political and Economic Developments of Ancient India.

Subject Code: 21H12 Course Name: HISTORY OF TAMILNADU- I (UPTO - 1336 A.D)

Upon completion of the course, the students will be able to

- 1. Recognize the topography and sources for the history of Tamilnadu.
- 2. Realize the value of social, political, economic development of ancient Tamilnadu.
- 3. Acquaint with the administration, art and architecture of the ancient Tamil kingdom and the heritage of early Tamils.

Subject Code: 21AH1

Course Name: ECONOMIC DEVELOPMENT OF INDIA

Upon completion of the course, the students will be able to

- 1. Develop ideas of the basic characteristics of Indian economy, its potential
- 2. Apprehend the importance, causes and impact of population growth and its distribution, translate and relate them with economic development.
- 3. Comprehend agriculture as the foundation of economic growth and development,
- 4. Analyze the progress and changing nature of agricultural sector and its contribution to the economy as a whole
- 5. Grasp the importance of planning undertaken by the government of India.

Subject Code: 21NMH1 Course Name: INTRODUCTION TO TOURISM

- 1. Display an understanding of the production, implementation, and impacts of tourism development locally, nationally, and internationally.
- 2 Write clearly and concisely in the conventions of tourism studies.
- 3 Exhibit effective oral communication through personal interaction as well as classroom presentations, individually or as part of a group, to a larger audience.

SEMESTER - II

Subject Code: 21H21 Course Name: HISTORY OF INDIA – II (900 A.D-1707 A.D)

Upon completion of the course, the students will be able to

- 1. Introduce the conception of Sovereignty and ideas of Mughal dynasty.
- 2. Focus on the process of State formation of Mughals in Chronologically
- 3. Be familiar with the outlines of Art and Architecture and begin with brief revision of the same.

Subject Code: 21H22 Course Name: HISTORY OF TAMILNADU – II (1336 A.D – 1800 A.D)

Upon completion of the course, the students will be able to

- 1. Acquire a strong theoretical knowledge of political, cultural, social, and, economic structure in Tamil Nadu
- 2. Create a deep and intense feeling of the culture of Nayaks.
- 3. Understand the Mastery over the past and grasp a much greater appreciation for current event today.

Subject Code: 21AH2 Course Name: ECONOMIC OF MARKETING

Upon completion of the course, the students will be able to

- 1. Introduce the basic concept of Marketing.
- 2. Understand the various aspects of marketing.
- 3. Develop the ideas of the functions of Advertising.

Subject Code: 21NMH2 Course Name: CONSTITUTION OF INDIA

- 1. Have sound knowledge on the constitutional development in India and gain knowledge on the Communal Electoral System
- 2. Enhance themselves for competitive examinations.
- 3. Realize the duties and responsibilities as citizen of India.

SEMESTER - III

Subject Code: 17H31

Course Name: HISTORY OF INDIA – III (1707 A.D-1885 A.D)

Upon completion of the course, the students will be able to

- 1. Introduce themselves students to the heredity of Peshwas.
- 2. Examines the Political Policies of the British Governor Generals.
- 3. Comprehend Socio Religious Reform Movements in the 19th century with authoritative historical narratives about their pasts.

Subject Code: 17H32 Course Name: HISTORY OF TAMILNADU-III (1800 A.D - 2006 A.D)

Upon completion of the course, the students will be able to

- 1. Gain depth knowledge about the impact of western education and missionary activities.
- 2. Significance of the role of Tamil leaders in liberating mother land.
- 3. Acquaint with the role of Political parties and post development of Economic and Industries in Tamilnadu.

Subject Code: 17AH3 Course Name: MODERN GOVERNMENTS- THEORY AND PRACTICE PAPER-I

Upon completion of the course, the students will be able to

- 1. Understand how different systems of government are organized in relations to different constitutional traditions and models.
- 2. Gain competence to identify and compare the general and specific features and functions of selected constitutions and governments.
- 3. Prepare themselves for Competitive Examinations.

Subject Code: 17SEH31 Course Name: COMPUTER APPLICATIONS

- 1. Demonstrate a basic understanding of computer hardware and software.
- 2. Understand the concept of input and output devices of Computers and how it works and recognize the basic terminology used in computer programming.
- 3. Create the various slides with different formats with the help of Ms PowerPoint.

SEMESTER – IV

Subject Code: 17H41

Course Name: HISTORY OF INDIA – IV (1885A.D-1947A.D)

Upon completion of the course, the students will be able to

- 1. Participate in discussion of the Formation of Indian National Congress.
- 2. Narrate the various movements and its impact to the freedom struggle.
- 3. Comprehend the role of Gandhi plays in the freedom struggle.

Subject Code: 17H42 Course Name: HISTORY OF SCIENCE AND TECHNOLOGY (SINCE 17th CENTURY A.D)

Upon completion of the course, the students will be able to

- 1. Be familiar with the outline of the foundation of Science academies and progress.
- 2. Shed light on major discoveries, inventions and scientific achievements and assess the society.
- 3. Stimulate the minds of the students on scientific discoveries.

Subject Code: 17AH4 Course Name: MODERN GOVERNMENTS- THEORY AND PRACTICE PAPER- II

Upon completion of the course, the students will be able to

- 1. To acquire the knowledge about the landmarks of Indian constitutional Development.
- 2. Acquire the knowledge of executive, legislature and judiciary of constitutional Development of India.
- 3. Apprehend features of the constitution of India, Switzerland and France.

Subject Code: 17SEH41 Course Name: FUNDAMENTALS OF ENTREPRENEURSHIP

- 1. Make clear qualities of successful entrepreneur, opportunities and challenges of women entrepreneurship.
- 2. Be Familiar with the financial institutions for entrepreneurial Development.
- 3. Be acquainted with the preparation of project proposals.

SEMESTER - V

Subject Code: 17H51

Course Name: HISTORY OF INDIA –V (1947A.D-2000A.D)

Upon completion of the course, the students will be able to

- 1. Understand the role of history plays in the contemporary India and also gain the knowledge of the formation and Re organization of states
- 2. Grasp vivid knowledge of Reforms in Education since 1947A.D.
- 3. Acquire the learning objective of Economic Planning and Rural Development in India.

Subject Code: 17H52 Course Name: HISTORY OF EUROPE – I (1789 A.D – 1914A.D)

Upon completion of the course, the students will be able to

- 1. Realize the cause and results of French Revolution and the achievements of Napolean Bonaparte.
- 2. Visualize the importance of revolt of 1830 and 1848 in France and the efforts of Bismarck for the unification of Germany.
- 3. Be acquainted with some of the political and social changes in Europe after the Revolution.

Subject Code: 17HE5A Course Name: TOURISM

Upon completion of the course, the students will be able to

- 1. Familiarize with the fundamental concept, growth and development of Tourism.
- 2. Acquire vivid knowledge of various elements of Tourism
- 3. Grasp the knowledge of travel formalities, Documents and to know the Tourism sites.

Subject Code: 17HE5B Course Name: PRINCIPLES AND METHODS OF ARCHAEOLOGY

- 1. Understand and apply precisely fundamental archaeological terminology
- 2. Familiarize with basic descriptive technique and preliminary study of various categories of exploration and excavation.
- 3. Identify basic concepts of Excavation principles and conservation techniques.

Subject Code: 17SEH51 Course Name: PANCHAYAT RAJ SYSTEM IN INDIA

Upon completion of the course, the students will be able to

- 1. Learn the historical importance of origin and development of the panchayat raj in India.
- 2. Make out the powers and functions of Grama Panchayat in India and the administration of Panchayat Raj in India
- 3. Build interest to participate in Panchayatraj administrative bodies.

Subject Code: 17SEH52 Course Name: HUMAN RIGHTS

Upon completion of the course, the students will be able to

- 1. Have sound knowledge about the National and State Human Rights commission.
- 2. Reflectively weigh up the human rights practice on local, national or international humanitarian efforts.
- 3. Develop the knowledge on Power and Function of the Central and state Human Rights Commission.

<u>SEMESTER – VI</u>

Subject Code: 17H61 Course Name: ELEMENTS OF HISTORIOGRAPHY

Upon completion of the course, the students will be able to

- 1. Be aware of Historiography as a field of study in History Students will analyze the evolution of the historical profession from the Enlightenment to the present.
- 2. Acquaint with important Historiographical interventions and issues related to the Historian's craft.
- 3. Understand the methodology of historical writing.

Subject Code: 17H62 Course Name: HISTORY OF EUROPE – II (1914 A.D -2005 A.D)

- 1. Know how the world became divided after the First World War among the superpowers of the world.
- 2. Identify the Nazism and Fascism in German and Italy, the establishment of UNO
- 3. Comprehend the post-war developments of Social, Political and Economic scenarios of the World and decolonization and the emergence of the third world.

Subject Code: 17H63 Course Name: FACETS OF WORLD CIVILIZATIONS

Upon completion of the course, the students will be able to

- 1. Understand the civilizations emerged in different parts of the world.
- 2. Acquire the knowledge of ancient civilizations like. Indus, Egypt, China. Mesopotamia, Greece and Rome.
- 3. Apprehend the different kinds of sources material culture, written sources and monumental Architecture.

Subject Code: 17HE6A

Course Name: EPIGRAPHY

Upon completion of the course, the students will be able to

- 1. View the history of India as a complex expression of communication and exchange systems within the history of epigraphy,
- 2. Successfully able to identify, decipher Brahmi scripts; and date of inscriptions with the help of paleographic features of the script.
- 3. Interpret the inscription in its socio-politico- religious and economical context.

Subject Code: 17SEH61

Course Name: WOMEN STUDIES

Upon completion of the course, the students will be able to

- 1. Identify the basic Concepts & Theories of women studies as well as defining gender, ideology, practice and relationship between gender, caste, class religion & politics.
- 2. Gather knowledge about the contribution of women towards the society through political, social and religious fields.
- 3. Be aware about the violence against the women and government preventive laws for their protection.

Subject Code: 17SEH62 Course Name: INDIAN HISTORY FOR COMPETITIVE EXAMINATIONS

- 1. Prepares the students for Union Public Service Commission, Tamil Nadu Public Service Commission (TNPSC) and other national and state level competitive exams.
- 2. Create perception among the aspirants about general and historic occurrences.
- 3. Be acquainted with Constitutional Provisions on the Formation, Functions, and Powers of Public Service Commissions for the Union and for the States and also clarifies about TNPSC and its rules of Procedure.

DEPARTMENT OF ENGLISH U.G.

DEPARTMENT OF ENGLISH

Programme Code: E

Programme Name: B.A. English

Programme Outcomes

- 1. Improve their brilliance in acquisition of listening, speaking, reading and Writing skills in English language. (Global)
- 2. Acquire many of the skills required for careers in the field of English Language Teaching, lexicography, interpretation/translation and Journalism. (National)
- 3. Manifest higher level of understanding, analyzing and interpreting any form of literature. (National)
- 4. Demonstrate skills in expressing thoughts and ideas intelligibly. (Global)
- 5. Critically evaluate the moral and ethical values in various literary texts and develop global perspectives. (Global)

Programme Specific Outcomes

On completion of B.A. English Programme, the students would be able to

- 1. Learn various language patterns, sentence structures and dialogue forms for effective communication. (Global)
- 2. Acquire knowledge about Indian Writing in English, American Literature and Common Wealth Literature. (Global)
- 3. Explore the full breadth of English and the society. (Global)
- 4. Develop the ability to read the prescribed texts and understand the forms, styles and structure implied. (Global)
- 5. Get familiar with variety of genres like Fiction, Nonfiction, Poetry, Biography, Autobiography, Drama and Short stories. (National)

Course Outcomes

SEMESTER – I

Subject Code: 21E11 Course Name: SOCIAL HISTORY OF ENGLAND

(Global)

Upon the completion of the course, the students will be able to

- 1. Explore the full breadth of English Life and its society.
- 2. Resourced with various major trends and movements which have shaped the English society.
- 3. Identify the key themes which encapsulated the period.
- 4. Imbibe the deeper ambivalences created by the inception and evolution of social history itself over the last centuries.
- 5. Integrate the gained knowledge further into the mainstream analyses of early modern society.

Subject Code: 21E11 Course Name: LITERARY FORMS

(Global)

Upon the completion of the course, the students will be able to

- 1. To identify various forms of Literature.
- 2. To understand the characteristics of various types of fiction.
- 3. To learn different types of poetry.
- 4. To differentiate between varied forms of essays.
- 5. To familiarize with the techniques of Drama.

Subject Code: 21E13 Course Name: FUNCTIONAL GRAMMAR (Global)

- 1. Make a systematic study of the fundamentals of grammar.
- 2. Augment their skills of speaking and writing effectively.
- 3. Obtain the nuances of arrangements of words, phrases and clauses and sentences in an efficient manner.
- 4. Develop employability skills by learning the language better.
- 5. Enhance their personality and interpersonal skills to communicate better.

Subject Code: 21NME1 Course Name: COMMUNICATION SKILLS I (Regional)

Upon the completion of the course, the students will be able to

- 1. Learn Communicative English by acquiring LSRW Skills.
- 2. Learn English language in a fun filled and easiest possible manner.
- 3. Establish employment strategies by developing communicative competency.
- 4. Tailor their language more effectively and concisely.
- 5. Self-aware of the barriers of their communication and thereby hone their verbal skills.

<u>SEMESTER – II</u>

Subject Code: 21E21 Course Name: BRITISH LITERATURE-II (AUGUSTAN AND ROMANTIC AGE) (Global)

Upon the completion of the course, the students will be able to

- 1. Emphasize a drastic shift in literary ideas that was influenced by classical writers like Horace, Virgil and Homer.
- 2. Feel the higher sense of imagination and deep thought provided by Romantic Literature.
- 3. Know the basic characteristic of Augustan period highlighting satire and irony, empiricism, comedy and the imitation of classics.
- 4. Know the fundamental attributes of Romantic age highlighting spiritual and supernatural elements of emoting through Literature.
- 5. Encounter the exceptionally bold political writings in all genres.

Subject Code: 21E22

Course Name: INDIAN ENGLISH LITERATURE (National)

- 1. Learn the historical inclination of various genres of Indian Writing in English from Colonial times till the present modern age.
- 2. Understand the cultural heritage and traditional values of India through the literary works of Indian English writers.
- 3. Appreciate the creative use of English language in Indian writing.
- 4. Be knowledgeable about the prolific Indian writers who voiced through the English language, their sentiments against the oppression of Britishers.
- 5. Know about the influence of the literary movements of the West in India such as symbolism, surrealism, existentialism and so on.

Subject Code: 21NME2 Course Name: COMMUNICATION SKILLS II (Regional)

Upon the completion of the course, the students will be able to

- 1. View the practical communicative lessons as a place where their social change happens
- 2. Active with the different learning modalities- aural, oral, visual and kinesthetic of learning communicative techniques.
- 3. Learn to be more confident about their oral and written presentations.
- 4. Acquire the ability to be employable at the job market.
- 5. Acquire competency in their interpersonal skills and enhance one's personality on the whole.

SEMESTER – III

Subject Code: 1721E31 Course Name: BRITISH LITERATURE-III (VICTORIAN AGE) (Global)

- 1. Get introduced to the time of the world's first Industrial Revolution, political reform and social change.
- 2. Learn how the reign of Queen Victoria saw the demise of rural life with the expansion and growth of cities.
- 3. Knowing the era's greatest writers like Charles Dickens, Thomas Hardy, George Eliot, Bronte Sisters and others.
- 4. Understand how Victorian society was organized hierarchically on the aspects of gender and class, more often than race and religion.
- 5. Learn the predominantly appreciated developments in science that reflected in Literature.

Subject Code: 17E32 Course Name: AMERICAN LITERATURE (Global)

Upon the completion of the course, the students will be able to

- 1. Understand the American Psyche, the conflicts and tension faced by the American writers and the uniqueness of American experience.
- 2. Expose themselves with cultural differences through the writings of the prolific American authors.
- 3. Learn the emerging distinct sensibilities of both the modernist and post modernist themes.
- 4. Comprehend the avant-garde styles of early twentieth century literature.
- 5. Analyze the linguistic differences of British and American writings.

Subject Code: 17AE31 Course Name: HISTORY OF ENGLISH LITERATURE (Global)

Upon the completion of the course, the students will be able to

- 1. Understand the literary movements in the history of English Literature from the Age of Chaucer to the Modern Age.
- 2. Study the development of Language and Literature starting from Anglo-Saxons through Middle English to contemporary English.
- 3. Assimilate the great transformation and literary glory for centuries in the form of poetry, prose, drama and fiction.
- 4. Gain an understanding of the greatest influence of religion into literature through satires and denounces of church and state in different periods
- 5. Familiarize themselves about the importance of influence of various languages say French, Italian, Greek and Latin in the evolution of the greatest English Literature.

Subject Code: 17SEE31 Course Name: COMPUTER APPLICATIONS (Global)

- 1. Become competent in using search engines and handling computers effectively.
- 2. Apprehend different versions of applications for different platforms.
- 3. Face the contemporary Technology-Oriented-Learning Process with right diligence.
- 4. Use MS Office tools and HTML more efficiently in their presentation skills.
- 5. Decipher computer knowledge as their fundamental route for future learning.

SEMIESTER – IV

Subject Code: 17E41 Course Name: INDIAN WOMEN WRITERS (National)

Upon the completion of the course, the students will be able to

- 1. Discern the feminine aspects of transcultural emotions through Indian English Literature.
- 2. Understand deeply the inner conflicts of Indian women through their writings
- 3. Understand the influence of western ideologies in the traditional Indian Women's Psyche.
- 4. Discover themselves by navigating the complexities of contemporary womanhood.
- 5. Get an insightful knowledge about marginalization and its Literature.

Subject Code: 17E42 Course Name: LITERARY THEORY AND CRITICISM (Global)

Upon the completion of the course, the students will be able to

- 1. Learn the relationship between authors, readers and texts.
- 2. Comprehend different approaches, techniques, theories and interpretations to discover rich and deeper meaning.
- 3. Attempt to criticize a literary work focusing on form, organization, structure and so many other scholarly attributes rather than merely exhibiting likes and dislikes.
- 4. Have a comprehensive knowledge above various schools of critical theories.
- 5. Interpret literature sociologically, psychologically, spiritually, linguistically and through various other technicalities.

Subject Code: 17E43 Course Name: BRITISH LITERATURE - IV (MODERN AGE) (Global)

- 1. Ascertain the contemporary themes and techniques of producing Literary works
- 2. Study how individualism and integrity of characters plays a vital role in most of the literary works
- 3. Unleash the modern anti-aesthetic, didactic, realistic way of characterizing human life.
- 4. Exposed to the writers of profuse intellect and wisdom.
- 5. Learn the radical & utopian spirit of modernism in political theories, anthropology, psychology and philosophy in the modern British Literature.

Subject Code: 17SEE41 Course Name: ECO-LITERATURE (National)

Upon the completion of the course, the students will be able to

- 1. Educate themselves on the relationship between natural settings and the human communities that dwell within them.
- 2. Acquaint themselves with ecological and nature themes.
- 3. Zoom out their perspectives beyond the personal narrative and connect themselves to humanities and nature.
- 4. Visualize the world with ecological concerns.
- 5. Comprehend various environmental movements and be in tune with nature.

<u>SEMESTER – V</u>

Subject Code: 17E51

Course Name: NEW LITERATURES (Global)

Upon the completion of the course, the students will be able to

- 1. Explore the writings of members of former British Empire.
- 2. Expose themselves to the new post colonial themes.
- 3. Learn about the radical opposition to colonial universalism through effusive writings of various authors.
- 4. Create awareness on the cultural and historical diversity of English Literature.
- 5. Learn 'English with a difference' where indigenous words are incorporated without translation.

Subject Code: 17E52 Course Name: GLOBAL MEN'S WRITINGS ON WOMEN (Global)

- 1. Gain understanding of the great awakening on femininity and womanhood through the literary voice of male intellectuals.
- 2. Acquire deeper understanding of men's perspectives on women and their emotional lifeline.
- 3. Share and relate the humanness and man-woman relationship in a more profound way.
- 4. Grasp universal thoughts of masculinity and femininity from world renowned authors.
- 5. Know the exact and comprehensive status of woman in the society worldwide.

Subject Code: 17EE5A Course Name: ENGLISH LANGUAGE TEACHING (Global)

Upon the completion of the course, the students will be able to

- 1. Learn grammatical, lexical and functional teaching methodologies to technically teach English language.
- 2. Focus on the building blocks of language through task based learning experience.
- 3. Involve themselves in a learner-centered process of communication and learning.
- 4. Explore and gain the skills and knowledge to design and produce materials for language lessons.
- 5. Apply wide range of popular career options either nationally or internationally.

Subject Code: 17EE5B Course Name: PHONETICS (Global)

Upon the completion of the course, the students will be able to

- 1. Learn the theory of pronunciation and understand how the language works.
- 2. Develop deeper knowledge of the 26 letters and 45 sounds so as to get equipped not only to learn the language but also teach the language better.
- 3. Become acquainted with basic knowledge of teaching English language if they choose English Language Teaching and to get eligible for tests like TESOL, TEFL.
- 4. Improve their level of confidence while speaking phonetically and phonologically.
- 5. Concentrate more on practical use of their technical knowledge of language through taskbased learning methodologies of language acquisition.

Subject Code: 17SEE51 Course Name: JOURNALISM AND MASS COMMUNICATION (National)

- 1. Expose themselves to basics concepts and types of communication and journalism, nature of media, mass communication in India.
- 2. Learn the role of media in society, its impacts and effects, limitations and different forms of media.
- 3. Know about the roles and responsibilities of journalist, ethics, careers and training in journalism, media laws in India and freedom of Press.
- 4. Gain understanding of the history and development of different forms of media.
- 5. Study the formats of Report Writings for press, writing for Radio and TV, Advertising and Public Relations.

Subject Code: 17SEE52 Course Name: ENGLISH FOR COMPETITIVE EXAMS (National)

Upon the completion of the course, the students will be able to

- 1. Confidently face competitive government exams by gaining strong basics in English.
- 2. Learn important topics of general English for competitive exams.
- 3. Improve their verbal ability by learning the nuances of English language
- 4. Clear the 'General English' section of various Government Exams easily.
- 5. Possess excellent vocabulary, grammar and communication skills.

<u>SEMESTER – VI</u>

Subject Code: 17E61 Course Name: WORLD CLASSICS IN TRANSLATION (Global)

Upon the completion of the course, the students will be able to

- 1. Familiarize themselves with the literary classics ever written and translated from different parts of the world.
- 2. Emphasize in their young minds, the varied cultural differences through Literature around the world.
- 3. Learn influence of various languages and cultures in the birth of various civilizations around the world.
- 4. Expose themselves to magnificent literary works of centuries exploring diversified themes and techniques of literary production.
- 5. Provide themselves an opportunity to study classical antiquity, philosophy, history and archeology through varied literatures of the world translated in English.

Subject Code: 17E62 Course Name: INDIAN DIASPORIC WOMEN WRITERS (Global)

- 1. Be acquainted with cultural experiences and socio-economic conditions of Indian immigrants.
- 2. Understand and appreciate adaptation and assimilation of the Indian Diaspora.
- 3. Get new perspective of maintenance of home culture and integration of the same in host culture.
- 4. Analyze the psychological and sociological traumas experiences by immigrants.
- 5. Explore the feminine sensibility through prolific women writers of international fame and background.

Subject Code: 17E63 Course Name SHAKESPEARE (Global)

Upon the completion of the course, the students will be able to

- 1. Learn about the greatest writer in the English language and the world's greatest dramatist.
- 2. Learn the elaborate technicalities and versatility of English language through his writings of universal appeal.
- 3. Get a wide knowledge and lasting impression on the theatre and literature.
- 4. Explore the colossal dramatic potential of characterization, plot language and genre.
- 5. Get acquainted with literature and trends in Drama during Elizabethan period.

Subject Code: 17EE6A Course Name: HUMAN RIGHTS IN LITERATURE (Global)

Upon the completion of the course, the students will be able to

- 1. Get introduced to a literary genre that deals with human rights issues and thus directly or indirectly promotes values of human rights
- 2. Commit themselves to moral duty and power to make social change by analyzing the right norms and rights to human life through literary works.
- 3. Learn the responsibility of the authors in realizing the social commitment under the power of their literary creation.
- 4. Know about the freedom of expression of writers' thoughts.
- 5. Provide themselves an opportunity for right action in the society due to the power of literature to enter our inner psyche.

Subject Code: 17SEE61 Course Name: JOB ORIENTED SKILLS (National)

- 1. Equip themselves with the required language skills to face interviews, group discussions and effective communications.
- 2. Focus on the development of their employability skills.
- 3. Concentrate on the technical aspects of written communication.
- 4. Train themselves to acquire interpersonal skills.
- 5. Become confident and assertive while presenting themselves in the job market.

Subject Code: 17SEE62 Course Name: ENGLISH FOR ENHANCEMENT (National)

- 1. Enhance their confidence level when using the English language on a daily basis.
- 2. Learn the proficiency that they need to keep up at the workplace and within the classroom.
- 3. Get experiences of language enhancement starting from fundamentals and basics of English Language to advance techniques.
- 4. Prepare themselves to confidently appear for English language oriented-competitive exams like IELTS & TOEFL.
- 5. Involve themselves with activity based learning of language.

DEPARTMENT OF ZOOLOGY U.G.

DEPARTMENT OF ZOOLOGY

Programme Code: Z

Programme Name: B.Sc. Zoology

Programme Outcomes

- 1. Learners would be able to analyze the relationships among animals, plants and microbes and gain skill in the systematics of animal kingdom.
- 2. Learners would be inspired to choose career options in the field of Developmental Biology, Fishery industry, Wild life conservation, Ecotourism, Biotechnology and Research etc.
- 3. Apply the knowledge and understanding of Zoology to one's own life.
- 4. Gain knowledge of protection of vulnerable and endangered species.
- 5. Gain Information and skill of advanced biological techniques for experimental purposes.
- 6. The programme is designed in such a way that students should be able to solve the problems, think scientifically, independently and draw rational conclusions.
- 7. Students will understand the science of vermicomposting, dairy, aquaculture, beekeeping with respect to entrepreneurship.

Programme Specific Outcomes

- 1. Maintain high standards of learning in animal sciences.
- 2. Apply the knowledge to lead a healthy lifestyle.
- 3. Identify animals beneficial to humans.
- 4. Awareness on ethical principles.
- 5. Acquire specific knowledge on the various sections of Life Sciences, Cell Biology, Genetics, Taxonomy, Applied Zoology, General Embryology and Public Health.
- 6. Understand good laboratory practices and safety.
- 7. Understand the applications of biological sciences in Biotechnology, Apiculture, Poultry, Fisheries, Aquaculture and Vermiculture.

Course Outcomes

SEMESTER - I

Subject Code: 17Z111

Course Name: INVERTEBRATA

Upon completion of the course, the students will be able to

- 1. Enable the students to understand the level of organization in Invertebrate classifications.
- 2. Help the students gain practical applications in the biomedical and agronomy fields of research.
- 3. Make the learners aware of the human misconceptions, bioethics and phobias associated with invertebrate interactions.

Subject Code: 21SEZ11 Course Name: COMPUTER APPLICATION

Upon completion of the course, the students will be able to

- 1. Enable the students to understand the basic operations in computer hardware and software.
- 2. Make students develop the skill in using computer applications software.
- 3. Help the students to gain basic computing skills.

Subject Code: 21SEZ12 Course Name: AQUACULTURE

- 1. Produce protein rich, nutritive, palatable and easily digestible human food.
- 2. Produce ornamental fish for aesthetic appeal.
- 3. Make learners aware of the means of livelihood through commercial and industrial aquaculture.

Subject Code: 21NMZ1 Course Name: MEDICAL MICROBIOLOGY

- 1. Introduce basic principles and applications in relevance to clinical diseases.
- 2. Make students know the etiological agents responsible for global infections and diseases.
- 3. Make students acquire and demonstrate with competency in microbiological research.

SEMESTER - II

Subject Code: 21Z21 Course Name: CHORDATE

Upon completion of the course, the students will be able to

- 1. Learners will be able to understand the origin and evolutionary relationship in different subphylum of chordates.
- 2. Understand the ecological role of different groups of chordates.
- 3. Make students learn and describe unique characters of urochordates, cephalochordates and fishes.

Subject Code: 21SEZ21

Course Name: VERMITECHNOLOGY

Upon completion of the course, the students will be able to

- 1. Understand the basic principles and procedures of Vermicomposting and Vermiculture technology
- 2. Make students aware of ecofriendly agriculture through organic farming utilizing the byproducts of Vermiculture.
- 3. Students will be able to produce and generate income in the production of biomanure made from kitchen wastes.

Subject Code: 21SEZ22 Course Name: CLINICAL MICROBIOLOGY

Upon completion of the course, the students will be able to

- 1. Create knowledge and avenues for self employment.
- 2. Impart knowledge of the basic principles of bacteriology, virology, mycology and parasitology.
- 3. Students will understand the nature of pathogenic microorganisms, pathogenesis, laboratory diagnosis, transmission, prevention and control of diseases common in the country.

Subject Code: 21NMZ21 Course Name: ORNAMENTAL FISH CULTURE

- 1. Analyse the impact of the aquarium fish trade on social and natural environments.
- 2. Collect baseline data on the ecosystems, socio –economy and diversity of fishes.
- 3. Develop best handling practices for the care of fishes.

Sub code :21Z2P Name of the Course: LAB IN INVERTEBRATA AND CHORDATA INVERTEBRATA

Upon completion of the course, the students will be able to

- 1. Students will be able to describe the morphology, habit, habitat, systematic position and various systems in all phylums.
- 2. Enable to prepare mounting of mouth parts of few common insects.
- 3. Experience in anatomy through simple dissections.
- 4. Familiarize organ systems.

CHORDATA

- 1. To describe the salient features and classification of phylum Chordata and their origin.
- 2. Gain knowledge to distinguish between poisonous and non-poisonous snakes.
- 3. Describe the External features of fresh and marine water fishes and other aquaculture organisms.

SEMESTER - III

Subject Code: 17Z31 Course Name: CELL AND MOLECULAR BIOLOGY

Upon completion of the course, the students will be able to

- 1. Study the fundamentals of Cell and Molecular Biology and gain knowledge on how all living organisms develop, survive and evolve.
- 2. Learn about the significance of macromolecules- DNA, RNA and proteins.
- 3. Understand the importance of cell division and replication in developmental biology.

SEMESTER - IV

Subject Code: 17Z41 Course Name: DEVELOPMENTAL BIOLOGY

- 1. Helps one to investigate how fertilized egg cells divide in regulated manners to grow into full size bodies.
- 2. Students will be enriched with the basic knowledge of Developmental Biology, Experimental Embryology and Applied Embryology.
- 3. Learn about molecular genetics, cellular /integrative aspects of building an organism and developmental abnormalities.

Sub code: 17Z4P Name of the Course: LAB IN CELL AND MOLECULAR BIOLOGY& DEVELOPMENTAL BIOLOGY CELL AND MOLECULAR BIOLOGY

Upon completion of the course, the students will be able to

- 1. Identify the phases of cell division.
- 2. Prepare Blood smear and identify the various cells
- 3. Ability to observe chromosomal arrangements during cell division.
- 4. Squash preparation of salivary glands in Chironomous larva.

DEVELOPMENT BIOLOGY

- 1. Identify and explain the types of eggs and placenta, blastula and gastrula of Frog.
- 2. Identify the age of chick embryo 48hrs, 72hrs 96hrs.
- 3. Study the mammalian sperm and ovum.
- 4. Study the cleavage stages 2cell, 4cell, 8cell stages.

SEMESTER - V

Subject Code: 17Z51 Course Name: GENETICS

Upon completion of the course, the students will be able to

- 1. Understand one's own health and make healthy choices.
- 2. Learn genetic technologies to help develop targeted medicines for certain diseases.
- 3. Gain knowledge on the arrangement of Genes, their interaction and the influence of environment on gene expression.

Subject Code: 17ZE5A Course Name: ECOLOGY AND EVOLUTION

- 1. Learn interdependence between people and nature that is vital for food production.
- 2. Able to solve biological problems that impact our lives.
- 3. Gain knowledge on the connections that exist between different species.

Subject Code: 17ZE5B Course Name: BIOCHEMISTRY

Upon completion of the course, the students will be able to

- 1. Broadens our understanding of biochemical changes relating to physiological alteration in human body.
- 2. Understand the chemical aspects of biological processes such as digestion, hormonal action and muscle contraction –relaxation.
- **3**. Application of skills in answering, critically analyzing, interpreting and presenting the results of laboratory investigations.

Subject Code: 17SEZ51 Course Name: BIO STATISTICS

Upon completion of the course, the students will be able to

- 1. Demonstration and familiarization with core content of any one area in health sciences. Example- Genetics.
- 2. Enable to formulate and perform a descriptive and inferential analysis of a public health or other health sciences study using statistical software.
- 3. Capable of self directed learning of unfamiliar statistical methods and presentation of results/findings.

SEMIESTER - VI

Subject Code: 17Z61 Course Name: PHYSIOLOGY

- 1. Provide thorough understanding of normal body function enabling more effective treatment of abnormal or disease states.
- 2. Provide insight into the complex nature of the human body and the countless different systems that make it up.
- 3. Acquire knowledge of the senses, movements and needs of the human body.

Subject Code: 17Z62 Course Name: MICROBIOLOGY AND IMMUNOLOGY

Upon completion of the course, the students will be able to

- 1. Acquire knowledge and understanding of the concepts of Microbiology in the field of medicine, industry, environment, genetics, agriculture, food and others.
- 2. Demonstrate key practical skills/competencies in working with microbes.
- 3. Demonstrate the basic knowledge of immunological processes at a cellular and molecular level and understand the principles governing vaccination and the mechanisms of protection against infectious diseases.

Subject Code: 17ZE6A Course Name: BIOTECHNOLOGY

Upon completion of the course, the students will be able to

- 1. Understand the principles of animal culture, media preparation, Invitro fertilization and embryo transfer technology.
- 2. Aware of the applications of recombinant DNA technology in agriculture and production of therapeutic proteins.
- 3. Knowledge of the microbial degradation of Pesticides, Bioremediation & Biofertilizers.

Subject Code: 17SEZ61 Course Name: ECONOMIC ZOOLOGY

- 1. Gain knowledge on the concepts of origin, growth and study of Sericulture as science, to acquaint the general aspects of Sericulture industry.
- 2. Identify various types of honeybee, importance of wax and identify what to look for in comb during hive inspections
- 3. Understand the principles, importance, purpose and application of the basic technologies in fisheries and aquaculture.
- 4. Gain skill on the economic importance of poultry farming to determine the best poultry management system.
- 5. Promote women entrepreneurship in rural areas through incorporation of women into economic activity.
- 6. Understand basic characteristics of common breeds of livestock species.

Sub code: 17Z61P Name of the Course: LAB IN BIOCHEMISTRY. GENETICS, ECOLOGY & EVOLUTION

Upon completion of the course, the students will be able to

BIOCHEMISTRY:

- 1. Enable to estimate Hb by Sahli's method.
- 2. Enable to investigate sugar in urine samples.
- 3. Qualitatively analyse the given carbohydrates, Proteins and Fats
- 4. Measure the pH of given samples.

GENETICS:

- 1. Biological data- calculation of Mean, Median, Mode and Standard deviation.
- 2. Observing Simple Mendelian traits.
- 3. Understand the significance of sex linked and sex limited inheritance in humans.

ECOLOGY:

- 1. Observe turbidity using Secchi disc.
- 2. Familiarize with ecological adaptations.
- 3. Analyse the content of dissolved Oxygen in various water samples –pond water, river water ,tap water etc.

EVOLUTION:

- 1. Study of living fossils, connecting link, evolutionary significance of Peripatus and Limulus.
- 2. Explain the stages of human evolution.
- 3. Identify the fossil types and adaptations in animals.

Sub code :17Z62P Name of the Course: L A B IN PHYSIOLOGY, MICROBIOLOGY, IMMUNOLOGY AND BIOTECHNOLOGY

Upon completion of the course, the students will be able to

PHYSIOLOGY:

- 1. Activity of human salivary amylase in relation to pH, enzyme and temperature.
- 2. Enable to detect ammonia (nitrogenous waste) in fish tank water.
- 3. Use of BP apparatus, Stethoscope etc.
- 4. Count total leucocytes from Blood samples.
- 5. Estimate dissolved O₂ content of various water samples with reference to weight of fish.

MICROBIOLOGY:

- 1. Students will be able to get the basics and importance of practicals of microscopy, staining and sterilization.
- 2. Master aseptic techniques and be able to perform routine culture handling tasks safely and effectively.

IMMUNOLOGY:

- 1. To identify the prepared slides of histology- Thymus, Spleen, Bone marrow, Lymph node.
- 2. To understand Ag–Ab reactions and to report human blood groups.
- 3. To be familiar with immunization schedule and its importance.

BIOTECHNOLOGY:

- 1. Explain the basics of Animal Biotechnology.
- 2. Explain gene transfer methods for the production of transgenic animals.
- 3. Address bioethical and biosafety issues related to animal transgenics.
- 4. Gain knowledge on the production of GMOs.

ALLIED CHEMISTRY-I

Allied Chemistry

(for B.Sc. Mathematics and Zoology Majors)

Course Outcomes

SEMESTER - I

Subject Code: 21AK1 Course Name: GENERAL CHEMISTRY-I

Upon completion of the course, the students will be able to

- 1. Understand the proper setups and various steps involved in metal extraction.
- 2. Provide a comprehensive overview on colloids.
- 3. Mention the types of catalysis and the laws of photochemistry.
- 4. Define chromophore, auxochrome theory and the explain in preparation of dyes.
- 5. Describe the arrangements of elements and a variation in periodic properties.

SEMESTER - II

Subject Code: 21AK2

Course Name: GENERAL CHEMISTRY-II

Upon completion of the course, the students will be able to

- 1. Describe the structure of atom by quantum mechanical approach.
- 2. Acquaint with the knowledge in preparation and usage of isotopes of hydrogen, covalent hydrides, polymeric hydrides.
- 3. Explain the fundamental concepts of sp³, sp², sp hybridization, bond fission and stability of reaction intermediates.
- 4. Get insight into synthesis and uses of naphthalene, furan, and pyridine.
- 5. Acquire in-depth knowledge about the carbohydrates.

Subject Code: 21AK2P Course Name: SALT ANALYSIS

- 1. Identify the simple cation and anions by preliminary reactions.
- 2. Follow the procedures systematically in the elimination of interfering radicals. and identify the cations in the group separation(Group I–VI).
- 3. Recording the result of salt analysis test.

SEMESTER - III

Subject Code: 17AK3 Course Name: GENERAL CHEMISTRY-III

Upon completion of the course, the students will be able to

- 1. Learn and analyze the bonding characteristics in compounds.
- 1. Predict the oxidation states and balance redox reactions.
- 2. Familiar with the organic halogen compounds.
- 3. Get concise information about polymers.
- 4. Know the fundamental aspects of ionic equilibrium.

<u>SEMESTER – IV</u>

Subject Code: 17AK4 Course Name: GENERAL CHEMISTRY-IV

Upon completion of the course, the students will be able to

- 1. Recognize the basic concepts of co-ordination chemistry.
- 2. Acquire basic idea about the alkaloids and Terpenoids.
- 3. Asses the chemistry of organic and industrial organic compounds.
- 4. Gain knowledge on the structure and uses of some drugs such as antibacterials, antimalarials, antibiotics and arsenical drugs.
- 5. Acquire the knowledge in various pesticides, insecticides, fungicides and herbicides.

Subject Code: 17AK4P Course Name: VOLUMETRIC ANALYSIS

- 1. Perform simple acid, base and redox titrations skillfully
- 2. Know the applications of volumetric analysis
- 3. Identify different types of errors in quantitative analysis.
ALLIED BOTANY-II

ALLIED BOTANY

Semester III

Course Outcomes

Subject Code: 17AG4 Course Name: PLANT DIVERSITY I- ALGAE, FUNGI, BRYOPHYTE, PTERIDOPHYTE & GYMNOSPERM

Upon completion of the course, the students will be able to

- 1. Understand the systematic position, diversity, morphology, structure, reproduction and life cycle of various types of Algae and Fungi species.
- 2. Know the systematic position, occurrence, thallus structure, reproduction and life cycle of selected Bryophyte and Pteridophyte species.
- 3. Analyze the evolutionary trends of living gymnosperms external, internal features, reproduction and life cycle.

Semester IV Course Outcomes

Subject Code: 17AG4

Course Name: CELL BIOLOGY, PLANT ANATOMY, GENETICS, PLANT BREEDING & HORTICULTURE.

- 1. Analyze basic structures of the plant cell, its function and cell inclusions.
- 2. Understand plant cells, tissues, their functions and internal structure of various tissues in the stem and root.
- 3. Acquire the basic concepts of Mendelian genetics.
- 4. Explain the concepts of plant breeding involving the principles, selection procedure and its achievements in the field of agricultural crop improvement.
- 5. Know the plant propagation type and its practices in specific plants.

Subject : 17AG4P Course Name: PRACTICAL I

Upon completion of the course, the students will be able to

- 1. Acquire hands-on practice about micro-preparation, hand sectioning and observation of permanent slides of the lower and higher group of plant species.
- 2. Categorize the internal structure of monocot and dicot (stem, leaf and root), secondary thickening and anomalous secondary thickening (Dicot and Monocot).
- 3. Attain the knowledge of plant cellular organelles.
- 4. Perform emasculation techniques.
- 5. Analyze the genetic variations among plants.
- 6. Demonstrate the techniques of gardening Types, Methods & Tools.

<u>Semester V</u>

Course Outcomes

Subject Code: 17AG5

Programme Name: MORPHOLOGY, TAXONOMY OF ANGIOSPERMS, MEDICINAL BOTANY & ECONOMIC BOTANY

- 1. Understand various modifications of plant parts and their purpose in plants.
- 2. Comprehend the concepts of plant taxonomy and classification of Angiosperms.
- 3. Know the Salient feature, taxonomy and economical values of plants in each family.
- 4. Gain knowledge of traditional medicine, sources of drugs and its application for human ailments.
- 5. Expansion of knowledge in the economic importance of certain plant and its demand for human needs.

Semester VI Course Outcomes

Subject Code: 17AG6

Course Name: PLANT PHYSIOLOGY, EMBRYOLOGY, PLANT TISSUE CULTURE & PLANT PATHOLOGY

Upon completion of the course, the students will be able to

- 1. Know about Photosynthesis and Respiration, absorption of water and translocation of solutes in plants.
- 2. Familiar with the application of plant growth hormones in agriculture and horticulture.
- 3. Understand the growth and developmental processes, pollination, fertilization, embryogeny and types endosperm in plants.
- 4. Acquire knowledge about the basic perception, procedural skill and applications of plant tissue culture.
- 5. Comprehend the scope and importance of plant pathology, its effect on the economy of crops and control measures for the plant diseases.

Subject: 17AG6P Course Name: PRACTICAL II

- 1. Relate the morphological features and dissected out floral parts of the plants in identifying its taxonomic family.
- 2. Recognize the economically important plants.
- 3. Knowledge of pharmacological importance of medicinal plants and their bioactive compounds.
- 4. Analysis of the process of photosynthesis through experimentations.
- 5. Get adequate knowledge in dissection and perceiving the internal structure of anthers, and ovules.
- 6. Demonstrate the plant tissue culture techniques and preparation of culture medium.
- 7. Categorize the organisms and causal factor responsible for some common plant diseases.

DEPARTMENT OF COMMERCE U.G.

DEPARTMENT OF COMMERCE

Programme Code: C

Programme Name: B.Com.

Programme Outcomes

- 1. Complete Professional Courses like CA, CS, CMA, MBA, M.Com, CPA and ACCA Successfully.
- 2. Become Chartered Accountant, Chief Internal Auditor, Chief Accountant, Legal Advisor, Managers and Sales representatives in multinational companies.
- 3. Acquire skill to select teaching and research as a Profession.
- 4. Became successful and socially responsible women entrepreneurs with creative ideas.
- 5. To gain knowledge that helps to face various competitive examination.

Programme Specific Outcomes

On completion of B.Com. Commerce Programme, the students would be able to

- 1. To become experts in accounting methodology and enhance professionalism through innovative practices, to be tactful in facing unforeseen demands and changes in situational roles in industry and academics.
- 2. To gain through subject knowledge from practical experiences, industrial learning and internship.
- 3. To develop entrepreneurial skills, groups activities, spirit of coordination shaping up their professionalism.
- 4. To adopt innovative opportunities, latest technologies that helps to develop new business.
- 5. To enhance informative, and expressive computer knowledge that helps them to face the competitive examinations.

