

**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 the Institution.**

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 modern computing 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-based solutions 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.

DEPARTMENT OF HISTORY  
U.G.

**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** **Outcome Based Education (OBE)**

### **SEMESTER – I**

**Subject Code: 22OUHI11**

**(National)**

**Course Name: HISTORY OF INDIA – I (upto 712 A.D.)**

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

1. To acquire knowledge on geographical features of India and its consequences on Indian history.
2. To develop an understanding over the characteristic features of early Civilizations of India
3. To make awareness on new religions in the 6th century B.C and its philosophies.
4. To understand the prevalence of ahimsa concept during ancient dynasty
5. To acquaint knowledge over the administrative skills of dynasties in ancient India.

**Subject Code: 22OUHI12**

**(National)**

**Course Name: History of Tamilnadu- I (Upto 1336 C.E)**

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

1. To acquire the knowledge on geographical features on early Tamil country.
2. To familiarize the students with ancient Tamil society.
3. To learn new style of Art and Architecture of Tamil Nadu.
4. To gain knowledge about the imperial Cholas Administration.
5. To develop knowledge on salient features of First and Second Pandiyan Empire.

**Subject Code: 22OUHIGEEEC1**

**(National)**

**Course Name: Economic Development of India**

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

1. To inculcate the Growth and Development of Indian Economy.
2. To estimating the population growth and explosions of India.
3. To know the concepts and Difficulties of calculating in national income.
4. To identify the relevance of Agriculture growth and Industry in Indian Economy.

5. To assess the achievements and failures of Planning in India.

**Subject Code: 22OUHID1**

**(National)**

**Course Name: History of Madurai**

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

1. To know about the History of Madurai.
2. To develop the knowledge about through the ages of Madurai.
3. To understand the Role of agriculture & economic condition of Madurai during this period.
4. To make knowledge on various Historical site & its significant.
5. To acquire knowledge on different religious center of Madurai.

## **SEMESTER – II**

**Subject Code: 22OUHI21**

**(National)**

**Course Name: History of Tamilnadu- II (1336 A.D.- 1800 A.D.)**

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

1. To Identifying the Vijayanagar rule and learn about the Nayaks ofTamilNadu.
2. To Extending the knowledge and understand the rule of Nayaks.
3. To identify the contribution of Nayaks in Tamil country.
4. To acquire knowledge on the rule of Tanjore Marathas.
5. To Reviving the role of Poligars.

**Subject Code: 22OUHIGEEC2**

**(Global)**

**Course Name: Economics of Marketing**

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

1. To recognize the students with the basic concepts of Marketing.
2. To understand the different kinds of Buying, Assembling and Selling.
3. To identify the Advantages of Storage and Warehouse.
4. To enable the students to comprehend the functions of Advertising.
5. To develop the knowledge on Media and online Marketing.

**Subject Code: 22OUHID2**

**(National)**

**Course Name: Constitution of India**

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

1. To create an awareness about the Indian constitution.
2. To enable the students to understand the working of Indian Governmental System.
3. To understand the framing of law in Union Legislative Assembly
4. To know the functions and powers of Judicial System.
5. To have a wide idea about central and state relations.

### **SEMESTER – III**

**Subject Code: 22OUHI31**

**(National)**

**Course Name: HISTORY OF INDIA – III (1526 A.D. - 1757 A.D.)**

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

1. To understand the emergence of Mughal Empire.
2. To acquire the knowledge of Mughals invasions.
3. To Analyze the Administration and Architecture during the Mughals.
4. To enlighten the Marathas relations with the Mughal Empire.
5. To explore the establishment of British rule in India.

**Subject Code: 22OUHI32**

**(Global)**

**Course Name: History of Tamil Nadu - III (1800 A.D. - 2006A.D.)**

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

1. To acquire knowledge on Poligar Rebellion against British administration.
2. To gain knowledge over the Christian Missionaries and other Social Movements.
3. To make awareness on Freedom Struggle in Tamil Nadu.
4. To familiarize with the progress of Political parties in Tamil Nadu.
5. To acquaint knowledge over the Government socio - economic schemes of Tamil Nadu.

**Subject Code: 22OUHIGEPS3**

**(National)**

**Course Name: Modern Governments – Theory and Practice - Paper I**

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

1. To understand on the basic concepts of Modern Governments.
2. To gain knowledge on the Functions of Government.
3. To enable the students to know the functioning of the Constitutions of U.K.
4. To identify the various features of U.S.A.
5. To develop the knowledge on Role of senate and Separation of Powers.

**Subject Code: 22OUHISE3**

**(Global)**

**Course Name: Computer Applications**

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

1. To provide a basic knowledge about the computer and its applications.
2. To learn about the various types of Software and Network.
3. To understand the new ideas to adopt in Internet features.
4. To acquire the skills on MS Power Point.
5. To familiarize with the usage of E-mails and its significances.

#### **SEMESTER – IV**

**Subject Code: 22OUHI41**

**(National)**

**Course Name: HISTORY OF INDIA – IV ( 1757 A.D. - 1858 A.D.)**

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

1. To understand the establishment of the British administration in India.
2. To recall the Socio-economic and educational reforms in British Period.
3. To acquire knowledge about the achievements of British through the Battles.
4. To trace the evolution of revolt, cause, course and its result.
5. To recognize the constitutional development from 1773A.D to 1858A.D.

**Subject Code: 22OUHI42**

**(Global)**

**Course Name: History of Science and Technology (Since 17th Century A. D)**

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

1. To acquire knowledge about the development of Science and Technology in the 17th Century.
2. To understand the invention in Textile Industry and Electricity

3. To make awareness on the origin of Human being and Technology of Telegraph and Telephones.
4. To recognize the developments in the field of Atomic energy and Electronics
5. To appreciate various achievements of the scientists in various fields.

**Subject Code: 22OUHIGEPS4**

**(National)**

**Course Name: Modern Governments – Theory and Practice - Paper II**

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

1. To understand the functioning of the Swiss Constitution.
2. To gain knowledge about the Constitutional set up in France.
3. To create an awareness among the students about Indian constitutional development.
4. To obtain Knowledge over the features of the Indian Constitutions and its Functions.
5. To Identify the Central and State Government Function and its Relation.

**Subject Code: 22OUHISE4**

**(Global)**

**Course Name: Fundamentals of Entrepreneurship**

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

1. To inculcate the basic knowledge to start own business.
2. To enable the students to have a strong foundation for their future self-employment.
3. To know the financial Institution for Entrepreneurs.
4. To inculcate the significant of Women Entrepreneurs.
5. To recognize the process of project formulation.



**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUHI11**

**(National)**

**Course Name: History of Ancient India upto 1206 CE**

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

1. Understanding of the characteristics of pre and proto historic cultures in India.
2. The impact of Vedic culture on society, religion and culture.
3. Emergence of Centralized State under the Mauryas and Ashoka's Dhamma.
4. Achievements of the Guptas and their contribution to literature, art and architecture.
5. Post-Gupta polity and the invasions of Mahmud of Ghazni and Muhammed of Ghor.

**Subject Code: 23OUHI12**

**(National)**

**Course Name: History of Tamil Nadu upto 1311 CE**

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

1. Knowledge of geography and sources of Tamil Nadu.
2. Understanding of polity, society and economy of the Sangam period.
3. The contribution of Pallavas in the field of art and architecture.
4. Appreciation of the achievements and contribution of the Imperial Cholas.
5. Factors for the decline of the Pandyas.

**Subject Code: 23OUHISECN1 I**

**(National)**

**Course Name: Introduction to Tourism**

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

1. Understanding of the basic components and elements of tourism
2. Knowledge of different types and forms of tourism
3. Knowledge of the role of Travel Agents
4. Understanding of the role of Tour Operators
5. Knowledge of the travel documents

**Subject Code: 23OUHIFC1**

**(National)**

**Course Name: Introduction to History**

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

1. Introduction to the meaning and nature of history.
2. Knowledge of different kinds of history and its relationship with other disciplines.
3. Use of facts in writing history.
4. Introduction of the concepts in history.
5. Knowledge of various sources for the study of history and usage of bibliography and Footnotes.