Course Outcomes

Upon completion of the course, the students will be able to **SEMESTER - I**

Subject Code: 211C1 Course Name: BUSINESS CORRESPONDENCE

Upon completion of the course, the students will be able to

- 1. To understand the basic concepts of communication and various forms of business communication including resume preparation.
- 2. Illustrate trade enquiries and orders.
- 3. To learn the skill of writing collection and circular letters.
- 4. To understand the Banking and Insurance letter writing that helps in making claims and settlements.
- 5. To gain the knowledge in report writing and recent developments in communication.

Subject Code: 21C11 Course Name: MARKETING

Upon completion of the course, the students will be able to

- 1. Describe the importance of modern marketing concepts.
- 2. Illustrate various functions of marketing.
- 3. Describe the various behavioral aspects of consumers such as standardization and grading system.
- 4. Examine the classification of products based on pricing, branding and packaging system in marketing.
- 5. Categorize the various modes of transportation, distributional channels and the recent developments in marketing.

Subject Code: 21C12 Course Name: FINANCIAL ACCOUNTING- I

- 1. Describe accounting concepts, conventions and preparation of final accounts for sole trading concern.
- 2. Identify various kinds of errors, its rectification and prepare the bank reconciliation statement.
- 3. Prepare both the receipts and payment account and Income and Expenditure account.
- 4. To understand the calculation of depreciation under the various methods.
- 5. Categorize the bills, promissory notes and to journalize the transactions in a bill.

Subject Code: 21AC1 Course Name: COMPUTER FUNDAMENTAL

Upon completion of the course, the students will be able to

- 1. Understand the fundamental concepts of computers.
- 2. Understand Decimal, Binary, Octal, Hexadecimal Number System.
- 3. Familiarize with the CPU, Memory and storage device of the computer
- 4. Understand the Input and Output Device of Computer.
- 5. Understand the Types and Topology of Computer Networks.

Subject Code: 21NMC1 Course Name: BASIC ACCOUNTING

Upon completion of the course, the students will be able to

- 1. Define Accounting, Concepts and conventions in preparation of journals.
- 2. Preparation of subsidy books.
- 3. Knowledge in preparation on cash and petty cash book.
- 4. Prepare ledger posting and trial balance.
- 5. Prepare the final accounts for sole trading concerns.

Subject Code: 211C2 Course Name: PRINCIPLES OF MANAGEMENT

- 1. Know the evolution of management thought.
- 2. Study the concepts of planning in management.
- 3. Describe the functions and principle of organization.
- 4. Describe the various stating functions and elements in an organisation.
- 5. Understand the leadership qualities and its importance.

SEMESTER - II

Subject Code: 21C12

Course Name: ADVERTISING AND SALESMANSHIP

Upon completion of the course, the students will be able to

- 1. Understand the importance of advertising.
- 2. Know about the qualities of a good advertisement copy and the kinds of media.
- 3. Describe the concepts of sales promotion.
- 4. Get the knowledge of duties and qualities of a salesman.
- 5. Identify methods of training and wage plan to salesman.

Subject Code: 21C22 Course Name: FINANCIAL ACCOUNTING-II

Upon completion of the course, the students will be able to

- 1. Prepare various accounting treatment in consignment.
- 2. Prepare accounting for joint venture business.
- 3. Get knowledge of both the single and double entry system of accounting
- 4. Prepare the branch and department accounting.
- 5. Know about the calculation of interest under various methods.

Subject Code: 21AC2 Course Name: BUSINESS ECONOMICS

- 1. Describe the concepts in managerial economics and application of appropriate economics tools in making business decisions.
- 2. Analyse the usage of law of demand and elasticity of demand.
- 3. Forecasting of demand rates under different market conditions.
- 4. Examine the various methods of pricing.
- 5. Learn the profit planning methods and break even analysis.

Subject Code: 21NMC2 Course Name: ENTREPRENEURSHIP DEVELOPMENT

Upon completion of the course, the students will be able to

- 1. Understand the importance and functions of entrepreneurship.
- 2. Identify entrepreneurial Qualities and types of entrepreneurs.
- 3. Examine the various types of women entrepreneurs.
- 4. Gain the knowledge about institutional support towards entrepreneurship.

SEMESTER - III

Subject Code: 17C31 Course Name: BUSINESS ENVIRONMENT

Upon completion of the course, the students will be able to

- 1. To explain the definitions, micro and macro business environment and the SWOT analysis.
- 2. To described about new industrial policy, privatization and MNC companies.
- 3. To described social business and audit.
- 4. To gain information about the micro, small and medium sized enterprises.

Subject Code: 17C32 Course Name: INSURANCE

- 1. Provide a basic understanding of insurance, the concepts and principles.
- 2. Gain the Knowledge regarding insurance policy, its term conditions and the mortality tables.
- 3. Explain the basic concepts, principles, policies, procedures, conditions loss claims, and premium calculation of marine insurance.
- 4. Describe the meaning, nature, the kinds of policies procedures, conditions, rate fixation, settlement of claim, and reinsurance in fire insurance.
- 5. Understand about the role of IRDA, its guidance, present scenario of IRDA and Life Insurance Corporation of India.

Subject Code: 17C33 Course Name: ADVANCED ACCOUNTANCY

Upon completion of the course, the students will be able to

- 1. Prepare the financial accounts for fire insurance at different situations, the loss of stock loss of profit policy.
- 2. Understand the various types of Royalty Accounts and their representatives in the books of lessor and lessee.
- 3. Prepare financial statements of affairs for Insolvency accounts and Individuals.
- 4. Evaluate the different modes of Installment methodologies in hire purchase, system calculation of Interest in books of buyer and seller

Subject Code: 17C34 Course Name: COSTING

Upon completion of the course, the students will be able to

- 1. Prepare the procedures in cost sheet accounting and preparation of Quotation.
- 2. Understand the level of stock and methods of pricing material.
- 3. Learn the various wage plans and the price rate system.
- 4. Understand the concepts of accounting for overheads and the process of costing techniques.

Subject Code: 17AC3 Course Name: BUSINESS STATISTICS

- 1. Understand the basic statistical collection, statistical series, tabular and graphical representation of data.
- 2. Calculate the measures of central tendency, dispersion and asymmetry, correlation and regression analysis.
- 3. Apply knowledge to solve simple task using skewness and kurtosis.
- 4. Independently calculate basic statistics parameter Viz Mean, measures of dispersion correlation and co-efficient indexes.
- 5. Choose a statistical method for solving practical problems.
- 6. Highlights statistical relationships between variables in the data sets
- 7. Predict the values of strategic variables using time series and trend analysis.

Subject Code: 17SEC3P Course Name: COMMERCE PRACTICAL

Upon completion of the course, the students will be able to

- 1. Make use of the practical knowledge of various forms used in Banking and Insurance Sector.
- 2. To became an entrepreneur through practice of preparing model projects.
- 3. To understand the preparation of filing GST.

SEMESTER - IV

Subject Code: 17C41 Course Name: ENTREPRENEURSHIP DEVELOPMENT

Upon completion of the course, the students will be able to

- 1. To understand the meaning, importance and role of entrepreneurs in economic development
- 2. To encourage entrepreneurship- and learn the positive and negative aspects of entrepreneurship.
- 3. To explain women entrepreneurs-the problems and remedial measures undertaken for the upliftment of women entrepreneurs –to gain knowledge on the incentives schemes of women entrepreneurs.
- 4. To understand the industrial support and subsidies given for entrepreneurship development.
- 5. To explain project report-its meaning and the appraisal of project.

Subject Code: 17C42 Course Name: AUDITING

- 1. To discuss the basic principles, qualities and role of the auditor in modern business society.
- 2. To understand the audit process from the engagement planning stage to the completion of the audit and preparation of various report.
- 3. To explain the internal audit process including the professional standards applicable to the process of internal audit.
- 4. To describe the importance of vouching and explain the broad principles in valuation of assets and liabilities.
- 5. To evaluate the role, duties and responsibilities of the auditor and briefly explain about rules and regulation governing the auditors appointment and removal.

Subject Code: 17C43 Course Name: BANKING

Upon completion of the course, the students will be able to

- 1. Understanding the principles of Banking law and its relationships to banks and customers.
- 2. To provide knowledge about commercial banks and its products.
- 3. To explain about the significance of paying banker and collecting banker and also evaluate the statutory protection against bankers.
- 4. To evaluate the banking lending services and describe the procedures of advances against securities.
- 5. Understand the function of RBI and to create awareness about modern banking services like E-Banking and M-Banking and Internet Banking.

Subject Code: 17C44 Course Name: PARTNERSHIP ACCOUNTS

Upon completion of the course, the students will be able to

- 1. The transaction related to a partnership accounts, the transaction entries for adding new partners and procedures for left partner are unique in partnership.
- 2. Able to prepare the financial statement for partnership.
- 3. Enabled the knowledge of preparing admission of new partners.
- 4. Findings and analysing the accounts preparation for a retiring partners.
- 5. Understand the deceased partner's share of profit.
- 6. Preparing the treatment made in a joint life policy.
- 7. Identifying and analyzing the reason in dissolution of a firm.
- 8. Findings and recording the solutions of insolvent partner of a firm.

Subject Code: 17AC4 Course Name: BUSINESS MATHEMATICS

- 1. To provide students with reinforcement of mathematical computations.
- 2. To make the students to understand the process and interpretation of information to that lead to logical conclusion through common business maths.
- 3. Use the simple interest and compound interest method in solving the relevant problems in financial sector.
- 4. To understand the concepts in ratio, proportion and time value.

Subject Code: 17SEC41 Course Name: FINANCIAL MARKETS AND SERVICES

Upon completion of the course, the students will be able to

- 1. Understand the function of financial system.
- 2. To know the function on new market issues.
- 3. Describes the types of mutual funds.

Subject Code: 171SEC4P Course Name: MS OFFICE PRACTICAL

Upon completion of the course, the students will be able to

- 1. Acquire the skill of entering text, selecting, copying and pasting the text in MS-Word.
- 2. Acquire the practical knowledge of creating table and deleting the rows and columns in MS-Word.
- 3. Entering data in MS-Excel and to know the methodologies in Power point Presentation.

SEMESTER - V

Subject Code: 17C51 Course Name: CORPORATE ACCOUNTING

- 1. Learn about the journal entries of issue of shares and issue of debentures.
- 2. To know about the meaning of companies sand working style of companies.
- 3. Learn about the evaluation methods of shares, goodwill and overall performance of companies.
- 4. Work on the calculation of profits before and after incorporation of companies.
- 5. Learn about the concept of sources of redemption of debentures and redemption of preference shares.

Subject Code: 17C52 Course Name: COMMERCIAL LAW

Upon completion of the course, the students will be able to

- 1. To Understand the Legal Environment of business and the statutory rules enforceable through agreements.
- 2. To know the law of contract, breach of contract and its remedies.
- 3. To learn about the nature of obligations and rights associated with parties of contract Act.
- 4. To enable the students to appreciate the laws governing agency contracts.
- 5. The students are exposed to the knowledge on concepts of sale, agreement to sell and also the rights of an unpaid seller

Subject Code: 17C53 Course Name: TALLY LAB

Upon completion of the course, the students will be able to

- 1. Describe the tally screen components in maintenance of company data preparation of trial balance, profit and loss account and balance sheet.
- 2. Identify the Inventory details in stock category, stock group and stock item.
- 3. Prepare the order processing including (sales order and purchase order).
- 4. Understand the Bill wise details and cost Centre.
- 5. Categorize GST and payroll accounting.

Subject Code: 17CE5A/17CE5P Course Name: MANAGEMENT ACCOUNTING/HUMAN RESOURCE MANAGEMENT

- 1. Describe objectives, relationship, advantages and limitation. Preparation of comparative statements, common statements and Trend Analysis.
- 2. Identify the ratio analysis or liquidity, solvency profitability, activity and capital structure.
- 3. Prepare the fund flow and cash flow analysis.
- 4. Understand the budget, budgetary control and prepare the various kinds of budgets.
- 5. Categorize the marginal costing and break even analysis.

Subject Code: 17CE5P Course Name: HUMAN RESOURCE MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Describe the concept of HRM.
- 2. Understand the Requirement and selection procedures in management.
- 3. To know the functions of trade union.

Subject Code: 17CE5C

Course Name: INCOME TAX –I/E-Commerce

Upon completion of the course, the students will be able to

- 1. To introduce the basic concept of Income tax.
- 2. Familiarize with salary head income tax and its component.
- 3. It helps to build an idea about income from house property.
- 4. It give more idea about the income from business or profession.
- 5. Make the students familiarize with the various concept of capital gain and others sources of income with practical problems.

Subject Code: 17CE5D Course Name: E-COMMERCE

Upon completion of the course, the students will be able to

- 1. To understand the application of E-Commerce in business.
- 2. To know the structure of E-Commerce.
- 3. To know E-payment system of modern times.

Subject Code: 17SEC51 Course Name: GENERAL KNOWLEDGE

- 1. Develop General English Knowledge.
- 2. Learn the concepts of general science.
- 3. Learn about the Indian historical events and current affairs which is useful to the students who are appearing for competitive examination.

SEMESTER - VI

Subject Code: 17C61 Course Name: SPECIAL ACCOUNTS

Upon completion of the course, the students will be able to

- 1. Know about the companies accounts.
- 2. Get the knowledge of banking system.
- 3. Learn about working format of companies.
- 4. Understand the concepts of investment in mutual funds.
- 5. Learn about the dissolution of a company.

Subject Code: 17C62 Course Name: INDUSTRIAL LAW

Upon completion of the course, the students will be able to

- 1. To learn the salient features of workers welfare, wages regulations and the norms governing the working condition.
- 2. Students are able to understand the benefits of trade union and identify the forms of industrial action.
- 3. Students will know about the judicial setup, Labour laws, and its relationship with industry.
- 4. To learn about the rate of compensation payable on the death or occupational diseases and settlement of a claim.
- 5. Students will learn about legislations relating wage fixation and revisions.

Subject Code: 17C63

Course Name: FINANCIAL MANAGEMENT

- 1. Calculate common investment criteria and project cash flows associated with corporate project evaluation.
- 2. Apply measures of cost on capital and financial leverages to form long term financial policies for business.
- 3. Judge the merits of over borrowing on purchase of assets.
- 4. Describe the common factors influencing dividend policy.
- 5. Describe application of options in financial management.
- 6. Judge the capital investment decisions and financial policies made on valuations of business.

Subject Code: 17CE6A/17CE6B Course Name: INCOME TAX-II/SERVICE MARKETING

Upon completion of the course, the students will be able to

- 1. To explain all set off carry forward.
- 2. To learn all deductions on gross total income.
- 3. To calculate the assessment of individuals total income.
- 4. To Assessment of firm and companies.
- 5. To explained clearly the rules and regulations governing the income tax.

Subject Code: 17CE6B Course Name: SERVICE MARKETING

Upon completion of the course, the students will be able to

- 1. To understand the Concepts, Principle and Practice of Service Marketing.
- 2. To help the students to know about the services marketing mix and consultancy service.
- 3. To identify the various sectors in service industry and International service.

Subject Code: 17SEC61 Course Name: SOFT SKILLS FOR JOB SEEKERS

Upon completion of the course, the students will be able to

- 1. Develop the skill of resume writing and placing application for jobs.
- 2. Understand the concept of group discussion and interviews.
- 3. To learn about the steps to be moved in achievement the goals.

Subject Code: 17SEC62

Course Name: QUANTITATIVE APTITUDE AND REASONING SKILL

- 1. Learn about the aptitude and reasoning skill techniques
- 2. Understand problem solving technique in competitive examination.

DEPARTMENT OF MATHEMATICS U.G.

DEPARTMENT OF MATHEMATICS

Programme Code: M

Programme Name: B.Sc. Mathematics

Programme Outcomes

- 1. To use Mathematical knowledge to analyze and solve problems.
- 2. To create Mathematical models, formulate precise statements and reason out logically.
- 3. To derive solutions for the models developed for a better functioning of the real world systems.
- 4. To create or select an appropriate technique in research methods including analysis, interpretation of data and synthesis of the information to provide valid conclusions.
- 5. To use the modern tools and software for obtaining solutions to the desired accuracy.

Programme Specific Outcomes

- 1. To be conscious of the environmental hazards and contribute to its minimization scientifically.
- 2. To apply ethical principles and commit to professional ethics, responsibilities and norms.
- 3. To recognize the need for individual and team work in an inter-disciplinary environment and participate effectively.
- 4. To present Mathematics clearly and precisely to an audience of peers, faculty and others.
- 5. To analyse Operations Research techniques, proficiency, especially in the execution of any specific projects.
- 6. Train intellectual minds to use mathematics to solve problems in day to day life.

Course Outcomes SEMIESTIER - I

Subject Code: 21M11 Course Name: CALCULUS

Upon the Completion of this course, the students will be able to

1. Comprehend the concepts and methods of finding envelopes, curvature, evolutes and involutes

- 2. Understand the significance of maxima and minima for function of two variables.
- 3. Perceive the various properties like Beta and Gamma functions.

Subject Code: 21M12 Course Name: THEORY OF EQUATIONS & NUMBER SYSTEM

Upon the Completion of this course, the students will be able to

- 1. Describe the association between roots, coefficients and the sum of the power of the roots of an equation, Newton's Theorem.
- 2. Demonstrate ability to cover a topic in increase the roots, decrease the roots and removal of terms.
- 3. Understand the significance of Descarte's rule of signs, Rolle's Theorem and Theory of Numbers.

Subject Code: 21NMM1 Course Name: MATHEMATICS FOR COMPETITIVE EXAMINATION

- 1. Gain the Knowledge of Calculating Simple Interest and Compound Interest.
- 2. Express the logarithms of a product as a sum of logarithms.
- 3. Understand how to calculate Time, Distance, Surface area and Volume.

<u>SEMESTER – II</u>

Subject Code: 21M21

Course Name: SEQUENCE AND SERIES

Upon the completion of the course, the students will be able to

- 1. Describe the behaviour related to Sets, Function, Bounded, Algebra of limits and behaviour of Monotonic Sequence.
- 2. Analyse how to prove Cauchy's limit theorems, Kummer's Test and Root Test.
- 3. Gain the knowledge of some simple techniques for tests of convergence of series, alternating series, rearrangement of series and Fourier series.

Subject Code: 21M22 Course Name: DIFFERENTIAL EQUATIONS

Upon the completion of the course, the students will be able to

- 1. Classify the Linear equation with constant coefficients and compute C.F and P.I
- 2. Evaluate the solution of exact equation, total differential equation and Lagrange's equation
- 3. Discuss the differential equation problem using Laplace transform and its inverse.

Subject Code: 21NMM2 Course Name: MATHEMATICS FOR COMPETITIVE EXAMINATIONS-PAPER -II

Upon the completion of the course, the students will be able to

- 1. Depict the basic concepts of probability functions.
- 2. Gain the Knowledge of calculating True Discount, Banker's Discount, Height and Distance.
- 3. Demonstrate the Odd Man Out & Series.

<u> SEMESTER – III</u>

Λ

Subject Code: 17M31

Course Name: MODERN ALGEBRA

- 1. Understand the basic concepts of Groups and Subgroups.
- 2. Inculcate an insight into Cosets and Lagrange's Theorem.
- 3. Understand the concept of Normal Subgroups, Quotient Groups, Isomorphism, Homomorphism and Rings.

Subject Code: 17ME3A Course Name: OPERATIONS RESEARCH

Upon the completion of the course, the students will be able to

- 1. Identify and develop operational research models from verbal description of the real system.
- 2. Understand the Mathematical tools to solve Optimization problem, Transportation & Assignment problem.
- 3. Comprehend the usage of game theory & simulation for solving business problem

Subject Code: 17ME3B Course Name: ASTRONOMY

Upon the completion of the course, the students will be able to

- 1. Describe the science of cosmology and its correspondence to other fields of science
- 2. Identify and describe cosmology's current unanswered questions.
- 3. Explain how the scientific method and quantitative arguments are used in cosmology.

Subject Code: 17SEM31 Course Name: APPLICATIONS OF DIFFERENTIAL EQUATIONS

Upon the completion of the course, the students will be able to

- 1. Analyse and Evaluate the Orthogonal Trajectories, Growth & Decay.
- 2. Solve the continuous compound interest and brachistochorne problem.
- 3. Describe Tautochronous property of the cycloid, simple electric circuits and Simple harmonic motion.

<u>SEMESTER – IV</u>

Subject Code: 17M41 Course Name: GRAPH THEORY

- 1. Depict the basic concepts of graph theory.
- 2. Illustrate Blocks, Connectivity, Eulerian, Hamiltonian graphs and Trees.
- 3. Gain knowledge of Matchings, planar and Colourability

Subject Code: 17ME4A Course Name: STATICS

Upon the completion of the course, the students will be able to

- 1. Apply the basic principles of classical particles in mechanics to the analysis of particles subjected to forces.
- 2. Remember the notions of friction and equilibrium of strings and deploy them in solving the problems.
- 3. Analyze the basics of coplanar forces and equilibrium of forces acting on a rigid body and solving the problems.

Subject Code: 17ME4B Course Name: AUTOMATA THEORY AND FORMAL LANGUAGE

Upon the completion of the course, the students will be able to

- 1. Remember the concepts of Mathematical Logic.
- 2. Explain the implication problems using truth table, replacement process and rules of inference.
- 3. Solve normal forms of given logical expression.

Subject Code: 17SEM41 Course Name: ANALYTICAL GEOMETRY OF THREE DIMENSIONS

Upon the completion of the course, the students will be able to

- 1. Understand the geometrical relationships between lines and planes and also planes and sphere.
- 2. Obtain the knowledge of angle bisectors and Distance between two planes.
- 3. Develop the acquaintance of the principles and techniques of Analytical geometry of three dimensions and to use them to solve problems.

<u>SEMESTER – V</u>

Subject Code: 17M51 Course Name: MODERN ANALYSIS

- 1. Understand the concepts of countable sets, uncountable sets, several standard concepts of metric spaces and their Properties.
- 2. Identify the continuity of a function defined on a metric spaces and homeomorphisms.
- 3. Introduce the concept of Connectedness, Compactness and Characterization for Compactness.

Subject Code: 17M52 Course Name: STATISTICS-I

Upon the completion of the course, the students will be able to

- 1. Understand the basic Statistical concepts and gain the knowledge on various aspects of curve fitting of curves and discuss remonstrate the concept of linear regression and correlation.
- 2. Comprehend the concept of attributes and to identify formulates and solves the problems and applies various types of index methods to data collection.
- 3. Use the terminology of probability and determine whether two events are mutually exclusive and are independent.

Subject Code: 17M53 Course Name: DYNAMICS

Upon the completion of the course, the students will be able to

- 1. Analyze the motion of projectiles in different angles.
- 2. Discuss the direct impact and Oblique impact of two spheres
- 3. Apply the concept of Simple harmonic motion and find the period and amplitude of S.H.M

Subject Code: 17M5A Course Name: LINEAR ALGEBRA

Upon the completion of the course, the students will be able to

- 1. Generalize the concepts of a real vector space and subspace.
- 2. Investigate properties of vector spaces and subspaces using by linear transformations.
- 3. Express a system of linear equations in a matrix form.

Subject Code: 17ME5B Course Name: FUZZY SETS

- 1. Gain the knowledge of basic concepts of fuzzy sets and fuzzy logic
- 2. Analyze t h e operations on fuzzy sets.
- 3. Understand the fuzzy relations.

Subject Code: 17AA51 Course Name: PROGRAMMING IN C

Upon the completion of the course, the students will be able to

- 1. Revise the basic concepts of programming and understand about data types, input, and output statements and write simple programs.
- 2. Explain about decision making statements like if, if else, else if ladder, switch, goto etc.
- 3. Explain and Use the concept of one dimensional array, two dimensional array and operators in Programs.

Subject Code: 17AA5P Course Name: C PRACTICALS

Upon successful completion of Programming Language C- Practical students will be able to

- 1. Create different programs using if, if else, for, arrays, functions and pointers and prepare the students to write programs.
- 2. Apply the concept of structures and file handling to develop programs.

Subject Code: 178EM51 Course Name: VECTOR CALCULUS

Upon the completion of the course, the students will be able to

- 1. Determine the differentiate Vector fields.
- 2. Understand how to find the solution of Problems in Divergence, curl and Solenoidal Vector.
- 3. Calculate an insight into the Stokes theorem.

Subject Code: 178EM52 Course Name: QUANTITATIVE APTITUDE

- 1. Gain knowledge to solve the problems on Numbers and Ages.
- 2. Calculate the profit and Loss -Ratio.
- 3. Understand how to calculate the Time, Distance and Permmutations.

SEMESTER – VI

Subject Code: 17M61

Course Name: COMPLEX ANALYSIS

Upon the completion of the course, the students will be able to

- 1. Define continuity, differentiability of a complex functions and be familiar with the Cauchy Riemann equations.
- 2. Learn the role of bilinear transformation.
- 3. Classify the nature of singularities, poles and residues

Subject Code: 17M62 Course Name: STATISTICS –II

Upon the completion of the course, the students will be able to

- 1. Gain Statistical Knowledge to identify and Evaluate Problems.
- 2. Identify the Probability distribution and the test of hypothesis.
- 3. Understand the Sample Size in Large and Small Sample Space.

Subject Code: 17M63 Course Name: NUMERICAL METHODS

Upon the completion of the course, the students will be able to

- 1. Demonstrate various numerical algorithms for solving simultaneous linear algebraic equations.
- 2. Apply numerical methods to obtain approximate solutions to mathematical problems and find the roots of transcendental equations.
- 3. Derive numerical methods for various mathematical operations and tasks, such as interpolation, differentiation, integration, the solution of linear, nonlinear equations, and differential equations.

Subject Code: 17AA61 Course Name: OBJECT –ORIENTED PROGRAMMING WITH C++

- 1. Identify data and understand the basic concepts in Object Oriented Programming C++
- 2. Apply concepts of arrays and friend function for program development and execution.
- 3. Evaluate the data and use constructors, destructors and operator overloading in the program for execution.

Subject Code: 17AA6P Course Name: C++ PRACTICALS

Upon the completion of the course, the students will be able to

- 1. Identify data and understand the basic concepts in Object Oriented Programming C++.
- 2. Apply concepts of arrays and friend function for program development and execution.
- 3. Evaluate data and use constructors, destructors and operator overloading in the program for execution.

Subject Code: 17SEM61 Course Name: DISCRETE MATHEMATICS

Upon the completion of the course, the students will be able to

- 1. Analyse TF statement and Connectives.
- 2. Obtain the knowledge about Tautology and Lattices.
- 3. Understand how to introduce Recurrence relation.

Subject Code: 17SEM62 Course Name: COMBINATORICS

Upon the completion of the course, the students will be able to

- 1. Understand logical notation to define and reason about fundamental mathematical concepts such as sets, relations, functions and integers.
- 2. Identify the numbers of possible outcomes of elementary combinatorial processes.
- 3. Analyze probabilities, discrete distributions and expectations.

Subject Code: 17AM1 Course Name: ALLIED MATHEMATICS-I

- 1. Describe the relations between roots and the coefficients and analyse the roots upto two decimals by Newton's, Horner's method.
- 2. Formulate the reduction formula for Sinⁿx, cosⁿx, tanⁿx, secⁿx, cotⁿx, cosecⁿx, and sin^mxcos^mx.
- 3. Understand the basic concepts of Hyberbolic functions, complex numbers and To Know the direction cosines, direction ratios of a line angle between two straight lines.

Subject Code: 17AM2 Course Name: ALLIED MATHEMATICS – II

Upon the completion of this course, students will be able to

- 1. Applying the differential operator to find Gradient, Divergence & Curl.
- 2. Prepare the students to apply fundamental concepts & working knowledge in algebra to their field.
- 3. Understand the concepts of correlation and regression.

Subject Code: 17AM3 Course Name: ALLIED MATHEMATICS –III

Upon the completion of the course, the students will be able to

- 1. Understand the basic concepts of differential equations and particular integral.
- 2. Obtain the knowledge of how to find the solution of Laplace transform and Inverse Laplace transform and Application of differential equation.
- 3. Understand the concepts of analytic functions and bilinear transformation and the basic concepts of groups.

Subject Code: 17AM4 Course Name: ALLIED MATHEMATICS –IV

Upon the completion of the course, the students will be able to

- 1. Understand the basic concepts of Linear Programming Problems and solve the problems of Graphical Method, Simplex method, Big-M method and Two phase method.
- 2. Formulate of the Transportation Problems
- 3. Construct the assignment problems for the given algorithms.

Subject Code: 17AMS1 Course Name: DISCRETE MATHEMATICS

- 1. Understand the basic principles of sets and operations in sets.
- 2. Solve problems in matrix algebra and Construct Truth table for the given proposition, interpret tautology and equivalences
- 3. Understand the concept of lattices, Boolean algebra and graph theory.

Subject Code: 17AMS2/17AMJ2 Course Name: RESOURCE MANAGEMENT TECHNIQUES

Upon the completion of the course, the students will be able to

- 1. Explain basic concepts of LPP, Slacks and surplus variable.
- 2. Solve the simplex methods, two phase method and Big-M method.
- 3. Illustrate Assignment problem and Transportation problem.

Subject Code: 17AMS3/17AMJ3 Course Name: GRAPH THEORY

Upon the completion of the course, the students will be able to

- 1. Illustrate the different types of graphs.
- 2. Demonstrate walk, trail and path.
- 3. Describe Eulerian and Hamiltonian graph

Subject Code: 17AMS4/17AMJ4 Course Name: NUMERICAL METHODS

- 1. Describe the relation between roots, coefficient and transformation of equation.
- 2. Understand the concept of curve fitting algebraic and transcendental equation.
- 3. Solve the simultaneous equation and Interpolation.

DEPARTMENT OF BBA U.G.

DEPARTMENT OF BUSINESS ADMINISTRATION

Programme Code: B

Programme Name: B.B.A

Program Outcomes

- 1. Understand to Business management.
- 2. Develop Entrepreneurship skills
- 3. Develop critical and Analytical thinking abilities
- 4. Develop Interpersonal Skill.
- 5. Develop critical and Analytical Thinking Abilities.
- 6. Create awareness about the Ethical and Sustainable. Businesses practices and demonstrate sensitivity to social ethical and sustainability issues.
- 7. Provide Global perspectives.

Program Specific Outcomes

On completion of B.B.A. the students would be able to

- 1. Acquire conceptual clearing of various functional areas such as production, marketing, finance etc.,
- 2. Ability to analyze various functional issues affecting the business organization
- 3. Analyse and interpretate the data which is used in Decision Making
- 4. Demonstrate ability to evolve strategies for organizational benefits
- 5. Demonstrate the ability to develop models / frameworks to reflect critically on specific business contexts
- 6. Demonstrate Effectively Oral and Written Communication
- 7. Demonstrate Ability to work in Groups
- 8. Demonstrate understanding of social cues and contexts in social interaction
- 9. Develop Ethical Practices and imbibe Values for Better Corporate Governance
- 10. Understand ethical challenges and choice in business setting
- 11. Analyze Global Environment and its impact on Business
- 12. Understand the ecosystem of start up in the country
- 13. Demonstrate the ability to create business plans

Course Outcomes Semester-I

Subject Code: 211B1

Course Name: BUSINESS COMMUNICATION

Upon completion of the course, the students will be able to

- 1. Understand the principles of letter writing and structure of Business Letter.
- 2. Understand different strategies to adopt while communicating with different personalities with different goals.
- 3. Understand communication process and barriers to communication.

Subject Code: 21B11 Course Name: PRINCIPLES OF ACCOUNTING

Upon completion of the course, the students will be able to

- 1. Show proficiency in basic accounting concepts, conventions and understanding of the accounting process.
- 2. Understand the process and preparation of financial statements and to apply principles in preparation of accounting records.
- 3. Prepare financial statements in accordance with generally accepted
- Accounting

Principles (GAAP).

Subject Code: 21B11 Course Name: PRINCIPLES OF MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Develop familiarity with the functions of Management.
- 2. Acquire themselves with the latest development in the field of Management
- 3. Understand realistic and practical applications of management concepts.

Subject Code: 21AB11 Course Name: BUSINESS ECONOMICS

Upon completion of the course, the students will be able to

- 1. Apply their knowledge in risky business situation and take right decision.
- 2. Learn how firms analyze market demand and the internal costs, how firms interact in

different market structures and make price, output decision

3. Apply the concepts of price, cross and income elasticity.

Subject Code: 21SEB1P Course Name: ACCOUNTING PACKAGING I - PRACTICAL

Upon completion of the course, the students will be able to

- 1. Develop the application of computer knowledge in Accounting System.
- 2. Get hold of adequate knowledge in Computerized Inventory.
- 3. Familiarise the view of various Accounting Reports.

Subject Code: 21NMB1 Course Name: PERSONALITY DEVELOPMENT

Upon completion of the course, the students will be able to

- 1. Become self-confident by mastering inter-personal skills, teammanagement skills, and leadership skills.
- 2. Develop all-round personalities with a mature outlook to function effectively in different circumstances.
- 3. Develop broad career plans, evaluate the employment market, and identify the organisations.

Semester - II

Subject Code: 211B2 Course Name: INDIVIDUAL DEVELOPMENT

Upon completion of the course, the students will be able to

- 1. Develop and exhibit the accurate sense of self.
- 2. Develop and nurture a deep understanding of personal motivation
- 3. Understand and practice personal and professional responsibility.

Subject Code: 21B21 Course Name: COST ACCOUNTING

- 1. Analyze implications of cost in managerial decisions.
- 2. Understand various methods and techniques of cost management.
- 3. Acquaint with functions of store keeping.

Subject Code: 21B22 Course Name: ENVIRONMENT OF BUSINESS

Upon completion of the course, the students will be able to

- 1. Identify and evaluate the complexities of business environment and their impact on the business.
- 2. Analyze the relationships between Government and business and understand the political, economic, legal and social policies of the country.
- 3. Analyze current economic conditions in developing emerging markets, and evaluate present and future opportunities.

Subject Code: 21AB21 Course Name: BANKING LAW AND PRACTICE

Upon completion of the course, the students will be able to

- 1. Demonstrate a comprehension of the principles of banking law and its relationship to banks and customers.
- 2. Engage in critical analysis of the practice of banking law from a range of perspectives.
- 3. Organise information as it relates to the regulation of banking services and the issues to which that information gives rise.

Subject Code: 21SEB2P Course Name: ACCOUNTING PACKAGE II- PRACTICAL

Upon completion of the course, the students will be able to

- 1. Work with well-known accounting software i.e. Tally.
- 2. Create their own company and familiar with accounting voucher entries.
- 3. Provide an in-depth knowledge on the concepts and practice of management accounting and generate require reports for managerial decision making.

Subject Code: 21NMB2 Course Name: BODY LANGUAGE

- 1. Learn about the Characteristics of Body Language.
- 2. Know the various gestures in Body Language.
- 3. Acquaint themselves with applications of body language in business
Semester - III

Subject Code: 17B31 Course Name: BUSINESS STATISTICS

Upon completion of the course, the students will be able to

- 1. Familiarize with classification, tabulation and graphical representation of statistical data.
- 2. Able to solve the industrial problems by using analytical skills.
- 3. Understand how the research works to be done in future.

Subject Code: 17B32 Course Name: ORGANISATIONAL BEHAVIOUR

Upon completion of the course, the students will be able to

- 1. Analyse the behaviour of individuals and group in organisations in terms of organisational behaviour theories, models and concepts.
- 2. Demonstrate a critical understanding of organisational behaviour theories and current empirical research associated with the topics covered in this course.
- 3. Compare and contrast different types, roles and styles of managers across organisations.

Subject Code: 17B33 Course Name: COMPUTER APPLICATION IN BUSINESS

Upon completion of the course, the students will be able to

- 1. Know about the database in Excel- Graphs and Charts
- 2. Familiarise with creating, saving and executing HTML document.
- 3. Understand editing, saving a power point presentation.

Subject Code: 17B3P Course Name: COMPUTER APPLICATION IN BUSINESS – PRACTICAL

- 1. Acquire practical knowledge about MS Office.
- 2. Be familiar with computer concepts and Office automation tools.
- 3. Perform practical training on using Internet based applications.

Subject Code: 17B34 Course Name: MARKETING MANAGEMENT

Upon completion of the course, the students will be able

- 1. To identify the role and significance of various elements of marketing mix.
- 2. To evaluate the role and relevance of marketing organization in current marketing conditions.
- 3. Understand the marketing concepts in global environment and its relevance.

Subject Code: 17AB31 Course Name: COMPANY ORGANIZATION

Upon completion of the course, the students will be able to

- 1. Know about the legal aspects of business.
- 2. Perceive the Articles of Association and Memorandum of Association.
- 3. Become more confident in formation of company.

Subject Code: 17SEB31 Course Name: STRESS MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Maintain a stress awareness log include identification of causes, symptoms and analysis of effects.
- 2. Gather information on current stress management techniques and evaluate personal relevance.
- 3. Practice specific techniques, track effectiveness and revise to meet personal preference.

Semester - IV

Subject Code: 17B41 Course Name: BUSINESS MATHEMATICS

- 1. Apply the knowledge in mathematics (algebra, matrices, calculus)in solving business problems
- 2. Analyse and demonstrate mathematical skills required in mathematically intensive areas in Economics and business.
- 3. Integrate concept in international business concepts with functioning of global trade.

Subject Code: 17B42 Course Name: MATERIALS MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Understand how the materials are managed in production.
- 2. Sensitised the students on the materials management functions.
- 3. Realise the importance of materials both product and service.

Subject Code: 17B43 Course Name: ENTREPRENEURIAL DEVELOPMENT

Upon completion of the course, the students will be able to

- 1. Become aware of entrepreneurship opportunities available in the society for the entrepreneur.
- 2. Acquaint them with the challenges faced by the entrepreneur.
- 3. Develop the motivation to enhance entrepreneurial competency.

Subject Code: 17B44 Course Name: CUSTOMER RELATIONSHIP MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Critically analyse an organisation's relational strategies with stakeholder groups that affect how well it meets customerneeds.
- 2. Formulate and assess strategic, operational and tactical CRM decisions.
- 3. Plan and conduct an investigation on an aspect of CRM, and communicate findings in an appropriate format.

Subject Code: 17AB41 Course Name: DISASTER MANAGEMENT

- 1. Make out the fundamentals of disaster assessment and environmental impact assessment.
- 2. Comprehend the various institutional agencies for disaster management.
- 3. Facilitate disaster preparedness, monitoring risks and emergency management.

Subject Code: 17SEB41 Course Name: COUNSELLING

Upon completion of the course, the students will be able to

- 1. Understand the various stages of counselling.
- 2. Solve the problems in the real life situations.
- 3. Develop counselling skills.

Semester - V

Subject Code: 17B51 Course Name: PRODUCTION MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Gain knowledge about managing production processes.
- 2. Enhance better understanding of modern production techniques.
- 3. Understand the quality management

Subject Code: 17B52 Course Name: MANAGEMENT ACCOUNTING

Upon completion of the course, the students will be able to

- 1. Critically analyse and provide recommendations to improve the operations of organisations through the application of management accounting techniques.
- 2. Analyse Cost- Volume- Profit- techniques to determine managerial decision.
- 3. Apply management accounting and the objectives in the way that demonstrates a clear understanding of ethical responsibilities.

Subject Code: 17B53 Course Name: RESEARCH METHODOLOGY

- 1. Grasp and use the concept of research methodology.
- 2. Judge the reliability and validity of experiments and perform exploratory data analysis.
- 3. Recognize the method of data collection and how to prepare the questionnaire.

Subject Code: 17BE5A Course Name: SERVICES MARKETING

Upon completion of the course, the students will be able to

- 1. Develop an understanding services, and distinguish between products and services
- 2. Examine the major elements needed to improve the marketing of services
- 3. Identify roles of relationship marketing and customer service in adding value to the customer's perception of a service.

Subject Code: 17BI5 Course Name: INSTITUTIONAL TRAINING

Upon completion of the course, the students will be able to

- 1. Acquire knowledge of the current requirements of raw-materials and technologies used for production process in the industry.
- 2. Gain practical knowledge about various functional areas like purchasing, production, finance and marketing.
- 3. Apply theoretical knowledge in industrial applications.

Subject Code: 17SEB51 Course Name: SOFT SKILLS

Upon completion of the course, the students will be able to

- 1. Effectively communicate through verbal communication and improve the listening skills.
- 2. Become more effective individual through goal/target settings, self-motivation and practicing creating thinking.
- 3. Function effectively in multi- disciplinary and heterogeneous teams through the knowledge of team work, Inter- personal relationships, conflict management and leadership quality.

Subject Code: 174EV5 Course Name: ENVIRONMENTAL STUDIES

- 1. Understand the concepts and methods from ecological and physical science and their application in environmental problem solving.
- 2. Acquire awareness about immediate/wider surroundings through lived experience on various related to daily life.

Subject Code: 17B61 Course Name: HUMAN RESOURCE MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Understand the role of human resource management in organisations and the factors shaping that role.
- 2. Understand key concepts and theories from the field of HRM.
- 3. Apply key course concepts to actual HRM problems in organisations.

Subject Code: 17B62 Course Name: FINANCIAL MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Tackle common practical financial problems of business.
- 2. Evaluate the economic condition and relating them to financial decision in the organisation.
- 3. Understand how to make investment decisions.

Subject Code: 17B63 Course Name: MANAGEMENT INFORMATION SYSTEM

Upon completion of the course, the students will be able to

- 1. Understand the basic concepts and technologies in the field of MIS.
- 2. Understand the role of information systems in organisations, the strategic management processes and the implication for the management.
- 3. Have the knowledge of the core activities in the system development process.

Subject Code: 17B64 Course Name: BRAND MANAGEMENT

- 1. Demonstrate understanding of brands and brand management in context with brand equity.
- 2. Grasp the relation between various components of a brand and brand value.
- 3. Explore key components of brand positioning and how these components work together in creating brand strategy.

Subject Code: 17BE6A Course Name: RETAIL MANAGEMENT

- 1. Apply a broad theoretical and technical knowledge of retail management to understand opportunities and challenges for creating excellent retailing experience.
- 2. Critically analyse and summarise market information to assess the retailing environment and formulate effective retail strategies.
- 3. Comprehend visual merchandising and its effect on store layout and design.

Subject Code: 17SEB61 Course Name: INTERVIEW TECHNIQUE

Upon completion of the course, the students will be able to

- 1. Perceive the various ways of gathering information by asking questions.
- 2. Articulate the importance of self-presentation.
- 3. Develop the skills needed for approaching different types of Interviews.

Subject Code: 174VE6 Course Name: VALUE EDUCATION

Upon completion of the course, the students will be able to

- 1. Understanding about the purpose of their life
- 2. Apprehend and start applying the essential steps to become good leader
- 3. Emerge as responsible citizens with clear conviction to practice value in their life

Subject Code: 19BC1 Course Name: HOSPITAL MANAGEMENT

- 1. Solve complex problems in the health care sector by employing analytical skills.
- 2. Apply health care management concepts in industry.
- 3. Establish a health care organisation in line with the needs.

DEPARTMENT OF COMPUTER SCIENCE U.G.

DEPARTMENT OF COMPUTER SCIENCE

Programme Code: S Programme Name: B.Sc. Computer Science

Program Outcomes

- 1. To acquire the sound knowledge in theory and practical in the discipline of computer science. (Global)
- 2. Ability to use assortment of programming languages and tools to develop computer programs that are effective to solve the problems. (Global)
- 3. Understand the basic concept of computer architectures, including computer hardware and networking. (National)
- 4. Design and analyze the particular specifications of algorithms, procedures, and interaction behavior. (Regional)
- 5.Students undertook projects which offer opportunities for interaction with academia and industry. Students will be able to work in teams to build software systems and apply the computing knowledge to the benefit of the society. (Global)
- 6. An understanding of professional, ethical, legal, security, and social issues and responsibilities for the computing profession (Regional)

Program Specific Outcomes

On completion of B.Sc Computer Science Programme, the students would be able to

- 1. Know the programming concepts and methodology & the functionality of hardware and software aspects of computer systems. (Global)
- 2. Provide effective and efficient real time solutions using acquired knowledge in various domains such as C, C++, JAVA, Web designing, RDBMS, Linux, DOT NET. (Global)
- 3. Apply problem-solving skills and the knowledge of computer science to solve real world problems. (Global)
- 4. Use software development tools, software systems, and modern computing platforms
- 5. Develop technical project reports for the requirements in society. (National)
- 6. Apply the knowledge gained through project experience in jobs. (Global)

Course Outcomes

Subject Code: 21S11 Course Name: C PROGRAMMING (National)

Upon completion of the course, the students will be able to

- 1. Demonstrate an understanding of computer programming language concepts. To be able to develop C programs on MS-DOS platform.
- 2. Design and develop Computer programs, analyzes, and interprets the concept of pointers, declarations, initialization, operations on pointers and their usage.
- 3. Define data types and use them in simple data processing applications and to use the concept of array of structures.
- 4. Define union and enumeration user defined data types.
- 5. Develop confidence through self education and ability for life-long learning needed for Computer language.

Subject Code: 21S1P Course Name: C PROGRAMMING LAB (National)

Upon completion of the course, the students will be able to

- 1. Understand the basic concept of C Programming, and its different modules.
- 2. Acquire knowledge about the basic concept of writing a program.
- 3. Demonstrate the role of Functions involving the idea of modularity.
- 4. Evaluate the concept of Array and pointers dealing with memory management.
- 5. Use the structures and unions through which derived data types can be formed.

Sub code: 21SES1P Course Name: OFFICE AUTOMATION LAB (Regional)

- 1. Create Microsoft Office programs on professional and academic documents.
- 2. Perform documentation on accounting operations and presentation skills
- 3. Prepare documents, spreadsheets, make small presentations and would be acquainted with internet.
- 4. Acquire strong foundation in software and hardware to record, code, sort, calculate, summarize, store and communicate information.
- 5. Understand the dynamics of an office environment.

Sub code: 21NMS1 Course Name: COMPUTER FUNDAMENTALS (Regional)

Upon completion of the course, the students will be able to

- 1. Describe the usage of computers and why computers are essential components in business and society.
- 2. Utilize the Internet Web resources and evaluate on-line e-business system.
- 3. Identify categories of programs, system software and applications. Organize and work with files and folders.
- 4. Enhance the application software and their use to perform any software engineering activity.
- 5. Grasp the concept of input and output devices of Computers and how it works and recognize the basic terminology used in computer programming.

Sub code: 21S21 Course Name: PROGRAMMING IN C++ (Global)

Upon completion of the course, the students will be able to

- 1. Create programming principles to design and implement it in the C++ programs.
- 2. Debug and test programs using the fundamental elements of C++.
- 3. Understand the primitive data types, values, operators and expressions in C++.
- 4. Comprehend design issues involved with variable allocation and binding, control flow, types, subroutines, parameter passing.
- 5. Create their own Applications/Projects using C++ and can be deputed as a C++ programmer in IT companies.

Sub code : 21S2P Course Name: C++ PROGRAMMING LAB (Global)

- 1. Identify importance of object oriented programming and difference between structured oriented and object oriented programming features.
- 2. Make use of objects and classes for developing programs.
- 3. Analyze the various object oriented concepts to solve different problems.
- 4. Design and test programs to solve mathematical and scientific problems using object oriented concepts.
- 5. C++ is used frequently in areas such as game development, hardware manufacturing, embedded systems, and for military applications.

(National)

Upon completion of the course, the students will be able to

- 1. Handle different file formats, changing the resolution, RGB color to gray-scale image and multicolor images.
- 2. Design brochure and multilayer of images.
- 3. Perform transformation and filtering on images.
- 4. Create some basic operations such as painting, strokes and grouping objects.
- 5. Animate using shapes, twining and actions.

Sub code: 21NMS2

Course Name: INTERNET APPLICATIONS (Global)

Upon completion of the course, the students will be able to

- 1. Implement interactive web page(s) using HTML, CSS and JavaScript.
- 2. Design a responsive web site using HTML5 and CSS3.
- 3. Demonstrate Rich Internet Application.
- 4. Build Dynamic web site using server side PHP Programming and Database connectivity.
- 5. Describe and differentiate different Web Extensions and Web Services.

Sub code: 17S31 Course Name: DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION (National)

- 1. Understand the concepts of Central Processing units, I/O, and memory.
- 2. Demonstrate the binary number theory, Boolean algebra and binary codes.
- 3. Define and design combinational systems using standard gates and minimization methods.
- 4. Describe and design the combinational systems of multiplexers, Demultiplexer, encoder and decoder.
- 5. Analyze and design the Basic Computer organization.

Sub code: 17832 Course Name: JAVA PROGRAMMING (Global)

Upon completion of the course, the students will be able to

- 1. Make out the use of oops concepts.
- 2. Solve real world problems using OOP techniques.
- 3. Define the use of abstraction.
- 4. Describe the use of Packages and Interface in java.
- 5. Acquire the knowledge of exception handling, multithreaded applications with synchronization.

Sub Code: 17S3P Course Name: JAVA PROGRAMMING LAB (Global)

Upon completion of the course, the students will be able to

- 1. Use an integrated development environment to write, compile, run, and test simple objectoriented Java programs.
- 2. Read and make elementary modifications to Java programs that solve real-world problems. Validate input in a Java program.
- 3. Identify and fix defects and common security issues in code.
- 4. Use utility classes in the real time applications

Sub code: 17SES3P Course Name: MULTIMEDIA LAB

(Regional)

- 1. Handle different file formats, changing the resolution, RGB color to gray-scale image and multicolor images.
- 2. Design brochure and multilayer of images.
- 3. Perform transformation and filtering on images.
- 4. Create some basic operations such as painting, strokes and grouping objects.
- 5. Animate using shapes, twining and actions.

Sub code: 17S41 Course Name: DOT NET (Regional)

Upon completion of the course, the students will be able to

- 1. Understand .NET framework and can realize some of the major enhancements in the new version of VB.
- 2. Analyze the basic structure of VB Dot Net and features of IDE.
- 3. Differentiate the various controls in VB Dot NET and develop programs using controls.
- 4. Connect database by using ADO Dot NET and manipulate the database.
- 5. To serve as project leaders and team members in future.

Sub code: 17S42 Course Name: DATA STRUCTURES AND COMPUTER ALGORITHM (National)

Upon completion of the course, the students will be able to

1. Select the appropriate design techniques to solve real world problems.

2. Implement various sorting, searching, and hashing algorithms. Students will build a substantial, complex data structure.

3. Demonstrate the design and development principles in the construction of software systems of varying complexity.

4. Analyze randomized algorithms (expected running time, probability of

error). Recite algorithms that employ randomization.

5. Compare between different data structures. Pick an appropriate data structure for a design situation.

Sub code: 17S4P Course Name: DATA STRUCTURES AND COMPUTER ALGORITHM LAB (National)

- 1. Design and analyze the time and space efficiency of the data structure.
- 2. Intend the algorithms to solve the programming problems.
- 3. Use appropriate algorithmic strategy for better efficiency.
- 4. Solve problems using data structures such as linear lists, stacks, queues, hash tables, binary trees, heaps, binary search trees, and graphs and writing programs for these solutions
- 5. Implement / Design suitable data structures (abstract data types) as required in C++ programs.

Sub code: 17SES4P Course Name: DOT NET Lab (Regional)

Upon completion of the course, the students will be able to

- 1. Creating website using ASP.Net Controls.
- 2. Performing Database operations for Windows Form and web applications.
- 3. Handle controls in Forms(message Box, Input Box), Windows MDI forms and Controls (Textbox, Creating Multi Line, Word Wrap textboxes).
- 4. Connect database by using ADO.NET and manipulate the database.
- 5. The concept of namespace includes the common, importing, referencing and creating own namespaces.

Sub code: 17851

Course Name: OPERATING SYSTEMS (National)

Upon completion of the course, the students will be able to

- 1. Exhibit the design and management concepts along with issues and challenges of main memory, virtual memory and file system.
- 2. Understand the types of I/O management, disk scheduling, protection and security problems faced by operating systems and how to minimize these problems.
- 3. Apply design and development principles in the construction of software systems.
- 4. A high-level understanding of the structure of operating systems, applications, and the relationship between them.
- 5. Evaluate the requirement for process synchronization and coordination handled by operating system and analyze the memory management and its allocation policies.

Sub code: 17852 Course Name: SOFTWARE ENGINEERING (Global)

- 1. Know the testing strategies and handle software product maintenance issues.
- 2. Apply different testing and debugging techniques and analyzing their effectiveness.
- 3. Analyze software risks and risk management strategies.
- 4. Extract and analyze software requirements specifications for different projects.
- 5. Define the concepts of software quality and reliability on the basis of International quality standards.

Sub code: 17S53 Course Name: RDBMS (Global)

Upon completion of the course, the students will be able to

- 1. Analyze Database design methodology.
- 2. Evaluate the difference between traditional file system and RDBMS.
- 3. Deal with online transactions and control Concurrency.
- 4. Apply DB system development life cycle to business problems
- 5. Understand the different types of Data Base failures and Recovery.

Sub code: 17S5P Course Name RDBMS LAB (Global)

Upon completion of the course, the students will be able to

- 1. Gain knowledge about SQL Fundamentals.
- 2. Handle online Transactions.
- 3. Create Database connectivity with front-end.
- 4. Build Index ,Views, Procedures, Triggers and Cursers.
- 5. Perform all the Table join operations.

Sub code: 17SE5A Course Name: COMPUTER GRAPHICS (Global)

- 1. Understand the use of object hierarchy in graphics applications.
- 2. Demonstrate computer graphics animation.
- 3. Create interactive graphics applications using graphics application programming interfaces.
- 4. Comprehend contemporary graphics hardware.
- 5. Have knowledge and understand the structure of an interactive computer graphics system, and the separation of system components.

Sub code: 17SE5B Course Name: CLOUD COMPUTING (Global)

Upon completion of the course, the students will be able to

- 1. Apply the fundamental concepts in datacenters to understand the tradeoffs in power, efficiency and cost.
- 2. Identify resource management fundamentals, i.e. resource abstraction, sharing and sandboxing and outline their role in managing infrastructure in cloud computing.
- 3. Analyze various cloud programming models and apply them to solve problems on the cloud.
- 4. Articulate the main concepts, key technologies, strengths, and limitations of cloud computing and the possible applications for state-of-the-art cloud computing
- 5. Identify the architecture and infrastructure of cloud computing, including SaaS, PaaS, IaaS, public cloud, private cloud, hybrid cloud, etc.

Sub code: 17SES5P Course Name: PYTHON LAB (Global)

Upon completion of the course, the students will be able to

- 1. Emphasis is placed on features unique to Python, such as tuples, array slices, and output formatting.
- 2.Use exception handling in Python applications for error handling and read/write files in Python.
- 3. Build and package Python modules for reusability and pass arguments in Python.
- 4. Know the concepts of lists, tuples, and dictionaries in Python programs and identify Python object type.
- 5. Write database applications and designing Graphical user Interfaces in Python.

Sub code: 17861 Course Name: DATA COMMUNICATIONS AND NETWORKING (Global)

- 1. Understand and explain the concept of Data Communication and networks, layered architecture and their applications.
- 2. Analyse and Set up protocol designing issues for Communication networks.
- 3. Apply various network layer techniques for designing subnets and supernet and analyse packet flow on basis of routing protocols.
- 4. Estimate the congestion control mechanism to improve quality of service of networking application
- 5. Be familiar with the architecture of a number of different networks.

Sub code: 17862 Course Name: WEB PROGRAMMING (Global)

Upon completion of the course, the students will be able to

- 1. Analyze and apply the role of languages like HTML, DHTML, CSS, XML, Javascript, VBScript, ASP, PHP and protocols in the workings of the web and web applications
- 2. Analyze a web project and identify its elements and attributes in comparison to traditional projects.
- 3. Build dynamic web pages using JavaScript and VBScript (client side programming).
- 4. Acquire and build interactive web applications.
- 5. Learn and create XML documents and XML Schema.

Sub code: 1786P

Course Name: WEB PROGRAMMING LAB (Global)

Upon completion of the course, the students will be able to

- 1. Design and implement dynamic websites with good aesthetic sense of designing and latest technical know-how's.
- 2. Have a Good grounding of Web Application Terminologies, Internet Tools, E Commerce and other web services.
- 3. Get introduced in the area of Online Game programming.
- 4. Create interactive web applications using XML, ASP.NET and PHP.
- 5. Familiarize the client server architecture and develop a web application using java technologies.

Sub code: 17SE6A Course Name: DATA MINING (Global)

- 1. Categorize and carefully differentiate between situations for applying different data mining techniques: mining frequent pattern, association, correlation, classification, prediction, and cluster analysis
- 2. Acquire the knowledge in data extraction and transformation techniques.
- 3. Use operational database, warehousing and multidimensional need of data base to meet industrial needs.
- 4. Describe the components of warehousing, classification methods and clustering analysis.
- 5. Identify and understand the Business analysis, query tools and application, OLAP etc.

Sub code: 17SE6B Course Name: MOBILE COMPUTING (Global)

Upon completion of the course, the students will be able to

- 1. Analyze and explain problems associated to localization and movements and the wireless and wired communication architecture and handling of data and business application over slow wireless networks
- 2. Identify business data management and security issues over slow wireless media and Working of software mobile agents over long distances
- 3. Learn transaction processing over wire and wireless media and various routing and communication protocols
- 4. Utilize QoS over wire and wireless channels and recognize CDMA and other network applications
- 5. Comprehend working, characteristics and limitations of mobile hardware devices including their user-interface modalities.

Sub code: 17SES6P Course Name: PHP LAB (Global)

Upon completion of the course, the students will be able to

- 1. Create PHP programs that use various PHP library functions, and that manipulate files and directories.
- 2. Web Development with PHP/MySQL is designed to provide essential skills and hands-on experience in developing dynamic web applications using PHP and MySQL.
- 3. Create powerful and dynamic web applications using PHP and MySQL.
- 4. Setup and configure MySQL, PHP, and Apache web server development environment.
- 5. Solve problems and insert data using PHP and MySQL and to Test, debug, and deploy web pages containing PHP and MySQL.

Sub code: 17SPR6 Course Name: PROJECT (Global)

- 1. Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- 2. Design, implements, and evaluate a computer-based system, process, component, or program to meet desired needs.
- 3. Apply design and development principles in the construction of software systems of varying complexity.
- 4. Learn to accomplish shared computing design, evaluation, or implementation goals.
- 5. Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusion.

DEPARTMENT OF INFORMATION TECHNOLOGY U.G.

DEPARTMENT OF INFORMATION TECHNOLOGY-UG

Programme Code: I Programme Name: B.Sc. Information Technology

Programme Outcomes

- 1. Apply the knowledge of Mathematics, Science and Computing in the core information technologies.
- 2. Design and develop software solutions for contemporary business environments by employing appropriate problem solving strategies.
- 3. Analyze common business functions and identify, design, and develop appropriate information technology solutions (in web, desktop, network, and/or database applications).
- 4. Learn future technologies through acquired foundational skills and knowledge and employ them in new business environments.
- 5. Practice communication, problem solving and decision-making skills through the use of appropriate technology and with the understanding of the business environment.
- 6. Select and apply current techniques, skills and tools necessary for computing practice and integrate IT-based solutions into the user environment effectively.

Programme Specific Outcomes

- 1. Analyze and recommend the appropriate IT infrastructure required for the implementation of a project.
- 2. Design, develop and test software systems for world-wide network computers to provide solutions to real world problems.
- 3. Analyze common business functions and identify, design and develop appropriate information technology solutions.
- 4. Learn future technologies through acquired foundation skills and knowledge and employ them in business environments and to identify research gaps.
- 5. Use and apply current technical concepts and practices in the core Information Technologies of human computer interaction, information management, programming and networking.
- 6. Effectively integrate IT-based solutions into the user environment.

Course Outcomes

SEMESTER – I

Subject Code: 21111 Course Name: PROGRAMMING IN C

Upon completion of the course, the students will be able to

- 1. Understand the basic concepts of program development statements and its syntax.
- 2. Differentiate the various types of arrays and Know about the various types of Functions and String handling mechanisms.
- 3. Grasp the Concepts of Structures and Unions.

Subject Code: 2111P Course Name: PROGRAMMING IN C LAB

Upon completion of the course, the students will be able to

- 1. Use conditional expressions and looping statements to solve problems associated with conditions and repetitions.
- 2. Use Arrays and Functions in programs.
- 3. Use pointers, structures and files handling.

Subject Code: 21AI1 Course Name: DISCRETE MATHEMATICS

- 1. Comprehend the notion of mathematical thinking, Mathematical proofs, and Algorithmic thinking and to apply them in problem solving.
- 2. Posses the Knowledge of the basics of Relations and to apply the methods in problem solving.
- 3. Equip to use effectively algebraic techniques to analyse basic discrete structures and algorithms.

Subject Code: 21SEI1P Course Name: HTML AND OFFICE AUTOMATION LAB

Upon completion of the course, the students will be able to

- 1. Create a well-designed and well-formed, professional Web site utilizing the most current standards and practices.
- 2. Demonstrate knowledge in web technologies including HTML.
- 3. Identify Web authoring obstacles created by the availability of various web browsers and markup language versions.

Subject Code: 21NMI1 Course Name: WINDOWS TOOLS AND APPLICATIONS

Upon completion of the course, the students will be able to

- 1. Give students an in-depth understanding of why computers are essential components.
- 2. Provide hands-on use of Microsoft Office applications Word, Excel, Access and PowerPoint.
- 3. Completion of the assignments will result in MS Office applications knowledge and skills.

<u>SEMESTER – II</u>

Subject Code: 21121 Course Name: OBJECT ORIENTED PROGRAMMING WITH C++

Upon completion of the course, the students will be able to

- 1. Explain the top-down and bottom-up programming approach and apply bottom up approach to solve real world problems.
- 2. Describe the concept of inheritance, overloading, constructors and apply real world problems.
- 3. Discuss the generic data type for the data type independent programming which relates it to reusability.

Subject Code: 2112P Course Name: OBJECT ORIENTED PROGRAMMING WITH C++ LAB

- 1. Ability to use the relative merits of C++ as an object oriented programming language.
- 2. Acquire Knowledge to implement programs in C++ Using polymorphism.
- 3. This lab work provides hands-on programs using C++ language learnt in theory session.

Subject Code: 21AI2 Course Name: RESOURCE MANAGEMENT TECHNIQUES

Upon completion of the course, the students will be able to

- 1. This module aims to introduce students to use quantitive methods and techniques for effective decisions-making.
- 2. Solve Linear Programming, Transportation and Assignment Problems.
- 3. To prepare and motivate future specialists to continue in their study by having an insightful overview of operations research.

Subject Code: 21SEI2P Course Name: DESKTOP PUBLISHING LAB

Upon completion of the course, the students will be able to

- 1. Create business forms (e.g., business cards, letterhead, desk notes) and Resume.
- 2. Create multi-page, multicolumn documents (e.g., newsletters, magazines).
- 3. Understood the creating and printing greeting cards, banners, postcards, candy wrappers using CorelDraw.

Subject Code: 21NMI2

Course Name: INTRODUCTION TO INTERNET

Upon completion of the course, the students will be able to

- 1. Build tools that assist in automating data transfer over the Internet.
- 2. Employ emerging technology to satisfy challenges or opportunities faced by organizations or individuals.
- 3. Understood the Design and create IT-based solutions using HTML and JavaScript.

<u>SEMESTER – III</u>

Subject Code: 17I31 Course Name: RDBMS

- 1. Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL.
- 2. Design ER-models to represent simple database application scenarios.
- 3. Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data.

Subject Code: 17I32 Course Name: DATA STRUCTURE AND ALGORITHMS

Upon completion of the course, the students will be able to

- 1. Students understand the advantages and disadvantages of fundamental data structures and can implement them using object oriented design principles.
- 2. Demonstrate an understanding of basic data structures (such as an array-based list, linked list, stack, queue, binary search tree) and algorithms.
- 3. Demonstrate the ability to analyze, design, apply and use data structures and algorithms to solve real time problems and evaluate their solutions.

Subject Code: 17I3P Course Name: VB AND RDBMS LAB

Upon completion of the course, the students will be able to

- 1. Describe the basic structure of a Visual Basic program and main features of the integrated development environment (IDE).
- 2. Create applications using Microsoft Windows Forms.
- 3. Know how to write SQL code to build and maintain database structures.

Subject Code: 17AI3 Course Name: NUMERICAL METHODS

Upon completion of the course, the students will be able to

- 1. Apply numerical methods to find solution of algebraic equations using different methods under different conditions, and numerical solution of system of algebraic equations.
- 2. Grasping the basic elements of numerical methods with application to approximation, integration, differential equations and algebraic equations.
- 3. Familiar with numerical solutions of nonlinear equations in a single variable.

Subject Code: 17SEI3P Course Name: MULTIMEDIA LAB

- 1. Identify the basic tools and components of a multimedia project.
- 2. Apply basic elements and principles of photo editing software to achieve a great photo effect by applying effects like color, shadows, alteration of backgrounds, cropping and collage making.
- 3. Create simple shapes using animation editing software and design simple animation by applying shape tweens and motion tweens.

SEMESTER – IV

Subject Code: 17I41

Course Name: OPERATING SYSTEM & SYSTEM SOFTWARE

Upon completion of the course, the students will be able to

- 1. Describe and explain the fundamental components of a computer operating system.
- 2. Define, restate, discuss, and explain the policies for scheduling, deadlocks, memory management, synchronization, system calls, and file systems
- 3. Understand different components of system software.

Subject Code: 17I4P

Course Name: UNIX AND LINUX PROGRAMMING LAB

Upon completion of the course, the students will be able to

- 1. Write shell scripts in order to perform shell programming.
- 2. Acquire knowledge about text processing utilities, process management and system operation of LINUX.
- 3. Run various UNIX commands on a standard UNIX/LINUX Operating system.

Subject Code: 17142 Course Name: COMPUTER GRAPHICS

Upon completion of the course, the students will be able to

- 1. List out the basic concepts used in computer graphics.
- 2. Develop the line and circle generation algorithms.
- 3. Implement various algorithms to scan, convert the basic Geometrical Primitives, Transformations, Area filling and Clipping.

Subject Code: 17AI4 Course Name: FINANCIAL AND COST ACCOUNTING

- 1. Acquire conceptual knowledge of basics of accounting.
- 2. Identify events that need to be recorded in the accounting records.
- 3. Equip with the knowledge of accounting process and preparation of final accounts of sole trader.

Subject Code: 17SEI4P Course Name: TALLY LAB

Upon completion of the course, the students will be able to

- 1. This course helps students to work with well-known accounting software i.e. Tally.
- 2. Ability to create company, enter accounting voucher entries including advance voucher entries, do reconcile bank statement, do accrual adjustments, and also print financial statements, etc. in Tally software.
- 3. Ready with required skill for employability in the job market.

<u>SEMESTER – V</u>

Subject Code: 17151 Course Name: PROGRAMMING IN JAVA

Upon completion of the course, the students will be able to

- 1. Knowledge of the structure and model of the Java programming language.
- 2. Use an integrated development environment to write, compile, run, and test simple objectoriented Java programs.
- 3. Propose the use of certain technologies by implementing them in the Java programming language to solve the given problem.

Subject Code: 17152 Course Name: DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION

Upon completion of the course, the students will be able to

- 1. Apply Arithmetic operations in any number system and various techniques to simplify the Boolean functions.
- 2. Build Combinational Circuits that perform arithmetic operations & Apply the knowledge of combinational and sequential logical circuits to design computer architecture.
- 3. Understand the input / output and Memory related concepts.

Subject Code: 17153 Course Name: COMPUTER NETWORKS

- 1. Recognize the technological trends of Computer Networking.
- 2. Perceive and describe the layered protocol model.
- 3. Describe, analyze and evaluate a number of data link, network, and transport layer protocols.

Subject Code: 1715P Course Name: PROGRAMMING IN JAVA LAB

Upon completion of the course, the students will be able to

- 1. Familiarize the Internet Programming using Java Applets.
- 2. Apply event handling on AWT components.
- 3. Make a reusable software component, using Java Bean.

Subject Code: 17IE5A Course Name: CLIENT SERVER COMPUTING

Upon completion of the course, the students will be able to

- 1. Comprehend the basic concepts of the client-server model.
- 2. Understand how Client-Server systems work.
- 3. Improve the performance and reliability of Client Server based systems.

Subject Code: 17IE5B Course Name: SYSTEM ANALYSIS AND DESIGN

Upon completion of the course, the students will be able to

- 1. Gather data to analyze and specify the requirements of a system.
- 2. Build general and detailed models that assist programmers in implementing a system.
- 3. Design a database for storing data, a user interface for data input and output, and controls to protect the system and its data.

Subject Code: 17SEI5P Course Name: PHP AND MYSQL LAB

- 1. Discuss the concepts of **PHP** and its advantages over other languages.
- 2. Use HTML form elements that work with any server-side language.
- 3. Create a **PHP** web page and perform various **MySQL** database queries.

SEMESTER – VI

Subject Code: 17161 Course Name: SOFTWARE ENGINEERING

Upon completion of the course, the students will be able to

- 1. Decompose the given project in various phases of a lifecycle.
- 2. Perform various life cycle activities like Analysis, Design, Implementation, Testing and Maintenance.
- 3. Apply the knowledge, techniques, and skills in the development of a software product.

Subject Code: 17162 Course Name: DATA MINING AND WAREHOUSING

Upon completion of the course, the students will be able to

- 1. Comprehend the functionality of the various data mining and data warehousing component.
- 2. Analyze the strengths and limitations of various data mining and data warehousing models.
- 3. Describe different methodologies used in data mining and data ware housing.

Subject Code: 1716P Course Name: WEB TECHNOLOGY LAB

Upon completion of the course, the students will be able to

- 1. Acquire .NET Framework and describe some of the major enhancements to the new version of Visual Basic.
- 2. Describe the basic structure of a Visual Basic.NET project and use main features of the integrated development environment (IDE).
- 3. Create applications using web Forms using ASP.NET.

Subject Code: 17IE6A Course Name: MOBILE COMPUTING

- 1. Grasp the fundamentals of wireless communications.
- 2. Analyze security, energy efficiency, mobility, scalability, and their unique characteristics in wireless networks.
- 3. Apply knowledge of TCP/IP extensions for mobile and wireless networking.

Subject Code: 17IE6B Course Name: CLOUD COMPUTING

Upon completion of the course, the students will be able to

- 1. Explain the core concepts of the cloud computing paradigm.
- 2. Apply the fundamental concepts in Cloud Services, Platforms and Application Design.
- 3. Analyze various cloud programming models and apply them to solve problems on the cloud.

Subject Code: 17IPR6 Course Name: PROJECT

Upon completion of the course, the students will be able to

- 1. Demonstrate a sound technical knowledge of their selected project topic.
- 2. Undertake problem identification, formulation and solution.
- 3. Describe the knowledge, skills and attitudes of a software engineer.

Subject Code: 17SEI61 Course Name: QUANTITATIVE APTITUDE

- 1. Draw conclusions or make decisions in quantitatively based situations that are dependent upon multiple factors.
- 2. The Quantitative Reasoning course is organized around big mathematical and statistical concepts.
- 3. Students will be expected to actively do Mathematics—such as analyzing data, constructing hypotheses, solving problems, reflecting on their work, and making connections.

DEPARTMENT OF TAMIL U.G.

Department of Tamil – UG

Programme Code: T

Programme Name: B.A. Tamil

Programme Outcomes

! 2:`!ா~்த அமர்!மீட் இர்! — ணபரபாடி சாபத வ பர்! பதாரமநர்! ரூ ணடர்!மீட் இன்று?ரா "பா ஆ ! ட ஒதைடர்! ரீ இராடி தண ! ! ! ! தொசுமு ! ழப வவாவுடர்! ரு வடிராராத நார்! ழா ஓரா எ.'! 3:`! ழீட் இடமைழைநர்! ட ஒருடர்! ரு தஅரார்மர்! மழைநணை! ஓடடரா ஆ ! தெ அரா எ.'! 4:`! ன டி ளபணாரா! டா டிணாரம் ஒப் எந்! ரா வடிரார் பத வார்! ழா ஓரா எ.'! 5:`! மீட் இர்! — தவ ! தொகும் ! ழப வரை எ.'! னபரப்படி சரபவணை! பாண் காழம் இடர்! று ஒரா ஆடர்! ட ஒது சப

6::! – பையு – சயவர்!பளாமநர்!ர வடிண வப்!மடதோ ார்!ரீது டிலநாலு! லா ளருடி?!நீமருடர்!ா டிலனை !! !! ழா ஒர எ::! 7::!மீடலு கலது ! செலு !ட ஷஒடர்! – லுமளராணா! ழர ஷலு! லா ஓடர்!! கமலடி !பு உதடாள – வ! லுமளரா கத – டிமர்! !!மலஒநர்! ழா ஒர எ:!

8.''!பணரூ !! க்கூரைந் சயவண்! ளேண்டிஎலபா !!ா — ஷ் ஷ்ஷ்டி!மபும் !! தெஅரள்.'! 9.' ! ழாளஞ் ! மிஷ் தடத்டி ! ரவளம்முப் ! ழபலவரும்நு ! ரல்டிண்லப் ! ளாடிக்ஸ் ! ழாள்ளல் வரலபுட் !!ரல்டிரார்த் நார ! ! ! ழா ஒரள்.! :.'!ரல் நலையிழமல் தன் பயல் அளம்! ழால்நடி ! னுஅபம் ! முத் ஒபவண் ! ழர் தன் ! ரல்டிரார்த் நார் ! ழா ஓட் ! ! ! ! ! மபுமித்டி ! தெஅரள்.'!

21.:!ாமமனயாதப ! மு த ஒடிணா!ாது மாஏமாமுடா!ா~யவாணா!ா~ார்எடிடா!மாஷநா! ழா ஓரா;!

<u>Царот! и голгон !</u>

Subject Code : 211T1 Title of the paper' ! — பாயான பாடிபராதமடி டி. இள்ஷபத மடிட !!

2.''!டளர்பா!பருக்கு எபவருது!பான ! ரு வதள டிலத் நடீடா!பராளர்ணமதமடீடா! ஷெரு எஃ'! 3.''!ம ஒப் லண்பா! பரு மதம் டிலநா!ரு பிளருப் ! ளங்பிணர்! என்று ஒண?! பேறு ர ஒந்த ஒ ! ர் வக்ஸு ! ழப் வளரு எஃ! 4.'.!பதம் !ட லக்மளபவறது!டநாறா வர்பலத் நடீடா! 'ளங்பிணப் த வடீடா! ஷெக்ஸு ! ழப் லவரு எஃ! 5..?நம்மனது!ர தப் தட்டிலத் ந ! ர் வக்ஸு ! ழப் எசு பிஜ் பிலந்து இற்மார்?ருப்படா! ழப் லவரு எஃ 6.?நம்மலவளபவறது!ர தஅரர் பதவ் ! ரங் என் நடர்! ழள் டிலந்து நா! ழா ஒரு எஃ! !

Subject Code : 21T11 Title of the paper : பல வான ! – னபாயடிட !

<u> Цажарат ! ЦГ ОМГТА 4 !</u>

2.!பண ொா தஅடிணா! – னபாபடி சாபவரத்! ர வ கானப் ! ப ஒர்ஒட்! ! பு ஹைமு ! லாாரது ! ழள டிமு ! கோ டியரத்ஷ ! ! !! ஒரர கத நா !! ழா ஒர க:! 3.! ம ஒப கண ! – னபாபடி ர கமய வரத்! ளக்கம் தந்! லு அஅம்தம் டீட்! ளருப் ! கஅராரடி தன் டீட்! ஒரர க:! 4.: ! பர சதம்!! பதம்!! க கஅப்ட்!! ர் மரத்ட்!! ன் த எக் தஅ ! பேடி ர ஒத் ஒரா ! ா தஅப்பிரத்ஷ் ! ! ! ! ா தஅரார கஷ் தணரா! ழா ஒர க:! 5.: ! ா தஅரார கவ கூபவரத்! மரை நி! மர வளார் கு ! ! ா த அரார்பவி! ன ஏ ர கபிபார் அஅ ! தேன் இரு நிழை தர்!! ! ! ா ஒரு ! ர் கைமு ! ழப கவிர க:! 6.: ! ட எர் ! – ணபிபடி சாப தவ ! ொரா தஅடி கப் ! ழப குன் பி இரு நி ! – ணபிபடி சாப தவ்! ர உண் நட்!! !! மு மு பிலத் ர ! ழா ஓர க:!!

<u> Пожарожн‼ р јали ни ад !</u>

2.'!மீடி ஆது! ழம வநுதடதடி ! தெஅடி வாள ஆமுமுடா! முழை தநாா! ழா ஒன்றாளா கூ. 3.'!ள சூப ! – னபாபாடி சாபவாணா ! பாு வைபுடா! பெ ! ட ஒழைடா! ர் ஒட எர் பதவ ! ரு தபாளா ஆமாமா ! ராவபாபுடா! ! ! ! ! ! ! ! ! ! ! ! ! ! மாஒ தநாா! ழா ஒன்றாளா கூ.'! 4.'! ஒரு 'ணாபவாணா ! தட டிட ஃபாடீ வாவ ! ஒபாப ஏமுமு பாபத வாா! ர் காகுமு ! ழப எுா ஆ இழுடா! மாஒது நாா! ! ! ! ழா ஒன்றாளா கூ.'! 5.'! ள சாப ! – பைரபாடி கூ! ழம ஃஅது ! க ராது ! – பைரபாடி சாபவா! ரு தஎ ! – பைரபாடி சாபவாணா ! று அள அதுவை ! ! ! ! ! தெடார் ! ட ஒரைடா! ர ! ம ஃன் சாப தவ ! லாளாஷாது ! ஹொடா! மா ஒது நாா! ழா ஒன்றாளா கூ.'! 6.'! மீடி ா! – பைரபாடி சாப தவ 175 தட டி ஃப ! ன வரர ஃசாபாடா! ழப ஸார மந் ஃணா! ழா ஃசும்! மும் சூரு பிரா பாடு பாடிமா! ! ! ! மடி என ஃபுடா! மால் தந் ! தெ காமஞாளா கூ.'! Sub code : 21AT1 Title of the paper :

பணினை மரவானா !

2.'! தல்ஒனை வர சந்! டுப்படி மம்மர மம்பத்த ! லெர கூ'! 3.'! தல்ஒனை வ ! ாடி — யவ் சந்! ர ஏ தப்டி சுநலண் ! க வசு உண்! றுலா ஆப்சந்லு ! ழா வர வ வம் வ ! கூடு தண் ! ன — சுகமு ! ! ! ! முப் வரர கூ'! 4.'! தல்ஒனை வ ! ர வடிக்ணை வப்! ாண்மளார் அவு ! டப்பவ்சந்! ர — ரா வஆப் தவ்! லெதுக்மு ! ழப் வளர கூ'! 5.'! தல்ஒனை வ ! ர வடிக்ணை வப்! ாண்மளார் அவு ! டப்பவ்சந்! ர — ரா வஆப் தவ் ! லெதுக்மு ! ழப் வளர் கூ'! 6.'! தல்ஒனை வ ! நடைப்! ழா ஏ புடப்! ர — யான்! எக்கும்பவு ! ரல்லு ! ழம் வைக்மு ! ழப் வெரர் கூ'!

Subject Code : 21NMT1 Title of the paper ! ! TIG TO ANGLON !

<u>LIGTEDUTTERAL!</u>

2.'.!மீட் ஈ!ழள வஒயதவ ! பெ எ ! ர கூதளாள ீற்முட் ஈ!முஷநூ ! ழா ஒர சு.' ! 3.'.!மடதே !ட எர் ரா ! ரீது டி மநாஷி நேமா ! ரு சு.'! 4.'.!மீட் ¶ மநா ! ழர குளா ! ழள வஒயதவபா ! பு அழைர கூ'.! 5.'.! ழம வளபவரதா ! ரதபபதவ ! ஷெக்மு ! ழப வரை சூ'.! 6.'.! ழா வஅடிமா! மு கா வடிட் ாடி மூணா ! ழா ஒர கூ'.!

Subject Code : 214TA1 Title of the paper ! ! ang ration! If an all !!

2.''!பராதமபவாநா!ரு ா!ளரூபடா!ட அஒடா! எளாடிணா! கஅார்பதவாா!ர்ளசுமு ! ழபாவாரா.'! 3.'!பதம !டாகமாபவாநா!டநாராரா வாபாதநடீடா!ளாயபாணபதவடீடா! ஷொரை! முபாவாரா.'! 4..?றம்மாநா!ரதபதட டிாதநார்!ர்ளசுமு ! ழபானா ஆ ! ாதே டிரைஷனுற்மாரா பாபடா! ழபாவாரா.' 5..?றம்மாவை எபவாநா!ா தஅரார்பதவ ! ராடளாநடா! ழள டிடிடா!மாஷநா! ழா ஓரா.'! ! ! ாது டிரைஷயா!ப உமடாற்முடா! ா டிரஷாய ! ழா ஓரா.

Sub code : 214TB1 Title of the paper : பாரத்அமாரி ஜ. ! 2!

<u> Ц отрот и разлити и на селити и на сели</u>

2::!மீட்ஸி ழீட்ஸி முயநிரிநிமரூபரபதவ் !கநாபு ! ஷெர க:!

3.'!மடத்து ! கந்பு ! ஸ்து டிலா்! முரளருட<u>ிரி</u>மருட்! ! பல்லூ்! மோவாரா...'! 4.? றமையத்! ர தப்பதவ் ! கந்பு ! னு ரா...'! 5.'!புலண் ! ழக் உண்? றமருபதவா்! ரல்லூ்! ழமங்குமு ! ழபாவாரா. 6.'! சோயணள்! ழளாலுப்பிப்பி ! கூயாவந் ! மீட்ரிளா்! ழளாலுப் தவ் ! லொகுமு ! ழபாவாரா.'! ! Subject Code : 211T2 Title of the paper ! ! I LIND! ! - ON LINING (BLIE & ROAL (BLE

2.''!தளர !தர — ர ! – ணபாபாடி சாபவா ! ன — ளமமுடா ! ளடடி ! !டார்பத வடிடா ! செ டி ர ளபவருன் ! ரபாமா ! ! ! ! ழக ஒய்பத வடிடா! ன — ளகும் ! ழபாவாரான் ! 3.'.!மீடல் ணா ! ரபாமா ! – ணபாபாடி சாபவா ! ழா ஒட டீடைப் ! பு ஒய்மமு ! ெலக்மு ! ழப வாரான்.! 4.'.! க வைப் ! – பைபபாடி மைனத் நபா ! மனாம் நா ? ரூணடா ! க உரார்மா ! மாஒத நார் ! ழா ஒரான் ! 5.'.! ழா டி எனா ! ழள வண்ணாநா ! ரதப்பதவ் ! ெலரான ! 6.'.! உடி வளபவாரன் ! ளரூப் ! ரிலி ராடிணா ! ழக ஒய்பதவ் ! லெக்மு ! ழப வாரான்.! !

Subject Code : 21T21 !

Title of the paper : m_ 19 ! - m L mump L #

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2.:**!** ளட டி ! —

னபாபாடி சாபவா! மும வநாஒருமு ழைய வந ! ப வா ← சாபதவ டீடா!! தளர ! ளட டி மா ! மும வன்ஹமைறை ! ! ! ! ர வ ஸாளதடி டீடா!! தளர ! ளட டி பாபு எர ஸ்ப தவாப்! ர ஒழைடீடா! மும ஸகாமு ! முப வளர ஸ்.! 3.! தர ← ர ! ளட டி மாமர்ந்! மு வஞ்ஒடா!ட ஒருடா! பி ார வைபவர்ந்! ளாஒராராடிணர் பவர்! பு ஒரமாமு ! ெல்காமு ! ! ! முப வளர ஸ்.! 4.:!ர ணாழர ஓ ! ளட டி ! – ணபாபாடி சாபவு பாபு ! – தஅழுடி !! காணருடா!!பர மாமு ! ல ஒரை தட பதவ ! ெல்ரா ஸ்.! 5.:!மநாரா வணைபவணா! ன வங !ர்ணர ஸ்பவர்ந்!ர்ண தட மா! மநாதட பதவமா! மும ஸகாமு ! ! ! முப வாரா ஸ்.! 6.:!பாலாமா ?! – வன வட மடி ! எட டி சாபவர்ந்! மும வர் பி பி வன்ணா!ட வரைந்!!!!!

7.:!ளாஷாராபதனார்பதவமா!!ழமங்காழ!ழபாவாரா;!

Subject Code : 21T22 Title of the paper ! DIN U! Jamage #! I - I and the paper ! DIN U! Jamage #!

<u>பணுணை"! முரு விராளால் ஆ</u>!

2::!மீட்ஸி ப ! ர எண ஒஒஒதுநா! ள உநாஒ உம சு சாபதவ ! ஒெறு எ:: !

3.'!ளசாப!பாண !டபாபவாநா!ரோ ராடிணா!டுத ஒபத வமா! ழமளகாமு ! ழபாவாரா.'!

4.'!ரூ ரர கமளபவா!ட ஒஒடா!பு ஓ காண !டநாநளபவாநா!! ேஅணா!மாடி த நாா!ர் எகாமு ! ழபாவார எ.'!

5;!டநாதளபவாத!!பதனமா!மாஷநாபதவாா!ர்ளகாழ!ழபாவாரா;!

!!ராழமதனார! ழா வா அஅ !ருன்பவந் !மழ வபசாபதவ ! ஒெக்ஸு ! ழப வார எ!!

Subject Code :217AT2 Title of the paper!-D 119 0000

<u>பனிறைணா!! மர வாரார ஆ</u>!!
2: ! ழம #அபுப ! பாண ! – கூலடி ! – பி பதவ ! ஷொர்: ! 3: ! – பி பவரு்! – நூலடி தட டி *தட தடி ! ழமளகாமு ! ழபாவரர் எ: ! 4: ! – பி பவர்ந் ! னளதடள் ! எஅஅசாப தவ ! ஷெகாமு ! ழபாவர்ர் எ ! 5: ! ாண ! ரதபடி * ந ! ழள டிலப்பத வி ! நி மட் ! ா டிக்ஷன் ! ழா ஓர் எ: ! 6: ! ா — ரா ஆஅ ! ர வளைன் மிழ்த் ந ! ஷொமு ! ழபாவர்ர் எ: !

ப ஹைண்கூ! ழ ர ஹானால் ஆ !

Subject Code : 21NMT2 Title of the paper :@) all of the paper

2.:!மபரண! டீபமமருத்!!ான~ உடி! ரவள்ளைடித்தந்! ஷெக்ஸ் ! டிபல்பர்க்! 3.:!மீட்லி #! டிட்லி #! – பைப்படிட்!! ள வக்கம் ! மபரண்பதவ்! – த~ டி! ன் பை மிழம் உழ்! – த~ முழாச!! வாலப்புட்!! !!ம்ஷ்நு! டிர் ஒரு ஒருக்!! 4.:! டிராளை ஒஷ்ணி!! நீடம் உஷ்ணி!! நீடார்ம்!ம்ஷ்நு! டுமண் உந்!ாத அரார் ஷைத்தன் ! ரவன்மையுப்! டிப் வைர்க்!! 5.:! – த~ டிட்!! ள வக்கம் ! டிள்டின்றா ஆட்!ம்ஷ் தந்! டிட் பா ஆம்மம்ப்! டிப் வைர்க்!! 6.:! ளரு ப!னு அப் சாபவற்த!ரா நாது வடை! ரு க~ ராட்!! எள்டின்!! ாதார்ண்ட்!!!!ா~ரா ஆ!பண் வள்ள வட்!!! !!டுமண் வந்ர ஒத் ஒள்! ஆண்டு 'ப்பனர்! என்படிட்டு! பாடிர்ட்! டிர் ஒரு ஆ!!

<u>Пожорожня и гомпина н</u> !

2.'.!ளடடிரா! ழா லமுடத ஒத டி ! ன~ எகுமு ! ழபலவரு எ.'.! 3.'.!ர~ந்தஅடி ! டபரபவரு! பொர் ஒ! ரி விருடிதன ! ர் எகுமு ! ழபலவரு எ.'.! 4.'.! னத எக தஅடிலு நூ! ரூணடா! னத எடிலளண்டினபவலு நூ! னத எ ! ரி வமமலத நி! ழமவலரா எ.'! 5.'.! பெமமலத ~ ரா! ரலபு ரலஅ உநா! வாஒராலத நி! லெரின! 6.'.! டெ டிலனபவலு நூள் ரூ பி! ரி விராஷணா! ழக லப் தவி! லெகுமு ! ழபலவரா எ.'!

Subject Code : 214TB2 Title of the paper ! ! பொதுமான் !!

<u>ப ஷாலான ! மா வானால் ஆ</u> ! !

2.'.!மீடல் ஸா!ழள &ஒப்பவள்ந்! ழா &ஏ வளத ந ! ஷொர்ஸ்.! 3.'!ாதி ! கூடாப<u>ரிறி</u>முடர்!ாடிஷன்ன ! ழா ஓர் ஸ்.! 4.'.! – அடர்!ட &ஒள்டி வனிரிற்பருபர்பத வ !ட &ஒர்வடி தடமாமு ! ழள &ஓர்பதவ ! ன ஏர் &பருரால் ! 5.;!மீட் இ விரா ழிட் இ வபதவ ! லெக்கமு ! ழப லவரா எ.'! 6.'! ன வாளவாள் ! மூர ஒர லஅடி தநால்!ர் வக்கமு ! ழப லவரா எ.'! !

Subject Code : 171T3 Title of the paper ! ! பளானழ ! –ணபாய் டுடா!! ர்மாநடுடா!!

> ! <u>பண்ணை#! மர வராரா</u>ல அ**சு**!

Jſ₩.