## SEMESTER – II

**Subject Code: 23OUHI21**

**(National)**

**Course Name: HISTORY OF MEDIEVAL INDIA – 1206 – 1707 CE**

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

1. Understanding about the genesis of the Sultanate rule in India and its early rulers
2. Appreciation of the administration of Tuglaqs, Sayyids and Lodis and the impact of Bhakti Movement
3. Knowledge about the founding and conquests of the Mughal rulers
4. Art and architecture and administrative policies during the Mughals
5. The administration, art and architecture during Bahmini and Vijayanagar kingdoms

**Subject Code: 23OUHI22**

**(National)**

**Course Name: HISTORY OF TAMIL NADU - 1311 – 1801 CE**

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

1. Rise of the Madurai Sultanate and its contribution.
2. Knowledge about the impact of Vijayanagar rule in Tamilaham.
3. Contribution of the Nayaks of Madurai, Senji and Thanjavur.
4. Contribution of the Marathas to Tamil culture.
5. Understand the Poligar Rebellion as the early resistance against British imperialism.

**Subject Code: 23OUHISECN2**

**(National)**

**Course Name: Indian Constitution**

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

1. Understanding of the salient features of the Indian Constitution
2. Knowledge about fundamental rights and duties

3. Knowledge about the structure and functions of the Union Government
4. Knowledge about the structure and functions of the State Government
5. Understanding of the powers and functions of the local government

**Subject Code: 23OUHISEC3**

**(National)**

**Course Name: Basic Journalism**

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

1. Understanding the definition, types, and determinants of news
2. Knowledge about newspaper organization structure
3. Knowledge about the role, qualities, and responsibilities of a reporter
4. Knowledge about reporting and writing
5. Understanding of the role, qualities, and responsibilities of an editor

**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 Commonwealth 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**

## **Outcome Based Education (OBE)**

### **SEMESTER – I**

**Subject Code: 22OUEN11**

**(Global)**

**Course Name: British Literature**

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

1. To know about British Prose, Poetry, Drama & Fiction.
2. To know more about the culture of England from 15th to 20th Century
3. To provide Knowledge about trend setters of Literary Age
4. To make understand about various styles in British Literature
5. To know about components of England from 15th to 20th Century

**Subject Code: 22OUEN12**

**(National)**

**Course Name: Children's Literature**

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

1. To enable the students to understand children's literature
2. To identify and recognise the importance of fables
3. To help the students to improve their poetic skills
4. To make the learners appreciate the values of human life
5. To develop an interest in children's literature.

**Subject Code: 22OUENGEEN1**

**(Global)**

**Course Name: Social History of England**

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

1. To identify the era- the medieval or middle period and the modern period of England
2. To make conversant with the socio-historical background to literature
3. To correlate the socio-political history with the literary history of English
4. To identify, analyse and interpret the critical ideas, values and themes that appear in various genres of literary and cultural texts

5. To ascertain and recognize the full breadth of English Life and society that offers requisite and imperative introductions about the key themes, cultures, Literature and so on which epitomizes various periods of English Society.

**Subject Code: 22OUENID1**

**(National)**

**Course Name: Communication Skills - I**

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

1. To identify and develop their communicative English by acquiring Listening, Speaking, Reading, and Writing Skills.
2. To discover various strategies to learn English language in a fun filled and easiest possible manner
3. To cultivate employability skills by developing communicative competency.
4. To improve their language more effectively and concisely.
5. To create Communication Skills for Placement and global mobility

## **SEMESTER – II**

**Subject Code: 22OUEN21**

**(National)**

**Course Name: Indian Writing in English**

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

1. To familiarize the students with the major writers and literary works in Indian Writing in English from colonial times till the present modern age.
2. To analyze the growth of Indian Writing in English with reference to the historical, political, social and cultural milieu of Indian subcontinent from the colonial days.
3. To understand the place and contribution of Indian Writing in English in Commonwealth Literature.
4. To analyze how effectively the Indian identity, both individual and collective, is represented through English language.
5. To examine how various literary trends prevalent in English literature from all over the world found a natural way into Indian Writing in English during every age

**Subject Code: 22OUEN22**

**(Global)**

**Course Name: Advanced English Grammar**

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

1. To enable the students to get acquainted with the fundamental knowledge of modern grammar.
2. To equip the learners to apply grammatical knowledge in Spoken English and written English with correct grammatical structure.
3. To impart a working knowledge of the basic rules of the English Language to the students.
4. To develop the skills of constructions in written and Spoken English and help the students gain confidence.
5. To enable the students, acquire adequate skills to use grammatically correct structures that would in turn promote effective speaking and writing.

**Subject Code: 22OUENGEEN2**

**(Global)**

**Course Name: History of English Literature**

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

1. To expose the students to the evolution of English literature.
2. To acquaint the students with the broader genres of literature in general.
3. To acquire an overview of the social and historical context of the major writers
4. To evaluate the perception of the ideology of a certain age of English literature.
5. To analyze the various movements and waves in English Literature.

**Subject Code: 22OUENID2**

**(National)**

**Course Name: Communication Skills - II**

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

1. To speak English with fluency
2. To develop listening skill and have the patience to acquire wide knowledge
3. To make use of creativity and to put an end for rote learning.
4. To analyze the power of gaining knowledge, reading enables them to widen their view.
5. To improve the concept of learning Literature.

### **SEMESTER – III**

**Subject Code: 22OUEN31**

**(Global)**

**Course Name: American Literature**

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



1. To identify and recognize various genres and terms of American Literature in different periods
2. To enable the students to understand the themes and styles of American Poetry
3. To acquaint the students with the philosophy of American thinker
4. To introduce students to American drama through the study of selected text
5. To develop an understanding of Cross-cultural perspectives in African-American fiction.

**Subject Code: 22OUEN32**

**(National)**

**Course Name: Indian Literature in English Translation**

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

1. To make the students aware of the art of translation.
2. To help the students understand the cultural heritage and traditional values of India through the literary works of Indian regional writers.
3. To familiarize the students with the regional literature translated into English.
4. To develop a literary sensibility and display an emotional response to the literary texts and cultivate a sense of appreciation for them.
5. To apply the ideas encapsulated in Indian Aesthetics to literary text.

**Subject Code: 22OUENGEEN3**

**(Global)**

**Course Name: Literary Genres and Terms**

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

1. To discuss about the impacts and effects of Genres and enable them to appreciate the beauty and style of the poem.
2. To identify the different types of Essays and make them to write their own essays.
3. To relate the concept of various novels and motivate them to know the elements of the novel.
4. To acquire the knowledge to identify and explain styles of Drama and analyse Drama in Text.
5. To identify the Literary Terms and study how these terms contribute to their writing skill.

**Subject Code: 22OUENSE3**

**(National)**

**Course Name: Interview Skills**

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

1. To train the students in group discussion and interviews.

2. To instills confidence in students to face interviews.
3. To provide the students a forum for developing their communication skills needed for their career.
4. To improve overall personality of the students
5. To build self-esteem

## **SEMESTER – IV**

**Subject Code: 22OUEN41**

**(Global)**

**Course Name: Women's Writings in English Translation**

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

1. To discuss the significant contribution of Female writers in English translation.
2. To develop the skill of translating a text ensuring accuracy in terms of source content, authenticity, cultural appropriateness, language and style.
3. To analyze the theory and practice of the written transmission of general and specialist texts into another language.
4. To learn multi-lingual cultural mediation.
5. To create understanding on the role of translated works in English Literature.

**Subject Code: 22OUEN42**

**(National)**

**Course Name: Introduction to English Language and Linguistics**

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

1. To enumerate the pedagogical skills to the students by acquainting them with the structure of modern English, history of English language, linguistics and methods of teaching English
2. To discuss the challenges of English Language Teaching and Testing
3. To develop the ability to study and analyze languages in general
4. To devise strategies to see how language operates.
5. To measure the students' learning on the nuances of standard English, Word-Making, Spelling and Pronunciation.