2:!பளாளடிபா!பதமபதவ ! ஷெசுமு ! ழபாவாரா:! 3:!ளடடிபா!பளாளடி சாபதவபா!ப்ளாமநா!ரோடிரா! ழா லமுடத் ஏபதவம்! ழமவர் ! 4:!ர் மரத ! – பைபாபடி மல்லாதா! ப் அஅத் டாள்கத் நம்! ழமன்கூழ் ! ழப் வரரா:! 5:!டி வாளணபாபு மதம்பா!ப் வாமணா!டள்ளா! ழள்டிடிவா! ாதஅபாபுட்! மல்லுநா! ழா ஒர் எ ! 6:!பலாளபடிபா! பலன் ! ரஎண ஷ்ஷக்தந் ! ஷெரா:! Subject Code : 17T31 Title of the paper : ! antion approximation of the paper : ! antion approximation of the paper is the second secon

<u> Ц отрот Ц ц г овгти а д</u> !

2.' ! ளாஒஒண்பாபாடிடா ! மும வநாஒடி ! ப வனளிரதி தன ! ன 🛥 ளகமு ! ரெ ஒஒவநா ! ா வ ஆ ழா வஏ த வ ! ஒெயர எ'. !

3.'.!ளாஒஒண்பாபாடி சாபவாநா!ரதபபதவடிடா!பஅஅதடாளாத நடிடா! னுனரா,'!

4::!பாண ! மூர ஒரா வசுடி ஒழுப் ஒரா !டபாபவாநு !ானா வழு !ாபா பாப !ரு பாபசாபவர் !டளர் !காதண !டா ஒருடா ! ! ! ! டுமணாநர வத ஒரா ! ரபுமுழனைக்கு ! முமவாரா:!

5.'!ளாஷஷணபாபாடி சாபவாணா!பானா ஆடா!பெடா!ட ஷஒடா!ர் ஒமாமுத ஒபா! மு ஒப தவளா!ள சாப !!

6.:!-тиниц ғи қала ! оптина ! Сомест! Сиоры ! упорт.

7."! ழளடிடீதவ ! கநடி ! ர வாயமு?! ழமவக்கமு ! மெதநா! ாதஅார்னபடி ழரவளா ஆம்முட்டி ம்ஷதநா! ! ண!

8.:**!** ழாஒ**ர** எ.்**!**

உருமாணபயா மலாநா!டுபபடிமழுரமாதம !டா சர சுபவா!ஷொ சூ!

திற்கு பாபவாநா!ர தப்பவா! எ ஒலுடிட்டி! எடி நாரா ஆபவா! எ ஒலுடிட்டி ழமாகாமு ! ழபாவாரா# ! !

4. நிமமூபாபவரதா! ராஷாார் ! ராஷாார் ! டு த ஒபவா?!ர் ← ஸானா! ட லஒரஒ சாபவா ! ன ளள வாரர் ! ரஓரஓர ! ஒருகமு ! ழபலவரர க: !

5.. சாபதவ ! னவார ஈசாபாடி !

மஒபாண ! கதஅடுதஒடிாண !ழடி வி யடியடிணாண !று ஒரா அடிஏ பாபாநாஒ !டா ஒஒ

காதனடிணி<u>ிற</u>மமணபாடு ! ர வாராரு! ரூனடா!ர்மழ !ஜெபுடு தஒப தவபா!பு~அவிடா!மதைநாா '

ழ**ா** ஒழைத**ாள க**்**!**

6, -

னபயு பைனது ! ர ஷண் வ ! மடது ரா ! எது டிரதுஷிற்ம ! ர டிருணா ! மா ஒஒ ! ளொரமமுத ஒடிணுடர்! அஅபமமுத ஒடிணுடர்! முர தன ! ர ஷாளது நார்! மா ஒடர்! மாஒது நார் ! மா ஒருராளன்.!

Subject Code : 17AT3

Title of the paper : - 51019 ! - 5111119

<u>Патан!! и гавития !!</u>

2.'.! — கூலாடி ! வெராண வந ! க ருந — பையாமுாா ! ானமைய வணா ! ழமநார ஆபாடி ! ழம வநாதடளா ! ! ! ளாஷார் பவா ! ! ! ! டுமண வந ! டெள் சாபத வார் ! ாபுமுழார் ! ா வாம்ழு !! ரெ ஒஷ்ணா ! ழமநார ஆபாடி ! ரீ விராடிணா ! மு ஒபதவ ! ! ! ! ழர ஓா ஆமாம் ! ஷெயாடி ! மாஷ் நாபத வார் ! ழா ஒஒ்ல்ராராக்.

3::! – கமஷ !வெரணாந ! கருந ! – னபயடி ! டிட தமபதவமா! ழமாரு ! ழளடிமு !!ொரதஅார்பவணா!!!!!

பு அஒடிடா! மாஷநாபதவாா! ழா ஷஷ ஏரான்! 4.்!ாநாடுபாராஅவ்!பராதம்!ட ஒழைடா <u>பலாணணா!மர வொராரா ஆ</u>!! !பகம!!க**ார**ண#!-னபாபாடி!ரஉரசாபதவ!தெஅடி வை *#*!! !!u=n26jmm.#:! 5. ! pr - - - MgL # ! L @ + @ L # ! an (h L ! J & *ஆமதண!புஷமாம!ளாகாமதநபதவ!* ொளதஅடிலபபா!ழபன—ாஅ!! !!ாதஅார்பதவ!ாஷ!ாதஅார்ப ഖ്‱!– ஏகாழ! மர ஓர ஆமாமா! ஷொடா!மாஒ தநா!ழா ஷனூாா க! 6. ! மவிலாமிழம்காம ! கருநபடிப் வஅட паниதати! ипадиниттаници! மாஷதநார! ழா ஷஷாஏராரன.!

2.; ! ழாளாஞ ! கவபாயம்மைத்த ! ஜொக்மு ! ழபாவாராக்; ! 3.; ! ஓட தஅரா ! ழாளாளுந் ! மாலநா ! ஹெராக்; ! 4.; ! தெர ! க வபாயம்தம ! ர்ளகாமு ! ழபாவாராக்; ! 5.; ! கத பளாஞத ர டிளுந் ! கநாதட டிலத ந ! நொ ரளாளாக்; ! 6.; ! ழாளளாணா ! மநாநடாங் மத டி ! ர வளமாமுபா ! ழபாவாராக்; !

Subject Code : 171T4 Title of the paper ! ! எசாப! – ரைபாயடிடுடா!! ன தஎக்க அடிபா

<u>Потот и пач</u>

!

2.' !ளசாபபாண !டபாபவாநா! 🗇 ாராடிணா?பு உயதவமா! ழமளகாமு ! ழபாவாரா.' !

3. !ர் ஒரார வண்பவரது:ரு 1!பெய என !ட நாத எபவரது ! ழப 1 த அிர த அீசேனா ! ளாஒராராத ந ! ஷெரு எ!

4. !பெ–னபயடி !ட *கூமசுபவரத்! னவார *சயாதந !ஷெடீட்!மாஷந்! ழா ஓர எ. !

5. !பெமமது ர். விமந்த கா!ா வுப தவ ! லாளது ! ஷெர எ. !

6.: ! ன த எக த அடியநு ! ரூ ணட !! ன த எடி ஸாஸ்டி ஈபவயநு ! ன த எ ! ர வ மய்த ந ! ழம ஸ்க்மு ! ழப ஸ்பர எ.: !

Subject Code : 17T41 Title of the paper ! ! ! INTITION !- ! ! ! MILIMING !- ! !

2.'!பலாராடி ! –ணபபடிமாவநு !பஅஅதடாராகந ! ஒரசன்.! !

3.; ! ழாவமாமா! பளாள்ஷமைங்தா?ரு #!ர்மாம ! ளட்டிப்ச! பஏமாசுதந்! ன~ ளர்ன.'! 4.; ! ளஞரப் ! ளக்கம் கட~ ஷவந்! – ணப்பாழ் ! கத்அடித்தநார்! ர்ள்க்கமு ! ழப் வளர்ன.'! 5.: ! க் வடி நடி வர்பவர்! டுபாம்ச்! ழா ஒரு ! ராண் வஞ்ஷத்தந்! ஷெர்ன.'! 6.: ! பிழையமார் ! – ஞண் வட்ஷ் ! ளட்டி ! ழப் வளால் ஆத்தமர்! ழமன்கமு ! ழப் வளர்ன.'! !

Subject Code : 17T42 ! Title of the paper : கநாது 'ணா!'. ! ழள வணாமைய வட !!

<u>Цажаат !! ргампат</u>ад!

2.:! ழள வணைணைபாு ! டார்பவரு ! கரதனாரா வூ 2 தந ! கநகு ' ண வா ! 「 ! ! லெக்மு ! ழப வார க. 3.:! மிடி வாழள வலுபத வா ! பிது டி யநாலு ! னான் வாரா மலபுட ! நி முர மலபுட வந ! ப முலனாடி 2 தநாமா ஓர க. ! 4.:! ழள வலுபவரு ! ! ர தப பவர் ! ட ஒரைட் ! பா வபு பா வூ ! ழா வநாலதர ! பல்லூ ! ழப வைர க. ! 5.:! – ண பாபம் ! – ட் ! ழர ஓர ஆப்பநாலு ! க்கதண் டிலத ந ! னபாு சாப வணை! ழள வணைமைய வட் ! லநாலா ஆட் ! டல ஓ ! !! ன ~ காலு ! ழப வரர க!

6.:!மீடரி மண்! ழள வண்ணாந்!ாடி நார வஅடி த ந **?ரு**தட டி வப ! ஒெக்ஸு ! ழப வரர கூ:! ! Subject Code : 17AT4 Title of the paper : ! () D @ @ #####1.Q @ ##!

<u>Потрот !</u> Потование !

2ியா சயாணளா!ளடுமாடிடா!ராஅருளா!ழளநாஒ!கா~டிசாபவர் ட அராா~ரைசாபவர்! !மேமசாபவர்

ழா வநாஒர ஒலுநா!ர வடிக்ண வட! பெய்பாண !ர எண கஒழைம்! ழம வநாதட டிக்த ந!ன~ சுர சு.! 3.: ா~ா வழ ! ட ஒழைடா! க வப வயமது மடிடா! ன~ சுக்மு ?ா டாழா வர அபத வா ! ா

ழாஒ**ர** க**்!**

4:மீட்லா #! ழிட்லா அவரு#! பனகூமட்டி ! ! ானலட்டி, ! ர அழிஅம்மு ! ! ழா லநாதிறேம்மூப்பவள்நு! ர வ என்ன! காதன் டிசுத ந ! ஒெரர ல்: ! 5:பண்டிர அடிபாபத வா#! ா உழடி மூம்மூ ! ர லாயாபங்நில் ! மழைத நா#! ழா ஒர ல! !

ெப்வனழ் சிலையாக இதுக்கு மாக்கு குடியாக குடியாக குடையாக குடியாக குடியாக குடியாக குடியாக குடியாக குடியாக குடியாக 6. இருபான ! செனா #பவாது ! சௌருமன், ! ரானு சாட், ! ழா ாரை வாமான ! கஅரா உபாதப் பதவார்! ரானகாமு ! ழபாவாரான.' !

Subject Code : 17SET41 Title of the paper ! பாதனாடிபா! பதனடிடா! ராடனாநடுடா

<u>LI @##@@@##!! [[[] @]#IT###@ # !</u>

2.'!மீடி ஈ!மது எாராஅ! – டிபடிகளபவது ்!ா தஅரர்பத வார!ர் எசுமு! ழப வரர எ.'! 3!மது எபாபதம?!ர எநடஸ்!ல வராமமர நுது! குஅரமமதை ந! ஷொமமது ந! ஷெடிப்! கேஷ்ணை! ழா ஒர எ.'! 4.'!மதை எரரா அமைது த! பலரை வளையைடிறது! ழா வபயத் ந! ஷெர எ.'! 5.'!மது எரரா அமைத் ந! ரங்டன் நட்ட்!ழள டிடிட்ட்!மழை நே! ழா ஷ்ஷ எ.'! ஏ ார 6.'!பு ஓடரா அசுபவது த! கு அரச்பதவம்! ழம வக்கு ! ழப வர்ர எ.'!

Subject Code : 17T51 Title of the paper : Trong for the paper ! Trong for the paper !

2.'! ஒரு 'ணி?ரோடி சாபவ ஸா! ரோ பாதபமாமாடா!' ன டி ஸர தம ! ஷொமுழப ஸாரா.'!

3..!ாதஅபணமா!மீடி வநா!பெ!ரி எப்தப!டௌசாபதவ!ஷெகமுழபாவாவுடா!மாஒதநாரிரா ஓரா #.!

4.:!பாண ொரதஅடிகணா! ெ ! கு 'ணாபதவ ! லாளாயுடா! மக்ஷ தநாயுர ஒர # !

5.:!ாமழநுகாடியாசபடி!கு'ணாபதவ !டமாளது ! ழளடிர க.!

6.'! ஒழகஒய்தவ ! **ரீவி பதபடிகள்**! ராநா ஒஒட்டீட் நார் சாபகத் ழா ஓர க.'! நார!

Subject Code : 17T52 Title of the paper ! – னபாுட்டா!! பொழா எஏவ#ர் ஒராழா எஏவா!!

<u>பணுணை!! மாலாளா</u> ஆன!

6.மாத 🛩 ிழத ஒ ! ொாதஅடிணா!ர் ஒ! – னபபாடி சாபத வார!ர் ஸகமு ! ழப வார #!

Sub code: 17TE5ATitle of the paper: pr - re- uq L #!

<u> Цатата д</u> [

2.'! ழா ஊை ழட்! றந்ஒ ! ழளவண்ணுர்! பஏமமை வாபம்வத்த ! ஒெரு க. 3.'! ளரு பள் ! கூடி ணண்! ழா உயவர்! டம்யாபாள் ஆப்றத்ஒ ! கதனாள் வேடி தந் ! ன உளர க.' 4.'! ர உள் வஆ ! னவ ரங்டிண் ! ட ஒர்ஒடர்! வே தட ! ெரார் தஅடிண்டி ழா ஊை பு ஒவ்மும் ! எவடியற்கு ! ! டிடர்! ! ! மழை த நார்! ழா ஒர க.'

5.'.!கஅார்ளிகூ ணணா!ழா~பவுபடி!–து பயார ஆபளுஷ ! ர நாடு தஒ, !ல ஆபடிடுத ஒ ! ர ஒஷ்டி ! ! ! ! ஷெரு சுத நடீடர்! பொழப வது தட பவணாஞ காழு ! டிவாரம்ஷப வநு ! ழமவளரு சுத நடீடர் ! ழா ஒர #. 6.'! ழா~ர்! டெ தட மம் நமமணைஞ காழு ! பர~ாது ! ரோ வார்~ #ரு ! ழா ஒபளுஷ ! காதன டிங்த நு ! றடிாமுர #.'!

Subject Code : 17TE5B Title of the paper ! & a angle of the paper !

<u>Пожорот !! По от тыта ут!</u>

2:! க வை ஆரார் ஒரு மூணா ! நநாநு டா ! ேழெரு மாழு த ஒடிவநா ! வொத அபத வமா ! ! ! ! ! மு வகாமு ழபாவார வ 2. க வை ஆரார் ஒபா ! பதமாரா வனையவா ! ன ~ எமாமுடா ! ன ~ நட ! கவதனை பதவ ! ஹொ க: ! 4: ! க வை ஆரார் ? ர் ஒபா ! பதனை பதவ ! ட ஒழைடா ! ட பாபவருநா ! கடாரா ாதப்பதவ ! ன ~ ளர க: ! 5: ! க வை ஆரார் ? ட ஏமாமு ரடா ! ட ஒழுடா ! ராதவ டி வை ஆபவா ! ா ஒனு ! ெல்காமு ! ழபா வார க: ! 6: ! ட ~ ளா வீதலம் ! டபாபவருநா! ரினி ாபாதப் ! டு த ஒத டி !பதனர உர சாபதவ ! ெல்குமு ! ழபா வார க: ! 7: ! க வை ஆரார் ஒ ரி பாபவருநா! ரினி ாபாதப் ! டு த ஒத டி !பதனர உர சாபதவ ! ெல்குமு ! ழபா வார க: !

Subject Code : 17TE5C Title of the paper ! மபரணா! ழமாஅனாய வா!

2.'.!மபரண! ழம ஷனர் ! ரவளைனா! காதனபதவ ! ஷொ ஃ.'! 3.'.! ராவடாா எ ! ழக ஒரு த ஒபத வமா ! ழம வக்மு ! ழப வார ஃ.'! 4.'.!மபரண! ழள டிணடு த ஒத டி ரா ! ர ஒலு ! ஷெக்மு ! ழப வார க்.'! 5.'.!ளொடு ! னு அப சாபவா ! ர ஒலு ! ழம வக்மு ! ழப வார ஐ.'.! 6.'! ர வழந வை!ழம வத னபாப வளவடிறா! லணா. லவா ! ா எராறாந! ரள த ர த டி ரா ! ர ஒலு ! ஷெக்மு ! ழப வார க்.'!

Subject Code : 17SET51 Title of the paper ! ! பராநாயதனபவா!

<u>Потот и и потитан!</u>

2.'!பஅஉஅபங்பதன்டியூந்!'கு அரசங்பதவார்!'ர் எசுமு ! ழபாவாரா.'! 3.'.! எழைராபங்பதன்டியுந்ர! ரூன்டர்! எழலா மியூந்!'டத் ஒழாாஏதவ் ! ஷெரா. ! 4.'.! – தளபர்!பஏரங்பதவடிடர்! மெநூ!டார்பதவடிடர்!ர் எக்ரமு ! ழபாவாஷ்டர்!மாஷதநார்! ழாஓரா.'! 5.:! காஅச்டி பரபதன டிரதநடீடர்!மெ ஒபு !ரு சாபுடர்!ா அவடர்!ா ஒஒர ஷெரா.! டிடர்! 6.:! மு மாமுபர்!பதன டிரை!ரை தட டிரத நார்!ர் வக்கமு ! ழபாவரா எ.:!

!ழப*லவார க*்!

3.'!ப~ளதுதடிரா!'ரடி நார ஆமமூட்ச!'ராமட்ச!'பு ஒயலமு !'ரடிஞனை ! ழா ஒஞ்ஞராரான்.'! 4.'!ப~ளதுடிணா! மீடனி ச! – னபாபாடி ! கு 'ணாபத வார்!' ரமரா ஒபர்! ழா ஷாமு !'ரடி நூ! ! ழா ஓடர்!'டு த ஒ ! பு ஒயமமு ! ! ! ! ஒெரான்.! 5.'!ப~ளது தடிபர்! தப டி ®ஷடர்!்டு த ஒப த வடிடேச!'பு ஒயலமுடர்!' – பாத அபாபுடச்! ! த~ டிமல்ணை!

!!மபரணபதவடிடு!!கடமு!பணரா!டுத்தப்வுப்பு!ற்றா !ரெ ஒத்தா!ாடிநா ஆமமூட்!!ராம் சங்தவடிட் !! !!ழமனதுமு!ழபாவரா க:!

6.:!பு⇔யநயடியண!ாடி நார ஆமாமுடா!பதனாளழள வஒபத வாஈ!ா ஒஒய! ஒெயுர க.்

Subject Code : 17T61 Title of the paper ! ! помрыте ит !

! <u>[] @##@@##!![[] @B[T##</u>#####!

2.: ! ள சுபாரா வூண்! மு ஒடிபவரத்! ரூணட்! ட வகமனபவரத்! ட நக்கதன் டிரத்த ! அெரள். ! 3.: ! பண்மழம் வத் பார்! ர வூண்டித்! ரூன் ! று து மருமண்டித்! எழுரார்க் நம்! ழமன்கும் ! ழப் வராள். ! 4.: ! ரமண்ஓராரம்மத்! ரூன்ட்! ழள் எட நாதன்பவரத்! ராண் வஞ்ஷக்தார் ஙக்கு ! ழப் வராள். ! நார்!

5.:!ளசுப!—ணபாபடி ! பஅரு தஎபவரது:ரு ர!ர்ணர எபவரது:!ா ஆகமாபடித ந ! ஒரர எ:! 6.:!ள சுபாரர்ணர எபவரது:!ரோ ருடி தணமு:! ழமனகுமு ! ழப வரர எ:!

<u>Патан</u> []

3.்ளூனீ!ம் தவ ?! டெபதவ ! தெஅடி வசா ! ப~ாத ! ழப வாஷடா ! மாஞ தநாா ! ழா ஒஒரூ ாா க.் ! 4.்ா ல? ! ா லர தபபதவ ! லாாாஊத ! மெநா ! மநாதடபதவ ! ரார மையபுடா ! மாஞ தந ! தெஅர க.் !

5.,

ெ பில்லாபா கட்டிர்மாஷ் ! ர உரட்டிர ஷஓ ! ர வ கள்ளாடித் அக்ம ! மந்தடத் டிள் ! எல் நடைப்பு அந் ! ஜொ ஆஓ ! ர வ கள்ளாடித் அக்ம ! மந்தடத் டிள் ! வல் நடிப்பு அந் ! ஜொ ஆஓ ! ர வ கள்ளாடித் அக்ம ! மந்தடத் டிள் ! வல் நடிப்பு அந் ! இல் உட் !

6:ாணாழரஓ! ெ—யவுபயாதஅழடி! னவாவ ! ழா ஸரதடபவா!! மரஓரா ஆபவா! பேடி நரஒந்தஒமா!

ழம வபுமாழ !டமாளது ! ழள டிடிடா ! எடிகளைய ! ழா அதாராள க. ! ! !

Subject Code : 17TE6A

Title of the paper ! ! னத எடி லாலாடி வாவுட 📲 னத எகத அடிட 🛙

<u>பன்றனா!! மா வாரா ஆ</u>!

- 2.: னதாகதஅ!–ணபாபடி மலாநா! முல ஒருடா!ட ஒருடா!ர வளையடி பத ந! ஒயரா:!
- 3. –னபயு !னத எடி வளளடி எயவளது! னத எர வமமைத நம?! ஓம எசு மு ! ஓப வார எ.!
- 4.' னத எர வமலாநா! ரூணடா! னபாபடி சாபவாநா! னவாவாகாம ! ழா ஈஏ தவ ! ன 🛥 சாரசு.'!
- 5.: பளாயடி ! மயாள சயவாநா! னதாளா! வாழாளாதந ! ஷெக்ஸ் ! ழபாவாரா.!
- 6.' எடடி ! கு 'ணாபவநா! ராணா ஒருதநமா! ழமங்காமு ! ழபாவாரா.'!

Sub code : 17TE6B Title of the paper : - @ LILINGLOF! LONG TO NATE !

<u>Цотот ам</u>

3. பராதமடியநா! முஓபவா, !ரதபபவா, !காஅபாரா வசுபுபவா !பு ஒய்லமு ! ஷொமு ! ழபாவாரா...

4. எந்பதமடியநா!தொர்டா! எந்பதமபாபு படி படி பில்படிய கு வடிடா! எு கையும் ! ழபாவாரா.

5. க வுபமாலஒயுடா!ர் மாநமாலஒயுடா! – தஅழடி ! ன வாவ ! முர ஓர வசு! ! க வுபமாலாநா ! பதம பாரப வார், ர் முபாபராதமடி வநா ! மா வப்புபவா ! ர ஒஷு ! கநாபு ! ஷெகாமு ! ழப வார க.

Subject Code : 17T63 Title of the paper :

<u>LIQ#@@@#!![[][]@BIT###@#!</u>!

2.: ! ழட்லி மதுது! முலகுதட !ட ஒஒடா!ரவதடதடி ! ஜெடா!மாஓதநாா! மா ஓர #.!

3.: ! ழள கலுபவறது ! ா கபு ா கபு பதவ ! ஒயிடா ! **ச**லுணை ! ழாஓர கா் !

4; ! ழடி வடி வநர ! ர உர டல்ர வளைனதடி ! ஒெக்கமு ! ழப லவர முமல ஆ ! 'ராடி ! ழட் லி வடவு அநர ! னவரவ ! ! ! ! ழமல அசுதாமர ! ழமக்கமு ! ழபலவர க:

5.: ! லணயாபுடா[!] ! லணாடி நு பாபுட எந ! முர ஓர லசு உத ந ! ஷெர க: !

6.:!ழடி வழாடி னாங்தா! குஅரசாபதவார!ர் வக்குழபானாரு !மொதிற யானர ஷாளத் நார! ழா ஒர 🕷!

Subject Code : 17SET61

Title of the paper : " I alg main to the set

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ப ஒக்ஜணை இழர வாகால ஆ ! !

2.'!ளசாப!பாண!—னபாபாடிசாபவா!ழமாஅசாபா?!கருநு!—னபாபாடிசாபவா!ர தஎடிணுடா!னவாவ!— னபாபாடி!!

!ட ஷஷசாபதவடிடர்!ரவளளா! காதனபதவடிடர்!ஷெர க.!

3.;

பவுபாபாதஅழடிடி ாந!!!

!ாதஅாள ஸவ சுபவரது !ாண்டிர ஒ !ாதஅார்மு !மடிநையத வடிட்டு!ாதஅார் ! டிர ஓா டி பத வடிடா! ஷெடிடா!மடித நார! ழா ஷஷராளக், !

4.; ! ௌரு ! ட ஒஒடா! னு அப சயவணா!ா ∽ ஆ கஒழைடா! மதை நடீடா!் தஅாள வை கபமா! மநாதந ! ! ! டிட்டா ஆமரமுடா! மதை நடீடா! ஷெகமதராள க;!

6.:! யா லஅடம்!! மு கருபவண்!ா சாயு வாம்வு வநம்!மபும்பதவ !ர வ கைமுப்!! முபலவர க.!!

Sub code : 17SET62 Title of the paper : ாதஅராலைபாயடிடல் !

<u> Цотрот !</u> Ц<u>г Авгта н</u> !

2,

பா~ளதமடிப்பின்ன!

மசயவர்!று ஒடமுதம ! ஓர வயஷாயூடர்! இரை மதமடிடர்!மெ ஒய வந ! ர உர டர்! ஷெக்கமு ! ஓப வரராக். !

3.'டார்பாபராதம்!னஏராபாபட்; !ர்முபாபராதம்! – டிபாபட்:!ாஷ்ஷா!கநாபு!ஷொன்! 4.'ளாஒபதம்!னஏராபாபுட்:!மாஒதாரா!ழாஓரா:! 5.'ரா உபாபுட்:!காஅபசாபவா!ட்ஷ்ஒட்:!கஉபாபுட்:!காஅபசாபவா! – ந்தஅழடி டி எந! முர ஓரா வாஉதந! ரஷ்ஷாமு ங்காகமு!ழபாவாரான:!

6.லணயு ஒளார், ! க உார்பயு ஒளார், ! ர எநடா, ! ன மூமயவா ! ாஒரஒய ! கநாபு ! ர் ஙகாமு ! ழப வார க.! !

DEPARTMENT OF PHÝSICS U.G.

DEPARTMENT OF PHYSICS-UG

Programme Code: P

Programme Name: B.Sc. Physics

Programme Outcomes

- 1. Understand the fundamental laws and principles of various areas of Physics.
- 2. Learn the theoretical knowledge of Physics principles and mathematical tools to solve practical problems.
- 3. Executing series of experiments or computations and to handle specialized equipments.
- 4. Understand the role of Physics in society and the background to consider ethical, legal and responsibilities.
- 5. Ability to pursue Science career, successfully.

Programme Specific Outcomes

- 1. Acquire Knowledge and to Understand the academic field of Physics and applications of Basic Physics.
- 2. Apply Mathematical techniques with emphasis on applications of Physics.
- 3. Develop knowledge and skills such as a practical approach to solve problems, the ability to reasoning out and to communicate complex ideas.
- 4. Assist in the creation of an effective project plan.
- 5. Personal skills such as the ability to work both independently and in a group.

Course Outcomes

SEMESTER - I

Subject Code: 17P11

Course Name: MECHANICS, PROPERTIES OF MATTER AND SOUND

Upon completion of the course, the students will be able to

- 1. Study the conservative laws and conservative forces angular momentum and types of collision.
- 2. Learn the fluid motion, determine the coefficient of viscosity by different methods.
- 3. Understand simple harmonic motion and the types of sound waves and also the acoustic properties.

Subject Code: 21SEP11 Course Name: BASIC ELECTRONICS

Upon completion of the course, the students will be able to

- 1. Know the fundamentals of Passive components.
- 2. Gain the knowledge about the functions and working of Transistors.
- 3. Learn about the fundamentals of semiconductors.

Subject Code: 21SEP12 Course Name: DIGITAL ELECTRONICS

Upon completion of the course, the students will be able to

- 1. Understand the fundamentals of code and number system.
- 2. Able to solve problems in digital electronics using K-map.
- 3. Develop skill to build and troubleshoot digital circuits.

Subject Code: 21NMP1

Course Name: ENERGY PHYSICS

- 1. Obtain qualitative ideas about fundamentals of energy.
- 2. Get an idea about basic principle of solar energy, wind energy and biomass energy.
- 3. Know about other non-conventional energy sources like Ocean Thermal Energy Resources, Wind energy and Chemical energy resources.

SEMESTER - II

Subject Code: 21P21 Course Name: HEAT AND THERMODYNAMICS

Upon completion of the course, the students will be able to

- 1. Understand the specific heat capacity of gas and different theories on specific heat capacity
- 2. Know the heat transmission through different experiments
- 3. Learn the postulates of kinetic theory of gases and theorem of equipartition of energy

Subject Code: 21P2P Course Name: MAJOR PRACTICAL I

Upon completion of the course, the students will be able to

- 1. Examine the young's modulus of different materials.
- 2. Calculate gravitational constant at different places.
- 3. Calibrate voltmeter and ammeter of different ranges.

Subject Code: 21SEP21 Course Name: ELECTRONIC INSTRUMENTATION

Upon completion of the course, the students will be able to

- 1. Identify the various parameters that are measurable in Electronic Instrumentation.
- 2. Practice the construction of testing and measuring set up for electronic systems.
- 3. Analyze the performance of the characteristics of each instrument.

Subject Code: 21SEP22 Course Name: ELECTRICITY

- 1. Understand the electrostatics and current electricity.
- 2. Gain the knowledge of electric current, resistance and capacitance in terms of electric field and electric potential and demonstrate the working of capacitors.
- 3. Acquainted with the dielectric properties, magnetic properties of materials and the phenomenon of electromagnetic induction.

Subject Code: 21NMP2 Course Name: ASTROPHYSICS

Upon completion of the course, the students will be able to

- 1. Assess the design of physical nature of path and the surface of the structure of moon.
- 2. Apply various optical instrument and explore the observation of the universe
- 3. Learn the age and origin of the solar system and illustrate the differences between earth and other planets in the solar system.

SEMESTER - III

Subject Code: 17P31 Course Name: ELECTRO MAGNETISM

Upon completion of the course, the students will be able to

- 1. Analyze the magnetic effects of electric current and demonstrate the associated concepts with Ballistic Galvanometer
- 2. Acquire knowledge of Gauss laws and solve the electric field for various geometric objects.
- 3. Exhibit the Knowledge in the basic concept of electromagnetic induction.

SEMESTER - IV

Subject Code: 17P41 Course Name: OPTICS

Upon completion of the course, the students will be able to

- 1. Analyse and understand the theory and experimental part of diffraction by the theory and experiment of interference using Fresnel's biprism, Newton's ring and Michelson's Interferometer.
- 2. Learn the knowledge on the Fresnel's and Fraunh offer diffraction .
- 3. Understand the basic concepts of Lasers.

Subject Code: 17P4P Course Name: MAJOR PRACTICAL II

- 1. Analyze the operation and application of various bridges used in d.c and a.c circuit
- 2. Explore themselves to understand the different bridges and to find the self inductance of the coil.
- 3. Learn the charge and current sensitivity by using Spot Galvanometer.

SEMESTER - V

Subject Code: 17P51 Course Name: ATOMIC AND NUCLEAR PHYSICS

Upon completion of the course, the students will be able to

- 1. Familiarize about the atomic structure and various atom models.
- 2. Gain knowledge about Elementary particle Physics and nuclear models.
- 3. Study the different types of particle accelerators and detectors.

Subject Code: 17P52 Course Name: PROGRAMMING WITH C++

Upon completion of the course, the students will be able to

- 1. Obtain the fundamental concept of Object oriented language.
- 2. Gain the knowledge about Tokens, Expressions and Control Structures and various types of function.
- 3. Learn the knowledge on the Classes, Objects, Constructors and Destructors.

Subject Code: 17PE5A Course Name: ELECTRONICS

Upon completion of the course, the students will be able to

- 1. Illustrate about diodes, transistor and FET amplifiers.
- 2. Learn the concepts of Op-amp and Oscillators.
- 3. Understand the digital sequential circuits, counter and converters.

Subject Code: 17PE5B Course Name: NUMERICAL METHODS

- 1. Solve the numerical solutions of algebraic and transcendental equations.
- 2. Learn about various interpolating and extrapolating methods. Solve initial and boundary value problems in differential equations using numerical methods.
- 3. Helpful for appearing Mathematical competitive examinations.

Subject Code: 17SEP51 Course Name: FIBRE OPTIC COMMUNICATION

Upon completion of the course, the students will be able to

- 1. Learn the principle and structure of optical fibres.
- 2. Apply the fundamental principles of optics and light wave to design optical fibre communication systems.
- 3. Understand the different Multiplexing system.

SEMESTER - VI

Subject Code: 17P61 Course Name: SOLID STATE PHYSICS

Upon completion of the course, the students will be able to

- 1. Distinguish the different types of bonding in solids.
- 2. Understand lattice, Unit cell and how these relate to crystal systems.
- 3. Analyze the theories of semiconducting material.

Subject Code: 17P62 Course Name: SPECTROSCOPY

Upon completion of the course, the students will be able to

- 1. Learn the structure of atoms and the origin of the observed spectra.
- 2. Gain knowledge about the techniques of IR and Raman spectra.
- 3. Interpret electronic spectra of diatomic molecules.

Subject Code: 17PE6A Course Name: THEORETICAL PHYSICS

- 1. Understand the basic significance of Classical mechanics.
- 2. Gain the knowledge about Quantum statistics.
- 3. Analyse the basic functions of wave mechanics and relativity.

Subject Code: 17PE6B Course Name: COURSE NAME: APPLICATIONS OF ELECTRONIC DEVICES AND INSTRUMENTATION

Upon completion of the course, the students will be able to

- 1. Illustrate basic meters such as ammeter and voltmeter.
- 2. Know the different types of recorders.
- 3. Differentiate IC and discrete components.

Subject Code: 17P61P Course Name: MAJOR PHYSICS PRACTICAL III

Upon completion of the course, the students will be able to

- 1. Construct experiments on optics and electricity and illustrate the related theoretical concepts.
- 2. Compute observed values and compare with standards.
- 3. Examine the measurements to draw valid conclusions and work co-operatively in a small group environment.

Subject Code: 17P62P Course Name: MAJOR PHYSICS PRACTICAL IV

Upon completion of the course, the students will be able to

- 1. Understand and examine the structure of various number systems, De-morgan's law, Boolean algebra and its application on digital design.
- 2. Generate different wave shapes using multi vibrator and oscillator circuits.
- 3. Knowledge in handling modern electronics practical equipments.

Subject Code: 17PPR6 Course Name: PROJECT

- 1. Learn problems formulate hypothesis, test, analyse, interpret and draw conclusions from data.
- 2. Identify relevant assumptions, formulate coherent arguments.
- 3. Act together as a group and work efficiently as a member of a team.

Subject Code: 17SEP61 Course Name: INTRODUCTION TO MICROCONTROLLERS 8051

Upon completion of the course, the students will be able to

- 1. Understand the architecture of pin description connection & memory organization in 8051 Microcontroller.
- 2. Enumerate the concept of input and output ports in 8051
- 3. Thorough knowledge in the assembly language programming tools

Subject Code: 17AP1 Course Name: MECHANICS, PROPERTIES OF MATTER AND SOUND

Upon completion of the course, the students will be able to

- 1. Gain the knowledge about basics of properties of matter.
- 2. Learn the fundamentals of harmonic oscillator model, including damped and forced oscillators.
- 3. Understand the Laws of Gravitation, Viscosity and Elasticity.

Subject Code: 17AP2 Course Name: THERMAL PHYSICS

Upon completion of the course, the students will be able to

- 1. Understand thermal expansion of solids and calculate the linear expansion of solids.
- 2. Learn the transfer of energy by conduction and convection.
- 3. Apply the various thermodynamics laws to the real system.

Subject Code: 17AP2P Course Name: ALLIED PHYSICS PRACTICAL I

- 1. Learning the concept of moduli of elasticity in a series of experiments.
- 2. Understand the use of potentiometer for the calibration of electrical meters.
- 3. Gain the knowledge about the principles of laws of vibration through various experimental procedure.

Subject Code: 17AP3 Course Name: ELECTRICITY AND ELECTRONICS

Upon completion of the course, the students will be able to

- 1. Understand the value of resistance of resistor, inductance of inductor and capacitance of capacitor using colour code method.
- 2. Apply the knowledge of semiconductors to illustrate the function of basic electronic devices
- 3. Design various circuits using Op-Amp 741 and design logic gates.

Subject Code: 17AP4 Course Name: OPTICS

Upon completion of the course, the students will be able to

- 1. Illustrate the concept of dispersion, aberration in prism and light propagation in optical fibers.
- 2. Explore the theoretical and practical ideas of Interference, Diffraction & Polarization.
- 3. Comprehend the resolution of optical instruments and analyze the spectroscopy of prism and grating

Subject Code: 17AP4P Course Name: ALLIED PHYSICS PRACTICAL II

Upon completion of the course, the students will be able to

- 1. Understand the concept of logic gate circuits.
- 2. Gain the knowledge about the applications of Op amp using adder and subtractor circuits
- 3. Focus on the spectrometer experiment using prism and grating

Subject Code: 19PC1 Course Name: SOLAR ENERGY

- 1. Identify the renewable and non-renewable energy resources and describe their applications.
- 2. Classify the type of solar energy collectors and cells.
- 3. Gain the knowledge about devise methods for energy storage systems

DEPARTMENT OF NUTRITION & DIETETICS U.G.

DEPARTMENT OF NUTRITION & DIETETICS

Programme Code: N Programme Name:B.Sc. Nutrition & Dietetics

Programme Outcomes

- 1. Understand the role of Food and Nutrients in health and Disease.
- 2. Provide nutrition education and diet counseling to individuals throughout the life span using a variety of communication strategies.
- 3. Apply technical skills, knowledge of health behavior, clinical judgment, and decision making skills.
- 4. Perform food management functions in business, health-care, community and institutional arenas.
- 5. Assessing and evaluating the nutritional status of individuals and communities and their response to nutrition intervention.
- 6. Competence in the skills of assessment, planning, management and evaluation of food service, nutrition and dietetics services in institutional food, community nutrition.

Programme Specific Outcomes

- 1. Provides in-depth understanding of the role of food under specific diseased conditions.
- 2. Understanding the working of dietary department.
- 3. Formulate innovative nutritious novel food products.
- 4. Become a successful entrepreneur.
- 5. Apply skill based knowledge in food industry.
- 6. Analyze nutrients, quality of food, disease and dietary management.

Course Outcomes

SEMESTER - I

Subject Code: 21N11 Course Name: FOOD SCIENCE –I

Upon the completion of the course, the students will be able to

- 1. Gain knowledge on food groups and their functions.
- 2. Analyze different nutrients in food.
- 3. Acquire knowledge on different methods of cooking.
- 4. Understand the basic concepts behind food science and food preparation.
- 5. Identify and explain the specific functions of different foods in maintaining body health.

Subject Code: 21AN11 Course Name: HUMAN PHYSIOLOGY

Upon the completion of the course, the students will be able to

- 1. Explain the basic knowledge of human anatomy and physiology.
- 2. Identify and use proper terminology for describing the anatomy of the body.
- 3. Gain knowledge on parts of the body and its diseases and disorders.
- 4. Illustrate the processes of the respective various body system.
- 5. Elaborate the regulation of body fluids and blood parameters.

Subject Code: 21SEN11 Course Name: SPICES AND HERBAL NUTRITION

Upon the completion of the course, the students will be able to

- 1. Understand the role of spices and herbs in human health.
- 2. Learn the importance of major spices.
- 3. Learn the importance of minor spices.
- 4. Gain knowledge on health benefits of herbs.
- 5. Apply knowledge in the preparation of herbal products.

Subject Code: 21SEN12 Course Name: FOOD SAFETY AND QUALITY CONTROL

- 1. Acquire knowledge on the importance of quality assurance in food industry.
- 2. Monitor and evaluate food laws and standards in food service industry.
- 3. Comprehend knowledge on national and international food standards organizations.
- 4. Learn the importance of food specification with reference to various food additives.
- 5. Gain in-depth knowledge on various food safety measures of food products.

Subject Code: 21NMN11 Course Name: BASIC NUTRITION

Upon the completion of the course, the students will be able to

- 1. Learn nutrients in foods and the specific functions in maintaining health.
- 2. Identify the good sources of foods and its nutrients.
- 3. Apply knowledge of the role of nutrition and healthy food habits.
- 4. Aware of disease prevention and wellness.
- 5. Provoke healthy food choices to prevent health problems.

<u>SEMESTER - II</u>

Subject Code: 21N21 Course Name: FOOD SCIENCE –II

Upon the completion of the course, the students will be able to

- 1. Apply process of different foods.
- 2. Analyze the nutritional composition of various food groups.
- 3. Gain knowledge on culinary use in sugar cookery.
- 4. Understand the concept of sensory evaluation of foods.
- 5. Identify and control adulterants in various foods and evaluate food quality.

Subject Code: 21N2P Course Name: FOOD SCIENCE I & II PRACTICALS

Upon the completion of the course, the students will be able to

- 1. Able to conduct basic sensory analysis of food.
- 2. Demonstrate skills on determination of edible portion of food.
- 3. Have an in-depth knowledge on application of food science.
- 4. Acquire skills on different methods of cooking.
- 5. Formulate novel recipes by applying knowledge on cooking methods.

Subject Code: 21AN2 Course Name: FOOD MICROBIOLOGY

- 1. Understand about characteristics of different microorganism associated to food.
- 2. Identify the sources, and contamination of various food substances by microbes.
- 3. Gain knowledge on microbial spoilage of food and responsible microorganisms.
- 4. Comprehend the key aspects of food poisoning and infection, bacterial food borne diseases and prevention.
- 5. Acquire knowledge on new trends in food microbiology.

Subject Code: 21SEN21 Course Name: NUTRITIONAL ASSESSMENT

Upon the completion of the course, the students will be able to

- 1. Assess the nutritional status of the community.
- 2. Addressing the nutritional problems in the community through proper evaluation.
- 3. Understand the role of nutrition at community level.
- 4. Provide nutrition education to the needy people.
- 5. Alleviate the nutrition problems at national level.

Subject Code: 21SEN22 Course Name: HOMEFOOD CATERING

Upon the completion of the course, the students will be able to

- 1. Acquire knowledge on menu planning using different food items in small scale production.
- 2. Learn the different methods of cooking.
- 3. Apply the principles of menu planning.
- 4. Develop skills in fusion cooking.
- 5. Gain knowledge in food preservation.

Subject Code: 21NMN2 Course Name: FOOD PRESERVATION

Upon the completion of the course, the students will be able to

- 1. Understand the importance of food preservation.
- 2. Acquire knowledge on various principles of food preservation.
- 3. Comprehend information regarding application of low temperature, high temperature, drying in foods
- 4. Enable to prepare preserved foods using locally available seasonable foods.
- 5. Become a n individual entrepreneur.

SEMESTER - III

Subject Code: 17N31

Course Name: FUNDAMENTALS OF NUTRITION

- 1. Understand the functions of micronutrients with health.
- 2. Comprehend the metabolism of macronutrients with health.
- 3. Correlate knowledge of nutrients with their deficiencies.
- 4. Elaborate the importance of holistic nutrition, among all age groups.
- 5. Generate wellness and healthy lifestyle adoption in community.

Subject Code: 17AN31 Course Name: BAKERY

Upon the completion of the course, the students will be able to

- 1. Gain basic knowledge relating to the principles of baking.
- 2. Acquire knowledge on role of various ingredients used in bakery recipes.
- 3. Educate the students to use additives and preservatives judiciously.
- 4. Identify and control faults in baking.
- 5. Establish a bakery business.

SEMESTER - VI

Subject Code: 17N41 Course Name: NUTRITIONAL BIOCHEMISTRY

Upon the completion of the course, the students will be able to

- 1. Understand the basic concepts of biochemistry.
- 2. Gain knowledge on metabolism of carbohydrate, protein and lipids.
- 3. Acquire knowledge on functions and mode of action of different hormones and enzymes.
- 4. Comprehend the Biochemical implications of foods and diseases
- 5. Identify various metabolic disorders.

Subject Code: 17N41P Course Name: NUTRITIONAL BIOCHEMISTRY PRACTICALS

Upon the completion of the course, the students will be able to

- 1. Understand basic lab techniques.
- 2. Acquire skills on preparation of solutions.
- 3. Perform qualitative and quantitative analysis of sugars, protein, and vitamin C.
- 4. Competent in handling analytical equipments
- 5. Interpretation of analytical results.

Subject Code: 17AN41 Course Name: FOOD PRESERVATION

- 1. Understand the basic knowledge of principles of food preservation.
- 2. Comprehend the ambient temperature processing.
- 3. Distinguish between high and low temperature processing.
- 4. Differentiate between syruping and brining.
- 5. Distinguish between chemical preservation and fermentation.

Subject Code: 17AN41P Course Name: BAKERY AND FOOD PRESERVATION PRACTICALS

Upon the completion of the course, the students will be able to

- 1. Acquire knowledge to weigh and measure ingredients used in baking.
- 2. Demonstrate skills in differentiating the qualities of all purpose flour.
- 3. Gain practical knowledge to prepare various bakery recipes.
- 4. Enhance the knowledge on usage of sugar, salt and chemicals in fruits and vegetables.
- 5. Become as an entrepreneur in small scale food industries.

SEMESTER - V

Subject Code: 17N51

Course Name: NUTRITION THROUGH LIFE CYCLE

Upon the completion of the course, the students will be able to

- 1. Understand the importance of nutrition in various stages of life.
- 2. Learn the concept of RDA, Recommendations and Guidelines.
- 3. Comprehend the physiological changes and nutritional requirements in pregnancy and lactation period.
- 4. Construct infant supplementary feeds, menu plan for preschool children, and nutritional food choices for adolescents.
- 5. Suggest suitable menus for old age people.

Subject Code: 17N52 Course Name: DIETETICS – I

Upon the completion of the course, the students will be able to

- 1. Comprehend the knowledge of role of dietitian in dietary department.
- 2. Understand the basic principles of diet and diet therapy.
- 3. Acquire the knowledge of modification of normal diet for therapeutic purposes.
- 4. Relate the causes, symptoms and onset of various types of diseases.
- 5. Understand the implication of diet under various diseased conditions.

Subject Code: 17NE5A Course Name CATERING MANAGEMENT

- 1. Gain in-depth knowledge of food service industries.
- 2. Apply basic managerial skills.
- 3. Understand organization structures in food service institutions.
- 4. Acquire knowledge on personnel management.
- 5. Enable to fix cost for food items and maintaining the accounts.

Subject Code: 17NE5B Course Name: FUNCTIONAL FOODS AND NUTRACEUTICALS

Upon the completion of the course, the students will be able to

- 1. Comprehend the role of functional foods.
- 2. Understand the role of Nutraceuticals.
- 3. Gain in-depth knowledge on phytochemicals.
- 4. Analyze the correlation between food and health components.
- 5. Emphasize on consumer marketing of health foods.

Subject Code: 17SEN51 Course Name: HOTEL HOUSEKEEPING

Upon the completion of the course, the students will be able to

- 1. Understand the importance of housekeeping department.
- 2. Apply managerial functions in housekeeping department.
- 3. Evaluate the work and staff control housekeeping department.
- 4. Gain knowledge on laundry services operation in housekeeping department.
- 5. Analyze current trends in housekeeping department.

SEMESTER - VI

Subject Code: 17N61 Course Name: FOOD PROCESSING

Upon the completion of the course, the students will be able to

- 1. Understand the principles of the various Food Processing Methods.
- 2. Comprehend the processing methods of different foods.
- 3. Explore the principle of preservation and processing of Cereal, Pulse, and Nuts & Oils.
- 4. Apply the principle of preservation and processing of vegetables based products.
- 5. Acquire skills to formulate fruits based preserved products.

Subject Code: 17N62 Course Name: DIETETICS –II

- 1. Comprehend the dietary management for nutritional deficiency diseases and lung diseases.
- 2. Analyze the causes, symptoms and dietary management for febrile conditions.
- 3. Apply the principles of diet for the management of metabolic diseases.
- 4. Understand the dietary management for special conditions like allergy and burns.
- 5. Develop the dietary models for HIV.

Subject Code: 17NE6A Course Name: POST HARVEST TECHNOLOGY

Upon the completion of the course, the students will be able to

- 1. Gain knowledge about post-harvest technology.
- 2. Enable the storage of agricultural products during the whole year in full quality.
- 3. Elaborate on spoilage agents and pest control methods.
- 4. Acquire knowledge on importance of pre-harvest physiology for fruits and vegetables on the long term storage of horticultural crops.
- 5. Comprehend the agencies governing food losses.

Subject Code: 17NE6B Course Name: FOOD SAFETY AND QUALITY CONTROL

Upon the completion of the course, the students will be able to

- 1. Gain in-depth knowledge on various food safety measures of food products.
- 2. Acquire knowledge on the importance of quality assurance in food industry.
- 3. Understand on various tests and quality assessment, using standards for quality assessment and food safety.
- 4. Learn the importance of food specification with reference to various food additives.
- 5. Monitor and evaluate food laws and standards in food service industry.

Subject Code: 17N61P Course Name: NUTRITION THROUGH LIFE CYCLE PRACTICALS

Upon the completion of the course, the students will be able to

- 1. Understand the nutritional requirements through the life cycle.
- 2. Prepare a balanced diet for various age groups.
- 3. Prepare and serve a balanced diet.
- 4. Calculate the nutrients contributed by a diet.
- 5. Suggest dietary guidelines for different age groups.

Subject Code: 17N62P Course Name: DIETETICS I & II PRACTICALS

- 1. Acquire the skills and techniques involved in the planning and preparation of therapeutic diets for various ailments.
- 2. Apply dietary principles to plan therapeutic diets for disease conditions.
- 3. Demonstrate skills in preparing appropriate therapeutic diets.
- 4. Calculate the nutrient content of diets.
- 5. Become a dietitian.

Subject Code: 17NEPR6 Course Name: DIETETICS INTERNSHIP – PROJECT

Upon the completion of the course, the students will be able to

- 1. Gain knowledge in hospital administration.
- 2. Acquire skills in maintaining medical records.
- 3. Develop the skills in effective planning, production and distribution at the hospital dietary department.
- 4. Compile the functions of the hospital dietary food service.
- 5. Plan and counsel patients effectively.

Subject Code: 17SEN61 Course Name: FRONT OFFICE MANAGEMENT

- 1. Understand the importance of front office management.
- 2. Identify the independent components of the lodging front office system.
- 3. Comprehend the functions of basic reservation procedures in front desk.
- 4. Gain knowledge to use basic amenities functions in lodging organization.
- 5. Apply skills in front office supervision and check in & check out management.

COMPUTER APPLICATIONS U.G.

DEPARTMENT OF COMPUTER APPLICATIONS

Programme Code: J

Programme Name: BCA

Programme Outcomes

- 1. Exhibit understanding of broad business concepts and principles. (National)
- 2. To identify and define problems and opportunities.(Local)
- 3. Demonstrate the ability to identify a business problem, isolate its key components, analyze and assess the salient issues, set appropriate criteria for decision making, and draw appropriate conclusions and implications for proposed solutions. (Global)
- 4. Demonstrate the capabilities required to apply cross-functional business knowledge and technologies in solving real-world business problems (Global)
- 5. Demonstrate use of appropriate techniques to effectively manage business challenges. (National)
- 6. Capable of recognizing and resolving ethical issues. (National)

Programme Specific Outcomes

BCA Programme has been designed to prepare graduates for attaining the following specific outcomes:

- 1. Develop the skill to apply knowledge of mathematics, computer science and management in practice. (Global)
- 2. An ability to enhance not only comprehensive understanding of the theory but its application too in diverse field. (National)
- 3. The program prepares the young professional for a range of computer applications, computer organization, techniques of computer networking, software engineering, Web Designing, Data mining, Networking and Android App development. (Global)
- 4. Learn to design a computing system to meet desired needs within realistic constraints such as safety, security and applicability in multidisciplinary teams with positive attitude.(Global)
- 5. Skill to communicate effectively. (National)

Course Outcomes

SEMESTER – I

Subject Code: 21J11 Course Name: PROGRAMMING IN C

Upon completion of the course, the students will be able to

- 1. To understand concepts in Programming.
- 2. Identify the situations where computational methods and computers would be useful.
- 3. Give a computational problem, identify and abstract the programming task involved.
- 4. Approach the programming tasks by using techniques and learn to write pseudo-code.
- 5. Choose the right data representation formats based on the requirements of the problem.

Subject Code: 21J1P Course Name: PROGRAMMING IN C LAB

Upon completion of the course, the students will be able to

- 1. Read, understand and trace the execution of programs written in C language.
- 2. Write the C code for functions and structures.
- 3. Implement Programs with pointers and arrays, perform pointer arithmetic, and use the preprocessor.
- 4. Write programs that perform operations using derived data types and string manipulations.
- 5. Able to implement the algorithms and draw flowcharts for solving Mathematical and Engineering problems.

Subject Code: 21AJ1 Course Name: FINANCIAL ACCOUNTING

- 1. Write financial statements in accordance with appropriate standards.
- 2. Prepare ledger accounts using double entry bookkeeping and record journal. entries accordingly.
- 3. Interpret the business implications of financial statement information.
- 4. Organize accounting information for planning and control and for the evaluation. of finance.
- 5. Develop Bank reconciliation statement from incomplete statement.
Subject Code: 21SEJ1P Course Name: OFFICE AUTOMATION LAB

Upon completion of the course, the students will be able

- 1. To prepare documentation.
- 2. To perform accounting operations to perform presentation skills.
- 3. Exhibit improved understanding of computer operations.
- 4. To Operate Ms-office operations.
- 5. Gain skills & knowledge to browse and get updated world wide information.

Subject Code: 21NMJ1 Course Name: PC- SOFTWARE

Upon completion of the course, the students will be able to

- 1. Describe the usage of computers and why computers are essential components in business and society.
- 2. Utilize the Internet Web resources and evaluate on-line e-business system.
- 3. Solve common business problems using appropriate Information Technology applications and systems.
- 4. Identify the categories of programs, organize and work with files and folders.
- 5. Describe various types of networks standards and communication software.

SEMESTER – II

Subject Code: 21J21 Course Name: OBJECT ORIENTED PROGRAMMING WITH C++

- 1. Comprehend the features of C++ supporting object oriented programming.
- 2. Perceive the concept of operators, data types, constructors and looping statements.
- 3. Apprehend the concept of arrays, functions and string handling operations in C++.
- 4. Interpret how to apply the major object-oriented concepts to implement object oriented programs in C++, Encapsulation, Inheritance and Polymorphism.
- 5. Understand advanced features of C++ specifically Stream I/O, Templates and Operator Overloading.

Subject Code: 21J2P Course Name: OBJECT ORIENTED PROGRAMMING WITH C++ LAB

Upon completion of the course, the students will be able to

- 1. Implement and test the concepts of Classes & Objects, friend Functions, Constructors and Destructors in program design of a few example exercises.
- 2. Design & implement a few forms of inheritance through a few exercises.
- 3. Test the performance of Polymorphism and Generic Programming through a few exercises.
- 4. To understand how C++ improves C with object-oriented features.
- 5. To grasp the concept of data abstraction and encapsulation.

Subject Code: 21AMJ2 Course Name: RESOURCE MANAGEMENT TECHNIQUES

Upon completion of the course, the students will be able to

- 1. To be familiar with the functions of Operations Research (OR).
- 2. Solve the Foundation mathematics and statistics.
- 3. Solve the Linear Programming (LP), LP and allocation of resources, Linearity requirement Maximization and Minimization problems.
- 4. Solve the graphical LP Minimization solution, formulating the Simplex model.
- 5. To apprehend the concept of Transportation problem and game theory.

Subject Code: 21SEJ2P Course Name: LINUX LAB

- 1. Make out the basic commands of linux operating system and can write shell scripts
- 2. Create file systems and directories and operate them
- 3. Create processes background and fore ground etc..by fork() system calls
- 4. Recognize the concept of shared memory segments, pipes, message queues and can exercise interprocess communication
- 5. Implement shell scripts and sed commands.

Subject Code: 21NMJ2 Course Name: ANIMATION USING FLASH

Upon completion of the course, the students will be able to

- 1. Create animated graphics, add sound and interactivity.
- 2. To create vector graphics-based animation programs with full screen navigation interfaces.
- 3. To study the graphics illustration simple interactivity in antialiased, resizable file format
- 4. Gain in-depth knowledge on designing and developing websites.
- 5. Gain proficiency in techniques of 2D and 3D software's.

SEMESTER – III

Subject Code: 17J31

Course Name: DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION

Upon completion of the course, the students will be able to

- 1. Demonstrate knowledge of binary number theory, Boolean algebra and binary codes.
- 2. Analyze and design systems using standard gates and minimization methods.
- 3. Examine and design systems composed of standard modules, such as Multiplexers, Flipflops, Demultiplexers and decoders.
- 4. Analyze and design the Basic Computer Organization structure.
- 5. Study the concept of Central Processing Units, I/O, and Memory.

Subject Code: 17J32

Course Name: JAVA PROGRAMMING

- 1. Grasp the use of OOPs concepts.
- 2. Comprehend the use of abstractions, data types, operators and control statements.
- 3. Analyze the concept of strings, functions and Applets
- 4. Apprehend the use of Packages and Interface in Java.
- 5. To develop and understand Exception handling, Multithreaded applications.

Subject Code: 17J3P Course Name: JAVA PROGRAMMING LAB

Upon completion of the course, the students will be able to

- 1. Implement Object Oriented programming concept using basic syntaxes of control structures, strings and function for developing skills of logic building activity.
- 2. Identify classes, objects, members of a class and the relationships among them for a finding the solution to specific problem.
- 3. Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.
- 4. Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.
- 5. Identify and describe common abstract user interface components to design GUI in Java using Applet, AWT along with response to events.

Subject Code: 17AMJ3 Course Name: GRAPH THEORY

Upon completion of the course, the students will be able to

- 1. Solve problems using basic graph theory.
- 2. Identify induced sub graphs, cliques, and matchings in graphs.
- 3. Determine the concept of Hamiltonian graphs and Eulerian graphs.
- 4. Solve problems involving vertex and edge connectivity, planarity and crossing numbers
- 5. Analyze the problems using vertex and edge coloring.

Subject Code: 17SEJ3P Course Name: MULTIMEDIA LAB

- 1. Design and apply two dimensional graphics and transformations.
- 2. Propose and apply three dimensional graphics and transformations.
- 3. Apply Illumination, color models and clipping techniques.
- 4. Understand the different types of Multimedia File Format.
- 5. Prepare and present a multimedia portfolio containing electronic media that demonstrates multimedia and problem-solving skills.

SEMESTER – IV

Subject Code: 17J41 Course Name: DATA STRUCTURES AND COMPUTER ALGORITHMS

Upon completion of the course, the students will be able to

- 1. Choose appropriate advanced data structures for given problem.
- 2. Analyze the concept of stacks, queues and linked list.
- 3. Select appropriate Binary trees and Binary search trees.
- 4. Apply the dynamic programming techniques and to apply the greedy programming technique to solve the problems.
- 5. Illustrate various types of sorting, searching and hashing techniques.

Subject Code: 17J4P Course Name: DATA STRUCTURE AND COMPUTER ALGORITHMS LAB

Upon completion of the course, the students will be able to

- 1. Select appropriate data structures as applied to specified problem definition.
- 2. Implement operations like searching, insertion, and deletion, traversing mechanism etc. on various data structures.
- 3. Implement linear and Non-Linear data structures.
- 4. Apply appropriate sorting and searching technique for given problem.
- 5. Design an algorithm for binary tree and binary tree traversals.

Subject Code: 17J42 Course Name: RELATIONAL DATABASE MANAGEMENT

- 1. Investigate Database design methodology.
- 2. Acquire knowledge in fundamentals of Data Base Management System.
- 3. Analyze the difference between traditional file system and RDBMS.
- 4. Handle with different Data Base languages.
- 5. Draw various data models for Data Base and Write queries mathematically.

Subject Code: 17SEJ4P Course Name: RDBMS LAB

Upon completion of the course, the students will be able to

- 1. Gain knowledge about SQL Fundamentals.
- 2. Create of database Packages, Perform Unary & Binary table operations.
- 3. Handle with different Data Base languages.
- 4. Create Table View, Log & Triggers.
- 5. Handle online Transactions.

Subject Code: 17AMJ4 Course Name: NUMERICAL METHODS

Upon completion of the course, the students will be able to

- 1. Apply Numerical analysis which has enormous application in the field of Science and some fields of Engineering.
- 2. Understand the concept of finite precision computation.
- 3. Familiar with numerical solutions of nonlinear equations in a single variable.
- 4. Analyze the concept of numerical integration and differentiation, numerical solution of ordinary differential equations.
- 5. Perceive with calculation and interpretation of errors in numerical method.

SEMESTER - V

Subject Code: 17J51 Course Name: OPERATING SYSTEM

- 1. Describe the concept of single processor and multiprocessor, system calls
- 2. Explain, contrast and compare different Structures for Operating Systems.
- 3. Grasp the term process management, concurrent processes and threads, memory management, virtual memory concepts, deadlocks.
- 4. Understand the concept of scheduling and synchronization.
- 5. Acquire knowledge in file system.

Subject Code: 17J52 Course Name: DATA COMMUNICATION AND COMPUTER NETWORKS

Upon completion of the course, the students will be able to

- 1. Define, use and implement Computer Networks and the basic components of a Network system.
- 2. Know and Apply pieces of hardware and software to make networks more efficient, faster, more secure, easier to use, able to transmit several simultaneous messages, and able to interconnect with other networks.
- 3. Differentiate the various types of network configurations and applying them to meet the changing and challenging networking needs of organizations.
- 4. Understand the layers of OSI and TCP and get knowledge about congestion control and network security.
- 5. Describe the different protocols, software, and network architectures.

Subject Code: 17J53 Course Name: DOT NET PROGRAMMING

Upon completion of the course, the students will be able to

- 1. Understand .NET Framework and describe some of the major enhancements to the new version of C#.
- 2. Learn to create applications using Microsoft Windows Forms.
- 3. Study the concept of application creation using ADO. NET.
- 4. Learn how to work with XML Documents.
- 5. Use Crystal Reports that may help in creating reports related to the project

Subject Code: 17J5P

Course Name: DOT NET PROGRAMMING LAB

- 1. Implement Visual Basic.Net classes, objectives, and class relationships.
- 2. Develop and write documented programs applying Object Oriented principles using Visual Basic.Net.
- 3. Create member functions and demonstrate the use of Visual Basic.Net syntax and exception handling.
- 4. Design, create and use a User Interface with forms, button boxes, scroll bars, labels, and graphics.
- 5. Utilize the details of structured programming techniques.

Subject Code: 17JE5A Course Name: COMPUTER GRAPHICS

Upon completion of the course, the students will be able to

- 1. Understand the survey and various applications of computer graphics.
- 2. To study the concept CRT monitors, hard copy and I/O devices.
- 3. Facilitate the details of Line drawing algorithms.
- 4. Analyze the term line attributes , fill color patterns.
- 5. To illustrate the term transformation such as translation, rotation and scaling.

Subject Code: 17JE5B Course Name: ENTERPRISE RESOURCE PLANNING

Upon completion of the course, the students will be able to

- 1. Understand ERP software package, software modules helps in integrating data and real time information.
- 2. Recognize planning and management of resources as per the requirements of company.
- 3. Identify how to control and manage the organizations at different locations.
- 4. Understand how to get Return on Investment (ROI) for an organization
- 5. Appreciate how to control different functions and enhance company efficiency

Subject Code: 17SEJ5P Course Name: NETWORKING LAB

- 1. Comprehend fundamental underlying principles of computer networking
- 2. Troubleshoot wireless LANs and VLANs.
- 3. Apply mathematical foundations to solve computational problems in computer networking
- 4. Design and build a wireless LAN.
- 5. Compare routing algorithms, practice packet and file transmission between nodes.

SEMESTER – VI

Subject Code: 17J61

Course Name: SOFTWARE ENGINEERING

Upon completion of the course, the students will be able to

- 1. Select and implement different software development process models.
- 2. Extract and analyze software requirements specifications for different projects.
- 3. Develop some basic level of software architecture/design.
- 4. Apply standard coding practice.
- 5. Define the basic concepts and importance of Software project management concepts like cost estimation, scheduling and reviewing the progress.

Subject Code: 17J62 Course Name: WEB TECHNOLOGY

Upon completion of the course, the students will be able to

- 1. To understand the concept of HTML 5 using links, tables and forms.
- 2. Analyze the concept of background colors, styles and positioning.
- 3. To study the terms in Java Script such as arrays and functions
- 4. To learn the concept of mysql database query for insertion, deletion and updation operations.
- 5. Able to know the concept of data types, arrays, strings and cookies in PHP.

Subject Code: 17J6P Course Name: WEB TECHNOLOGY LAB

- 1. Write a program for creation of tables and forms using HTML 5.
- 2. To study the concept of changing background color and styles in CSS.
- 3. Facilitate the term arrays and function in Java Script.
- 4. Debug, test the mysql database query to perform insertion, deletion and updation operations.
- 5. Understand the various types of operators, data types, strings and cookies.

Subject Code: 17JE6A Course Name: DATA MINING

Upon completion of the course, the students will be able to

- 1. Design a data mart or data warehouse for any organization
- 2. Extract knowledge using data mining techniques
- 3. Adapt to new data mining tools
- 4. Explore recent trends in data mining such as web mining, multimedia mining, text mining.
- 5. Implement data mining techniques like classification, clustering,
 - association rule and decision tree etc on the real data set.

Subject Code: 17JE6B Course Name: COMPILER DESIGN

Upon completion of the course, the students will be able to

- 1. Understand the requirement of compiler design.
- 2. Apply working skills in theory and application of finite state machines, recursive descent, production rules, parsing, and language semantics.
- 3. Understand about powerful compiler generation tools.
- 4. Apply the ideas, the techniques, and the knowledge acquired for the purpose of other software design.
- 5. Design the structures and support required for compiling advanced language features.

Subject Code: 17JPR6 Course Name: PROJECT

- 1. Learn critical thinking skills and inquiring skills through application-oriented project development in Computer Science and Information Technology in a team-work environment.
- 2. Learn literature survey skills.
- 3. Refine communications skills and public speaking skills through written and oral presentations.
- 4. Learn problem solving skills.
- 5. Learn proposal development skills to initiate an application-oriented project in the areas of Computer Science and Information Technology.

Subject Code: 17SEJ6P Course Name: ANDROID LAB

- 1. Describe the basic components of an Android application.
- 2. Define the lifecycle methods of Android application components.
- 3. Describe the basics of event handling in Android.
- 4. Demonstrate and deploy various tools in Android application.
- 5. Illustrate the basics of graphics and multimedia support in Android.

DEPARTMENT OF COMMERCE(CA) U.G.

DEPARTMENT OF COMMERCE WITH CA

Programme Code: D Programme Name: B.Com (Computer Applications)

Programme Outcomes

- 1. Complete Professional Courses like CA, CS, CMA, MBA, M.Com, CPA and ACCA Successfully.
- 2. Become Chartered Accountant, Chief Internal Auditor, Chief Accountant, Legal Advisor, Managers and Sales representatives in multinational companies.
- 3. Acquire skill to select teaching and research as a Profession.
- 4. Became successful and socially responsible women entrepreneurs with creative ideas.
- 5. To gain knowledge that helps to face various competitive examination.

Programme Specific Outcomes

On completion of B.Com (CA) Programme, the students would be able to

- 1. To become experts in accounting methodology and enhance professionalism through innovative practices, to be tactful in facing unforeseen demands and changes in situational roles in industry and academics.
- 2. To gain through subject knowledge from practical experiences, industrial learning and internship.
- 3. To develop entrepreneurial skills, groups activities, spirit of coordination shaping up their professionalism.
- 4. To adopt innovative opportunities, latest technologies that helps to develop new business.
- 5. To enhance informative and expressive computer knowledge that helps them to face various competitive examination.

Course Outcomes

<u>SEMESTER – I</u>

Subject Code: 21D1P Course Name: MS-OFFICE LAB

Upon completion of the course, the students will be able to

- 1. Describe the usage of computers and to understand its significance in business and society.
- 2. Understand a Word Processor, Create, Edit, Format documents, work with tables, Import and Export data between files, proofing a document save, Protect and Print documents.
- 3. Recognize the segregation of Microsoft Office program to create both the professional and academic documents.
- 4. The use of Microsoft Office program to create personal, academic and business documents following the current Professional and/or Industrial standard.

Subject Code: 21AD1 Course Name: COMPUTER FUNDAMENTAL

Upon completion of the course, the students will be able to

- 1. Understand the fundamental concepts of computers with current updation of knowledge.
- 2. Understand Decimal, Binary, Octal, Hexadecimal Number System.
- 3. Familiarize CPU, Memory and storage device of computers.
- 4. Understand the Input and Output Devices of Computer.
- 5. Understand the Types of Computer Network and its Topology.

SEMESTER - II

Subject Code: 21D2P

Course Name: PROGRAMMING IN C LAB

- 1. Read, understand and trace the execution of programs in C language.
- 2. Write the C code for a given algorithm.
- 3. Implement Programs using pointers and arrays, perform pointer arithmetic using the preprocessor.
- 4. To Practice the students to write C Programs on their own.

Subject Code: 21AD2 Course Name: PROGRAMMING IN C

Upon completion of the course, the students will be able to

- 1. Understand the fundamental concept of C Structure, declaration of constants and variables.
- 2. Populate and evaluate the type of Operators and Arithmetic operation of C Program.
- 3. Declare and Enforce Decision Making and Branching statements in C Program.
- 4. Understand and effectively explain about the Dimensional Arrays, Dynamic Arrays and String Variable.
- 5. Understand and Define the Structure and Union of C Program.

SEMESTER - III

Subject Code: 17D31 Course Name: VISUAL BASIC

Upon completion of the course, the students will be able to

- 1. Design, create, build, and debug the Visual Basic applications.
- 2. Explore Visual Basic's Integrated Development Environment (IDE).
- 3. Implement syntax rules in Visual Basic programs.
- 4. Explain the variables and data types used in the development of programs.
- 5. Apply arithmetic operations for displaying the numeric output.
- 6. Write and apply the decision structures for determining the different operations.
- 7. Write and apply the loop structures to perform repetitive tasks.
- 8. Write and apply procedures, sub-procedures, and the functions.

Subject Code: 17D3P Course Name: VISUAL BASIC LAB

- 1. Build a windows Application.
- 2. Create a user interface following good GUI design guidelines.
- 3. Change the attributes of control by setting properties at design time or in code.
- 4. Write coding procedures to bring it into business application.
- 5. Create classes and objects.
- 6. Debug an application.
- 7. Access data from a database.

SEMESTER - IV

Subject Code: 17D41 Course Name: WEB TECHNOLOGY

Upon completion of the course, the students will be able to

- 1. Interpret the concept of internet, protocols and its usage.
- 2. Determine the concept of HTML and Dynamic HTML.
- 3. Identify the usage of JSP in java.
- 4. Develop applications using ASP Dot Net.
- 5. Understand the concepts in programming and scripting language.

Subject Code: 17D4P Course Name: TALLY LAB

Upon completion of the course, the students will be able to

- 1. Describe the components in Tally screen, maintaining the company data and preparation of trial balance, profit and loss account and balance sheet.
- 2. Identifying the Inventory details in stock category, stock group and stock item.
- 3. Prepare the order processing in sales order and purchase order.
- 4. Understand the Bill wise details and cost Centre.
- 5. Categorizing GST and payroll accounting.

Subject Code: 17SED4P Course Name: DESKTOP PUBLISHING PRACTICAL

- 1. To understand database, Relationship and creating Table through Design.
- 2. Create Photoshop screen, creating digital images converting B/W to Color.
- 3. Create Photoshop by using Color Correction Techniques and Animation.
- 4. Understand PageMaker using tools and workspace, labels, Pamphlets and advertisement.
- 5. CorelDraw- Understand tools and workspace, graphics, multicolor design, web graphics

SEMESTER - V

Subject Code: 17D52 Course Name: DATABASE MANAGEMENT SYSTEM

Upon completion of the course, the students will be able to

- 1. Understand, appreciate and effectively explain concept of Database and Database Management System.
- 2. Declare and Enforce Relational data structure and Data Integrity on a database using RDBMS.
- 3. Design and Develop a Database Modelling for a given Domain.
- 4. Populate and Query a database using SQL Command and SQL Operators.
- 5. Populate and Query including Subqueries, Aggregate Function and Join Function.

Subject Code: 17D5P Course Name: ORACLE LAB

- 1. Create Data Definition Language with Constraint.
- 2. Create DML.
- 3. To build in Queries in various function Character Function, Numeric Function, Date Function.
- 4. To create SQL using Logical operator and Function.
- 5. Create PL/SQL Program.
- 6. Create Program for exceptional Handling.
- 7. Create Program for exceptional Handling.

SEMESTER - VI

Subject Code: 17C62 Course Name: JAVA PROGRAMMING

Upon completion of the course, the students will be able to

- 1. Understand the fundamental concept Java Program
- 2. Populate and Evaluate Types of Operators and Arithmetic operation of Java Program.
- 3. Declare and Enforce Decision Making and Branching statement of Java Program.
- 4. Understand and effectively explain about Dimensional Arrays.
- 5. Understand and Define Java Applets.

Subject Code: 17PRC6 Course Name: PROJECT

- 1. Understand and know how to develop java Dot Net project.
- 2. Use an integrated development environment to write, compile and run the project.
- 3. Use a version control system to track source code in a project.

DEPARTMENT OF CHEMISTRY U.G.

DEPARTMENT OF CHEMISTRY

Programme code: K

Programme Name: B.Sc., Chemistry

Programme Outcomes

- 1. Students aid strong knowledge in fundamentals and applications of organic, inorganic, physical, analytical chemistry and also in inter-disciplinary subjects such as Green, Nano, Environmental, Forensic, Pharmaceutical chemistry etc.,
- 2. After the completion of the degree, they will be able to work in various fields such as cement industry, petrochemical industry, rubber industry, fertilizer industry, paint industry, food safety, research laboratory, pharma companies, schools, public sectors etc.,
- 3. Students appreciate the great role of chemistry in day-to-day life.
- 4. Understands the safe handling of chemicals, environmental issues and key issues that faces society through energy, health and medicine.
- 5. Motivate them to involve in research and tackle the new challenges.

Program Specific Outcomes

On completion of B.Sc Chemistry Programme, the Students would be able to:

- 1. Explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions.
- 2. Perform scientific experiments skillfully by application of procedural knowledge.
- 3. Enhance the ideas about research in chemistry and develop knowledge of significance in scientific concepts which find applications in industry, medicine and modern research.
- 4. Gain the knowledge of Chemistry through theory and practical.
- 5. Identify chemical formulae and solve numerical problems.
- 6. Understand good laboratory practices and safety.
- 7. Make aware and handle the sophisticated instruments/equipments.

Course outcomes

SEMESTER- I

Subject Code:21K11 Course name: INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY –I

Upon completion of the course, the students will be able to

- 1. State the fundamental concepts of atomic structure, explain the periodic properties and its applications.
- 2. Explain the formation of chemical bonding, VB theory and MO theory.
- 3. Understand the concepts of electron displacement effect, reaction intermediate.
- 4. Write the mechanism of substitution, elimination reactions.
- 5. Recognize kinetic theory of ideal gases, gas laws, vanderwaal's equation, and Joule Thomson effect and inversion temperature.

Subject. Code: 21SEK11 Course Name: LABORATORY TECHNIQUES

Upon completion of the course, the students will be able to

- 1. Inculcate the selection and proper use of emergency equipment (e.g., fire extinguishers, eyewash stations, safety showers, spill kits, first aid kits, fire alarms, and fire blankets).
- 2. Understand the techniques of semi micro qualitative analysis in the removal of interfering anions,
- 3. Get insight into the applications of solubility product principle, complication reactions.
- 4. Define concentration systems: molarity, molality, normality
- 5. Differentiate post precipitation and co-precipitation.
- 6. Explain recrystallisation of solid, experimental techniques of fractional distillation and distillation under pressure for the purification of liquids.

Subject. Code: 21SEK12 Course Name: INDUSTRIAL CHEMISTRY

- 1. Understand the manufacturing process of matches and explain the preparation of TNT, RDX explosives.
- 2. Enumerate the manufacturing method of Portland cement & glass.
- 3. Illustrate the manufacturing methods and applications of fertilizer.
- 4. Explain the isolation of natural rubber, vulcanization, applications of synthetic rubber.
- 5. Classify plastics, knowing their preparation and applications.

Subject. Code: 21NMK1 Course Name: DAIRY SCIENCE

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

- 1. Explain the composition, detection of adulteration in milk and milk products.
- 2. Demonstrate milk processing, milk powder processing methods.
- 3. Comment on the preparations of butter, cheese, ghee, ice cream.

SEMESTER-II

Subject Code: 21K21 Course name: INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY –II

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

- 1. Illustrate the mechanism of atom bomb, hydrogen bomb formation.
- 2. Compare the properties of α, β, γ radiations and mention the applications radioactive isotopes, Carbon dating.
- 3. Explain acid, base concepts and be familiar with the balancing of redox equations.
- 4. Outline the methods of preparation in alkanes, alkenes, alkynes, aromatic hydrocarbons and its uses.
- 5. Give brief account on crystal systems, space lattice, and unit cell, laws of crystallography, Schottky defect, and Frenkel defect.

Subject. Code: 21SEK21 Course Name: MEDICINAL CHEMISTRY

- 1. Understand the terminology in drug chemistry: Pharmacy, Pharmacology, Pharmaco dynamics etc.
- 2. Explain the mode of action, applications of Anaesthetics, Analgesics, and Antipyretics.
- 3. Outline the need of sulphadrugs, antibiotics, and antiseptics.
- 4. Mention the applications of barbituriacid, sulphonol, piperadol, hydroxyzine.
- 5. Reason out the causes for cancer and its treatment.

Subject.Code: 21SEK22 Course Name: FORENSIC CHEMISTRY

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

- **1.** Tell about the basic principles of Forensic Science, identification of physical evidence, Forensic examination of hair, fiber, paints.
- 2. Know about the examination and identification of drugs, alcohol.
- 3. Get insight into finger print detection, forensic serology.
- 4. Understand detecting forgery in bank cheques /draft, detection of gold purity.

Subject.Code: 21NMK2 Course Name: CHEMISTRY IN EVERY DAY LIFE

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

- 1. Understand the manufacturing techniques of some of the small- scale industrial
- 2. Trained in preparing sambirani, phenoil, shoe polish, plaster of paris .
- 3. Start small scale manufacturing unit .

Subject.Code: 21K2P Course Name: SEMI-MICRO QUALITATIVE ANALYSIS AND ORGANIC PREPARATIONS

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

1. Analyze given inorganic mixture qualitatively and report the two cations and two anions by using semi micro quantity.

- 2. Identify various anions and cations through flame test.
- 3. Distinguish interfering radicals and follow the procedure of elimination.
- 4. Practice group separation to identify the cations and affirm by confirmation test.
- 5. Acquainted with the apparatus setup, explain the theory of reactions in the preparation of following organic compounds:
- i. Benzoic acid from methyl benzoate, ii. Salicylic acid from methyl/ethyl salicylate, iii.Osazone from glucose

SEMESTER-III

Subject Code: 17K31 Course Name: ORGANIC AND INORGANIC CHEMISTRY

Upon successful completion of this course, the students will be able to:

- 1. Recognize the basic practical skills for the synthesis of alkyl halides, aryl halides and aralkyl halides.
- 2. Understand the evidences, reactivity and mechanism of various nucleophilic elimination and substitution reactions.
- 3. Recognize and draw constitutional isomers, stereoisomers, including enantiomers and diasteromers, racemic mixture and meso compounds.
- 4. State the principle resemblances of elements within each main group in particular alkali metals, alkaline earth metals.
- 5. Know the fundamentals of the chemistry of the main group elements, and important real world applications of many of these species
- 6. Compare the Chemical reactivity of elements in the group III to VI

SEMESTER-IV

Subject Code: 17K41

Course Name: ORGANIC AND PHYSICAL CHEMISTRY

- 1. Describe different classes of alcohols and able to write down structure of phenol and phenoxide ion.
- 2. Form the fundamental electronic structure and bonding in carbonyl compounds
- 3. Explain the reactivity of carbonyl compounds with both hard and soft nucleophiles (aldehydes and ketones)
- 4. Understand the physical properties and chemical constitution of liquids.
- 5. Know about the characteristics of adsorption and catalysis
- 6. Understand the concept of activation energy, steady state, and zero, first and second order rate laws.

Subject Code: 17K4P

Course Name: GRAVIMETRIC AND VOLUMETRIC ANALYSIS

Upon completion of the course, the students will be able to

- 1. Estimate the quantities of metal cautions gravimetrically.
- 2. Facilitate the learner to make solutions of various molar concentrations.
- 3. Compute the different types of errors in practical.
- 4. Calculate titration errors for method evaluation, and perform statistical evaluation of results from classical and instrumental chemical experiments and analyses
- 5. Know how to engage in safe laboratory practices handling laboratory glassware, equipment, and chemical reagents.

SEMESTER-V

Subject Code: 17K51 Course name: ORGANIC CHEMISTRY

Upon completion of the course, the students will be able to

- 1. Understand aromatic electrophilic, nucleophilic substitutions and the process of reactions.
- 2. Identify organic naming reactions and their mechanism.
- 3. Classify organic nitrogen compounds and compare the basicity of amines.
- 4. Summarize the preparation, properties of heterocyclic compounds and its uses
- 5. Define carbohydrates, mutarotaion, and epimerization and discuss their structure and configuration.

Subject code: 17K52 Course name: PHYSICAL CHEMISTRY-I

- 1. Assess knowledge on importance of thermodynamics, Joule Thomson effect and its applications in real life.
- 2. Recognize the need for second law of thermodynamics, Nernst heat theorem, and absolute entropy of solid, liquid, gas.
- 3. Define phase, equilibrium, component, degrees of freedom and Gibbs phase rule and interprets the stability regions in one component, two component, congruent melting, incongruent melting phase diagrams.
- 4. Describe the effect solute concentration on various properties (vapour pressure, boiling point, freezing point and osmotic pressure)
- 5. Identify the point group, order of the group in molecules, construct character table for C_2V point group

Subject Code: 17KE5A Course name: INORGANIC AND ANALYTICAL CHEMISTRY

Upon completion of the course, the students will be able to

- 1. Comment on behavior of halogen compounds, peculiarities of fluorine, inter halogen compounds and their structure.
- 2. Explain the extraction process of titanium, molybdenum, tungsten and get insight into their compounds.
- 3. Understand the characteristics of lanthanides and actinides and its applications
- 4. Know the properties of non-aqueous solvents and inorganic polymers.
- 5. Develop accuracy and precision in doing experiments, understands the different types of errors and methods for minimizing errors.
- 6. Describe the principles of thermo gravimetric analysis, differential thermal analysis which is used to find the stability of compounds.

Subject Code: 17SEK51 Course name: CHEMISTRY OF BIOMOLECULES

Upon completion of the course, the students will be able to

- 1. Discuss the chemistry of biomolecules: Amino acids, proteins, nucleic acids
- 2. Understand the functions of nucleotide, DNA, RNA and distinguish DNA and RNA Structures.
- 3. Categorize the functions of hormones and vitamins and hormones.
- 4. Summarize enzyme activity and its mechanism
- 5. Determine saponification value, iodine value of oil.

SEMESTER-VI

Subject Code: 17K61

Course name: ORGANIC CHEMISTRY AND SPECTROSCOPY

- 1. Outline the preparation, applications of active methylene compounds and dyes.
- 2. Apprehend the instrumentation of column, thin layer, paper chromatography
- 3. State Bayer strain theory, and its modification also discuss conformations of ethane, butane, 1, 2-dichloroethane, cyclohexane, methyl cyclohexane
- 4. Label the various molecular rearrangements by understanding its mechanism.
- 5. Distinguish tautomerism and resonance.
- 6. Analyze the extraction method, elucidate the structure of alkaloids and terpenoids.
- 7. Calculate λ_{max} values for conjugated dienes and α , β -unsaturated carbonyl compounds.
- 8. Tell about finger print region, spin-spin coupling, coupling constant, and Pascal's triangle.

Subject Code: 17K62 Course name: PHYSICAL CHEMISTRY –II

Upon completion of the course, the students will be able to

- 1. Use the Nernst equation to calculate cell potential.
- 2. Describe the functions of fuelcells and batteries.
- 3. Understand the laws of photochemistry, quantum yield and differentiate phosphorescence and fluorescence process.
- 4. Enumerate the postulates of quantum mechanics
- 5. Apply Schrodinger wave equation to particle in 1D and 3D box.
- 6. Elaborate on rotational spectroscopy of diatomic molecules, identify modes of vibration of polyatomic molecules in IR spectroscopy and understand the rule of mutual exclusion principle in Raman spectroscopy.

Subject Code: 17KE6A

Course name: INORGANIC AND APPLICATIONS OF COMPUTER IN CHEMISTRY

Upon completion of the course, the students will be able to

- 1. Understand Nomenclature, EAN rule of coordination complexes and applications of chelated complexes in analytical chemistry.
- 2. Calculate crystal field splitting energy, magnetic moments of transition elements.
- 3. Compare VBT and CFT, explain MOT of octahedral complexes.
- 4. Explain the role of metal ions in biological systems, functions of haemoglobin, myoglobin, and chlorophyll.
- 5. Solve the chemistry problems with the use of C-language.
- 6. Represent and manipulate 2D, 3D- molecular structure using cheminformatics.

Subject Code: 17SEK61

Course name: GREEN AND NANO CHEMISTRY

- 1. Understand the 12 principles of green chemistry.
- 2. Design green synthesis using appropriate materials, catalysts & green solvents to improve the sustainability of the product.
- 3. Brief study on applications of ultrasound and microwave in organic synthesis.
- 4. Outline the synthesize of nanoparticles, nanosized semiconductors, carbides, and their applications in real world.
- 5. Create an appreciation of how the practice of nanochemistry enhance competitiveness, innovation and faster time to market.

Subject Code: 17K61P Course name: ORGANIC ANALYSIS & ESTIMATION

Upon completion of the course, the students will be able to

- 1. Analyze organic compounds systematically
- 2. Identify of a compound as to belong to a particular class of compounds and confirm it by preparing a suitable derivative.
- 2. Distinguish the reactions of various functional groups.
- 3. Understand the theory behind the reactions of estimation of aniline and phenol

Subject Code: 17K62P Course name: PHYSICAL CHEMISTRY

- 1. Determine molecular weights by transition temperature method, Rast's macro method.
- 2. Construct phase diagram and determine eutectic composition and eutectic temperature.
- 3. Determine the miscibility temperature of phenol-water system.
- 4. Prepare the solutions of desired strength and buffer mixtures.
- 5. Demonstrate conductometric, potentiometric, colorimetric, and pH titrations.

ALLIED CHEMISTRY-I U.G.

ANCILLARY CHEMISTRY (FOR B.SC . N&D) Course outcomes

SEMESTER-I

Subject.Code: 17AKN3 Course Name: BIO CHEMISTRY

Upon completion of this module, the student will be able to:

- 1. Classify aminoacids and proteins.
- 2. Differentiate between vitamins and hormones.
- 3. Demonstrate the concepts of structure, replication of DNA, RNA.
- 4. Illustrate the role of enzyme activities and its mechanism.
- 5. Analyse the fats using saponification value, iodine value, Reichert-Meisel value.

SEMESTER - IV

Subject.Code: 17AKN4

Course Name: ENVIRONMENTAL AND ORGANIC CHEMISTRY

Upon completion of this module, the student will be able to:

- 1. Define, theories and disadvantages of corrosion, how to prevent corrosion.
- 2. Understand and identified the dangerously toxic solids, liquids and gases, explain
- 3. The biochemical effect of toxic metals in man and children.
- 4. Acquaint knowledge on a thropogenic sources of radiation, protection from radiation.
- 5. Compare and inter conversion between glucose and fructose.
- 6. Enumerate the preparation and applications of azo, nitro dyes.

Subject Code: 17AKN4P Course Name: QUALITATIVE ANALYSIS

- 1. Recognize the basic practical skills for the analysis of inorganic compounds
- 2. Inculcate the principle of qualitative analysis and eliminate the interfering radical.
- 3. Be skilful in identifying the simple salt containing one cation and anion.

SEMESTER- V

Subject code: 17AKN5

Course Name: APPLIED CHEMISTRY

Upon completion of the course, the students will be able to

- 1. Study the water management.
- 2. Gain basic knowledge on natural, synthetic rubber, plastics and resins
- 3. Study the manufacture of cement and glass by modern methods
- 4. Understand the function of paints and pigments.
- 5. Know the different plant nutrients, their functions and deficiency symptoms.
- 6. Identify the problematic soil and recommend a method for their reclamation.