**Subject Code: 22OUENGEEN4**

**(Global)**

**Course Name: English for Competitive Examinations**

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

1. To enumerate the pedagogical skills to the students by acquainting them with the structure of modern English and methods of teaching English
2. To discuss the challenges of English Language Testing

3. To develop the ability to study and analyze languages in the four skills
4. To measure the students' learning on the nuances of Standard English.
5. To make the students aware of competitive examination skills

**Subject Code: 22OUENSE4**

**(National)**

**Course Name: Computing Skills**

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

1. To introduce the basic skills of computer
2. To build a strong foundation for student in Ms Word
3. To develop the ability to handle Ms Excel
4. To devise strategies to work in table top and lap top computers
5. To make students serve in IT industries.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUEN11**

**(National)**

**Course Name: Introduction to Literature**

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

1. To introduce the different forms of literature
2. To provide learners with the background knowledge of literature
3. To enable learners to understand the different genres of writing
4. To examine the various themes and methodologies present in literature
5. To create the ability of critically examining a text

**Subject Code: 23OUEN12**

**(National)**

**Course Name: Indian Writing in English**

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

1. To familiarize the students with the emergence and growth of Indian Writing in English in the context of colonial experience.
2. To help in understanding issues concerning Indian Writing in English such as the representation of culture, identity, history, constructions of nation, (Post) national and gender politics, cross-cultural transformations.
3. To enable learners to appreciate Nation-Nationalism; Counter Discourse; Subalternity; Identity Movements.
4. To closely examine the various themes and methodologies existing in Contemporary Indian Writing in English.
5. To help learners apply the ideas encapsulated in Indian Aesthetics to literary texts

**Subject Code: 23OUENGEEN1**

**(Global)**

**Course Name: Social History of England**

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

1. To provide students with a comprehensive idea about the development of English literature and language over the ages
2. To help student trace the trajectory of the growth of English literature from the period of its inception, dating back to the seventh century, to the present era

3. To help them develop an understanding of the structural development of the English language
4. To inform them about the various external linguistic influences that have contributed to the making of the language
5. To create the ability of critically examining a text

**Subject Code: 23OUENSECN1**

**(National)**

**Course Name: Popular Literature and Culture**

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

1. To broaden the idea of literature and the concept of texts.
2. To learn the difference between genre fiction and literary fiction.
3. To make students gain an understanding of the folk roots of popular literature.
4. To make students find a perspective into the debate between high and low Cultures.
5. To analyze the fantasy work that gains popularity.

**Subject Code: 23OUENFC1**

**(Global)**

**Course Name: Fundamental Framework for Reading English Literature**

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

1. To enable students to gain knowledge about Literature's relevance in Contemporary times.
2. To provide a basic understanding of genres.
3. To help students to convey creative and literary ideas effectively.
4. To help develop the ability to practically appreciate literary pieces.
5. To introduce students to world renowned writers across genres.

## **SEMESTER – II**

**Subject Code: 23OUEN21**

**(National)**

**Course Name: British Literature-I**

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

1. To introduce British Identity, Periods and other related forms.
2. To increase the ability for students to intellectually assess the world and their place in it.
3. To enable learners to understand that British literature is at the foundation of English-speaking peoples' culture.
4. To closely examine the various themes and methodologies present in British literature
5. To create an aptitude of critically probing through the text

**Subject Code: 23OUEN22**

**(Global)**

**Course Name: American Literature -I**

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

1. To understand the growth and development of American literature.
2. To critically examine how various genres developed and progressed.
3. To learn about prominent writers and famous works in American literature.
4. To closely examine the various themes and methodologies present in British literature
5. To create an aptitude of critically probing through the text

**Subject Code: 23OUENGEEN2**

**(National)**

**Course Name: History of English Literature**

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

1. To help students with a survey of the history of English literature from Old English times to the Modern period.
2. Help them gain particular reference to the major literary movements and authors
3. To help them with an overview of the major linguistic influences on the English language
4. To provide them with a look at certain linguistic processes that have contributed to the development of the English language
5. To create the ability of critically examining a text.

**Subject Code: 23OUEN22**

**(Global)**

**Course Name: Philosophy for Literature**

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

1. To understand the growth and development of American literature.
2. To critically examine how various genres developed and progressed.
3. To learn about prominent writers and famous works in American literature.
4. To closely examine the various themes and methodologies present in British literature
5. To create an aptitude of critically probing through the text

**Subject Code: 23OUENGEEN2**

**(National)**

**Course Name: History of English Literature**

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

1. To help students with a survey of the history of English literature from Old English times to the Modern period.
2. Help them gain particular reference to the major literary movements and authors

3. To help them with an overview of the major linguistic influences on the English language
4. To provide them with a look at certain linguistic processes that have contributed to the development of the English language
5. To create the ability of critically examining a text

**Subject Code: 23OUENSECN2**

**(National)**

**Course Name: Philosophy for Literature**

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

1. Engage with the philosophy of literary representations.
2. Give the students a historical overview of the major figures in philosophy
3. Introduce to them some of the significant schools of thought that has influenced human perception.
4. Inform students how an understanding of philosophy is vital to the reading of literature
5. Analyze the philosophical thought present in the literary text

**Subject Code: 23OUENSEC3**

**(Global)**

**Course Name: English for Communication**

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

1. To enhance the level of literary and aesthetic experience of students and to help them respond creatively.
2. To sensitize students to the major issues in the society and the world.
3. To provide the students with an ability to build and enrich their communication skills.
4. To equip students to utilize the digital knowledge resources effectively for their chosen fields of study
5. To help them think and write imaginatively and critically

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** **Outcome Based Education (OBE)**

### **SEMESTER – I**

**Subject Code: 22OUZO11**

**(Global)**

**Course Name: Invertebrate**

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

1. To enable the students to understand the level of organization in invertebrate classifications.
2. To identify the animals and recognize their key characters of all phyla.
3. To help the students gain practical applications in the field of research.
4. To make the learners aware of the human misconceptions, bioethics and phobias associated with invertebrate interactions.
5. To create awareness on the role of Invertebrates in biological communities, ecological interactions.

**Subject Code: 22OUZOSE11**

**(National)**

**Course Name: Skill Enhancement Course**

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

1. Insight the student's knowledge with basics of computer system.
2. Equip the students to access the usage of MS word.
3. Gain knowledge of working with Excel, PowerPoint.
4. Make students to recognize for accessing the usage of Internet.
5. Take up self-employment in all Computer applied fields.

**Subject Code: 22OUZOSE12**

**(Global)**

**Course Name: Skill Enhancement Course**

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

1. Acquire knowledge on the different breeds of cattle and their characteristics
2. Make them aware of the factors affecting health and livestock diseases.
3. Learn about nutritional recommendations for lactating mother and breeding management.

4. Acquire the skills to manage a dairy farm or to start one with adequate inputs.
5. Know how on the novel techniques of cattle breeding.

**Subject Code: 22OUZOID1**

**(Global)**

**Course Name: Inter Disciplinary Course**

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

1. To enhance the skill and encourage students to contribute to the economy.
2. Examine the potential for self-employment.
3. Prepare the pupils for employment in rural areas that focuses on the social welfare.
4. Emphasize your knowledge of agro ecosystem-cottage industry auxiliary activities.
5. To know the value of dairy products, its efficacy in human livelihoods, as well as to impart useful information on dairy farming

## **SEMESTER – II**

**Subject Code: 22OUZO21**

**(National)**

**Course Name: Chordata**

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

1. To understand the basic and systematic classification of Chordates.
2. To discuss diversity, adaptations, Organization and taxonomic status of Chordates
3. To understand the origin and evolutionary relationship in different subphylum of Chordates
4. To understand the ecological role of different groups of Chordates.
5. To make students learn and describe unique characters of Urochordates, Cephalochordates and fishes

**Subject Code: 22OUZOSE21**

**(Global)**

**Course Name: Vermitechnology**

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

1. To impart the knowledge on the identification and biology of earthworms.
2. To foster the skills on the preparation of quality vermicomposting and vermiwash by recycling the waste.
3. To understand the prospects and marketing strategies of Vermitechnology
4. To make them become entrepreneurs.

5. To understand the ill effects of chemical fertilizers and relay on Organic manure.

**Subject Code: 22OUZOSE22**

**(National)**

**Course Name: Aquaculture**

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

1. To produce protein rich, nutritive, palatable and easily digestible human food.
2. To produce ornamental fish for aesthetic appeal.
3. To make learners aware of the means of livelihood through commercial and industrial aquaculture.
4. To learn the formation of pearl oyster culture.
5. To discuss the need of water quality management in aquaculture farms

**Subject Code: 22OUZOID1**

**(National)**

**Course Name: Interdisciplinary Course**

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

1. To learn the basic principles and techniques of Ornamental fish culture.
2. To study the salient features of popular ornamental fishes.
3. To get an exposure on setting up and maintenance of aquarium.
4. Acquire knowledge on principles, designing and maintenance of an aquarium.
5. Motivation to take up entrepreneurship through ornamental fish culture.

**Subject Code: 22OUZO31**

**(Global)**

**Course Name: Cell & Molecular Biology**

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

1. To illustrate, elucidate and describe the basic structure and functions of cell as a basic fundamental unit of an organism
2. To explore the molecular architecture of biomolecules and their complex interactions.
3. To learn about the significance of macromolecules- DNA, RNA and proteins.
4. To understand the importance of cell division and replication.