SEMESTER- VI

Subject Code: 17AKN6

Course Name: APPLIED AND MEDICINAL CHEMISTRY

Upon completion of the course, the students will be able to

- 1. Study the manufacture of Soap, Detergents and paper by modern methods.
- 2. Know about process of dyeing leather, use of mordants.
- 3. Acquire knowledge about the properties and applications of colloids.
- 4. Know the applications of anaesthetics, analgesics, antipyretics, antibiotics.

Subject Code: 17AKN6P Course Name: VOLUMETRIC ANALYSIS

- 1. Perform double titrations for simple acid base and redox titrations skilfully.
- 2. Identify different types of errors in quantitative analysis.
- 3. Calculate titration errors for method evaluation, and perform statistical evaluation of results from classical and instrumental chemical experiments and analyses
- 4. Make scientific reports from chemical experiments and present the results in a transparent manner.

ALLIED CHEMISTRY-I U.G.

ANCILLARY CHEMISTRY (FOR B.SC., PHYSICS) SEMESTER- III

Subject code: 17AKP3

Course Name: PHYSICAL CHEMISTRY

Upon completion of the course, the students will be able to

- 1. Understand the symmetry aspects in chemical systems
- 2. Comprehend the importance of point group and its classification
- 3. Apprehend the basic concepts of crystallography
- 4. Write down the laws of photochemistry and quantum yield.
- 5. Explain radiative and non radiative processes using Jablonsky diagram.
- 6. Get insight into the basic laws governing the behavior of gases?

SEMESTER - IV

Subject code: 17AKP4

Course Name: ORGANIC AND PHYSICAL CHEMISTRY

Upon completion of the course, the students will be able to

- 1. Comprehend the preparation, properties, structure and importance of carbohydrates
- 2. Understand the fundamental properties and reactivity of biologically important molecules.
- 3. Understand the properties of ideal and non ideal solutions, the basic concepts of electrochemistry and its applications.
- 4. Construct the different types of electrochemical cells and batteries

Subject Code: 17AKP4P Course Name: QUALITATIVE ANALYSIS

- 1. Recognize the basic practical skills for the analysis of inorganic compounds
- 2. Inculcate the principle of qualitative analysis and eliminate the interfering radical.
- 3. Develop skill in identifying the simple salt containing one cation and anion.

SEMESTER-V

Subject code: 17AKP5

Course Name: INORGANIC, PHYSICAL AND MEDICINAL CHEMISTRY

Upon completion of the course, the students will be able to

- 1. Apply the fundamental principles of chemical periodicity
- 2. Learn and analyse the bonding characteristics in compounds
- 3. Analyse the properties of different states of colloidal system
- 4. Discuss catalytic cracking of petroleum and reforming of petrol
- 5. Outline the procedure for synthesis of biodiesel
- 6. Know the various pharmaceutical drugs, their application and synthesis

SEMESTER- VI

Subject code: 17AKP6

Course Name: ANALYTICAL AND INORGANIC CHEMISTRY

Upon completion of the course, the students will be able to

- 1. Apply analytical techniques in quantitative measurements
- 2. Appreciate the basic concepts of acid base reactivity.
- 3. Classify the various metallurgical operations.
- 4. Give an extended knowledge about chromatographic techniques
- 5. Basic knowledge of nuclear structure, stable and unstable atomic nuclei, nuclear reactions and different modes of radioactive decay and also methods for measurements of radioactivity.
- 6. Develop skills in handling and measurement of radioactive material

Subject Code: 17AKP6P Course Name: VOLUMETRIC ANALYSIS

- 1. Perform double titrations for simple acid –base and redox reactions skillfully.
- 2. Identify different types of errors in quantitative analysis.
- 3. Calculate titration errors for method evaluation, and perform statistical evaluation of results from classical and instrumental chemical experiments and analysis.
- 4. Make scientific reports from chemical experiments and present the results in a transparent manner.

DEPARTMENT OF COMMERCE U.G

DEPARTMENT OF COMMERCE

Programme Code: R

Programme Name: B.Com (PA).

Programme Outcomes

- 1. Complete Professional Courses like CA, CS, CMA, MBA, M.Com, CPA and ACCA Successfully.
- 2. Become Chartered Accountant, Chief Internal Auditor, Chief Accountant, Legal Advisor, Managers and Sales representatives in multinational companies.
- 3. Acquire skill to select teaching and research as a Profession.
- 4. Became successful and socially responsible women entrepreneurs with creative ideas.
- 5. To gain knowledge that helps to face various competitive examination.

Programme Specific Outcomes

On completion of B.Com. Commerce Programme, the students would be able to

- 1. To become experts in accounting methodology and enhance professionalism through innovative practices, to be tactful in facing unforeseen demands and changes in situational roles in industry and academics.
- 2. To gain through subject knowledge from practical experiences, industrial learning and internship.
- 3. To develop entrepreneurial skills, groups activities, spirit of coordination shaping up their Professionalism.
- 4. To adopt innovative opportunities, latest technologies that helps to develop new business.
- 5. To enhance informative, and expressive computer knowledge that helps them to face the competitive examinations.
Course Outcomes

<u>SEMESTER – I</u>

Subject Code: 211R1 Course Name: MODERN BUSINESS CORRESPONDENCE AND OFFICE MANAGEMENT

Upon completion of the course, the students will be able to

- 1. To understand the basic concepts of communication and various forms of business communication including resume preparation.
- 2. Illustrate trade enquiries and orders.
- 3. To learn the skill of writing collection and circular letters.
- 4. To understand the Banking and Insurance letter writing that helps in making claims and settlements.
- 5. To gain the knowledge in report writing and recent developments in communication.

Subject Code: 21R11 Course Name: BUSINESS STATISTICS

Upon completion of the course, the students will be able to

- 1. Understand the basic statistical collection, statistical series, tabular and graphical representation of data.
- 2. Calculate the measures of central tendency, dispersion and asymmetry, correlation and regression analysis.
- 3. Apply knowledge to solve simple task using skewness and kurtosis.
- 4. Independently calculate basic statistics parameter Viz Mean, measures of dispersion correlation and co-efficient indexes.
- 5. Choose a statistical method for solving practical problems.
- 6. Highlights statistical relationships between variables in the data sets
- 7. Predict the values of strategic variables using time series and trend analysis.

Subject Code: 21AR1 Course Name: FINANCIAL ACCOUNTING-I

- 1. Describe accounting concepts, conventions and preparation of final accounts for sole trading concern.
- 2. Identify various kinds of errors, its rectification and prepare the bank reconciliation statement.
- 3. Prepare both the receipts and payment account and Income and Expenditure account.
- 4. To understand the calculation of depreciation under the various methods.
- 5. Categorize the bills, promissory notes and to journalize the transactions in a bill.

Subject Code: 21NMR1 Course Name: BASIC ACCOUNTING

Upon completion of the course, the students will be able to

- 1. Define Accounting, Concepts and conventions in preparation of journals.
- 2. Preparation of subsidy books.
- 3. Knowledge in preparation on cash and petty cash book.
- 4. Prepare ledger posting and trial balance.
- 5. Prepare the final accounts for sole trading concerns.

Subject Code: 211R2 Course Name: PRINCIPLES OF MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Know the evolution of management thought.
- 2. Study the concepts of planning in management.
- 3. Describe the functions and principle of organization.
- 4. Describe the various stating functions and elements in an organisation.
- 5. Understand the leadership qualities and its importance.

Subject Code: 21R21 Course Name: FINANCIAL ACCOUNTING II

- 1. Prepare various accounting treatment in consignment.
- 2. Prepare accounting for joint venture business.
- 3. Get knowledge of both the single and double entry system of accounting
- 4. Prepare the branch and department accounting.
- 5. Know about the calculation of interest under various methods.

Subject Code: 21R22 Course Name: MARKETING

Upon completion of the course, the students will be able to

- 1. Describe the importance of modern marketing concepts.
- 2. Illustrate various functions of marketing.
- 3. Describe the various behavioral aspects of consumers such as standardization and grading system.
- 4. Examine the classification of products based on pricing, branding and packaging system in marketing.
- 5. Categorize the various modes of transportation, distributional channels and the recent developments in marketing.

Subject Code: 21AR2 Course Name: BUSINESS MATHEMATICS

Upon completion of the course, the students will be able to

- 1. To provide students with reinforcement of mathematical computations.
- 2. To make the students to understand the process and interpretation of information to that lead to logical conclusion through common business maths.
- 3. Use the simple interest and compound interest method in solving the relevant
- problems in Financial sector.
- 4. To understand the concepts in ratio, proportion and time value.

Subject Code: 21NMR2 Course Name: ENTREPRENEURSHIP DEVELOPMENT

- 1. Understand the importance and functions of entrepreneurship.
- 2. Identify entrepreneurial Qualities and types of entrepreneurs.
- 3. Examine the various types of women entrepreneurs.
- 4. Gain the knowledge about institutional support towards entrepreneurship.

DEPARTMENT OF MATHEMATICS P.G.

DEPARTMENT OF MATHEMATICS

Outcome Based Education(OBE)

Programme Code: OPM

Programme Name: M.Sc. Mathematics

Programme Outcomes

- 1. After completing 2 years of M.Sc., program, students obtain knowledge in pure and allied Mathematics.
- 2. The Mathematical curriculum offers number of practical exposures which equips the students to face the modern challenges in Mathematics.
- 3. The PG students after the completion of the course will gain knowledge in preparing themselves for CSIR-NET / SET examination.

Programme Specific Outcomes

- 1. Students enable to apply the concept of statistics, Operation Research and Numerical Analysis in real life problems.
- 2. Number theory, Fuzzy sets and Fuzzy logic enable the students to face the real time applications.
- 3. To assimilate complex mathematical idea and arguments.
- 4. To improve own learning and performance.

Course Outcomes

Outcome Based Education(OBE)

SEMESTER - I

Subject Code: 210PM11

Course Name: ABSTRACT ALGEBRA

Upon the Completion of the course, the students will be able to

- 1Analyze counting principle and sylow's theorem and apply them for describing structures of finite groups.
- 2. Describe polynomial rings and other forms of polynomial rings.
- 3. Derive and apply Guass lemma and Eisentein criterion for irreducibility of polynomials.
- 4. Learn fundamental theorem of Galois Theory and related results.
- 5. Understand solvability by radicals and know the application of Galois Theory.

Subject Code: 210PM12 Course Name: REAL ANALYSIS

Upon the completion of the course, the students will be able to,

- 1. Know how continuity of derivatives are generalized from real line
- 2. Determine the Riemann-stieltjes integrability of a function, prove a selection of theorems and concerning integration.
- 3. Illustrate the effect of uniform convergence in the limit function with respect to continuity, differentiability and integrability.
- 4. To be able to differentiate and integrate power series to obtain new ways to represent functions.
- 5. To be able to understand the concept of integration of differential forms.

Subject Code: 210PM13 Course Name: DIFFERENTIAL EQUATION

- 1. Obtain the solutions of second order homogenous and non-homogenous linear differential equation with constant coefficients and understand the utility of Wronskian, linear independence and linear independence solutions.
- 2. Understand the concepts regular singular points and solve the Bessel equation.
- 3. Understand the concept of successive approximation, the Lipchitz condition and prove local and Non-local existence theorems.
- 4. Classify first order partial differential equations and their solutions and solve those using different methods.

5. Solve the first order linear and nonlinear PDE's by using charpits and Jacobi's method respectively.

Subject Code: 210PM14

Course Name: DIFFERENTIAL GEOMETRY

Upon the completion of the course, the students will be able to

- 1. Understand the curvature and torsion of a space curve.
- 2. Understand the idea of surface of revolution.
- 3. Illustrate Geodesics on Curves.
- 4. Identifying the concept of principal curvature and lines of curvature.
- 5. Demonstrate the concept of developable and minimal surface.

Subject Code: 21OPME1A Course Name: NUMBER THEORY AND CRYPTOGRAPHY

Upon the completion of the course, the students will be able to

- 1. Understand the properties of divisibility and congruence.
- 2. Use arithmetic functions in area of mathematics
- 3. Understand and use the theorems, Chinese reminder theorem and Lagrange's theorem.
- 4. Know the applications of reciprocity law and Diophantine equation.
- 5. Apply elementary number theory concepts in cryptography.

Subject Code: 210PME1B

Course Name: FLUID DYNAMICS

Upon the completion of the course, the students will be able to

- 1. Describe the principles of motion for fluids.
- 2. Formulate the motion of fluid element.
- 3. Use the dimensional analysis and derive dimensional numbers.
- 4. Understanding of thermo dynamics properties and processes.
- 5. Be able to analyze shock waves.

Subject Code: Subject Code: 210PMNM1

Course Name: TEACHING & RESEARCH APTITUDE PAPER –I

- 1. Able to do verbal reasoning problems.
- 2. Able to do non verbal reasoning problems
- 3. Understand and practice assertions and presumption problems.
- 4. Understand and practice classification of figures and Venn diagram.
- 5. Able to do critical thinking and decision making ability

SEMESTER - II

Subject Code: 210PM21 Course Name: LINEAR ALGEBRA

Upon the completion of the course, the students will be able to

- 1. Understand the relationship between a linear transformation and its matrix representation.
- 2. Understand the idea of algebra of polynomials.
- 3. Understand the concept of Determinants and matrix with various conditions.

4. Decompose a vector apace into a sum of invariant subspaces an a linear transformation into a direct sum of induced operators.

5. Compute the cyclic subspace generators by a vector and to construct the rational and Jordon form of linear transformation.

Subject Code: 210PM22 Course Name: MEASURE AND INTEGRATION

Upon the completion of the course, the students will be able to

1. Understand and analyze outer measure and measurable sets.

2. Be able to understand, the requirement and the concept of the Lebesque integral along its properties.

3. Be able to extend the concept of outer measure in an abstract space and integration with respect to a measure.

4. Be able to learn and apply Holder and Minkowski inequalities in Lp-spaces.

5. Do decomposition

Subject Code: 21OPM23 Course Name: GRAPH THEORY WITH APPLICATIONS

Upon the completion of the course, the students will be able to,

1. Examine the Graphs and Subgraphs.

- 2. Understand the Connectivity
- 3. Investigating the relationship between Euler Tours and Hamilton Cycles.
- 4. Explain the Directed Graphs.
- 5. Compute the Analysis of Networks.

Subject Code: 210PM24 Course Name: ADVANCED STATISTICS-1

Upon the completion of the course, the students will be able to

- 1. Investigating the relationship between Probability and Distributions.
- 2. Identify the multivariate Distributions.
- 3. Resolve the test of some special distributions.
- 4. Analyze the concept of distributions of functions of Random variables.
- 5. Apply knowledge to the limiting distributions

Subject Code: 210PME2A

Course Name: FUZZY SETS AND LOGIC

Upon the completion of the course, the students will be able to

- 1. Understand to Examine the Basic Concepts of Crisp sets and Fuzzy sets
- 2. Describe Fuzzy Operation
- 3. Understand the concept of Fuzzy Arithmetic
- 4. Determine the difference between Crisp and Fuzzy Relation.
- 5. Use Fuzzy Relation as tools to Visualize and Simplify

Subject Code: 210PME2B

Course Name: AUTOMATA THEORY AND FORMAL LANGUAGES

Upon the completion of the course, the students will be able to

- 1. Understanding the basic properties of formal languages.
- 2. Utilize the two way finite Automata.
- 3. Analyze the properties of regular sets.
- 4. Present the context free grammars.
- 5. Build the algorithm of DFA's

Subject Code: 210PMNM2

Course Name: TEACHING & RESEARCH APTITUDE PAPER - II

- 1. Understand the concept of Data Interpretations.
- 2. Classify the interpretations of data.
- 3. Learn the Information and Communication Technology.
- 4. Identify the classification of Structure of Modern Computer.
- 5. To know about the value Education.

Non-Outcome Based Education <u>SEMESTER - III</u>

Subject Code: 17PM31 Course Name: ADVANCED STATISTICS

Upon the completion of the course, the students will be able to

- 1. Recognize the binomial, Poisson, geometric, hyper geometric probability distribution and apply it appropriately.
- 2. Classify discrete, continuous word problems by their distributions.
- 3. Recognize and understand continuous, uniform, exponential probability density functions in general and central limit theorem problems normal probability distribution and apply it appropriately.

Subject Code: 17PM32 Course Name: COMPLEX ANALYSIS

Upon the completion of the course, the students will be able to

- 1. Analyze Power series to construct the function.
- 2. Apply Cauchy integral theorem and also Laurent's series about isolated singularities.
- 3. Understand a sequence of analytic function and its application.

Subject Code: 17PM33 Course Name: MECHANICS

Upon the completion of the course, the students will to able to

- 1. Describe behavior related to D'Alembert's Principle, Lagrange's equation and Hamilton's Principle
- 2. Apply the extension of Hamilton's principle conservation theorem and symmetry properties.
- 3. Solve reduction to the equivalent one body problem and the equivalent one dimensional problem and To know how to find the solution of the Kepler's problem.

Subject Code: 17PM34 Course Name: TOPOLOGY

- 1. Analyze topology on a space is determined by the collection of open sets, closed sets or by a basis of neighbourhoods at each point.
- 2. Understand the ideas of connected spaces and compact spaces.

3. Learn a Metric space to be Complete, Urysohn lemma and Metrizable spaces.

Subject Code: 17PME3A Course Name: FUZZY SETS & LOGIC

Upon the completion of the course, the students will be able to

- 1. Learn the concepts of crisp sets and fuzzy sets and apply the fuzzy logic in real life application.
- 2. Analyze difference between crisp set and fuzzy set theory.
- 3. Know fuzzy relations and understand the concept of Compatibility or tolerance relations, orderings.

Subject Code: 17PME3B Course Name: STOCHASTIC PROCESSES

Upon the completion of the course, the students will be able to

- 1. Analyze generating function and classification of distribution
- 2. Acquire knowledge on Markov chain and non homogeneous chains
- 3. Understand the poisson process and birth death process

SEMESTER - I

Subject Code: 17PM41

Course Name: ADVANCED TOPOLOGY

Upon the completion of the course, the students will be able to

- 1. Gain knowledge of the local compactness.
- 2. Analyze properties of local finiteness.
- 3. Understand Baire Spaces, point wise and compact convergent.

Subject Code: 17PM42

Course Name: COMBINATORIAL MATHEMATICS

Upon the completion of the course, the students will be able to

- 1. Describe the rules of sum and product for permutation and combination with examples.
- 2. Discuss the enumerators for permutation and Recurrence relation.
- 3. Derive the theorem for Polya's theory of counting of function and to have the knowledge about orthogonal latin squares.

Subject Code: 17PM43

Course Name: FUNCTIONAL ANALYSIS

- 1. Identify duals of inner product space and Banach space.
- 2. Understand the notion of orthogonal complement and orthogonal sets.

3. Explain main theorem for normed spaces and topological spaces.

Subject Code: 17PM44 Course Name: OPERATIONS RESEARCH

Upon the completion of the course, the students will be able to

- 1. Develop mathematical models associated with network flows and related real life applications.
- 2. Perform Critical analysis of project schedule and analyzing the cost-time trade-offs in the context of a project network.
- 3. Comprehend several non-linear programming algorithms such as, separable programming algorithm, quadratic programming algorithm, geometric programming algorithm and queuing system

Subject Code: 17PMR Course Name: PROJECT

- 1. Apply knowledge of Mathematics, in all the fields of learning including higher research and its extensions.
- 2. Innovate, invent and solve complex mathematical problems using the knowledge of pure and applied mathematics.
- 3. Explain the knowledge of contemporary issues in the field of Mathematics and applied sciences. Work effectively as an individual, and also as a member or leader in multi-linguistic and multi-disciplinary teams.

Course Outcomes

Outcome Based Education(OBE)

Programme Code: OMC

Programme Name: MCA

Subject Code: 210MC11

Course Name: MATHEMATICAL FOUNDATION OF COMPUTER APPLICATION

Upon the completion of the course, the students will be able to,

- 1. Understand the basic principles of sets and operation.
- 2. Verify the connectness of argument using logical connectives.
- 3. To understand lattices an algebraic structure. Perform minimization of Boolean functions.
- 4. Demonstrate the ability to solve problems using discrete probability.
- 5. Use graphs and trees as tools to visualize and simplify situations

Subject Code: 21OMC31 Course Name: OPTIMIZATION TECHNIQUES

- 1. Remember the concept of linear programming problem using Simplex Method.
- 2. Make out the rules of game theory for solving games and summarize the concept of inventory control.
- 3. Apply the notions of linear programming in solving transportation problems and Assignment Problem.

DEPARTMENT OF INFORMATION TECHNOLOGY P.G.

DEPARTMENT OF INFORMATION TECHNOLOGY

Programme Code: OPI

Programme Name: M.Sc. Information Technology

Programme Outcomes

- 1. Identify, design, and analyze complex computer systems and implement and interpret the results from those systems.
- 2. Design, implement and evaluate a computer-based system, or process component, to meet the desired needs within the realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- 3. Review literature and indulge in research using research based knowledge and methods to design new experiments, analyze, and interpret data to draw valid conclusions.
- 4. Select and apply current techniques, skills, and tools necessary for computing practice and integrate IT-based solutions into the user environment effectively.
- 5. Apply contextual knowledge to assess professional, legal, health, social and cultural issues during profession practice.
- 6. Analyze the local and global impact of computing on individuals, organizations, and society.

Programme Specific Outcomes

- 1. At the end of the programme, the student should be able to Understand the concepts and applications in the field of Information Technology like Web designing and development, Mobile application development, and Network and communication technologies.
- 2. Apply the learning from the courses and develop applications for real world problems.
- 3. Understand the technological developments in the usage of modern design and development tools to analyze and design for a variety of applications.
- 4. Competent and complete software professional to meet the requirement of corporate world and Industry standard to provide solutions to industry, society and business.
- 5. Analyst who can apply latest technologies who can analyze and synthesize computing systems through quantitative and qualitative techniques to solve problems in the areas of Information Technology.
- 6. A thorough and practical expert in the use of state of the art techniques for developing Software based systems.

Course Outcomes

Outcome Based Education(OBE)

SEMESTER - I

Subject Code: 210PI11 Course Name: COMPUTER ARCHITECTURE

Upon completion of the course, the students will be able to

- 1. Understand the principles of number system, binary codes and Boolean algebra to minimize logic expressions.
- 2. Describe concepts of Hardwired control and micro programmed control.
- 3. Identify various design alternatives in processor organization.
- 4. Implement the principles of I/O in computer systems, including viable mechanisms for I/O and secondary storage organization.
- 5. Illustrate the I/O and memory organization.

Subject Code: 21OPI12 Course Name: OBJECT ORIENTED PROGRAMMING WITH C++

Upon completion of the course, the students will be able to

- 1. Understand the procedural and object oriented paradigm with concepts of streams, classes, functions, data and objects.
- 2. Identify the dynamic memory management techniques using constructors, destructors, etc
- 3. Describe the concept of operator overloading and polymorphism.
- 4. Discuss on Pointers and virtual functions.
- 5. Implement the concept of Files and Templates.

Subject Code: 21OPI13 Course Name: DATA STRUCTURE AND ALGORITHMS

Upon completion of the course, the students will be able to

- 1. Understand the uses of data abstraction and linear data structures.
- 2. Describe high level of abstraction of various linear and nonlinear data structures.
- 3. Sketch the significance of trees and binary search trees.

4. Illustrate various data structure of graphs and technique for hashing Level. (Understand) Illustrate various data structure of graphs and technique for hashing Level.

5. Understand and implement various data structures along with their application of Binary Search Trees and AVL trees.

Subject Code: 21OPIE1A Course Name: DISCRETE MATHEMATICS

Upon completion of the course, the students will be able to

1. Show appropriate set, function, or relation models for analysis of practical examples and interpretation of the associated operations and terminology in context.

- 2. Indicate the recurrence relations and generating functions.
- 3. Apply the concept of Coding Theory.
- 4. Solve the problems using Logic.
- 5. Apply formal proof techniques, and explain their reasoning clearly with Lattices and Graph Theory.

Subject Code: 210PIE1B

Course Name: SYSTEM ANALYSIS AND DESIGN

- 1. Understand the system design & element System life cycle
- 2. Describe about Analyst & MIS Organization the Bases for planning
- 3. Identify the Feasibility Study Data Analysis Cost/Benefit Analysis.
- 4. Implement the Forms Design File Organization and Data Base Design.
- 5. Illustrate the Hardware/Software Selection Financial considerations in selection.

Subject Code: 210PI11P

Course Name: C++ AND DATA STRUCTURE LAB

Upon completion of the course, the students will be able to

1. Understand the procedural and object oriented paradigm with concepts of class & objects, functions and constructors.

- 2. Identify the method to implement the various Inheritance types.
- 3. Describe the concept of operator overloading, polymorphism and virtual functions.
- 4. Gain knowledge of data structure like Stack and Queue which can be applied to solve problems.
- 5. Describe the nonlinear data structure like List, trees and sorting techniques.

Subject Code: 21OPI12P Course Name: PHP PROGRAMMING LAB

- 1. Write PHP scripts using control statements.
- 2. Create PHP programs that perform operation on arrays and use various PHP Library function.
- 3. Develop PHP programs by applying various object oriented concepts.
- 4. Analyze and solve common web application tasks use form controls with validation.
- 5. Analyze and solve various database tasks using the PHP.

Subject Code: 210PINM1 Course Name: PHOTO DESIGNING

Upon completion of the course, the students will be able to

- 1. Understand the Principles of Photoshop.
- 2. Describe the concept of Editing and Retouching.
- 3. Analyze the Painting Tools, Brushes, Drawing-Eraser Tool and Pen Tools.
- 4. Implement the concept of create layer and r own Custom shapes.
- 5. Applying the text tool and wrap text.

SEMESTER - II

Subject Code: 210PI21 Course Name: OPERATING SYSTEM CONCEPTS

Upon completion of the course, the students will be able to

- 1. Identify the role of Operating System and understand the design of control unit.
- 2. Understanding CPU Scheduling, Synchronization.
- 3. Identify Deadlock Handling and Solve Deadlock Detection Problems.
- 4. Describe the role of paging, segmentation and virtual memory in operating systems.
- 5. Illustrate the file system interface.

Subject Code: 210PI22

Course Name: DIGITAL IMAGE PROCESSING

Upon completion of the course, the students will be able to

- 1. Understand the basic concepts of digital image fundamentals.
- 2. Describe concepts of Image Transformation & Filters.
- 3. Identify various design alternatives in image restoration and Segmentation techniques.
- 4. Implement the principles of Color Image Processing.
- 5. Illustrate the Morphological Image Processing Techniques.

Subject Code: 21OPI23 Course Name: DATA COMMUNICATIONS AND NETWORKING

Upon completion of the course, the students will be able to

1. Describe the functions of each layer in OSI and TCP/IP model.

- 2. Differentiate various Switching techniques and apply the concept of different Error Detection and Correction methods.
- 3. Discuss the design principles of wired and wireless communication media.
- 4. Understand the various Transport layer protocols and also differentiate IPV4 and IPV6 Protocols.
- 5. Discuss and Explain current network authentication applications, network security and their Vulnerabilities that are exploited by intentional and unintentional attacks.

Subject Code: 210PIE2A

Course Name: ANDROID PROGRAMMING

Upon completion of the course, the students will be able to

1. Develop various Android applications related to layouts and pass information between multiple activities.

- 2. Describe how to design simple GUI applications, use built-in widgets and components.
- 3. Discuss the usage of fragments in android platform. Design and develop user interfaces for the Android platform.
- 4. Design Android applications which make use of internal storage.
- 5. Rate the importance of animation techniques and graphics with simple graphical objects on a display screen.

Subject Code: 21OPIE2B Course Name: THEORY OF COMPUTATION

Upon completion of the course, the students will be able to

- 1. To use basic concepts of formal languages of finite automata Techniques.
- 2. Understand and construct finite state machines and the equivalent regular expressions.
- 3. To Construct context free grammar for various languages.
- 4. Synthesizes Context Free Grammar with specific properties.
- 5. Construct model of Turing machine and the comparison of Finite Machine with Turing Machine.

Subject Code: 210PI21P

Course Name: UNIX AND LINUX PROGRAMMING LAB

- 1. Understanding the basic set of commands and utilities in Linux/UNIX systems.
- 2. To learn the important Linux/UNIX library functions and system calls
- 3. Develop UNIX programs Using Function and AWK.
- 4. Analyze Various File and Directory Handling Commands in LINUX Programming.
- 5. Analyze System Variables Path, Home.

Subject Code: 21OPI22P Course Name: DIGITAL IMAGE PROCESSING LAB

Upon completion of the course, the students will be able to

- 1. Understand program for extract image attributes and image. Negation.
- 2. Interpret and analyze graphical representation through image transforms.
- 3. Apply image and video processing for various image smoothening applications.
- 4. Design for Morphological Operation on binary image and pseudo coloring.
- 5. Develop various compression techniques on digital images.

Subject Code: 210PINM2 Course Name: TECHNOLOGIES OF INTERNET

Upon completion of the course, the students will be able to

- 1. Describe the concept of Network Definition, Network Administrator, Network Security and Network Topologies.
- 2. Discuss the concepts of Browsers and Search Engines.
- 3. Describe on E-mail Networks and Servers, E-mail Protocols, Structure of E-mail, Attachments, E-mail Clients, web-based E- mail-Address book, Signature File.
- 4. Elaborate the concept of Computer Security and Computer Crimes.
- 5. Discuss the concept of Computer Viruses, Bombs and Worms.

Non-Outcome Based Education

SEMESTER - III

Subject Code: 17PI31 Course Name: ADVANCED SOFTWARE ENGINEERING

Upon completion of the course, the students will be able to

- 1. Understand and adhere to professional ethical standards in the system development and modification process, especially by accepting responsibility for the consequences of design decisions and design implementations.
- 2. Design applicable solutions in one or more application domains using software engineering approaches that integrate ethical, social, legal and economic concerns.
- 3. Deliver quality software products by possessing the leadership skills as an individual or contributing to the team development.

Subject Code: 17PI32 Course Name: ADVANCED JAVA

- 1. Learn the Internet Programming, using Java Applets.
- 2. Apply event handling on AWT components including windows, menus, buttons, checkboxes, text fields and scrollbars.
- 3. Make a resusable software component, using Java Bean.

Subject Code: 17PIE3A

Course Name: COMPUTER NETWORKS

Upon completion of the course, the students will be able to

- 1. Show clear understanding of the basic concepts of data communications including the key aspects of networking and their interrelationship, packet switching, circuit switching and cell switching as internal and external operations, physical structures, types, models, and internetworking.
- 2. Explain networking as it relates to the connection of computers, media, and devices (routing).
- 3. Demonstrate an understanding of the significance and purpose of protocols and standards and their key elements and use in data communications and networking.

Subject Code: 17PIE3B Course Name: MOBILE COMPUTING

Upon completion of the course, the students will be able to

- 1. Understand fundamentals of Mobile Computing Architecture and wireless communications.
- 2. Analyze security, energy efficiency, mobility, scalability, and their unique characteristics in wireless networks.
- 3. Apply knowledge of TCP/IP extensions for mobile and wireless networking.

Subject Code: 17PIE3C Course Name: ARTIFICIAL INTELLIGENCE

- 1. Demonstrate the fundamental understanding of the history of artificial intelligence (AI) and its foundations.
- 2. Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning.
- 3. Demonstrate awareness and a fundamental understanding of various applications of AI techniques in intelligent agents, expert systems, and other machine learning models.

Subject Code: 17PI12 Course Name: BIG DATA ANALYTICS

Upon completion of the course, the students will be able to

- 1. Understand the key issues in big data management and its associated applications in intelligent business.
- 2. Acquire fundamental enabling techniques and scalable algorithms like Hadoop, Map Reduce and NO SQL in big data analytics.
- 3. Interpret business models and scientific computing paradigms, and apply software tools for big data analytics.

Subject Code: 17PIE3E Course Name: CYBER SECURITY

Upon completion of the course, the students will be able to

- 1. Analyze and evaluate the cyber security needs of an organization.
- 2. Evaluate how cyber security operations are carried out.
- 3. Determine and analyze software vulnerabilities and security solutions to reduce the risk of exploitation.

Subject Code: 17PIE3F Course Name: PATTERN RECOGNITION

Upon completion of the course, the students will be able to

- 1. Explain and compare a variety of pattern classification, structural pattern recognition, and pattern classifier combination techniques.
- 2. Apply pattern recognition techniques to real-world problems such as document analysis and recognition.
- 3. Implement simple pattern classifiers, classifier combinations, and structural pattern recognizers.

Subject Code: 17PI31P Course Name: ADVANCED JAVA LAB

- 1. Apply the concepts of control structures, inheritance, method overriding in Java.
- 2. Implement the concept of interface, packages, multithreading and applets.
- 3. Learn the Java programming language in the aspects of designing, coding and implementation.

Subject Code: 17PI32P Course Name: WEB TECHNOLOGY LAB

Upon completion of the course, the students will be able to

- 1. Understand the goals and objectives of the .NET Framework. .NET is a revolutionary concept on how software should be developed and deployed.
- 2. The working knowledge of the C# programming language.
- 3. Comprehend ADO.NET and develop database applications.

SEMESTER - IV

Subject Code: 17PIPR4 Course Name: PROJECT – VIVA VOCE

- 1. Evaluate a sound technical knowledge of their selected project topic.
- 2. Undertake problem identification, formulation and solution.
- 3. Demonstrate the knowledge, skills and attitudes of a software engineer.

DEPARTMENT OF MCA P.G.

DEPARTMENT OF MCA

Programme Code: OMC

Programme Name: MCA

Programme Outcomes

- 1. Apply knowledge of computing fundamentals and domain facts. (Local)
- 2. Identify, formulate and solve complex computing problems reaching substantiated conclusions. (National)
- 3. Design and evaluate solutions for complex computing problems with appropriate Consideration. (Global)
- 4. Use research-based knowledge and research methods for analysis and interpretation of data, and synthesis of the information to provide valid conclusion. (National)
- 5. Apply computing, management principles to manage Multidisciplinary projects (Global)
- 6. Commit to professional ethics and cyber regulations for professional computing practices. (Global)

Programme Specific Outcomes

On completion of the MCA Programme, students will be able to

- 1. Develop an ability to apply knowledge in the computing discipline (Local)
- 2. Develop ability to design and conduct experiments, as well as interpret data. (National)
- 3. Develop ability to use current technologies, skills and models for computing practice (Global)
- 4. Develop techniques to enhance ability for lifelong learning (Global)
- 5. Make graduates understand cross cultural, societal, professional, legal and ethical issues prevailing in industry (National)

Course Outcomes Outcome Based Education(OBE)

SEMESTER-I

Subject Code: 21OMC11 Course Name: MATHEMATICAL FOUNDATION OF COMPUTER APPLICATION

Upon completion of the course, the students will be able to

1. Understand the basic principles of sets and operation

- 2. Verify the connectness of argument using logical connectives
- 3. To understand lattices an algebraic structure. Perform minimization of Boolean functions
- 4. Demonstrate the ability to solve problems using discrete probability
- 5. Use graphs and trees as tools to visualize and simplify situations

Subject Code: 21OMC12 Course Name: OBJECT ORIENTED PROGRAMMING IN C++

Upon completion of the course, the students will be able to

1. Understand to Examine the Basic Concepts of C++ language.

2. Identify how Functions, Classes and Objects used in C++.

3. Apply the Knowledge to Develop C++ Programs by implementing Constructor, Destructor and Overloading Concepts.

4. Apply Knowledge to Construct C++ Programs using Inheritance, Polymorphism and Virtual Functions.

5. Analyze the concept of Files and Exception Handling.

Subject Code: 21OMC13 Course Name: RELATIONAL DATABASE MANAGEMENT SYSTEM

Upon completion of the course, the students will be able to

1. Understand to Examine the Basic Concepts Database design and relational database.

2. Discover how Functions, Procedures, Trigger and Recursive Queries used in SQL.

3. Apply the Knowledge to Develop RDBMS by implementing Entity relationship design and decomposition using functional dependencies.

4. Apply Knowledge to Construct RDBMS Programs using Indexing, hashing and Query Optimization.

5. Analyze the concept of Transaction and Recovery System.

Upon completion of the course, the students will be able to

1. Analyze the problem statements and various ADTs such as List, Stack and Queue.

2. Collect knowledge of non linear data structure like trees and hash which can be applied to solve problems.

- 3. Describe the computational efficiency of various sorting techniques.
- 4. Design and implement the various graph operations and its application.
- 5. Analyze the complexity of different algorithms to solve real life problems.

Subject Code: 21OMCE1A Course Name: OPERATING SYSTEMS

Upon completion of the course, the students will be able to

- 1. Remembering the basic concepts of computers and operating system .
- 2. Understand the operating system process management and scheduling algorithm.
- 3. Learning the synchronization and deadlock concepts.
- 4. Identifying the memory management and virtual memory management.
- 5. Analyzing the concept of storage management

Subject Code: 21OMCE1B Course Name: ENTERPRISE RESOURCE PLANNING

Upon completion of the course, the students will be able to

- 1. Understand to Examine the Basic Concept of contemporary and forward-looking on the theory and practice of Enterprise Resource Planning Technology.
- 2. Identify how ERP is secure the data and to expand the market places.
- 3. Apply the ERP package software for various transition strategies.
- 4. Apply Knowledge to Construct implementation life cycle of ERP and select best ERP vendors and Consultants
- 5. Explore the present and future trends for ERP business

Subject Code: 21OMC11P Course Name: DATA STRUCTURES AND ALGORITHM USING C++ LAB

Upon completion of the course, the students will be able to

1. Understand to Examine the Basic Concepts of Object Oriented Programming and its features

2. Identify how Functions ,Classes and Objects in C++.

3. Apply the Knowledge to Develop C++ Programs by implementing Constructor , Destructor and Overloading Concepts.

4. Analyze to Construct C++ Programs using Inheritance, Polymorphism and Virtual Functions.

5. Analyze the Concept of Files and Exception Handling.

Subject Code: 21OMC12P Course Name: RDBMS LAB

Upon completion of the course, the students will be able to

1. Understand to Examine the Basic Concepts of Object Oriented Programming and its features.

- 2. Identify how Functions, Classes and Objects in C++
- 3. Apply the Knowledge to Develop C++ Programs by implementing Constructor, Destructor and Overloading Concepts.
- 4. Analyze to Construct C++ Programs using Inheritance, Polymorphism and Virtual Functions.
- 5. Analyze the Concept of Files and Exception Handling.

Subject Code: 21OMCNM1 Course Name: FRONT END WEB DEVELOPMENT

Upon completion of the course, the students will be able to

- 1. Understand the basic concept of HTML and Tables.
- 2. Learn and design the various styles of CSS.
- 3. Identify the concept of statements, operators and arrays in JavaScript.
- 4. Write a program using built in objects and cookies.
- 5. Analyze data validation with DHTML.

SEMESTER –II

Subject Code: 21OMC21

Course Name: OPEN SOURCE TECHNOLOGY

- 1. Explain the Basic Data types and variables of PHP
- 2. Classify various Functions and String Manipulation
- 3. Construct Array concept and Numerical Functions
- 4. Apply SQL Database design ,Replication and Recovery
- 5. Build Form Submission to a Database

- 1. To Understand the basic concepts of Data Types, Variables and Array and Classes in Java.
- 2. To identify Packages and Exception Handling in Java.
- 3. To Apply the Concepts of String Handling concepts and Networking.
- 4. To develop Event Handling and AWT Controls in Java.
- 5. Analyze the Swing and Java Beans in Java

Subject Code: 21OMC23

Course Name: SOFTWARE ENGINEERING

Upon completion of the course, the students will be able to

1. Understand to Examine the Basic Concepts Software engineering.

2. Identify how estimation, scheduling and risk is to used in Software engineering

3. Apply the Knowledge to Develop software by implementing requirement and design engineering principles

4. Apply Knowledge to Construct software using Testing strategies and conventional applications.

5. Analyze the concept of software quality improvements and SCM process.

Subject Code: 210MCE2A

Course Name: DATA MINING AND DATA WAREHOUSING

Upon completion of the course, the students will be able to

- 1. Understand the basic concepts of Data mining and Data Warehouse.
- 2. Classify the various methods of data preprocessing and frequent itemset mining.
- 3. Apply the Basic and Advanced methods in classification.
- 4. Make use of various methods of Clustering.
- 5. Examine the various types of Outlier Detection and Data Mining Applications.

Subject Code: 21OMCE2B

Course Name: ARTIFICIAL INTELLIGENCE

- 1. Understand the importance, the basic concepts and the Applications of AI.
- 2. Apply various search techniques used for Intelligent systems.
- 3. Efficiently represent the various knowledge representation schemes used for intelligent systems.
- 4. Apply some statistical like Bayes Theorem and Soft computing techniques (like ANN and GA) to solve the AI problem.
- 5. Understand the phases and the architecture of various advanced system like NLP based system and Expert System.

- 1. Develop the basic Programs using strings and arrays.
- 2. Make use of functions and OOPS concepts in PHP.
- 3. Write Programs for files and form validation.
- 4. Construct different types of Database programs in PHP.
- 5. Build the programs using web applications.

Subject Code: 21OMC22P Course Name: ADVANCED JAVA PROGRAMMING LAB

Upon completion of the course, the students will be able to

- 1. Develop the basic Programs in Java.
- 2. Make use of Overloading and Overriding methods in Java.
- 3. Write Programs for various types of Inheritance.
- 4. Construct different types of APPLET and AWT Programs in Java.
- 5. Build various Packages of Java.

Subject Code: 21OMCNM2 Course Name: E- COMMERCE

Upon completion of the course, the students will be able to

- 1. Discuss the basic concepts of E-Commerce.
- 2. Describe the architecture and technologies of E-Commerce.
- 3. Illustrate the various business and process models.
- 4. Analyse the B2B business models.
- 5. Evaluate the Impacts of E-Commerce.

Non-Outcome Based Education

SEMESTER - III

Subject Code: 18MC31 Course Name: OPTIMIZATION TECHNIQUES

- 1. Formulate and solve Mathematical Models for the real world problems.
- 2. Understand the Transportation Model, Traveling Salesman and able to find Optimal Solution.
- 3. Interpret the Major Limitations and Capabilities of deterministic Operations Research Modeling as Applied to Problems in industry or government.
- 4. Deal with real world problems in Network Analysis, Project Management, for their Optimal Solutions

5. Solve the various Non- Linear Programming Problems.

Subject Code: 18MC32 Course Name: PROGRAMMING IN JAVA

Upon completion of the course, the students will be able to

- 1. Understand the use of OOPs concepts.
- 2. Solve real world problems using OOPs techniques.
- 3. Understand the use of Abstraction, Packages and Interface in Java.
- 4. Develop and understand Exception handling, Multithreaded applications with synchronization.
- 5. Design GUI based applications and develop applets for web applications.

Subject Code: 18MC33

Course Name: DATA COMMUNICATIONS AND NETWORKING

Upon completion of the course, the students will be able to

- 1. Understand basic computer network technology.
- 2. Explain Data Communications System and its components.
- 3. Identify the different types of network topologies and protocols.
- 4. Enumerate the layers of the OSI model and TCP/IP. Explain the functions of each layer.
- 5. Differentiate the types of network devices and their functions within a network.

Subject Code: 18MC34 Course Name: SOFTWARE ENGINEERING

- 1. Understand the analysis and design of complex systems.
- 2. Apply software engineering principles and techniques to develop, maintain and evaluate largescale software systems.
- 3. Produce efficient, reliable, robust and cost-effective software solutions.
- 4. Perform independent research and analysis and to work as an effective member or leader of software engineering teams.
- 5. Manage time, processes and resources effectively by prioritizing competing demands to Achieve personal and team goals

Subject Code: 18MC31P Course Name: PROGRAMMING IN JAVA LAB

Upon completion of the course, the students will be able to

- 1. Implement Object Oriented programming concept using basic syntaxes of control Structures, Strings and Function for developing skills of logic building activity.
- 2. Identify Classes, Objects, Members of a Class and the relationships among them .
- 3. Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved and the use of different exception handling mechanisms.
- 4. Describe common abstract user interface components to design GUI in Java using Applet & AWT along with response to events
- 5. Design and develop complex Graphical user interfaces using principal Java Swing classes based on MVC architecture

Subject Code: 18MC32P Course Name: LINUX PROGRAMMING LAB

Upon completion of the course, the students will be able to

- 1. Implement the basic commands of Linux Operating System and can write shell scripts
- 2. Apply and change the Ownership and file Permissions using advance Linux Commands.
- 3. Create File Systems and Directories and operate them .
- 4 Set Processes Background and foreground Etc..by Fork() system Calls.
- 5. Evaluate Shared Memory Segments, Pipes ,Message Queues and can exercise Interprocess Communication.

SEMESTER - IV

Subject Code: 18MC41 Course Name: OPEN SOURCE TECHNOLOGY

- 1. Understand the concept of server-side scripting, variables, control structures in PHP.
- 2. To study the details of functions, string handling and arrays in PHP.
- 3. Illustrate the concept of number handling, learning sql and data base administration and design.
- 4. To perform database queries, integrating web forms and databases
- 5. Write session control PHP code for a website and coding for cookies.
Subject Code: 18MC42 Course Name: MOBILE COMPUTING

Upon completion of the course, the students will be able to

- 1. Understand cellular concepts like frequency reuse, hand-off and Interference.
- 2. Apply knowledge of reflection, diffraction and scattering to calculate link budget using path loss models.
- 3. Present the importance of Equalization and different diversity techniques.
- 4. Analyze the concepts of GSM., channels, coding techniques, data transmission, services.
- 5. Apply the fundamentals of CDMA., channels, coding techniques, data transmission, services.

Subject Code: 18MC43 Course Name: PRINCIPLES OF COMPILER DESIGN

Upon completion of the course, the students will be able to

- 1. Acquire knowledge about various system software and role in programming environment.
- 2. Apply lexical analyzer using NFA and DFA.
- 3. Implement various parsing techniques.
- 4. Understand the basic issues of Code optimization, Register allocation and Assignment methods their limitations and benefits.
- 5. Create a Compiler for a small programming language.

Subject Code: 18MCE4A Course Name: CLOUD COMPUTING

- 1. Define Cloud Computing and memorize the different Cloud service and deployment models
- 2. Describe the importance of virtualization along with their technologies.
- 3. Use and examine different cloud computing services and analyze the components of open stack & and Google Cloud platform and understand Mobile cloud Computing .
- 4. Understand components of Amazon web service.
- 5. Design and develop backup strategies for cloud data based on features.

Subject Code: 18MCE4B Course Name: SOFT COMPUTING

Upon completion of the course, the students will be able to

- 1. Comprehend the fuzzy logic and the concept of fuzziness involved in various systems and fuzzy set theory.
- 2. Understand the concepts of fuzzy sets, knowledge representation using fuzzy rules, approximate reasoning, fuzzy inference systems, and fuzzy logic
- 3. Apply the fundamental theory and concepts of neural networks, Identify different neural network architectures, algorithms, applications and their limitations
- 4. Infer appropriate learning rules for each of the architectures and learn several neural network paradigms and its applications
- 5. Reveal different applications of these models to solve engineering and other problems.

Subject Code: 18MCE4 Course Name: ENTERPRISE RESOURCE PLANNING

Upon completion of the course, the students will be able to

- 1. Make basic use of Enterprise software, and its role in integrating business functions
- 2. Analyze the strategic options for ERP identification and adoption.
- 3. Understand and apply the concepts of ERP Manufacturing Perspective and ERP Modules.
- 4. Design the ERP implementation strategies.
- 5. Create re engineered business processes for successful ERP implementation

Subject Code: 18MC41P Course Name: OPEN SOURCE TECHNOLOGY LAB

- 1. Implement various applications using build systems
- 2 .Understand the installation of various packages in open source operating systems
- 3. Explore different open source technology like Linux, PHP & MySQL with different packages.
- 4. Execute Linux commands for programming.
- 5. Write PHP programs with MySQL connection

Subject Code: 18MC42P Course Name: MOBILE COMPUTING LAB

Upon completion of the course, the students will be able to

- 1. Experiment on Integrated development environment for Android application development.
- 2. Design and Implement User Interfaces and Layouts of Android app.
- 3. Use Intents for activity and broadcasting data in Android app.
- 4. Design and Implement Database Application and content providers.
- 5. Develop Android App with security feature

SEMESTER – V

Subject Code: 18MC51 Course Name: WEB TECHNOLOGIES

Upon completion of the course, the students will be able to

- 1. Develop a dynamic web page by the use of JavaScript and DHTML.
- 2. Create simple websites using HTML, JavaScript and CSS.
- 3. Write a well formed and valid XML documents
- 4. Develop server-side Java application called JSP to catch form data sent from from client and store it on database
- 5. Programming web pages with JavaScript

Subject Code: 18MC52 Course Name: CRYPTOGRAPHY& NETWORK SECURITY

- 1. Provide security of the data over the network.
- 2. Do research in the emerging areas of cryptography and network security.
- 3. Implement various networking protocols.
- 4. Protect any network from the threats in the world.
- 5. Analyze and implement public key algorithms like RSA, Diffie-Hellman Key Exchange mechanism, the message digest of a text using the SHA-1 algorithm.

Subject Code: 18MC53 Course Name: DATA MINING & DATA WAREHOUSING

Upon completion of the course, the students will be able to

- 1. Understand various steps in KDD Process ,major issues in Data Mining
- 2. Preprocess the data for mining applications
- 3. Apply the association rules for mining the data
- 4. Design and deploy appropriate classification techniques
- 5. Cluster the high dimensional data for better organization of the data

Subject Code: 18MCE5A Course Name: BIG DATA ANALYTICS

Upon completion of the course, the students will be able to

- 1. Understand the key issues in big data management and its associated applications in intelligent business and scientific computing.
- 2. Acquire fundamental enabling techniques and scalable algorithms like Hadoop, Map Reduce and NO SQL in Big Data analytics
- 3. Interpret business models and scientific computing paradigms, and apply software tools for Big Data analytics.
- 4. Achieve adequate perspectives of Big Data analytics in various applications like Recommender Systems, social media applications etc.
- 5. Demonstrate the understanding of storing and managing Big Data using HDFS, Pig and Hive tools

Subject Code: 18MCE5B Course Name: DIGITAL IMAGE PROCESSING

- 1. Review the fundamental concepts of digital image processing system.
- 2. Analyze images in the frequency domain using various transforms.
- 3. Evaluate the techniques for image enhancement and image restoration.
- 4. Categorize various compression techniques and interpret Image compression standards.
- 5. Interpret image segmentation and representation techniques.

Subject Code: 18MCE5C Course Name: INTERNET OF THINGS

Upon completion of the course, the students will be able to

- 1. Identify the requirements for the real world problems.
- 2. Conduct a survey of several available literatures in the preferred field of study.
- 3. Study and enhance software/ hardware skills.
- 4. To report and present the findings of the study conducted in the preferred domain.
- 5. Demonstrate an ability to work in teams and manage the conduct of the research study.

Subject Code: 18MC51P Course Name: WEB TECHNOLOGY LAB

Upon completion of the course, the students will be able to

- 1. Develop a dynamic webpage by the use of JavaScript and DHTML
- 2. Write a Well Formed / Valid XML Document.
- 3. Format and Languages used in model web pages such as HTML, XHTML, CSS and XML.
- 4. Design a Serve-Side Java Application called Servlet to catch form data sent from Client, Process it and store it on database.
- 5. Compose a Server-Side Java aapplication called JSP to catch form Data sent from Client and store it on Database.

Subject Code: 18MC52P Course Name: DATA MINING & DATA WAREHOUSING LAB USING OPEN SOURCE TOOLS

- 1. Understand the functionality of the various data mining and data warehousing component.
- 2. Apply the various data mining and data warehousing models .
- 3. Explain the analyzing techniques of various data.
- 4. Describe different methodologies used in data mining and data ware housing.
- 5. Compare different approaches of data ware housing and data mining with various technologies.

<u>SEMESTER – VI</u>

Subject Code: 18MCPR6 Course Name: PROJECT - VIVA VOCE

- 1. Understand and analyse the project.
- 2. Apply the knowledge of latest trends in design/simulation and fabrication of the project.
- 3. Relate the ideas while executing the project.
- 4. Conduct test to examine the performance of the project.
- 5. Prepare Project Report and power point presentation for seminar in team to enhance his writing skills and oral communication.

DEP&RTMENT OF COMMERCE P.G.

DEPARTMENT OF COMMERCE

Programme Code: OPD

Programme Name:M.Com(Computer Applications)

Programme Outcomes

- 1. Complete Teaching Education Course like B.Ed. Eligibility Test, NET and SET successfully.
- 2. Acquire skill to select teaching and research as a Profession.
- 3. Became Project Manager, Web Designer and HR Leader in Multinational Companies.
- 4. To gain knowledge that helps to face various competitive examination.

Programme Specific Outcomes

On completion of M.Com (CA) Commerce Programme, the students would be able to

- 1. To become experts in accounting methodology and enhance professionalism through innovative practices, to be tactful in facing unforeseen demands and changes in situational roles in industry and academics.
- 2. To gain through subject knowledge from practical experiences, industrial learning and internship.
- 3. To develop entrepreneurial skills, groups activities, spirit of coordination shaping up their professionalism.
- 4. To adopt innovative opportunities, latest technologies that helps to develop new business.
- 5. To enhance informative and expressive computer knowledge that helps them to face various competitive examination.

<u>Course</u> Outcomes

Outcome Based Education(OBE)

<u>SEMESTER – I</u>

Subject Code: 210PD11 Course Name: RESEARCH METHODOLOGY

Upon completion of the course, the students will be able to

- 1. Display the Concepts Relating to Business research, Types and Process
- 2. Classify the Research Problem and Drew the Research Design
- 3. Prepare Questionnaire and Interview Schedule and study Pretest and Pilot study.
- 4. Prepare a data analysis and Hypothesis testing procedures
- 5. Interpret and Conclude a Research Report

Subject Code: 21OPD12 Course Name: MARKETING MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Gaining the knowledge of marketing concept and Importance of marketing
- 2. Develop a new product and to apply the pricing strategies.
- 3. Understand the channels of Distribution for marketing of products.
- 4. Apply the various promotional strategies in marketing.
- 5. Classify the Advertising copy, preparing the Digital Advertising.

Subject Code: 210PD13 Course Name: ADVANCED CORPORATE ACCOUNTING

- 1. Understanding Accounting concept for Banking and Insurance companies.
- 2. Solve accounting aspects of Amalgamations, Absorption and Reconstruction and Liquidation of companies
- 3. Equip the Liquidators final statement of accounts
- 4. Learn various types of Indian Accounting standards.
- 5. Examine holding companies

Subject Code: 21OPDE1A Course Name: OBJECT ORIENTED PROGRAMMING WITH C++

Upon completion of the course, the students will be able to

- 1. Identify the basic concepts of object oriented programming.
- 2. Illustrate Functions, Classes and Objects works in object oriented programming.
- 3. Develop Programs by implementing Constructor, Destructor and Overloading Concepts.
- 4. Demonstrate Inheritance concepts.
- 5. Infer the concept of Pointers, Polymorphism and Virtual Functions.

Subject Code: 210PDE1B Course Name: MULTIMEDIA

Upon completion of the course, the students will be able to

- 1. Learn the basics concepts of Multimedia.
- 2. Identify the basic hardware and software requirements for multimedia development and playback.
- 3. Assemble various media (audio, type, photographs, graphics and video) into a timeline.
- 4. Understand the Storage system for multimedia.
- 5. Face Multimedia in the Real World using its information and systems.

Subject Code: 210PD1P

Course Name: PROGRAMMING IN C++ LAB

Upon completion of the course, the students will be able to

1. Understand to Examine the Basic Concepts of Object Oriented Programming and its features

2. Identify how Functions, Classes and Objects in C++

3. Apply the Knowledge to Develop C++ Programs by implementing Constructor,

Destructor and Overloading Concepts

- 4. Analyze to Construct C++ Programs using Inheritance.
- 5. Understand the concept of Polymorphism and Virtual Functions

Subject Code: 210PDNM1

Course Name: INTERNET AND ITS APPLICATIONS

- 1. Know how the Internet Connection is made and Learn the Internet service features.
- 2. Learn about browser and its types.
- 3. Internet Addressing with Domain name and URL.
- 4. Study Internet protocol with IP Address.
- 5. Understand about E-mail and finding E-mail Address.

SEMESTER – II

Subject Code: 21OPD21 Course Name: ADVANCED BUSINESS STATISTICS

Upon completion of the course, the students will be able to

- 1. Calculate and interpret measures of central tendency for a set of data.
- 2. Investigating the relationship between two quantitative variables.
- 3. Resolve the test of hypothesis.
- 4. Compute the Analysis of variance and F-test.
- 5. Examine the non-parametric test.

Subject Code: 21OPD22 Course Name: COST AND MANAGEMENT ACCOUNTING

Upon completion of the course, the students will be able to

- 1. Prepare the accounting for cost sheet.
- 2. Gain the knowledge an application of processing.
- 3. Prepare cash flow and fund flow statement under AS3.
- 4. Understand the application of marginal costing and standard costing techniques.

Subject Code: 210PD23

Course Name: HUMAN RESOURCE MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Understand the Recruitment and Selection Process in management.
- 2. To know the methods of training.
- 3. Describe the concepts of Performance Appraisal Technique.
- 4. To know the functions of Trade Union.
- 5. To understand the various system of Human Resource Management.

Subject Code: 210PDE2A

Course Name: WEB DESIGNING

- 1. Understand to the Basic Concepts Internet.
- 2. Be able to use the HTML programming language and Runs the page he/she has designed using HTML codes.
- 3. Equip basic JavaScript.
- 4. Develop CSS effectively to create well organized, styled web page using DHTML.
- 5. Learn the basics of creating XML documents, transforming XML documents, and validating XML documents.

Subject Code: 21OPDE2B Course Name: MANAGEMENT INFORMATION SYSTEM

Upon completion of the course, the students will be able to

- 1. To understand the importance of information system for all management levels by describing the differences between various types of information systems.
- 2. Gain the knowledge of Types of Information System and Elements of System.
- 3. Recognize and evaluate linkages between end user requirements and underlying hardware and software technologies.
- 4. Describe the advances in networking, data communications and the Internet.
- 5. Explain the benefits and limitations of the steps and deliverables used in information systems projects.

Subject Code: 21OPD2P Course Name: WEB DESIGNING LAB

Upon completion of the course, the students will be able to

- 1. Understand to the Basic Concepts Internet.
- 2. Be able to use the HTML programming language and Runs the page he/she has designed using HTML codes.
- 3. Implement basic JavaScript.
- 4. Write CSS effectively to create well organized, styled web page using DHTML.
- 5. Learn the basics of creating XML documents, transforming XML documents, and validating XML documents.

Subject Code: 21OPDNM2 Course Name: DESK TOP PUBLISHING

- 1. Outline the basics of DTP by choosing the paper quality, color and fonts.
- 2. Working with PageMaker window and Text window.
- 3. Understand the Master pages with adding Text and Auto Flow.
- 4. Learn the Photoshop program window.
- 5. Able to resize, edit and change the resolution of the images in Photoshop.

Non-Outcome Based Education

SEMESTER - III

Subject Code: 17PC31 Course Name: ADVANCE CORPORATE ACCOUNTING

Upon completion of the course, the students will be able to

- 1. Enable the students to understand about amalgamation absorption and external reconstruction.
- 2. To make them aware about accounting procedures of banking companies and insurance companies.
- 3. Enable the students to gain an idea of liquidation of companies.
- 4. To introduce and develop knowledge of holding companies and subsidiary companies accounts.

Subject Code: 17PC32 Course Name: DIRECT TAX

- 1. Define Income tax act Preparing Residential status and various head of income calculating Income from salary.
- 2. Prepare II and III head of income from House property and profit and loss a/c.
- 3. To explain the head of capital gain and Income from other hand.
- 4. To explain all set off and deduction of gross total income.
- 5. To know the Assessment of income from individual.
- 6. To know the Assessment of wealth tax.

Subject Code: 17PCE3A Course Name: FINANCIAL MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Analyze financial statement by using standard financial ratios of liquidity, activity, debt, profitability and market values.
- 2. Apply techniques to project financial statement for forecasting long term financial needs.
- 3. Apply future values, present values concepts to single sums, mixed stream and annuities.
- 4. Apply time value of money, risk and return concepts.
- 5. Identify relevant cash flows for capital budgeting projects and apply various methods to analyze projects.
- 6. Explain the concept of leverage, the benefits and the costs associated with department financier.
- 7. Identify the various long term sources of funds for a firm.

Subject Code: 17PC33 Course Name: DATABASE MANAGEMENT SYSTEM

Upon completion of the course, the students will be able to

- 1. Identify the overview of Database Systems.
- 2. An ability to design database using ER Model.
- 3. Familiarize Integrity constraints, Relational and Logical database design.
- 4. Able to write SQL commands using basic queries, Triggers and Aggregate operators.
- 5. Understand the deep knowledge of storing data disks and files in DBMS.

Subject Code: 17PC3P Course Name: ORACLE LAB

- 1. Create Data Definition Language with Constraint.
- 2. Create DML.
- 3. To build in Queries in various function Character Function, Numeric Function, and Date Function.
- 4. To create SQL using Logical operator and Function.
- 5. Create PL/SQL Program.
- 6. Create Program for exceptional Handling.

SEMESTER - IV

Subject Code: 17PC41 Course Name: RESEARCH METHODOLOGY

Upon completion of the course, the students will be able to

- 1. Introduce the research The role of Research, Research process overview.
- 2. Perform research design, field research and survey research.
- 3. Explain sampling design and determination of sample design.
- 4. Describe methods, quantitative methods of data collection and survey methods of data collection.
- 5. Discuss the processing and analysis of data.
- 6. Explain the formulation of the research hypotheses –the importance of problems and hypotheses.
- 7. Describe the abstract, introduction, methodology, results, discussion, references and appendices.

Subject Code: 17PC42 Course Name: INDIRECT TAX

Upon completion of the course, the students will be able to

- 1. To understand the indirect tax and commercial of taxation.
- 2. To acquire the knowledge of central excise act 1944.
- 3. To understand customers act 1962.
- 4. To evaluate GST Procedures and valuation of taxable in GST.
- 5. To explain taxable services and valuation of taxable service.

Subject Code: 17PCE4A / 17CE4B

Course Name: SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT / INTERNATIONAL MARKETING

- 1. To understand security analysis and practical background in field of investment.
- 2. To create awareness about risk and return of different investment.
- 3. To enlighten the evolution of securities and derivatives, valuing equity and dept. instruments measuring the portfolio performances.
- 4. To make them understand the investments decision and portfolio performances.
- 5. To make the students eligible for employment in teaching profession and employable in corporate sector including confidence among the students to appear for competitive examination.

Subject Code: 17CE4B Course Name: INTERNATIONAL MARKETING

Upon completion of the course, the students will be able to

- 1. To acquaint the students with the knowledge of Export and Import trade.
- 2. To understand the students to learn the contribution of various institutions in the promotion of export.
- 3. To help the students to know about the export pricing and distribution of marketing.

Subject Code: 17PC43 Course Name: SOFTWARE ENGINEERING

Upon completion of the course, the students will be able to

- 1. Understand the deep knowledge of software engineering process and process models.
- 2. Develop an ability to measure the software and identify the metrics in the software process.
- 3. Acquire strong fundamental knowledge in software quality and analyze its concepts and principles.
- 4. Understand on quality control and how to ensure good quality software.
- 5. Discuss various software testing issues and solutions in software unit test, integration, validation and system testing.

Subject Code: 17PCPR4 Course Name: PROJECT

- 1. Understand how to develop java., Dot net project.
- 2. Use an integrated development environment to write, compile and run the project.
- 3. Use a version control system to track source code in a project

DEPARTMENT OF ENGLISH P.G.

DEPARTMENT OF ENGLISH - PG

Programme Code: OPE

Programme Name:M.A.(English)

Programme Outcomes

- 1. Be eligible to pursue further higher studies and research in the field, say Ph.D. (National)
- 2. Evolve as a creative writer in English with phenomenal writing skills. (Global)
- 3. Open themselves to varied area of career prospects in journalism, teaching profession, Communicative English Training, Civil services, Banking; as Translators, Proof Reader, Linguist, Public Relations Officer and more, either nationally or internationally. (National)
- 4. Visualize life and life's experience in a more aesthetic and positive way. (Global)
- 5. Be eligible to become competent student who would further wish to pursue a carrier in English language teaching. (Global)

Programme Specific Outcomes

On completion of M.A English Programme, the students would be able to

- 1. Hone their critical thinking skills by contextualizing issues based on historical, political, cultural and social contexts. (Global)
- 2. Improve their ability to research and analyze complex written information. (National)
- 3. Learn the interconnectivity of literature with other arts like Psychology, Sociology and Philosophy. (Global)
- 4. Aware of texts and their historical and cultural context in English. (Global)
- 5. Understand the issues of Gender and Sense of identity. (National)
- 6. Apply various approaches and literary theories to the work of art. (Global)
- 7. Comprehend varieties of English language and develop a writing style of their own. (National)

Course Outcomes

Outcome Based Education(OBE)

<u>SEMESTER – I</u>

Subject Code: 21OPE11 Course Name: LANGUAGE AND LINGUISTICS (Global)

Upon the completion of the course the students will be able to

1. Enumerate the nuances and hybrid nature of the English Language

- 2. Discover the applications to comprehend the socio-cultural influences on Language
- 3. Identify the different types of linguistic changes taking place in the language across the time and acquire multiple layers of meanings.
- 4. Comment the structure of the language and use the language properly.

5. Predict the functionality of the language ,to learn its working principles used in literary discourses.

Subject Code: 21OPE12 Course Name: BRITISH LITERATURE (Global)

Upon the completion of the course the students will be able to

- 1. Recall in-depth knowledge and understanding of the religious, socio- intellectual and cultural thoughts of the British nationality.
- 2. Describe and identify the different styles and associate them with the period.
- 3. Identify and compile the importance of language and integrity of character in human life.
- 4. Classify the skill of imagination and creativity.
- 5. Evaluate and focus on the research skills and reproduce it in writing.

Subject Code: 21OPE13 Course Name: INDIAN WRITING IN ENGLISH

(Global)

Upon the completion of the course the students will be able to

1. Enumerate the Indian Tradition exhibited by the poets and how they remain distinctive in drafting and crafting poetry.

- 2. Identify the aesthetic and utilitarian handling of prose in the hands of Indian writers.
- 3. Discuss the writings of Playwrights of India and their ideals and the impact of Indian Plays in English.
- 4. Comment the works of the Indian novelists and their effects.
- 5. Analyse the critical Insights of the authors and their works.

Subject Code: 210PE14

Course Name: ELT & ICT (Global)

Upon the completion of the course the students will be able to

- 1. Identify English Language Teaching and Learning Skills in a more technical and pedagogical way.
- 2. Discover communicative competency and proficiency.
- 3. Construct a creative mindset of how to psychologically inspire the young learners.
- 4. Focus on professionalism in presentation and negotiation skills to meet the national and international standards.
- 5. Prioritize leadership skills of starting their own language laboratory, online learning platform, entrepreneurial efforts of building business through English Language Teaching and Learning.

Subject Code: 210PEE1A

Course Name: WORLD SHORT STORIES

Upon the completion of the course the students will be able to

- 1. Describe the origin of short story and the types of short stories.
- 2. Express the elements of short story in American writings.
- 3. Apply the knowledge of western ideas.
- 4. Analyzing the coherence of the British short story and their culture that are explained through the writers.
- 5. Agree the above mentioned techniques and create a short story

Subject Code: 210PEE1B

Course Name: AFRICAN-AMERICAN LITERATURE

Upon the completion of the course the students will be able to

- 1. Identify the racial discrimination and social segregation encountered by African American people.
- 2. Discover role of spirituality and the role of tradition upon African American Literature.
- 3. Construct and gain awareness about African contemporary thought and forms of literary expression.
- 4. Focus on the unique literary voice of African American Writers
- 5. Prioritize on developing the students own research questions and hypotheses based on diasporic culture.
- 6.

Subject Code:210PENM1

Course Name: GRAMMAR FOR COMMUNICATION

- 1. Identify nouns, concord, determiners and adjectives.
- 2. Rephrase the grammatical patterns using the various forms of verbs.
- 3. Develop the uses of tenses, modals, auxiliaries.
- 4. Distinguish prepositions, questions, active/ passive form.
- 5. Recommend relative clauses while organizing information.

<u>SEMESTER – II</u>

Subject Code: 210PE21

Course Name: AMERICAN LITERATURE (Global)

Upon the completion of the course the students will be able to

- 1. Identify the unique American culture and prominent literary figures emerged through literature.
- 2. Explain awareness about various unique post colonial themes like transcendentalism,
- existentialism, surrealism, psychoanalysis, alienation and more.
- 3. Discover the psychological and spiritual dogmas, conflicting ideologies and tensions of American life through literary portrayals.
- 4. Analyze the eminent and august writers of the era to explore about the American culture, life style and emotions.
- 5. Evaluate and distinguish the lexical differences and similarities of british and American writings.

Subject Code: 21OPE22 Course Name: LITERARY THEORY AND CRITICISM (Global)

Upon the completion of the course the students will be able to

1. Relate with representative literary and cultural texts within a significant number of historical, geographical, and cultural contexts.

- 2. Summarize the critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres.
- 3. Apply, interpret and describe the critical ideas, values, and themes that appear in literary and cultural texts and understand the way these ideas, values, and themes inform and impact culture and society, both now and in the past.

4. Analyze to write analytically in a variety of formats, including essays, research papers, reflective writing, and critical reviews of secondary sources

5. Reframe, gather, understand, evaluate and synthesize information from a variety of written and electronic sources.

Subject Code: 21OPE23 Course Name: SHAKESPEARE (Global)

Upon the completion of the course the students will be able to

1. Illustrate the students with general understanding of the universality, timelessness and myriad characters of the Shakespearean plays.

- 2. Scrutinize and associate themselves with Shakespearean life and society.
- 3. Discover the historical elements and life in this era
- 4. Enhance their critical abilities through Shakespearean Criticisms.
- 5. Reinforce with Shakespeare's erudite style of writing, and scholarly innovation and influence in the realms of language, literature and theatre.

Subject Code: 210PE24

Course Name: COMPARATIVE LITERATURE: THEORY & PRACTICE (Global)

Upon the completion of the course the students will be able to

- 1. Identify the ethnographic, historical and anthropological perspectives of different literatures.
- 2. Discuss the terms and techniques of comparative literature.
- 3. Apply the global diversity of literary forms, theories, genres and aspects of comparative Literature.
- 4. Analyze, compare and cognize literature, in their own terms, with various disciplines of humanities.
- 5. Evaluate a strong critical thinking and sophisticated understanding of cultural diversity.

Subject Code: 21OPEE2A Course Name: TRANSLATION STUDIES

(National)

Upon the completion of the course the students will be able to

1. Recall the theory, application and description of translation so as to interpret and localize any piece of literary work all over the world.

2. Explain the sociolinguistic, communicative, hermeneutic, linguistic, literary and semiotic approaches of translating a literary work.

- 3. Identify information of sociological study of Tamil folklore such as Ballads, songs etc, thereby gravitating them towards the Tamil Culture.
- 4. Examine into the political set up of Tamil region and its influence in the literary productions.
- 5. Appraise themselves with diversified and colossal use of words, phrases, clauses and sentences in different languages.

Subject Code:210PEE2B Course Name: HUMAN RIGHTS IN LITERATURE

(Global)

Upon the completion of the course the students will be able to

- 1. Recognize and interpret the nature and need for human rights to respond to moral violations.
- 2. Discover, compare and appraise diverse cultural and theoretical representations of human rights.
- 3. Develop and critically assess multidisciplinary connections to human rights both across the institution and their own educational programmes.

4. Focus and illustrate the effectiveness of human rights practice on local, national and international humanitarian efforts.

5. Measure the opportunities of professional and entrepreneurial engagements in NGOs, Ministries, State Agencies and international organizations.

Subject Code: 210PENM2

Course Name: MASS COMMUNICATION AND JOURNALISM

Upon the completion of the course the students will be able to

- 1. Recognize the nuances of reporting, researching and investigating and writing good copy.
- 2.
- 3. Associate themselves to various oratorical and communication skills and overcome shyness.
- 4. Utilize the skills gained and get career options in other fields such as Media and
- Communications, Marketing, Education and Entertainment.
- 5. Function under work pressure and have a flexible and creative approach towards work.
- 6. Appraise the importance of teamwork and enhance individuality

Non-Outcome Based Education <u>SEMESTER – III</u>

Subject Code: 17PE31 Course Name: HUMAN RIGHTS IN LITERATURE (Global)

- 1. Develop their empathy and social understanding
- 2. Encounter more literary and cultural texts to study the representations and discourses of rights
- 3. Articulate about the larger development governed by natural laws and state legitimacy as well as seen in literary works.

- 4. Be aware that writing is not just artistic and aesthetic but it's the power of literary creation's commitment to the society.
- 5. Understand the geopolitical changes and social crises through Literature around the world.

Subject Code: 17PE32 Course Name: AFRICAN AMERICAN LITERATURE (Global)

- 1. Understand and analyze how this genre is 'Slave narratives'
- 2. Explore the role of African American within the larger American Society.
- 3. Learn the indepth mystic meaning of racism, slavery and social equality.
- 4. Learn the factual and emotional views from the renowned writers on what it means to be American and their identity crisis.
- 5. Explore this genre as a post colonial literature that acts as a rhetorical self-definition.

Subject Code: 17PE33 Course Name: RESEARCH METHODOLOGY (Global)

Upon the completion of the course the students will be able to

- 1. Learn how to document the research paper for the study's overall validity and reliability.
- 2. Learn how to systematically design a study to address the research aims and objectives.
- 3. Learn different strategies to enhance the research experience at all stages of a research project.
- 4. Efficiently and originally summarize, paraphrase quote from the sources without being a plagiarist.
- 5. Learn how to evaluate the authority of the sources that a researcher consults, thereby organizing and the developing their writings.

Subject Code: 17PEE3A Course Name: TRANSLATION: THEORY AND PRACTICE (Global)

Upon the completion of the course the students will be able to

- 1. Study the theory, application and description of translation so as to interpret and localize any piece of literary work all over the world.
- 2. Learn the sociolinguistic, communicative, hermeneutic, linguistic, literary and semiotic approaches of translating a literary work.
- 3. Enrich their writing style by applying the translation theories to reproduce any literary text without disturbing its originality.
- 4. Learn the importance of multilingual competency.
- 5. Upgrade themselves with diversified and colossal use of words, phrases, clauses and sentences in different languages.

Subject Code: 17PEE3B Course Name: INDIAN DIASPORIC LITERATURE (Global)

- 1. Study the yearning sense of the immigrants towards the motherland which overwhelms in all the Diasporic works.
- 2. Examine the psychological traumas associated with the lives of the immigrants.
- 3. Elaborate the cultural differences and the sociological difficulties in migration.
- 4. Define the emotional suffocation suffered being in the foster country.
- 5. Analyze dominant post colonial themes such as alienation, identity crisis, transcendentalism, displacement, dislocation and more.

SEMESTER – IV

Subject Code: 17PE41

Course Name: SHAKESPEARE (Global)

Upon the completion of the course the students will be able to

- 1. Approach Shakespeare's works with more technical insights (e.g. iambic pentameter), tragedy, comedy, soliloquies.
- 2. Recognize and instigate their perceptions of philosophy and intellectual view points of the Renaissance.
- 3. Interpret and unravel their insight into his timeless characters, riveting plots, universal human themes and versatile dramatic techniques.
- 4. Apply the knowledge of the social, political, intellectual context of Elizabethan England.
- 5. Develop a life-long love of appreciation for one of the English language's greatest artist.

Subject Code: 17PE42 Course Name: CANADIAN LITERATURE (Global)

Upon the completion of the course the students will be able to

- 1. Develop a critical awareness and sensitivity to the tensions created by racism in Canada in the past and the present.
- 2. Develop an insightful understanding of the relations between nation building and literature.
- 3. Cultivate reading strategies for recognizing allusions and symbolic knowledge other than western.
- 4. Discover the ability in themselves to recognize colonizing narratives and representations.
- 5. Discuss the historical and critical processes involved in developing a Canadian Literary Canon.

Subject Code: 17PE43 Course Name: NEW LITERATURES IN ENGLISH (Global)

- 1. Establish their awareness on the language and literature of the former colonies of British Empire.
- 2. Update their erudition on the trending post-colonial themes.
- 3. Notice and apprehend the indigenous words that are incorporated in the writings without translation.
- 4. Recognize the artistic voices from the newly emerged independent countries
- 5. Trace the evolutions of different literary traditions around the world.

Subject Code: 17PEE3C Course Name: LITERATURE AND PHILOSOPHY (Global)

Upon the completion of the course the students will be able to

- 1. Discover the literary treatment of philosophers and philosophical themes.
- 2. Enlighten themselves with a blend of sacredness and science through literature
- 3. Envisage the relationship between mind, body and soul that is depicted through literature.
- 4. Evolve oneself into a deeper understanding of life itself and the purpose of human existence.
- 5. Associate their classroom learning experiences with experiences of life.

Subject Code: 17PEPR4

Course Name: PROJECT (National)

The Post graduate students, on the completion of the course, would be able to

- 1. Acquire independent judgement and first hand experience.
- 2. Develop and manifest an erudite reading habit, thereby, forming consciousness and awareness of all the courses that they have completed.
- 3. Motivated to become research scholars and teaching professionals.
- 4. Frame practical knowledge of Research Methodologies and different approaches that they learnt theoretically.
- 5. Unravel an expeditious, thorough and constructive application of the courses learnt.

The Project requirements are

- 1. The length of the project report should not be less than 50 pages
- 2. Documentation should be done in the standard MLA format.
- 3. The progress of the project report should be duly supervised by the faculty.

DEPARTMENT OF PHÝSICS P.G.

DEPARTMENT OF PHYSICS-PG

Programme Code: OPP

Programme Name: M.Sc. Physics

Programme Outcomes

- 1. Coherent understanding of academic field of Physics through laboratory experiments.
- 2. Acquire knowledge to analyse and solve advanced problems in Physics.
- 3. Ability to carry out advanced tasks and projects successfully.
- 4. Acquiring recent knowledge towards the research.
- 5. Developing research skill provides them to work in scientific and in research laboratories

Programme Specific Outcomes

- 1. Develop experimental and data analysis skills through a wide range of advanced level Physics experiments.
- 2. Acquire subject knowledge and skills of the calibre sought by industry, as well as provides academic teachers and researchers of the future.
- 3. Trained to evolve new technologies in their own discipline
- 4. Learning research skills which includes advanced laboratory techniques.
- 5. Understand the skills of independent investigation of Physics related problems.

Course Outcomes

Outcome Based Education(OBE)

SEMESTER - I

Subject Code: 210PP11

Course Name: MATHEMATICAL PHYSICS-I

Upon completion of the course, the students will be able to

- 1. Acquire knowledge on the Mathematical basis of vectors and their application in Physics problems.
- 2. Gain knowledge on the concept of eigen vectors and eigen values and their physical meaning
- 3. Analyze the problems using different methods of special function

Subject Code: 21OPP12 Course Name: CLASSICAL MECHANICS

Upon completion of the course, the students will be able to

- 1. Understand the mechanics systems of particles and apply the Lagrangian to solve the macroscopic physical problems.
- 2. Apply the Hamiltonian's formalism for solving the macroscopic physical problems.
- 3. Analyze the system using Hamilton Jacobi Theory.

Subject Code: 210PP13 Course Name: ADVANCED ELECTRONICS

- 1. Understand the working of different semiconductor devices and operational amplifiers.
- 2. Gain the knowledge of Digital to Analog conversion, Analog to digital conversion technique and corresponding circuits.
- 3. Learn to design Flip flops and counters.

Subject Code: 210PPE1A Course Name: NUMERICAL METHODS

Upon completion of the course, the students will be able to

- 1. Obtain knowledge on the algebraic and transcendental equations.
- 2. Familiarize the knowledge about Interpolation of Forward, Backward and central differences.
- 3. Acquire knowledge about the Least squares, B-splines, Numerical differentiation and integration.

Subject Code: 21OPPE1B Course Name: PROGRAMMING IN C++

Upon completion of the course, the students will be able to

- 1. Get a wide knowledge about Principles of OOP, Tokens, Expressions and Control Structures.
- 2. Learn the knowledge on the Inheritance and Pointers.
- 3. Managing console I/O Operations, Files.

SEMESTER - II

Subject Code: 210PP21

Course Name: MATHEMATICAL PHYSICS-II

- 1. Use the characteristics of complex function the method of Cauchy integral theorem, Taylor's and Laurent's series.
- 2. Evaluate residues and definite integrals.
- 3. Apply the concepts of tensor analysis and tensor calculus to formulate physical laws and simplify them using coordinate transformation.

Subject Code: 210PP22 Course Name: THERMODYNAMICS AND STATISTICAL MECHANICS

Upon completion of the course, the students will be able to

- 1. Acquire knowledge about different laws of thermodynamics.
- 2. Focus on the concept of phase space and its volume.
- 3. Learning the uses of partition function for calculations about the canonical ensemble.

Subject Code: 210PP23 Course Name: ELECTROMAGNETIC THEORY

Upon completion of the course, the students will be able to

- 1. Know about the basics of Electrostatics and Magneto statics.
- 2. Learn the use of the Maxwell's equations, role of gauge transformations, scalar and vector potentials.
- 3. Acquire the knowledge of the propagation of EM waves in waveguides.

Subject Code: 20PP21P Course Name: PRACTICAL-I GENERAL EXPERIMENTS

Upon completion of the course, the students will be able to

- 1. Design the experiments and verify the theoretical concepts.
- 2. Gain the knowledge to handle the Data and error analysis.
- 3. Learn about the Physical experiments and also computational methods.

Subject Code: 21OPP22P Course Name: PRACTICAL-II ELECTRONICS

- 1. Familiarize with applications of zener diode and IC voltage regulators.
- 2. Designing amplifier, oscillator and wave shaping circuits for defined specifications.
- 3. Significance of various devices which are beneficial to understand how they will operate and use.

Subject Code: 210PPE2A Course Name: INSTRUMENTATION

Upon completion of the course, the students will be able to

- 1. Introducing the concepts of measuring instruments of the different meters.
- 2. Explicate the construction and working of various recorders.
- 3. Apply the complete knowledge of various transducers to measure the physical quantities in the field of science ,engineering and technology.

Subject Code: 21OPPE2B Course Name: MEDICAL PHYSICS

Upon completion of the course, the students will be able to

- 1. Develop medical Physics methods and tools related to Physics, radiation biology and radiation detection and computation in research setting.
- 2. Learn the instrumentation techniques of bio potential recorders.
- 3. Acquire the understanding of the working of operation theatre equipments.

Non-Outcome Based Education <u>SEMESTER - III</u>

Subject Code: 18PP31

Course Name: SOLID STATE PHYSICS I

Upon completion of the course, the students will be able to

- 1. Get a brief idea about crystalline and amorphous substances, about lattice, unit cell, concept of Brillouin zones and diffraction of X-rays by crystalline materials.
- 2. Gain the wide view about phonons and its importance.
- 3. Enhance the idea about Semiconductor Crystals and their properties.

Subject Code: 18PP32 Course Name: QUANTUM MECHANICS I

- 1. Study the postulates of Quantum mechanics and understand the concepts one dimensional problem.
- 2. Grasp the concepts of angular momentum operators, Eigen values and matrix.
- 3. Acquire the knowledge of relativistic Quantum Mechanics.

Subject Code: 18PP33 Course Name: NUCLEAR PHYSICS

Upon completion of the course, the students will be able to

- 1. Acquire the basic aspects of nuclear reactions, the Q-value of reaction and known to measure the nuclear size from Rutherford scattering.
- 2. Gain the knowledge about the Nuclear Fission and Fusion.
- 3. Comprehend the Elementary particle and classification of Elementary particle.

Subject Code: 18PPE3A Course Name: NANO PHYSICS

Upon completion of the course, the students will be able to

- 1. Grasp the principles, fabrication and design of carbon nano tubes and their application.
- 2. Apprehend the theoretical and experimental aspects of quantum wells, wires and dots.
- 3. Realize the techniques of nano machines and nano devices, expected to provide the necessary understanding in nanotechnology.

Subject Code: 18PPE3B Course Name: SOLAR ENERGY

Upon completion of the course, the students will be able to

- 1. Learning the fundamentals of solar energy technologies.
- 2. Evaluate the concept of solar thermal technology for process heating applications.
- 3. Measure and evaluate different performance testing of solar collectors.

SEMESTER - IV

Subject Code: 18PP41

Course Name: SOLID STATE PHYSICS II

- 1. Apprehend the basic idea about superconductors and their classifications.
- 2. Gain the basic idea about Plasmons, Polaritons, Polarons and Excitons.
- 3. Recognize the defects and their types in crystals.

Subject Code: 18PP42 Course Name: QUANTUM MECHANICS II

Upon completion of the course, the students will be able to

- 1. Grasp the concept of perturbation and transition probability.
- 2. Study the consequence of Relativistic wave equation.
- 3. Discuss the identical particles and spin matrices.

Subject Code: 18PP43 Course Name: MOLECULAR SPECTROSCOPY

Upon completion of the course, the students will be able to

- 1. Obtain the knowledge of microwave and IR Spectroscopy.
- 2. Demonstrate an understanding the concept of Raman Spectroscopy and its application.
- 3. Wide knowledge on the concept of electronic spectra of molecules.

Subject Code: 18PP41P Course Name: PRACTICAL-III GENERAL PHYSICS

Upon completion of the course, the students will be able to

- 1. Acquire the knowledge of experimental Physics.
- 2. Improve the analytical and observation ability of Physics experiments.
- 3. Analyze the various physical properties such as optical, electrical and magnetic properties using experimental observations.

Subject Code: 18PPPR4 Course Name: PROJECT

- 1. Develop the skill to plan, execute and report the results of an experimental and theoretical Physics based project in research work.
- 2. Acquire the knowledge in the inter disciplinary project.
- 3. Make out the innovative ideas in research work.

Subject Code: 18PPE4A Course Name: MICROPROCESSOR

Upon completion of the course, the students will be able to

- 1. Comprehend the structure and working of 8085 microprocessor.
- 2. Learning the looping, counting and indexing.
- 3. Recognize 8085 BCD to Binary conversion and 8085 Interrupts.

Subject Code: 18PPE4B Course Name: CRYSTALLOGRAPHY

- 1. Analyze the methods involved in crystal structure determination.
- 2. Gain the knowledge of different methods of recording X-ray diffraction.
- 3. Explore the applications of crystallography to study the structures of Molecules.
DEPARTMENT OF TAMIL P.G.

Department of Tamil

Programme Code: OPT

Programme Name: B.A. Tamil

Programme Outcomes

! ிட ெதுமாழியி ஆைமை திறனை , தமிழ கைல இல கிய வ வ கைள திறனா ெச திறனை வள! த . 2. தமிழிய சா!!"த ஆ கைள ேம\$கொ% ப மாணவ!கைள

- 2. தம்ிழியை சிராத் ஆண்கள் ேய்\$ெகிர்கின் பியின்னவான்கள் உ∋வா *த.
- 3. ெமாழி திற ம\$+ படை__ திறனை ேம ப⁄ ௦௲ .
- 4. தம**ி 1 * ப**ிற**ெ**றைக *மான தொட!பிைன அறிய3 செ த .
- 5. தமி இல கிய இல கண அறி நிர பிய மாணவ!களாக உ∋வா ≁த
- 6. தம**ி இ№ க**ிய வ**ைகைமகள**ி ஏ\$ப∕ மா\$ற கைள அறி த**ிற**ைன வள! த .
- 7. தமி இல கிய க% வலி + o அற கைள உணர3ெச வoட சகக , அரசிய ,ப⊖பா∕ ஆகியவ\$றி ேத!''த மாணவ!களாக உ∋வா ~த .
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2ப்பை ! — டிபாய என் பஅருமாயநா! எருபிா 🗢 ராஷாதர் என் எஒர்துத் நமா! ழமங்காழ் ழபாவாரால். !

3.ளடடிபடிப்பாப்எர் வாய்தவலா எங்அகோடி! வைச்பாப்டா! மாஒர் கட்!

5. டு ஒர்பாணாட டிரா ராநா ராணர்பத வ டீட ரோடி ஒர்பாணாட டி ராரா நா ராணர்பத வ டீ ட ஈ! லா ராடி அர்பு ஷொரான். !

6.்ளடடி ! – ணபாயடி சாயவாணா! இர வாரா ஆடா! எடடி கடாயாதப்பவிரி ா வாஆடு த ஒப்வா!

னவாவூஅதரபதவடுவா !

Title of the paper : – கஅப∰ ‱ ! – ணப∰மட ₽!

: 210PT14

Subject Code

5. ட— ஸாஜகாமட்பாயவாநா!ரி ாபாதபடுத்தப் தவட்டாயதனர் உர சாபதவட்டா! ஹொஸ்.

5. கலைகாரா சிர் ஒபா ! பதன பவா ! ட ஒரஒடா ! ட பாபவாநா ! கட பாபாதப்பதவ னு எரால். !