**Subject Code: 22OUZO41**

**(National)**

**Course Name: Developmental Biology**

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

1. To make an awareness to the students about the theories, concepts and basics of Developmental Biology.
2. To provide students about the idea of sex cells, fertilization, cleavage, differentiation and development of organs.
3. To make an awareness of the induction, organizers and development of extra embryonic structures.
4. To provide adequate explanation to students about the late embryonic developments and post embryonic development and ageing.
5. To give an idea about teratogenesis, invitro fertilization, stem cells and amniocentesis to the students.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUZO11**

**(National)**

**Course Name: Invertebrata**

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

1. To understand the basic concepts of lower animals and observe the structure and functions.
2. To illustrate and examine the systemic and functional morphology of various group of invertebrates.
3. To differentiate and classify the various groups of animal modes of life and to estimate the biodiversity.
4. To compare and distinguish the general and specific characteristics of reproduction in lower animals.
5. To infer and integrate the parasitic and economic importance of invertebrate animals.

**Subject Code: 23OUZO1P**

**(National)**

**Course Name: Lab in Invertebrata**

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

1. To identify the different groups of invertebrate animals by observing their external characteristics.
2. To understand the organs, organ system and their functions in lower animals.
3. To get knowledge about the different modes of life and their adaptation based on the environment
4. Able to dissect and display the internal organs and mount the mouthparts and scales of invertebrates.

**Subject Code: 23OUZOSECN1**

**(National)**

**Course Name: Ornamental Fish Farming and Management**

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

1. To highlight the importance of ornamental fish culture in relation to entrepreneurship development.

2. To enable the identification, culture and maintenance of commercially important ornamental fishes.
3. To provide the knowledge on the techniques of ornamental fish breeding, rearing, disease control and economics of ornamental fish farming

**Subject Code: 23OUZOFC1**

**(National)**

**Course Name: Foundation Course in Zoology**

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

1. The objective of this document is to facilitate institutions and faculty in implementing a Foundation Course of three-month duration at the beginning of the B.Sc., course that will sensitize the fresh graduate student with the required knowledge and skills that will assist her in acclimatizing to the new college environment which would be her basement for a life-long career.
2. The Foundation Course will also provide a sound foundation for learning in the B.Sc., Zoology course and later in their professional career. While the institutions are expected to abide by the general guidelines, local changes can be made depending on the context and requirements.

## **SEMESTER – II**

**Subject Code: 23OUZO21**

**(National)**

**Course Name: Chordata**

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

1. To understand the structures and distinct features of Phylum Chordata.
2. To understand and able to distinguish the characteristic features of each subphylum and class. To understand the economic importance of vertebrate.
3. To know about the adaptations of vertebrates. • To understand the evolutionary position of different groups of vertebrates.

**Subject Code: 23OUZO2P**

**(National)**

**Course Name: Lab in Chordata**

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

1. To understand the structures and distinct features of phylum chordata.

2. To understand and able to distinguish the characteristic features of each subphylum and class. To understand and compare the structure of various internal organs in different classes of vertebrates.
3. To know about the classification, adaptations and affinities of chordate animals.

**Subject Code: 23OUZOSECN2**

**(Global)**

**Course Name: Basic Course in Ornithology**

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

1. To equip students with the required knowledge to understand the taxonomic position and role played by birds in the ecosystem, their importance to humans and their evolution
2. To enable students to comprehend the biological evolution of birds and their structural adaptations
3. To enable students to understand and learn aspects of bird behaviour
4. To enable students to learn about the breeding biology of birds
5. To equip students with a knowledge of macro ecology of birds, bird populations and communities, bird diseases, bird conservation and on the role of citizen science in ornithology

**Subject Code: 23OUZOSECN3**

**(National)**

**Course Name: Basics of Marine Biology**

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

1. To understand and learn the physical, chemical and biological aspects of marine environment and to gain knowledge about the management of oceans.
2. To introduce students to the marine environment and its indigenous organisms.
3. To study the principles, concepts and facts through which the student can better understand and appreciate the nature of the sea and its inhabitants.
4. To acquaint the student with the characteristics used to identify and classify marine plants and animals and to develop an awareness of the career possibilities available to students in this area.



# ALLIED BOTONY

## **SEMESTER – V**

**Subject Code: 21AG5**

**(National)**

**Course Name: Taxonomy of Angiosperms & Plant Pathology**

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

1. To learn the morphology of flowering plants.
2. To know the economic values of plants in each family.
3. To bring awareness to the usage of economically useful plants.
4. To identify the plant diseases and the method of rectification.

## **SEMESTER – VI**

**Subject Code: 21AG6**

**(National)**

**Course Name: Applied Botany**

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

1. To understand the basic concepts of plant breeding and its methods.
2. To learn plant propagation methods
3. To know the plant tissue culture techniques and their importance
4. To acquire the therapeutic values of various medicinal plants.
5. To study the potential scopes of medicinal plants in nanotechnology.

# ALLIED CHEMISTRY

## **Course Outcomes** **Outcome Based Education (OBE)**

### **SEMESTER – III**

**Subject Code:** 22OUZOGECH3/ 22OUMAGECH3 (Global)

**Course Name:** Chemistry–III Industrial Chemistry

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

1. To gain knowledge about the chemistry of important manufacturing process of match industry.
2. To gain the basic knowledge about manufacture and properties of cement and glass.
3. To understand the classification, manufacture and applications of fertilizers.
4. To achieve the knowledge on the preparation, and applications of natural rubber and synthetic rubber.
5. To analyze and apply the knowledge of plastics and paper industry

### **SEMESTER – IV**

**Subject Code:** 22OUZOGECH4/ 22OUMAGECH4 (Global)

**Course Name:** Chemistry –IV - Medicinal, Green & Nano Chemistry

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

1. To learn about classification, application of Anesthetics, Analgesics and Antipyretics
2. To become familiar with Sulpha Drugs, Antibiotics and Antiseptics.
3. To learn the chemistry of Hypnotics, Sedatives and Tranquilizers
4. To study the nature of Green Chemistry.
5. To learn various synthesis techniques of Nanoparticles.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUZOGÉCH1**

**(National)**

**Course Name: Chemistry for Biological Sciences -I**

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

1. To provide knowledge on basics of atomic orbitals, chemical bonds, hybridization and fundamentals of organic chemistry
2. To provide knowledge about nuclear chemistry and industrial chemistry
3. To know importance of specialty drugs and separation and purification techniques.

**Subject Code: 23OUZOGÉCH1P**

**(National)**

**Course Name: Chemistry Practical for Biological Sciences -I**

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

1. To provide knowledge on the basics of preparation of solutions.
2. To obtain knowledge on principles and practical experience of volumetric analysis

**SEMESTER – II**

**Subject Code: 23OUZOGÉCH2**

**(Global)**

**Course Name: Chemistry for Biological Sciences-II**

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

1. To study the nomenclature of coordination compounds.
2. To acquire the knowledge about carbohydrates.
3. To gain the knowledge about Amino Acids and Essential elements of bio system.
4. To understand the concepts of kinetics and catalysis.
5. To provide fundamentals of electrochemistry and photochemistry

**Subject Code: 23OUZOGÉCH2P**

**(Global)**

**Course Name: Chemistry Practical for Biological Sciences -II**

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

1. To provide knowledge on identification of organic functional groups
2. To identify different types of organic compounds with respect to their properties.
3. To provide knowledge for determination of elements in organic compounds.

DEPARTMENT OF COMMERCE

U.G.

## **DEPARTMENT OF COMMERCE**

**Programme Code: C**

**Programme Name: B.Com.**

### **Programme Outcome**

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** **Outcome Based Education (OBE)**

### **SEMESTER – I**

**Subject Code: 22OU1COM1**

**(National)**

**Course Name: Business Correspondence**

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

1. To enable the students to understand the Essential Parts of a Business Letter.
2. To identify the Contents of an order letter.
3. To help the students gain practical applications in the Procedure for Export and Import.
4. To make the learners aware of the Letters from the Customers to the Banker.
5. To create awareness on the Report writing and electronic communication.

**Subject Code: 22OUCOM11**

**(National)**

**Course Name: Marketing**

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

1. To enable the students to understand the level of Marketing and marketing functions.
2. To identify the product and pricing with the help of product life cycle and kinds of Pricing
3. To help the students to understand the standardization, grading warehouse and storages of products.
4. To make the learners to know the promotion and physical distribution of marketing.
5. To create awareness on the recent trends in marketing.

**Subject Code: 22OUCOM12**

**(National)**

**Course Name: Financial Accounting - I**

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

1. To enable the students to understand the Concepts of Final Accounts
2. To Identify the Errors of omission, Principle and Commission
3. To Help the students gain practical knowledge in final accounts of Non-Profit Organization
4. To make the learners to understand various depreciation Methods.
5. To create awareness on Recording Bill Transaction in Journal & Bill sent for collection



**Subject Code: 22OUCOMGECO1**

**(National)**

**Course Name: Computer Fundamentals**

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

1. To give basic knowledge about parts of computers and their functions.
2. To Identify and Solve the Number System.
3. To Populate and Evaluate the Type of Memory and Storage Devices.
4. To Understand and effectively explain Input Devices and Output Devices.
5. To Understand and basic concept of Network and Topology

**Subject Code: 22OUCOMID1**

**(National)**

**Course Name: Basic Accounting**

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

1. To understand what a process is and how processes are Purchase book & Sales book.
2. To understand different approaches to Cash Book

## **SEMESTER – II**

**Subject Code: 22OU1COM2**

**(National)**

**Course Name: Principles of Management**

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

1. To enable the students to understand the Concepts of Principles of Management
2. To help the students to know the evolution of management thought.
3. To understand the principles and practice of business management.
4. To make the learners aware of the theories of Motivation.
5. To create awareness on channel of communication and techniques of controlling.

**Subject Code: 22OUCOM21**

**(National)**

**Course Name: Advertising and Salesmanship**

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

1. To understand the Nature and Scope of Advertisement and salesmanship.
2. To understand the Methods of Advertising.
3. To explain how Purpose and Use of Advertising
4. To understand what a process is and how processes are Essentials of a successful for sales man
5. To understand different approaches to Advertising & salesmanship.

**Subject Code: 22OUCOM22**

**(Global)**

**Course Name: Financial Accounting - II**

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

1. To enable the students to understand the Distinction between Sale and Consignment.
2. To identify the Recording in joint venture.
3. To Help the students gain practical knowledge in Single Entry System.
4. To make the learners aware of Cost price Method & Invoice Method.
5. To create awareness on Methods of Calculation of Interest.

**Subject Code: 22OUCOMGECO2**

**(National)**

**Course Name: Business Economics**

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

1. To enable the students to understand the Concepts of Business Economics
2. To identify the Business Economics Elasticity of Demand and Factors affecting Elasticity of Demand.
3. To help the students gain Demand Forecasting and Methods of Forecasting, Established Product and New product.
4. To make the learners aware of Price Analysis, Methods of pricing, Differential pricing and Product line pricing.
5. To create awareness on Profit Planning and Control.

### **SEMESTER – III**

**Subject Code: 22OUCOM31**

**(National)**

**Course Name: Business Environment**

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

1. To understand the basic concepts business Environment.
2. To familiarize the students about the New Industrial Policy 1991.
3. To create awareness about the Social responsibility of business and Social audit
4. To study the concepts of MSME's and Industrial Sickness.
5. To analyze the Technological Environment and the Global Environment

**Subject Code: 22OUCOM32**

**(Global)**

**Course Name: Principles of Insurance**

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

1. To understand the conceptual framework of insurance.
2. To familiarize the students to determine the Life insurance policy and their procedures.
3. To Provide the subject matters of Marine insurance.
4. To analyse the procedures for Fire insurance and Rate fixing of Fire insurance.
5. To understand the Concept of Insurance Regulatory and Development Authority of India (IRDA)

**Subject Code: 22OUCOM33**

**(National)**

**Course Name: Financial Accounting-III**

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

1. To enable the students to understand the Fire Insurance claims
2. To Identify the Royalty Accounts of accounting treatment
3. To Help the students gain practical knowledge in Insolvency Accounts
4. To make the learners to understand various installments purchase system
5. To Create awareness on Contract Accounts

**Subject Code: 22OUCOM34**

**(National)**

**Course Name: Costing**

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

1. To understand the various concepts and methods of costing.
2. To enable the students to compute the cost of products, cost of jobs and process
3. Help the students Computation Calculation of Simple Average Price method
4. Make the learners aware of System of wage payment
5. To Measurement of Solving a Machine hour rate method

**Subject Code: 22OUCOMGECO3**

**(National)**

**Course Name: GEC - III Business Statistics**

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

1. To understand various statistical tools used in business.
2. To equip the students with the application of statistical tools in the analysis of data for decision making.
3. To be able to calculate measures of central tendency, measures of dispersion
4. To gain working knowledge on correlation and regression
5. To acquire skills towards solving problems in Index and time series analysis

**Subject Code: 22OUCOMSE3P**

**(National)**

**Course Name: Commerce Practical**

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

1. To acquire practical knowledge in the use of various forms used in GST, banking & Insurance sectors.
2. To train the students in drafting of advertisement copy and preparation of project report for entrepreneurship.

#### **SEMESTER – IV**

**Subject Code: 22OUCOM41**

**(National)**

**Course Name: Entrepreneurship Development**

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

1. To enable the students to understand the basic concepts of entrepreneurs and entrepreneurship development.
2. To learn the Theories of entrepreneurship and also motivational factors to be an entrepreneur.
3. To help the students to identify the opportunities for women entrepreneurs
4. To familiarize the students with formalities of starting new business.
5. To develop a thorough understanding of various project Analysis.

**Subject Code: 22OUCOM42**

**(National)**

**Course Name: Auditing**

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

1. To understand the basic principles auditing.
2. To familiarize about the Final Audit, Interim Audit, Special Audit and how to prepare Audit Report
3. To create awareness about the Internal Control
4. To learn about the Vouching and verification and valuation of Assets and Liabilities
5. To enable the students to know about the Rights, Duties and liabilities of an Auditor

**Subject Code: 22OUCOM43**

**(Global)**

**Course Name: Banking**

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

1. To enable the students to understand the relationship between a banker and customers.
2. To identify the different types of Negotiable Instruments.

3. To determine the duties and statutory protection to a paying bankers.
4. To make the learners aware of the principles of and types of lending.
5. To apply the recent trends in banking system.

**Subject Code: 22OUCOM44**

**(National)**

**Course Name: Partnership Accounts**

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

1. Enable the students to understand the fixed and fluctuating capital
2. To identify the Accounting standards
3. Enable the student's treatment of goodwill
4. Make the learners aware of Garner versus Murray rules
5. To create awareness on the pie meal distribution

**Subject Code: 22OUCOMGECO4**

**(National)**

**Course Name: GEC -IV Business Mathematics**

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

1. To learn important mathematical concepts and tools
2. To acquire the mathematical skills and its application in business.
3. To examine the appropriate method for calculation of Interest.
4. To Compute small / micro differences using differential calculus.
5. To Solve problems in matrices

**Subject Code: 22OUCOMSE4**

**(National)**

**Course Name: SEC-Financial Markets & Services**

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

1. To help the students to learn the various constituents of financial markets and their services.
2. To learn about the operations of Securities market.

**Subject Code: 22OUCOMSE4P**

**(National)**

**Course Name: SEC-MS Office Practical**

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

1. To train the students in document preparation.
2. To develop the presentation skills of the students with Power point.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUCOM11**

**(National)**

**Course Name: Financial Accounting -1**

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

1. To understand the basic accounting concepts and standards.
2. To know the basis for calculating business profits.
3. To familiarize with the accounting treatment of depreciation.
4. To learn the methods of calculating profit for single entry system.
5. To gain knowledge on the accounting treatment of insurance claims.

**Subject Code: 23OUCOM12**

**(National)**

**Course Name: Principles of Management**

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

1. To understand the basic management concepts and functions
2. To know the various techniques of planning and decision making
3. To familiarize with the concepts of organisations structure
4. To gain knowledge about the various components of staffing
5. To enable the students in understanding the control techniques of management

**Subject Code: 23OUCOMGE01**

**(National)**

**Course Name: Business Communication**

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

1. To enable the students to know about the principles, objectives, and importance of communication in commerce and trade.
2. To develop the students to understand about trade enquiries.
3. To make the students aware about various types of business correspondence.
4. To develop the students to write business reports.
5. To enable the learners to update with various types of interviews

**Subject Code: 23OUCOMSECN1**

**(National)**

**Course Name: Basic Accounting**

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

1. To understand the basics of accounting
2. To familiarize with the principles of bookkeeping.
3. To enable the students to know about the journal and double entry system.
4. To prepare purchase and sales book
5. To make the students to analyse the profit or loss from final accounts.