あ வ அ お は 「 お ら し 市 ! し み し 「 計 い அ ண ド レ み வ ! 一 ண し 市 ! い し か し 市 ! い か し 市 ! い し か あ 市 い じ し か の 市 「 ஸ 、

1அகா ஈட்டை ப சபவ யந ஈ!ள ரூ பள ஈ! எமக சம த ந ப த வ ெலுர ல. 2. கதஅடு தஒட வலாடியி தனபவிரா பாரா பாசாபவா!டுமண்டிர லாதலா ா!ர் வகாமு பவவாரா.

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Subject Code :210PT13 1 1 Title of the paper ! க வஅச்ஆா சர்ஒ ர ஙடிணல

Subject Code : 210PT11 Title of the paper ! - பரமனை ! - ணபரமழட #

3. вауштя! парныв прольнир и ал втан!

Sub code :210PT12

2. – ப சபலிறை ம சமவ எ சபவ மந ச!ாத அா சம் ச! மால த ந ெல ந எ !

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—ணபாச மாமலை வா எந்தழள டி எங் நால் மால் த நா ஈ! ழா ஒர ஸ்! 6. – னப பயடி ச படிவ வ ஆ, ! – னப பான ம பயத நா ஈ ! ழா வஏ ம பயத வடி பயநாடி வெர பத நறடி புர ல. !

£ீற்மாாணபா**ு ர**ாமங்பவு, னதஎடி வாயாடி ஜன தஎமாஒநஈ!ா ஒரலுகந ஈபு ெஹர ௷்!

4.ர்தநபதமடியநே#!—ணபாயடி!—ணபாசுடைளர்பதவா#!ர்ஸகாµழபாவாரா…!

6்.ா தஅர பலவ எப்பவந்த!ன் த எக் த அடியந்திரி பின் த எர் வமப்பத நா சிழா ஒர் சு !

5. ர்மாந ! –னபாயடிமாயநா! தெடா ராதநமா! ழமளகாழழ பலவாரன! !

மிழனா பா சாடி வசியு ஒளா சாடி பயநிறை மாழட எர் பத வா சிர ஒசலு ஒதக சமுழ ப வை சரல. !

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Outcome Based Education(OBE)

Subject Code :210PTE1A

Title of the paper ! ! 如 啊啊! ! !

கிடீஷ ! — பி யவாநா!ராண ஆச்தநதொட்!

3. – பி சயவாநச!டு பசயடிமாழர மசதமமச!ழமனகாழழப வை சரன.!

4. – பி சபவலநா! ாமளாள்ளா!ளஅச்சு சபதவ தெடைமுழ பலவ ஈரஎஈ!

5. ழளடி சம்பவரைசர் தப்பவச!ட ஒச்ஒட்ச! சோன்டி எச்பவருசிரு ஊடதவாசிர் ஒச்ஷழமன்கச் முழ் பாவசரன. ! 6. – பிசபவண்சிர் தஅப்சபுட சிம்ஷ் நசிழா ஒர் எ. !

Sub code : 21OPTE1B Title of the paper : .2 ! ! ! ເມສະພະໄຊ .2 ! ! !

இத்பாசபுஒவா!ன்னபழ் பியவணா!வூரா எப்பியி ஈரம் ஒப்பாந் பள் மாதமக நாபு ஒங்காழ ழப்பி வாரன. ! 3..மாதபாசபுஒவாணா! நுஅர்அரா மா ஒப்பு நால் நிரி ஈராடிணா! ஒச் சப்தவன் உள்காழம் டா! நிரி சப்சுதப் டிணா! பத் அரா மா சப் வந்தில் நிரி திரு தரு பதவழ் ஒர்ழப் வை சரன. !

4.்மூரபாபுஒவாநா!ழா ஏ தட டிாத நற ஆமா முத எபாயநாடிமாஒத நாா!ழா ஓர 🕷 !

5.்மூரபாபுஒதவீடுதடடிலபபா!ப் தொமநா!ர ஷண் வபிரி ாராணா!யூட்டால் ஆதெஅர் கூ!! ீடி காடி ஈ!ெஓ!— தெயராகதாாா!ழாஓர் கூ! பை பாயுசாபயூவ ல ஆமாரபாபுஒதவலா ராடி ஆடேடியநாஓ

Subject Code : 21OPT21

Title of the paper : $\bigcirc \bigcirc -$

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<u>ப ஒஈ ஹா! ழர வாராலத்</u> !

நீமழடடπaஅங_ஒஈµ்றி வரபுபஈபுடஈ!ஒபாபஏமாழபாபத வட**ு ர** aruவா!னு ararusஏாாான. !

3.ாக ஈதஅடிபாணடபாயவாநசியை பாரு பாயசாயவா!ரொ ாயனா!

ாங் சால் சல் போடி கல் பிட தவ ஷெக்சமா ரா என். !

4. து க சயத ஊட ப சயவ யந ஈ!ரி விசுதபடுத ஒப த வா ஈஒ சலட எஊ ர வசயவ ஈ! ழம லக சயஏா ஈல. ! 5.

கூலுதடிடீடா!தெபாரமாரமாரதவடீடா!டா சராவப்புற்குமாரதளா எமானா!ரொ சாரணா! னடி வடி காதணதடி தெஅடீடா!மநாதடத் தரா ா!ழா ஒர்வு ஏா என்!!

6. – நடித் ஒடி பாண ! கூரிண்ணா! ஒழக் ஒய் வநா! முதர டிகத் நீடு தட்டி வப ஷெக் பலரா பல ! !

Sub code : 210PT22

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ப ஒஈஒ வா**ள!**! ழ **ர** வநாரால ஆ் !

1.ழமாண சாவா சாடிடச!பு ஒள சாஆடச! ழளா ஒசாவாநச!ர தப்பத வ ஒெக்சமு ழபாவ சரன.

2. முர ஒசுஒதடன ஏர்பவச!ட ஒசுஓடச!னடி வாயத 🗢 ! ெ வத 🕶 ா ஒசு மும வகச மு மு ப வ சுரன.

3.-ணபாயடிசாவணஈ!-

அடஈரா ஒஈஓவஈவழள எணாண தடாஈர் ழம ®அஎ தடா ஈ்ர ஒஒ

ங**ெ**லுக∓ழழபவைஈரவ⊀.

4.ப எண காழமா ஒடா!ழளா ஒர்பவாநா!ொரத் அடிபணா!று ஒர் ஆபாநாடி உருச்சாபத வன 🗢 வர்காழ ழபாவாரால்.

5.ழள வண சனமங்ப வரமாதமார்!ாஜ்! —னப சா—!கு'ண சபழவ உதுட்டு –னப் சங் முவ உதுட்டி சர்ப் முவ உதுட்டி நா வரம் சயார்!

! !ாலையாயநாலுமாஒதநாஈ!ழாஓ**ர** ். !

Subject Code : 21OPT23 Title of the paper: □ 𝔤𝑘𝑘𝔄 ! ! ! ! 𝔤 ⊔𝑘𝑘𝔄 ! ! ! !

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தவஷெர 🕷 !

பாடிபாணடபாயவாநா!ரு வாசதபகாதன் 'ா — ால இரு பாரு பாசப 3.பா ா ாடி சாயவாநா!பஅச்சு தடார்பதவாரிர் வகாழம் பாவாரன !

4. கவடி நாடவாயவா சி ஈரவாபவாநா! காதணா பா ஆடி ஒரமாம ஷெகாமு பு வாரால். !

5. ்க வட வட்டு மண்ளள்கதன் இம் மு ஈரகடாங்பாதபின்ட்டி சாபவநா !நொத்ஒழி ! — நாத்ஒழி கதன் முந்த நமா ! ! ! ! ! மும் கைசுழுப் வை ஈரன: !

6.பளாம் சயவாநா!ாசு பதவ ஷெட்டிப்பில் தநா ஈ! மா ஒர ல.!

Subject Code : 210PT24

Title of the paper : Den #!-መப Hup ரஎனாஓ !! !

பஓஈஒணஈ! ழர வஙாரால ஆ!

ீ2ியி் ஈ!—ணப ⊮யடி π нாளா ⊮யந ஈ! **ர** எண வஒ + லத ந ெலக + முழ ப வவ ஈர ஊ.்!

3.்ளசாப ! —

ணபாமடிசாவணா!தடடிடாதபொதாடீடா!ர்ஓடாதாடீடா!ர தபாா மடித்தநாா!ழாஓர க: ! ஆம⊧ம**ரை**பைஈபுடஈ!

4.்மீட்வி காகாரு பமசயந்தா!ா — எல் சுத்துகையுக்கு வக்குண் குசுத்த பசிப் அசுத்த பசி பு - ணப் சயல் மசும் குவாக!ா மந்த!

ழபாவாவுடா!டுதஒதடிரா!ர்ஸுகாழழபாவாரா!!

5.்ளசாய ாணமாயணாரகாழபானகாயுமாஒடா!—னபாயடிர உரசாயவா!டாஒர தமபா!புனாரன ஏடா!மாஒதுநாா! மா வாலாரா ால!!!

5. மா வசாமாமுமாரபாபுமா!மடி எஎ வபுடா! ! மாததநரவ எமாமபா! ழப வாரால்.

Sub code : 210PTE2A

Title of the paper: மபரணஈ!ழமாஅவாவுணா!!!?! ! ! !

பஒஈஒணா! ழர வாரால ஆ!

2. மபரனா!ழமாஅலாமுணாநா!ராணாஒட ஒந்தடா!ரவலாலாலதன் பதவமா!ழமங்காழழபாவாரன!

3. –ு ொவாநஈ!ழளடினால் பதவடிடோ!பஅதடபதவடிடோ!னு ஸாரால்!

4. மபர ணஈ!ழமாஅாள் எமந சாயவாநஈ!ா 🗢 ஈட ஒருடா சாடி நாளா ஆபு ஒடிசுமாற் எசு சமு மு பா வாராட்!

5.

ளொரு பா!பரரங்கு வநாச!ர ஏதபடியுநாணாச!மீடி பொன்களு படச!ழா ஒர்ஷாம் வடியத்து நார்வுகாழழ்ப் வை ஈரவுச!..! 6. ழள்டி பயபவ வணாச!ன் னப் படிணாச! ஒய்தர டீட்சாரோ பார்— கூதர டீட்ச!ழா ஒர வ!

!

| Sub code : 21OPTE2B | | | | |
|----------------------|----------------|-----------------|-------------|------|
| Title of the paper : | .!3!! | ! | ! | |
| மாரபாபுஒவா | | | | |
| ! | <u>ப ஒ ஈ ஓ</u> | ண ⊞‼ ழ்ற | <u>™™</u> ® | मे । |

ிரைரங்டிண்சி:ெஒச் பவங்நா!டு பாய்டி மாழர் மாதமன் ← வாகாழழ்பவை ஈரவ: 2.மங்ஏ பாபுஒவங்நா!ழா ஏதட்பதவாா!ா ஒடிை ஒங்கொழழ்பவை ஈரன

3.மார்பாபுதவா!ரா ஷண்வரா ாராடினா! ரட்டாலாப்வா!தெஅரமதநனு முபலவாரா. លករណ្

4.மங்ஏபாபுஒவாணா!மு ஒரா பஅக்குவாவஎெள்குணா!மங்ஒநா!பு ஒம்முடா!ெல நப வாரா. கமு

5.மாரபடிவடிப்தாமநடிர ஷண் வமநாநடாயடித்தந்தொ @FF !

Non-Outcome Based Education

Sub code : 21PT31

Title of the paper : r 🕶 🗑 அடி ! – ணப் 🖽 டிடல் பட 🛍 ! !

1

பலாலானையை! முரவாராலத் !

ச்பா! —ணபாமடிர தபதட ,ர உரடா,ழளர ஈருடிணா!மநாதடடுமண வநர ஒாதஒ ெலுகாமு ழப வார வ. 2. வஅாதஅ ெலுர சு

ழமாணணைபாயடி ஒெடுபமாயநா!ரூணடா!மீட் வா கா!ளரு பமாயநா!ாசா

4. எச சமா எநு ரண சுவ வநாச!ம வட சுடாக் சுமலை ! — பை சும்டி சுப வணாச! ஓர வள சுஅசுள்கிறா எதம ! — நச சுமல ஜட சு!

மாஒதநாஈ!ழா ஓர 🕷

5. எசாப! – பைசமடிமாமநா!பதாதநகடிடா! தொகரா தஅராததன முடடா ஆமாமபா! ழப வாரன

Subject Code : 21PT32

Title of the paper : ழமாண சமா சங்டிட ச!. ழா எரவ மயா எட ச!. ! 2!

பஞாஹா!ழரவாாகால ஆ!

ழி தபகணடா!ளாலாகாமடபாயவாநா!ரிறா ஈராடிணாசிரியாடி சாயதவ தொக்மழ் பாவாரால்.! 3.'எசாயபாணாா! ராலா? குஅராசாபத வாா! ாலால் தொழு பியிலாரால்.! 4.'பெ! – னைபாயடி சாயவு பாபுடா! பெ! – ாால் ஆபத வாா! வாபான டார்பவு பாபுடா! எவாலழா எரமாம் வகாழழ் பாவாரால்.!

5. ழமானா சாடிராச! ழா எஏவ மங்பாளடச!பஅச்சுதட்பாடிடி∺ா் ஒ! —ணப் சாட் எர்ப் தவ ! — ணப் சாயவாணச! ழா வரம் சாயாச!ா வாச்பாடிட்டா!மாஒது நாச! ழா ஒரான:!

6.'மட்சிஈ!ழிடி எடிணுவரவழா எஏவணபான குஅாசாபதவ ! –னபான ! கு'ணஈிரு ஈ! ஷெகாழழபாவாராட்!

Subject Code: 21PT33Title of the paper ! of # HL_ of !!

ப<u>் என்னா?! முர வாராலத்</u> !

£ிஸ் ! — னபாமடி சாபவாநா!ா வூழா வஏ வாபதவ ஷெரான். ! 3.்ள சாபாாா!ா வஅணாபவாநா!மாது — ிமுத ஒப தவாா!ர் எங்காழழ் பாவாரன். ! 4.்பொார்வா வஅணாபவாநா!்றாா! ரோாரானாரிறாடாடி சாபதவ மா! ழமனகமு ழபாவாரன். !

!

5. ட எக சமா சபவ யநா!ன வா சா யத நா ஈ!ர் வக சுழழப எவ சுவுட ச!மாஒ நா! ழா ஒர எ. ! 6. ளச சபா ச!ர் ணர எசபவ யநா!ர் ணதடதடி ஒயர எ. !

Subject Code : 21PT34 Title of the ! ! paper ! ! on this like ! Light of the ! !

மீர்ாணப் பாய்டிமாயந்த!ரூணட்ச!—ையாயடிசாபவுப் பயத்அழடிடி வநன் ஒரு பதேநம்க!ழமங்காழழ்பில் வாரால்.! 3. ழரரு ஒழிட்சி பி.—ையாயடிசாபதவலா பிடிட்சிபத்த நாக!ழா ஒரால்.!

- 4. லாசாணப்சயடி ழப் வைசாவைச் தநாச!ா வக்சம் ழப் வை சுரஎ!.!
- 5. ாக்ஷழ்ட் வி கழம வஅ எசா வந வரு ப வசி இது தண ஷெக்ச முழ ப வ வசர எட்!
- 6. ாழைவி ப! பையடி வேதடபதவமா! ழமனகாழழபாவாரா!!

Subject Code :21PTE3A

1

Title of the paper !பபரணஈ!ழமாஅஎசஙடிணா!II

<u>பஷாஷண்**டி!** முராவஙாகால</u>த்தை ப

2. மபர ணஈ!ழமாஅஎாட்டு த ஒர ஒரலுடிர் மஷா டி நு வாவபு கூர கூசுமாதம ெலரா கூ!

3. ழளடி சய்பவ ஸ்னசின் ன் பயடிணசி ஒந்நட சிரா பார் கா குருட்சி மா ஒர ஐ. !

4..4.்ளடு ம வடி ம பயணா ! ம நடி நடி நடி நடி நா சி வரு ப ! ழா சு ஏ வ சு ம சு ஏ வ சு சு வ சு சு சு வ சு ச ச ம ழ ப சு வ சு ர ச !

5. மபரணஈ!ழமாஅஎார் வாளளங்காதன் பதவ ஷொ கி!

6.்மபரணஈ!ழளடினஈடுதஒதடிாஈ!ா ஒண் ஒங்காழழ் ப வாரான்!

Subject Code: 21PTE3B Title of the

paper : เวษฐ ป หนุดู ม ห เป หนุดู ม 🛍 . ! 4 ! 🦉 ! 🦉 !

ப ஒஈ ல ன ஈ! ழ ர வாா ால த் !

2.' மாஏபாபுஒவாநா!பஏமாராா!ழளஒாதர ஷொர்னன் பாா!ழா ஈமுட தல நாதமன 🕶 எாரா!!

- 3. கஅசுநாச!ெல்லாதமடிடா! இடநாதடதடிடிடா!ெல்ரா.!
- 4. மரைபாபுஒவா!ரி ாநடினா!ழகஒயதவனு எஸாரடா! ரமடா!நாதம !

பாபாண நிரை ஈராடி முண வ ஆ லா சாடிஅச்துமசிழமவ பிராக்!

- 5. ழளணாரமாயதா!ளாஒராயதநடீடா!தெமாா!ாடிநா ஆமாழடா!டா 🕶 ாயதநடீடா!ஒயுரா.!
- 6. டெடிச!ளானச்சமா தஅார்பதவன ஏர லப் ஈடிட் ச!மாஓ நா! ழா ஓர எட்!

Subject Code : 21PT41

Title of the paper : - mulliput !!!!

! பலாலனா! மா வாராலத்!

2.: ழள ரார ஈரங்டிணா! — ண்டாய்டி சாபவாநா! பு சாவ அதிராடங்டி சாபத வ ஷொமு பி வாரா!!

- 3.ா ~ ஈதஅமா!மீடி எநா!ரீ வி ாசதபடுத்திலு தலிரபாய முக்கு விரா வநாள் ரோடியடிசாபதவமா! முமளகாமுழபாவாரால்!
- 4. டநாநாசப்வ வநா! மா வாடித்த ஓ ! ! ேஅள்படுத் ஓ ! ! எள்படிண் தடார் ! டு மண் வந் ! மா வர ஈதடப்தவ் ! ன — எர்காம் ! ழப் வை ஈரள். !

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6XEMHFW &RGH 21PT41

2. னவராடிணாநா! முமாஒர்தடா! ரவாளாளா ஒர்து தொன்.! 3. முட தனகாலாது னவராடினா! ஒர்து காபதவடிடா! ரொப்படா! முபாலாரால், பதவடிடா! முமாகாமு முபாவாரால்.! 4. பிகர் கொடு ா! – னபாயடி மாமணா! னவா படிராராடி ராரா ! முபாலாராலா உதநலா பாலாது முகா பாடிடா! மாதத நாா! ழா ஒரால்.! 5.்ப லனகாழமல் ஒட்சிறிற்றா ஈ!— னப் பாடி சாபவாணா! ! று ஒரா ஆ பாநாஒன வ ராடிணா! ட ஷ ஈடி ச ஈப த வ ெ ஒங்க ஈய ஏ ா ஈா எட் !

6. – னபாயடிட காமாயவரா! வே தடமாயஒத நழர வளாகு மாரடா! ! ஷெராத நாா! ழா ஒரா. !

Subject Code : 21PT43

Title of the paper : pramelar Har Har !!! praga Dalate !!!!!

படிகளா ! முர வாராளத் !

2. ழட டி பாபா ஆின ர தட ழமா அவாவந ழமாண பிலா பாபடிப்பு பில அப்பி ஆப் தவ ஷெக்கம் ழபா வசுரன. !

3. – ணப்சயடிட்டி!ள் வச்சாயட் எர்டி வடி! இன் டி சம்பதவ்! – ணப் புகூரி மடி! மும் வக்சம் பு பி வடிர் வடி

4.: ழமாணா பாரா பாடிடா!டு நாதர பாபுடா! ழள டி பாவா! ன ஒரார்ப் தவ டீட்லீழள டி பாவாடிணா! ருபா அராவ ஆப் தவ டீடா! ழமானகாரு ழபாவாரான: !

5.மீடி ஈ!— ணப்சமடி சசபத வாச! மால் ஏவிண்ப் சா— பச! முடல் அச்சல் ஆல் பா ங⊪ஆெ ஒங்க∓முழப aவ ஈர ≋். **!**

6. ! ழளடி ஈவ நா ! ர உ ர ட ஈ! ள வை காம ஜெ புடு த ஒப த வ ம ஈ! ழம வன சப வா சாடி வா ? ர ப ! ர் வக சமு ழப வ சர வ.

2. 😮 டி ஈரவை எச்பஈபுஎங்டி மபு மங்பத வ ப ஈ! ப ஒ ஈஓ ஒங் ரு எட்!

3. கோஷாஸ்டு தஒபதவடிடைசினமாயபதவடிடைசிழமவாராக்!

4.பவ 🕻 டி ஈரங்த ந டிட ஒ ஈடிப வை கவா ஈ!ா டி மூன் பிழா ஒர எ. !

5. கு'னபாஈ!ாடி நாலஅங்த நமஈ! ழமங்காழழ் பலாராக்!

Subject Code : 21PTE4A Title of the paper :ரங்டாரப்பதன ! !

பஓஈஹா!ழரவாரால ஆ!

!

2. ராவடாஎடா!மடி எஸ்பாபுடா!டு தஒதடிடா 🕶 ராயவா!ஷெகாழழபாவாரா!

த.. ருடை எஎமாறு நா!ம நாதட !ர வடாஎ ! ர தபபவார் வடாள வமந்சாவா ! சாவா !

4. ரடைசாஎமானநாணா! எ ஒராமானடிவை வாயவா! தெஅடீடா! கநாதடிரேப் வாழர் வதாபா! தபடி வை டா! ரடிபா! பு வுமாழ் வெகானரா என்.!

5. ரடை எக்கலா நசங்வர் நடை எள் அசு பவசி என் குடிட்ட 🕶 ர வாவசிழம் வகாழழ்ப் வசு கி. !

6. ரடை எமசதமழர வடிக்குட்டி! னம் பில் வடி! பில் குண்டிர் குண்டி குண் பில் பில் பில் குண்டி குண்டி குண்டி குண்டு

7. ரடை பாமாழத ஒடி ணாச! முரதன ராடி பாதா ராச! மா ஒட ச! மதை த நட 🕶 ராபவ ச! ரவா மு ப ச! மு ப வ சராட்!

Subject Code : 21PTE4B Title of the paper: ເມາງ ເມາະບາງ ເມາະ 5 !

2. மாரபாபுஒவா!லஏரி ாராடினா!கு'ணா!நாதமாா!ா் காராமுபாவாரால்!

3. டக்சமல் பவர்!

பெரி ாராணுடியூ திர ாராணுட்பு தஅராமப்படிரு சு மடி பொரத்தா பசு விதுக்கு முப வார

ØH.

4. பவருரி பாதப பஒர்ரி பாதபடி நா! முர ஓா வி த ந ெ ரி கி.

- 5. மாரபாபுஒதவாா!ாாஒ!—ையாயடிசாபரவா ஆலா பாதொற்குடா!கே ஒடினா!ழா ஒரா.!!
- 5. ரவாவுரா!முஓடா!பஒாதநகடிசாபதவன— ஸாசமாதஅாராஷாததனை முடடா ஆமாமடாயாஒதநாா!மாஓரா

DEPARTMENTOF HISTORY P.G.

DEPARTMENTOFHISTORY-PG

ProgrammeCode:OPH

ProgrammeName:M.A.History

ProgrammeOutcomes

- 1. Disseminate in-depth knowledge of the subject and reflective thinking. (Global)
- 2. Empowerthesocialconcernthroughbridgingtheacademicintelligenceandmoraljustice.(National)
- 3. Sustain the cultural heritage and ethics with an empathetic view. (National)
- 4. Theskillto recognizeandarticulatethediversity of human experience, including ethnicity,race, language, sex, gender, as well as political, economic, social, and cultural structures overtimeand space.(Global)
- 5. Aftercompletionofthiscourseithelpstogrowethicalvaluesamonghistorystudents. (Global)
- 6. Theygatherknowledgeabout thesocio-cultural heritageofIndiaand theworldaswell. (Global)
- 7. Thiscoursehelpstogrowintellectualvaluesamonghistorystudentsandtodevelopliberalvaluesamongt hem.(National)

ProgrammeSpecificOutcomes

On completion of M.A.History programme, the students would be

- 1. Eligible for higher studies in Ph.D., MSW and other professional courses such as B.L.and B.Ed. (National)
- 2. Capable to apply acquired updated knowledge on research methods and to pursue researchorientedactivities(National)

3. Under take competitive examinations and qualify examinations with confidence and gusto. (National)

- 4. Engage as educators in elementary schools, secondary schools and postsecondary, historicSites and Museumsetc.asa researcher theywillbe associated in several fields like,Museums andHistorical Organizations, Cultural Resources Management and H istoric Preservationetc.(National)
- 5. Directly engage in different ranks of the Archaeological Survey of India according to theirperformanceslikeasHeritageManager, Historic buildings inspector or conservation Officer, Museum education Officer etc. (National)

Course Outcomes

Outcome Based Education(OBE)

SEMESTER-I

SubjectCode:210PH11

CourseName: SOCIO- CULTURAL (National HISTORY OF INDIA (UPTO 1206 A.D)

Uponcompletionofthecourse, the students will be able to

- 1. Recall the different culture of Ancient Period.
- 2. Classify on in-depth knowledge of Vedic age.
- 3. Identify the Socio religious awakening through Jainism and Buddism.
- 4. Existing the Asokha's contributions of Social, Political, Religious and economic condition of the society.
- 5. Justify various dynasties to illustrate the Guptas, Harsha's and Rajputs contribution to Indian Culture.

SubjectCode: 210PH12

CourseName: HISTORY OF TAMILNADU FROM PRE-HISTORY TO CHOLAS (Regional)

Uponcompletionofthecourse, the students will be able to

- 1. Recognise the different sources and races of Tamilnadu.
- 2. Understand the Socio Economic and Cultural aspects of Sangam Age.
- 3. Realize the legacy of Khalabhras and the progress of Pallava in Tamilnadu.
- 4. Assessing the characteristic of Bhakthi Movement and Features of Dravidian Architecture.
- 5. Estimating the achievements of Imperial Cholas.

SubjectCode: 210PH13 CourseName: INTERNATIONAL RELATIONS (1914A.D. - 2001A.D.) (Global)

- 1. Familiarize with International Theories and Diplomacy.
- 2. Gathering the trends before the II World war.
- 3. Determining the courses of Cold War and its impacts in world scenario.
- 4. Explaining the emergence of new order in Global Economic perspective.
- 5. Analyse the importance of Environment issues of its significance

SubjectCode: 210PH14 CourseName: WORLD CIVILIZATIONS (EXCLUDING INDIA)

Upon completion of the course, the students will be able to

- 1. Identify the salient features of Pre-Historic Age.
- 2. Outline on the First advanced civilizations features.
- 3. Explaining the growth and expansion of classical civilization.
- 4. Inspect on the characteristic and Level of Middle age civilization.
- 5. Reviewing the philosophy of different religion

SubjectCode:21OPHE1A CourseName: PRINCIPLES AND METHODS OF ARCHAEOLOGY

Upon completion of the course, the students will be able to

- 1. Reorganization of various definitions and kinds of Archaeology.
- 2. Focussing on the Level in Archaeology and Indian Archaeologists in India.
- 3. Categorised with knowledge on Archaeological exploration, excavation and methods.
- 4. Analyze on various dating methods and its relative techniques adopted in Archaeology.
- 5. Importance of Archaeological sites of Tamilnadu and its significance.

SubjectCode: 21OPHE1B CourseName: HISTORY OF USA (Up to 1860 A.D.)

Upon completion of the course, the students will be able to

- 1. To make on awareness about the establishment of 13 colonies, and territorial expansion of U.S.A from Atlantic to Pacific.
- 2. To know about the various Presidents from George Washington to James Bucanen.
- 3. 3. Recognize the role of USA the war of 1812 and its results.
- 4. Compare the relationship between Red Indians and Americans.
- 5. Assess the role President Van Buren to James Buchanan.

SubjectCode: 210PHNM1

CourseName: HISTORY FOR COMPETITIVE EXAMINATIONS – PAPER – I

- 1. Discuss the culture of pre-historic period.
- 2. Classify on in-depth knowledge of Vedic age...
- 3. Existing the Asokha's contributions of Social, Political, Religious and economic condition of the society and Justify various dynasties in Indian Culture.

- 4. Identified with the progress of Khilji, Tughlaq and Lodi dynasties during medieval period.
- 5. Develop the significance of Bakthi movement and Sufi Movement along with the role of Saints.

SEMESTER -II

SubjectCode: 210PH21

CourseName: SOCIO-CULTURAL HISTORY (National) OF INDIA (1206 A.D-1707 A.D)

Upon completion of the course, the students will be able to

- 1. Identify the social condition under Sultanates administration.
- 2. Explain the social transmission during the Mughuls.
- 3. Construct on overview about the Vijayanagar Society.
- 4. Evaluate the significance of Bakthi Movement and the role of saints.
- 5. Assess the characteristic feature of Art and Architecture of Medieval India

SubjectCode: 21OPH22 CourseName: FREEDOM MOVEMENT IN INDIA (Regional)

Upon completion of the course, the students will be able to

1. Indicate the socio Religious Reform movement of 19thcentury and the formation of Indian National Congress.

- 2. Explain the Curzons Administration and the role of Moderates and extremists in the early place of Freedom movement simulate.
- 3. Knowledge on the Gandhian era and the Simon commission.
- 4. Organize idea on Purnasawarj and the rice of other movements against British Administration.
- 5. Construct the proceedings of India before Independence.

SubjectCode: 21OPH23 Course Name: SOCIO- CULTURAL HISTORY OF TAMIL NADU (1565A.D.- 2006A.D.) Global

Upon completion of the course, the students will be able to

- 1. Recall the different culture of Nayaks and poligars.
- 2. Explain the contribution of Marathas to Taminadu Culture.
- 3. Identify the Socio religious awakening through Christian Missionaries.
- 4. Existing the Socio religious Movement and empowerment of downtrodden people.
- 5. Justify various Political parties to Illustrate their schemes to women empowerment.

SubjectCode: 21OPH24 Course Name: TOURISM PRODUCT IN INDIA

Upon completion of the course, the students will be able to

- 1. Recognize to know about the character of Tourism and its Typology.
- 2. Outline on Indian Culture, Architectural, Heritage and Styles of Architect in India.
- 3. Classification over the natural Tourism resources in India.
- 4. Highlights on Indian National Parks, Sanctuaries and Tiger reserve in Tourism perspective.
- 5. Explain the various Heritage monuments and important festivals of India.

SubjectCode: 210PHE2A

CourseName: PUBLIC ADMINISTRATION
PAPERI

(Global)

- 1. Recall the meaning, significance and Evolutions of public administration.
- 2. Represent public administration Relations with social science subjects.
- 3. Identify the basic principles of organizations and its delegations of powers of the authority.
- 4. Focus on Administrative functions of executive and the leadership quality.
- 5. Assess the executives, legislative and judicial control of Public Administration in India.

SubjectCode: 210PHE2B

CourseName: HUMAN RIGHTS

Upon completion of the course, the students will be able to

- 1. Visualize the evolution of Human Rights and its generations.
- 2. Familarized with the important declarations on Human Rights.
- 3. Identified with the powers and functions of Human Rights machineries in India.
- 4. Analyze the Human Rights violations in various field.
- 5. Evaluate the role of NGOs on safeguarding Human Rights

SubjectCode: 210PHNM2

CourseName: HISTORY FOR COMPETITIVE EXAMINATION – PAPER-II

- 1. Discuss the advent and administration of the Mughuls.
- 2. Explain theadvent of Europeans and their reforms under East India Company.
- 3. Describe the social reforms under east India Company.
- 4. Identified with the progress of National Movement in India.
- 5. Indicate the role of important leaders in the freedom movement and social reform movement

SEMESTER -III

Non-Outcome Based Education

SubjectCode: 17PH31 CourseName: HISTORY OF MODERN INDIA

(National)

Upon completion of the course, the students will be able to

- 1. Become a responsible citizen of India and appear in the competitiveexams.
- 2. Be aware of the condition of Indian rural Indebtedness.
- 3. Acquire wide knowledge on new Educational policy and gain wide knowledge about the various organizations on Social reforms.

SubjectCode: 17PH32 Course Name: HISTORICAL THEORIES AND (Global) METHODOLOGY

Upon completion of the course, the students willbeableto

- 1. Enterintoaserviceinacademics, research and ino the professional areas of History.
- 2. Apply to acquire updated knowledge on research methods and to purpose research oriented activities.
- 3. Understand the methodology of historical writing.

SubjectCode: 17PH33

CourseName: FREEDOM MOVEMENT IN (National) INDIA

- 1. To understand the value of our freedom fighter and Independence and develop a sense of Patriotism, co- operation and belongingness
- 2. Recognize the ideals of Mahatma Gandhi and the importance of non-violence in our life.
- 3. Understand the nature, policies and administration of British Rule in India and helpful to attend the competitive exam.

SubjectCode: 17PHE3A Course Name: PUBLIC ADMINISTRATION–PAPERII (Global)

- 1. Get an employment opportunity in communications, public transportation or legal fields.
- 2. Have the ability to make a direct impact on the local, state and federal governments.
- 3. Chance to Hold a Positionin Political analysts form major news networks have often pursued careers in publica dministration.

SubjectCode: 17PHE3B CourseName: WOMEN STUDIES (Global)

Upon completion of the course, the students will be able to

1. Categorize the basic Concepts & Theories of women studies as well as defining Gender.

2. They are responsive about the violence against the women and governmentprecautionary laws for their safeguard.

3. Analyze key issues of a f f e c t i n g women's Health.

4. Understand about schemes and programmers commissions and committees related to women empowerment.

5. Analyze the various organization and its role to promote the women empowerment.

SEMESTER -IV

SubjectCode: 17PH41 CourseName: CONSTITUTIONAL HISTORY OFINDIA (1773A.DTO1950A.D)

(National)

Uponcompletionofthecourse, the students will be able to

- 1. Gain knowledge on the Communal Electoral System and have deep interest in the reservation of unity integrity and solidarity of ournation.
- 2. Realize the duties and responsibilities citizen of India.
- 3. Receive guidelines forcompetitive examinations.

SubjectCode: 17PH42 Course Name: CONTEMPORARY INDIA

(National)

- 1. Understand the welfare schemes and educational policies of the Government of India.
- 2. Equipthem to become an efficient administrator.
- 3. Obtain Help to appear for competitive examinations.

SubjectCode: 17PH43 CourseName: ARCHIVESKEEPING (National)

Uponcompletionofthecourse, the students will be able to

- 1. Identify the difference between the responsibilities and activities of archivists and records managers and understand the influences of the institutional contexts in which documents arecreated, used and retained.
- 2. Recognize the changing nature of the document overtime and technology.
- 3. Madeawareofthevarious professional associations, their activities and publications

SubjectCode: 17PH44

| Course Name: ART AND ARCHITECTURE | (National) |
|-----------------------------------|------------|
| OFINDIA | |

Uponcompletionofthecourse, the students will be able to

- 1. Acquire knowledge of the chronological framework for the development to heart and architecture of India from In dus Valley Civilization to Modern period with anemphasison sacred architectureand sculpture.
- 2. Recognize the value of architecture in their religious, regional and stylistic context

3. Identify the sculpture, architecture and urban landscapes from Tamilnadu using appropriate vocabulary.

DEPARTMENT OF COMMERCE P.G

DEPARTMENT OF COMMERCE

Programme Code: OPC

Programme Name: M.Com.

Programme Outcomes

- 1. Complete Teaching Education Course like B.Ed. Eligibility Test, NET and SET successfully.
- 2. Acquire skill to select teaching and research as a Profession.
- 3. Became Project Manager, Web Designer and HR Leader in Multinational Companies.
- 4. To gain knowledge that helps to face various competitive examination.

Programme Specific Outcomes

On completion of M.Com (CA) Commerce Programme, the students would be able to

- 1. To become experts in accounting methodology and enhance professionalism through innovative practices, to be tactful in facing unforeseen demands and changes in situational roles in industry and academics.
- 2. To gain through subject knowledge from practical experiences, industrial learning and internship.
- 3. To develop entrepreneurial skills, groups activities, spirit of coordination shaping up their professionalism.
- 4. To adopt innovative opportunities, latest technologies that helps to develop new business.
- 5. To enhance informative and expressive computer knowledge that helps them to face various competitive examination.

<u>Course</u> Outcomes

Outcome Based Education(OBE)

<u>SEMESTER – I</u>

Subject Code: 21OPC11 Course Name: RESEARCH METHODOLOGY

Upon completion of the course, the students will be able to

- 1. Display the Concepts Relating to Business research, Types and Process
- 2. Classify the Research Problem and Drew the Research Design
- 3. Prepare Questionnaire and Interview Schedule and study Pretest and Pilot study.
- 4. Prepare a data analysis and Hypothesis testing procedures
- 5. Interpret and Conclude a Research Report

Subject Code: 210PC12 Course Name: ADVANCED FINANCIAL ACCOUNTING

Upon completion of the course, the students will be able to

- 1. Display the financial information system and accouting standard.
- 2. Classify the single-entry system and accounting for bills of exchange.
- 3. Prepare the hire purchase and instalment purchase system.
- 4. Interpret the Advance Application insolvency accounting and investment accounting.
- 5. Develop retirement and death of a dissolution and amagalmation of firms.

Subject Code: 210PC13

Course Name: APPLIED COSTACCOUNTING

- 1. Preparing cost sheet.
- 2. Classify various elements of cost.
- 3. Knowing the cost accounting standards.
- 4. Analyse the different methods of costing.
- 5. understand the various costing technique

Subject Code: 210PC14 Course Name: FINANCIAL MARKETS AND SERVICES

Upon completion of the course, the students will be able to

- 1. Explain the Meaning of Financial Market and its importance in the development of economy
- 2. Classify the types of Financial Market.
- 3. Understand the meaning and other features of Share market, Stock exchange and Depositary system.
- 4. Evaluate mutual funds.
- 5. Analyze the Importance of forfeiting.

Subject Code: 21OPCE1A Course Name: AUDITING ANDASSURANCE

Upon completion of the course, the students will be able to

- 1. understand the Role of an auditor for checking arithmetical accuracy of books of accounts.
- 2. Differentiate capital and revenue nature of transactions.
- 3. Analyze the authenticity and validity of accounting transactions.
- 4. Remembering the points in preparing an Audit Report.
- 5. Gaining the knowledge of e- Audit and Green Audit.

Subject Code: 210PCE1B Course Name: RETAIL MARKETING

Upon completion of the course, the students will be able to

- 1. Describe the basic concepts of Retail Marketing.
- 2. Able to prepare a business model.
- 3. Describe the concepts of Customer Relationship Management.
- 4. Students gain Knowledge Service Operation.
- 5. Understand the Marketing channel systems Concepts

Subject Code: 21OPCNM1 Course Name: PRACTICALBANKING

- 1. understand the relationship between banker and customer
- 2. understand the various types of deposit of the bank
- 3. Use cheques and draft in commercial transaction
- 4. evaluate the performance of crossing cheque in the bank
- 5. The recent trends in the banking system

Subject Code: 21OPC21 Course Name: ADVANCED BUSINESS STATISTICS

Upon completion of the course, the students will be able to

- 1. Calculate and interpret measures of central tendency for a set ofdata.
- 2. Investigating the relationship between two quantitativevariables
- 3. Resolve the test of hypothesis
- 4. Compute the Analysis of variance and F-test
- 5. Learn non-parametric test

Subject Code: 21OPC22 Course Name: HUMAN RESOURCE MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Understand the nature & scope of Human Resource Management.
- 2. Differentiate Grievance and Redressal Procedures nature of Training.
- 3. To analyze the Performance Appraisal based on MBO system.
- 4. Remembering the points in Quality of working life and Management of Stress.
- 5. Students gain the knowledge of Human Resource ManagementResearch and Audit.

Subject Code: 21OPC23 Course Name: ADVANCED CORPORATE ACCOUNTING

Upon completion of the course, the students will be able to

- 1. Understand the accounting concept for Banking and Insurance companies.
- 2. Solve accounting aspects of Amalgamations, Absorption and Reconstruction and liquidation of companies
- 3. Equip the Liquidators final statement of accounts
- 4. Learn various types of Indian Accounting standards
- 5. Examine holding companies

Subject Code: 21OPC24 Course Name: INSURANCE AND RISK MANAGEMENT

- 1. To describe about Basics of insurance.
- 2. Understanding the concepts of life insurance
- 3. Differentiate life insurance and non-life insurances.
- 4. Identifying classification of Risks.
- 5. Classified on various levels of risk management.

Subject Code: 21OPCE2A Course Name: MARKETING MANAGEMENT

Upon completion of the course, the students will be able to

- 1. Gaining the knowledge of marketing concept and Importance of marketing
- 2. Develop a new product and to apply the pricingstrategies.
- 3. Understand the channels of Distribution for marketingof products.
- 4. Apply the various promotional strategies in marketing.
- 5. Classify the Advertising copy, preparing the DigitalAdvertising

Subject Code: 21OPCE2B Course Name: SERVICES MARKETING

Upon completion of the course, the students will be able to

- 1. Understand the basic concepts of Service Marketing.
- 2. Able to understand a Bank and Insurance Marketing
- 3. Learn the concepts of Transport Marketing
- 4. Students gain the Knowledge about Tourism Marketing
- 5. Understand the Marketing channel systems Concepts

Subject Code: 210PCNM2 Course Name: ADVANCED EXCEL

- 1. Know Spread Sheet Basics
- 2. Learn Advanced Techniques of Microsoft Excel
- 3. Understand the Advanced Techniques of Microsoft Excel
- 4. Identify Validating and Importing Data in Microsoft Excel
- 5. Accessing Web with Microsoft Excel

DEPARTMENT OF MATHEMATICS M.PHIL.

DEPARTMENT OF MATHEMATICS

Programme Code: PM

Programme Name: M.Phil. Mathematics

Programme Outcomes

- 1. This course improves the standards of research.
- 2. To acquire advanced knowledge and comprehensive understanding the fundamental principles in respective discipline.
- 3. To apply knowledge and critically evaluate the concepts and scientific developments to take up any challenge.
- 4. Employ innovative and environment friendly methods, novel idea to solve complex and challenging societal and environmental issues.

Programme Specific Outcomes

- 1. To develop research level thinking in the field of pure and applied mathematics.
- 2. To develop and enhance teaching skills in Mathematics.
- 3. To develop abstract Mathematical thinking.
- 4. To write research articles in mathematics and to publish it in reputed journals.

Course Outcomes

Subject Code: 17LM11

Course Name: RESEARCH METHODOLOGY

Upon completion of the course, the students will be able to

- 1. Classify the types of Research and Objectives of the Research.
- 2. Discuss Rings, Ideals , Modules, Tensor Product of Module and Tensor of product of algebra.
- 3. Define Notherian modules, primary decomposition and Artin modules.

Subject Code: 17LM12 Course Name: ADVANCED ANALYSIS

Upon completion of the course, the students will be able to

- 1. Understand the Topological vector spaces and Metrization.
- 2. Study baire category theorem, Steinhaus theorem, The open mapping theorem-The Closed graph theorem.
- 3. Study the Principle of convexity and duality in Banach Spaces

Subject Code: 19LMPD2/: 19LMPV2 Course Name: DISSERTATION/ VIVA VOICE

Upon completion of the course, the students will be able to

- 1. Select Research topic, do review and pilot study.
- 2. Formulate Research design.
- 3. Draft a final report.

Subject Code: 19LMO1A Course Name: ADVANCED GRAPH THEORY

- 1. Understand the concepts of Graph colorings, Matchings and Independence in Graphs.
- 2. Study the concepts of Factorization and Decomposition
- 3. Apply the concept of Labeling of Graphs, Domination ,independent domination and irredundance domination of Graphs.

Subject Code: 19LMO1B Course Name: FUZZY THEORY

Upon completion of the course, the students will be able to

- 1. Analyze the concepts of fuzzy sets
- 2. Understand the various concepts of Fuzzy complements, Fuzzy intersection and Fuzzy numbers
- 3. Understand various types of Fuzzy Relations.

Subject Code: 19LMO1C Course Name: HOMOLOGICAL ALGEBRA

Upon completion of the course, the students will be able to

- 1. Discuss test functions and calculus with distribution.
- 2. Derive some properties of distributions.
- 3. Discuss Wiener's theorem, prime number theorem and Renewal equation.

Subject Code: 19LMO1D Course Name: HOMOLOGICAL ALGEBRA

Upon completion of the course, the students will be able to

1. Discuss Rings and Modules.

2. Discuss Homology and derived functions.

3. Classify $\mathbf{O} T$ and $\mathbf{O} T$ comparison, derived functors of X , Homological modules and Rings.