**Subject Code: 23OUCOMFC1**

**(National)**

**Course Name: Basic Commerce Knowledge**

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

1. To gain knowledge on Trade and Industry.
2. To know the forms of business Organization sectors.

## **SEMESTER – II**

**Subject Code: 23OUCOM21**

**(National)**

**Course Name: Financial Accounting – II**

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

1. The students are able to prepare different kinds of accounts such higher purchase and Instalments System.
2. To understand the allocation of expenses under departmental accounts.
3. To gain an understanding about partnership accounts relating to Admission and retirement.
4. Provides knowledge to the learners regarding Partnership Accounts relating to dissolution of firm.
5. To know the requirements of international accounting standards

**Subject Code: 23OUCOM22**

**(National)**

**Course Name: Business Law**

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

1. To know the nature and objectives of mercantile law.
2. To gain knowledge on performance contracts.
3. To be acquainted with the rules of Indemnity and Guarantee
4. Make aware of the essentials of Bailment and Pledge.
5. To understand the provisions relating to sale of goods.

**Subject Code: 23OUCOMGECO2**

**(National)**

**Course Name: Business Environment**

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

1. To understand the nexus between environment and business.
2. To know the Political Environment in which the businesses operate.
3. To gain an insight into Social Environment.
4. To familiarize the concepts of an Economic Environment.
5. To learn the trends in Global Environment.

**Subject Code: 23OUCOMSECN2**

**(National)**

**Course Name: Entrepreneurship development**

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

1. To understand the importance of entrepreneurship and Support in the promotion of entrepreneurship.
2. To encourage the students to become Women Entrepreneurs.

**Subject Code: 23OUCOMSEC3**

**(National)**

**Course Name: Financial Markets and Services**

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

1. To help the students to learn the various constituents of financial markets & their services.
2. To learn about the operations of Securities market.



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** **Outcome Based Education (OBE)**

### **SEMESTER – I**

**Subject Code: 22OUMA11**

**(National)**

**Course Name:** Calculus

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

1. To know more about differentiation.
2. To introduce envelopes & curvatures.
3. To acquire knowledge about finding the radius of curvature in polar co-ordinates.
4. To get skill to solve double and triple integration.
5. To learn idea to find change of variable.

**Subject Code: 22OUMA12**

**(Global)**

**Course Name:** Theory of Equations & Trigonometry

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

1. Acquire the basic knowledge of roots and coefficients of equation.
2. Acquire skills of solving problems in transformation of equations.
3. Obtain skills to solve a cubic equation.
4. Gain knowledge of trigonometric functions and related problems.
5. Know about the various types of hyperbolic functions.

**Subject Code: 22OUMAID1**

**(National)**

**Course Name:** Mathematics for Competitive Examinations -I

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

1. To learn new techniques and methods to solve quantitative Aptitude
2. To enhance the problem solving skill
3. To improve the basic mathematical skills
4. To help students who are preparing for any type of competitive exam
5. To solve real time problems such as percentage, profit & loss

**Subject Code: 22OUMA21**

**(Global)**

**Course Name:** Analytical Geometry of 3Dimension and Vector Calculus

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

1. To explain angle and distance between two planes and bisecting planes.
2. To calculate the symmetric form of straight lines.
3. To explain the sphere, equations of the tangent plane and orthogonal sphere.
4. To understand the concept of gradient, divergence and curl.
5. To obtain the knowledge of evaluating line and surface integrals by applying Green, Gauss and Stokes theorem.

## SEMESTER – II

**Subject Code: 22OUMA22**

**(National)**

**Course Name: Differential Equations**

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

1. To study the exact differential equations.
2. To classify differential equations by order, linear equations and homogeneous Linear Equations.
3. To study the Simultaneous linear differential equations.
4. To apply Laplace transforms to solve differential equations.
5. To understand the concepts of partial differentiation.

**Subject Code: 22OUPHGEMA1/ 22OUCHGEMA1**

**(National)**

**Course Name: Mathematics-I Theory of Equations & Trigonometry, Analytical Geometry 3D and Vector Calculus**

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

1. To solve cubic and bi quadratic equations
2. To explore trigonometry as a tool in solving problems.
3. To study the concept of sphere.
4. To learn about vector differentiation.
5. To Solve surface area and volume using vector integration.

**Subject Code: 22OUPHGEMA2/ 22OUCHGEMA2**

**(National)**

**Course Name: Mathematics-II Calculus, Differential Equations and Applications**

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

1. Develop strong background on finding solutions to nth – derivatives and curvature.
2. To solve the Reduction formula and Integrals.
3. To study the differential equations.

4. To find the solution of Partial differential equations.
5. To know about Laplace Transforms.

**Subject Code: 22OUCSGEMA2/ 22OUCAGEMA2**

**(National)**

**Course Name: Probability and Statistics**

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

1. To provide on understanding of the basic concepts in probability theory and statistical analysis.
2. To understand the major hypothesis of correlation and regression.
3. To understand the notion of moment generating function in probability.
4. To learn the overview of distribution theory.
5. To know about the fundamental of sampling distribution

**SEMESTER – III**

**Subject Code: 22OUMA31**

**(National)**

**Course Name: Modern Algebra**

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

1. To enrich with the knowledge of Abstract Algebra.
2. To learn a method to count the elements of a finite groups.
3. To understand algebraic concepts of Groups and Rings.
4. To have a good foundation in Groups and Rings.
5. To study some standard theorems in Ideals and Prime Ideals.

**Subject Code: 22OUMADSE3A**

**(Global)**

**Course Name: Operations Research**

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

1. To apply various optimization techniques for decision making.
2. To aim at building capabilities in the students for analyzing different situations in the industrial/ business scenario involving limited resources
3. To find the optimal solution within constraints.
4. To enable the student to understand and analyze managerial and engineering problems to equip him to use the resources
5. To deal with the various transshipment techniques using Transportation and Assignment problems.

**Subject Code: 22OUMASE3**

**(National)**

**Course Name Application of Calculus**

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

1. Trace some curves whose equations are given in Cartesian, parametric or polar form.
2. Determine whether a curve is concave, or convex, or neither in a given interval.
3. Apply maxima and minima in real life situations.
4. Find the asymptotes parallel to axes.
5. Explain the concept of area under a curve and between two curves and length of a curves.

### **SEMESTER – IV**

**Subject Code: 22OUMA41**

**(National)**

**Course Name: Sequences and Series**

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

1. To impart the knowledge of sequences and summation of series.
2. To recognize when a sequences are increasing, decreasing, bounded, or monotone
3. To determine the sequences are converge or diverge.
4. To Classify a sequence as arithmetic, geometric or neither.
5. To develop the skill of computation with real sequence and series.

**Subject Code: 22OUMADSE4A**

**(Global)**

**Course Name: Number Theory**

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

1. To provide a deep knowledge of Number theory
2. To learn the concept about Congruence and Residue classes
3. To know the applications of Wilson's theorem and Factor theorem for polynomials.
4. To have a good foundation of Quadratic residues and non-residues.
5. To study some standard theorems like Wolstenholme.

**Subject Code: 22OUMASE4**

**(National)**

**Course Name: Applications of Differential Equations**

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

1. To provide a deep knowledge of orthogonal trajectories
2. To learn the concept about growth and decay

3. To know the applications of Brachistochrone problem
4. To have a good foundation of electric circuits
5. To have a basic knowledge about simple pendulum

**Subject Code: 22OUPHGEMA3/ 22OUCHGEMA3**

**(National)**

**Course Name: Allied Mathematics-III Algebra and Statistics**

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

1. To learn characteristic equations of Matrix.
2. To solve the Rank Correlation and Regression.
3. To study the Finite Differences.
4. To find the solution of Attributes, Consistency of Data, Independence and Association of Data.
5. To know about Index Numbers.

**Subject Code: 22OUPHGEMA4/ 22OUCHGEMA4**

**(National)**

**Course Name: Allied Mathematics-IV Linear Programming**

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

1. To introduce the fundamental concepts of LPP.
2. To develop the skills in decision making.
3. To equip the students in solving real time problems.
4. To Construct and solve a minimization problem.
5. To develop formulation skill in transportation model and finding solutions.

**Subject Code: 22OUCSGEMA4/ 22OUCAGEMA4**

**(Global)**

**Course Name: Resource Management Techniques**

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

1. To know about Linear Programming Problems.
2. Under the Mathematical tools that are needed to solve optimization problems.
3. To equip the students in solving real time problems.
4. To construct and solve a minimization problem.
5. To develop formulation skills in transportation model and finding solutions.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUMA11**

**(National)**

**Course Name: Algebra & Trigonometry**

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

1. Basic ideas on the Theory of Equations and Matrices.
2. Knowledge to find expansions of trigonometry functions, solve theoretical and applied problems.

**Subject Code: 23OUMA12**

**(National)**

**Course Name: Differential Calculus**

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

1. The basic skills of differentiation, successive differentiation, and their applications.
2. Basic knowledge on the notions of curvature, evolutes, involutes and polar co-ordinates and involving related problems.

**Subject Code: 23OUMASECN1**

**(Global)**

**Course Name: Mathematics for Competitive Examinations-I**

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

1. To learn new techniques and methods to solve quantitative Aptitude
2. To enhance the problem solving skill
3. To improve the basic mathematical skills
4. To help students who are preparing for any type of competitive exam
5. To solve real time problems such as percentage, profit & loss.

**Subject Code: 23OUMAF1**

**(National)**

**Course Name: Foundation Course- Bridge Mathematics**

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

1. To bridge the gap and facilitate transition from higher secondary to tertiary education;
2. To instill confidence among take holders and inculcate interest for Mathematics;



## SEMESTER – II

**Subject Code: 23OUMA21**

**(National)**

**Course Name: ANALYTICAL GEOMETRY (2D & 3D)**

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

1. Necessary skills to analyse characteristics and properties of two- and three-dimensional geometric shapes.
2. To present mathematical arguments about geometric relationships.
3. To solve real world problems on geometry and its applications.

**Subject Code: 23OUMA22**

**(National)**

**Course Name: INTEGRAL CALCULUS**

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

Knowledge on integration and its geometrical applications, double, triple integrals and improper integrals.

Knowledge about Beta and Gamma functions and their applications.

Skills to determine Fourier series expansions.

**Subject Code: 23OUMASECN2**

**(Global)**

**Course Name: Mathematics for Competitive Examinations-II**

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

1. To learn new techniques and methods to solve quantitative aptitude
2. To enhance the problem solving skill
3. To improve the basic mathematical skills
4. To help students who are preparing for any type of competitive exam
5. To solve real time problems such as calendar

**Subject Code: 23OUMASEC3**

**(National)**

**Course Name: Computation Mathematics**

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

1. To acquire the knowledge about permutations and combinations with repeated and non-repeated objects.
2. To understand the concept of principle of inclusion and exclusion.

3. To acquire the knowledge of generating functions and exponential generating functions with repeated and non-repeated objects.
4. To understand the concepts of difference equations.

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**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OU1BA1** (National)

**Course Name: Business Communication**

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

1. To understand the principles of letter writing and structure of Business Letter
2. To enable the students to know the types of communication and Barriers of Communication
3. To provide an outline to effective Organizational Communication.
4. To develop their Communication skill in Business.
5. To impart the correct practices of the strategies of effective business writing.

**Subject Code: 22OUBA11** (National)

**Course Name: Principles of Accounting**

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

1. To understand the concepts and conventions of Accounting.
2. To apply the principles in preparation of subsidiary books.
3. To identify the causes of depreciation and apply the methods of preparing depreciation and identify the reason for difference between cash book and pass Book.
4. To compile and prepare final accounts.
5. To apply the principle in preparing accounts for non-trading concern.

**Subject Code: 22OUBA12** (National)

**Course Name: Principles of Management**

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

1. To understand the fundamental principles of management.
2. To understand the purpose of effective planning and to practice the process of management objectives.
3. To enable the organization structure and to examine their functions as well.
4. To acquire themselves with the latest development in the field of management.
5. To examine work and control quality through various quality control techniques.

**Subject Code: 22OUBAGEBA1**

**(National)**

**Course Name: Business Economics**

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

1. To understand the nature of business economics
2. To acquire basic knowledge of consumption theories in economics
3. To enable the students to know the business cycle.
4. To understand the cost – out put relationship.
5. To relate their knowledge in business situations.

**Subject Code: 22OUBASE1P**

**(National)**

**Course Name: Practical Computerized Accounting – I**

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

1. To Create application of computer knowledge in Accounting System
2. To Acquire adequate knowledge in Computerized Inventory
3. To View of various Accounting Reports

**Subject Code: 22OUBAID1**

**(Global)**

**Course Name: Personality Development**

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

1. To understand the behavior of an individual
2. To recognize the factors influencing the behaviour of an individual
3. To acquaint them with the various concepts of behavioral process
4. To know the factors influencing the perceptual set
5. To familiar with the determination of Personality

**Subject Code: 22OU1BA2**

**(Global)**

**Course Name: Individual Development**

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

1. To understand the human behaviour
2. To be aware of the factors influencing the behaviour of an individual
3. To acquaint them with the various concepts of behavioral process
4. To analyze the perception process like selecting, organizing, and interpreting information from our senses
5. To recognize how personality develops as well as how it influences the way we think and behave.

## SEMESTER – II

**Subject Code: 22OUBA21** (National)

**Course Name: Cost Accounting**

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

1. To acquaint with functions of cost Accounting.
2. To understand how the costing techniques are useful in the managerial decision – making
3. To familiarize with the process of determination of cost, pricing of materials particularly in manufacturing concern
4. To acquaint with basic concepts used in labor cost, various methods of remuneration and incentive systems.
5. To equip them to solve the Overheads problems and calculate the machine hour rate.

**Subject Code: 22OUBA22** (National)

**Course Name: Environment of Business**

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

1. To familiarize the nature of the business environment and its components in business decision making.
2. To increase the awareness of the interconnected nature of today's world, and how economic, social, political and environmental issues can impact international integration and business.
3. To impart the environmental scanning skills to identify the business opportunity and challenges.
4. To analyze and interpret the current events relating to globalization and international business.
5. To examine the various economic conditions and effects of government policy on business performance.

**Subject Code: 22OUBAGEBA2** (National)

**Course Name: Banking Law and Practice**

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

1. To understand the relationship between banker and customer.
2. To classify the types of account.
3. To acquaint precautions associated with handing cheques.
4. To acquire practical knowledge of Banking.
5. To make them aware of the loans and advantages given by Banks.

**Subject Code: 22OUBASE2P** (National)

**Course Name: Practical - Computerized Accounting – II**

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

1. To Create application of computer knowledge in Accounting System
2. To Acquire adequate knowledge in Computerized Inventory
3. To View of various Accounting Reports

**Subject Code: 22OUBAID2 (National)**

**Course Name: Body Language**

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

1. To understand the concepts of non-verbal communication
2. To recognize head, eye, hand, face and posture expressions
3. To know the difference between male and female body languages
4. To learn the skills of using non-verbal communication in the workplace
5. To identify expressions and signs of distress.

### **SEMESTER – III**

**Subject Code: 22OUBA31 (National)**

**Course Name: Business Statistics**

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

1. To understand the various formulas and concepts in statistics
2. To equip themselves to solve the business and industrial problems by using analytical skills
3. To help them in undertaking research programmes
4. To inculcate the use in practical situation with statistical data
5. To understand and able to calculate the trend values with the help of Time Series.

**Subject Code: 22OUBA32 (Global)**

**Course Name: Organizational Behaviour**

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

- 1.To familiarize the organizational dynamics
2. To increase the awareness of theories of motivation
3. To impart the group cohesiveness and consequences
4. To analyze the organizational change
5. To examine the various steps in organizational development

**Subject Code: 22OUBA33 (National)**

**Course Name: Computer Application in Business**



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

1. To understand the basics of windows 11
2. To create and design various types of Word Documents
3. To learn Ms-Excel
4. To prepare slide show presentation in Power Point
5. To create a webpage through HTML language

**Subject Code: 22OUBA3P (Global)**

**Course Name: Computer Application in Business-Practical**

1. To create tables, charts and slides using various applications of Ms-Office
2. To Acquire adequate knowledge in access database
3. To create and view images, marquees in web pages.

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

**Subject Code: 22OUBA34 (National)**

**Course Name: Marketing Management**

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

1. To have an insight into the importance and role of marketing in business world
2. To understand the different pricing strategies and how to adapt them.
3. To familiarize with physical distribution system.
4. To enable a student to understand the 'Marketing mix' elements and the strategies and principles underlying the modern marketing practice.
5. To enable the students to understand the elements of the complex world of marketing.

**Subject Code: 22OUBAGEBA3 (National)**

**Course Name: Company Organization**

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

1. To understand the fundamental concepts of companies.
2. To acquire basic knowledge of legal document
3. To enhance the knowledge about articles of memorandum.
4. To enable the students to know the prospects and registration of the company.
5. To understand the powers and duties of Directors and relate their knowledge in company meetings

**Subject Code: 22OUBASE3 (National)**

**Course Name: Stress Management**

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

1. To know about the causes and implications of stress.
2. To manage the stress.
3. To inculcate positive thinking and self- confidence.
4. To develop the Emotional Intelligence.
5. To understand the Consequences of stress

**SEMESTER – IV**

**Subject Code: 22OUBA41 (National)**

**Course Name: Management Information System**

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

1. To understand the concept of data base management system
2. To equip themselves in building DSS in an organization.
3. To acquaint with the basic idea for system design and Implementation.
4. To facilitates the decisions-making process by furnishing information in the proper time frame.
5. To provide information for decision making on planning, initiating, organizing, and controlling the operations of the subsystems of the firm.

**Subject Code: 22OUBA42 (National)**

**Course Name: Disaster Management**

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

1. To understand the fundamentals of disaster assessment and environmental impact assessment.
2. To familiarize the fundamental of remote sensing
3. To facilitate disaster preparedness, monitoring risks and emergency management.
4. To sensitize the learner to the various institutional agencies for disaster management.
5. To know the economy and essential services in emergencies.

**Subject Code: 22OUBA43 (Global)**

**Course Name: Entrepreneurial Development**

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

1. To know about the various traits and factors influencing an Entrepreneur.
2. To make out the government schemes for women entrepreneurs in India and self-help groups.
3. To familiarize the course contents and curriculum of entrepreneurial training programme.

4. To acquainted with the importance and functions of MSME.
5. To educate institutional support about small business owners and Sickness in Small Scale Industry.

**Subject Code:** 22OUBA44 (National)

**Course Name:** Customer Relationship Management

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

1. To know the Relationship between Customer and Management
2. To learn the customer relationship management in Marketing
3. To analyze the Customer Satisfaction through Customer Relationship Management
4. To acquire knowledge in CRM practices with service industry
5. To investigate the E- CRM

**Subject Code:** 22OUBAGEBA4 (National)

**Course Name:** Legal Aspects of Business

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

1. To enlighten the elements of General Contracts and Special Contracts.
2. To learn about the Agency and Sale of Goods Act.
3. To enhance the knowledge about the Labour Laws.
4. To know about the wages Act.
5. To explore the legislation relation to Sales – Insurance.

**Subject Code:** 22OUBASE4 (National)

**Course Name:** Counselling

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

1. To Familiarize with the basic concepts of counselling.
2. To understand various situations and types of counselling.
3. To Get acquainted with the process of counselling.
4. To learn few ethical and legal issues pertaining to counselling.
5. To Develop counselling skills in real life situations.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUBA11**

**(National)**

**Course Name: Principles of Management**

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

1. To impart knowledge about evolution of management.
2. To provide understanding on planning process and importance of decision making in organization.
3. To learn the application of principles in organization.
4. To study the process of effective controlling in organization.
5. To familiarize students about significance of ethics in business and its implications

**Subject Code: 23OUBA12**

**(National)**

**Course Name: Accounting for Managers I**

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

1. To impart knowledge about basic concepts of accounting its applications.
2. To analyze and interpret financial reports of a company
3. To understand the gross profit and net profit earned by organization
4. To foster knowledge on Depreciation Accounting
5. To understand the procedures of Accounting under Single entry system

**Subject Code: 23OUBAGEE C1**

**(National)**

**Course Name: Managerial Economics**

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

1. To familiarize students with concepts of economics and its relevant in business scenario.
2. To understand the applications & implications of economics in decision-making and problem solving.
3. To Understand the optimal point of productivity of a firm.
4. To describe the pricing strategies that are consistent with evolving marketing needs
5. To Provide insights to the various market structures in an economy.

**Subject Code: 23OUBASECN1**

**(National)**

**Course Name: Basics of Event Management**

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

1. To know the basic of event management its concepts

2. To make an event design
3. To make feasibility analysis for event
4. To understand the 5 Ps of Event Marketing
5. To know the financial aspects of event management and its promotion

**Subject Code: 23OUBAFC1**

**(National)**

**Course Name: Managerial Communication**

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

1. To educate students role & importance of communication skills.
2. To build their listening, reading, writing & speaking communication skills
3. To introduce the modern communication for managers.
4. To understand the skills required for facing interview.
5. To facilitate the students to understand the concept of Communication

## **SEMESTER – II**

**Subject Code: 23OUBA21**

**(National)**

**Course Name: Marketing Management**

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

1. To understand the marketplace.
2. To identify the market segmentation and the Product mix
3. To select the different pricing methods and channels of distribution.
4. To know the communication mix and sales promotion tools.
5. To prepare according to the latest trends in market

**Subject Code: 23OUBA22**

**(National)**

**Course Name: Accounting for Managers - II**

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

1. To provide basic understanding of cost concepts and classification.
2. To develop skills in tools & techniques and critically evaluate decision making in business
3. To understand various ratios and cash flow related to finance
4. To recognize the role of budgets and variance as a tool of planning and control
5. To gain insights into the fundamental principles of accounting and use them in day-today business scenarios

**Subject Code: 23OUBAGEBA2**

**(Global)**

**Course Name: International Business**

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

1. To familiarize students with basic concepts of International Business
2. To impart knowledge about theories of international trade
3. To know the concepts of foreign exchange market and foreign direct investment
4. To understand the global environment
5. To gain knowledge on the Contemporary Issues of International Business

**Subject Code: 23OUBASECN2**

**(National)**

**Course Name: Managerial Skill Development**

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

1. To improve the self-confidence, groom the personality and build emotional competence
2. To address self-awareness and the assessment of core management skills such as communication, working with teams and creating a positive environment for change
3. To assess the Emotional intelligence
4. To induce critical-thinking and analytical skills to investigate complex problems to propose viable solutions
5. To improve professional etiquettes.

**Subject Code: 23OUBASEC3**

**(National)**

**Course Name: Business Etiquette and Corporate Grooming**

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

1. To impart knowledge about basic etiquettes in professional conduct.
2. To provide understanding about the workplace courtesy and ethical issues involved.
3. To suggest on guidelines in managing rude and impatient clients.
4. To familiarize students about significance of cultural sensitivity and the relative business attire.
5. To stress on the importance of attire.

# **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**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OUCS11**

**(National)**

**Course Name: Programming in C**

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

1. Make the students to understand programming language concepts.
2. The main emphasis of the subject is to write 'C' program in an efficient manner.
3. This programming language is utilized for the development of system software and desktop application.
4. To impart adequate knowledge of programming languages and problem solving techniques.
5. Make the Students to analyze different kinds of mathematical and scientific problems.

**Subject Code: 22OUCSID1**

**(National)**

**Course Name: Computing Fundamentals**

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

1. Understand the basics components of computer.
2. Study the usage of input devices.
3. Identify the important characteristics of storage devices.
4. Explore the components of system software and output devices.
5. Gain the knowledge of working with word processors.

**SEMESTER – II**

**Subject Code: 22OUCSID2**

**(Global)**

**Course Name: Internet Technology and Web Design**

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

1. Insight the students knowledge with basics of Internet Knowledge.
2. Equip the students to access the usage of Internet.
3. Gain the knowledge of working with, sending and receiving mails.
4. Make the students to recognize for accessing the usage of online purchase.
5. Take up self-employment in the all Computer applied fields.

**SEMESTER – III**

**Subject Code: 22OUCS31**

**(National)**

**Course Name: Digital Principles and Computer Organization**

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

1. Make the students to understand gates and circuit level.
2. The main emphasis of the subject is to convert conversion in number system.

3. Explore the basic computer organization and design.
4. To impart adequate knowledge of instruction techniques and data format.
5. Make the Students to analyze different types input and output memory organization.

**Subject Code: 22OUCS32**

**(National)**

**Course Name: RDBMS**

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

1. To learn the physical and logical database designs, database modeling, relational, hierarchical, and network models.
2. To understand how a real world problem can be mapped to schemas.
3. To understand and use data manipulation language to query, update, and manage a database.
4. Acquire the Knowledge of Cursor and Trigger Operation.
5. To learn to design the Database to implement the concept of database security, integrity and concurrency

#### **SEMESTER – IV**

**Subject Code: 22OUCS41**

**(National)**

**Course Name: Data Structures**

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

1. Understand basic concepts of data structures and algorithms.
2. Ability to describe stack, queue and linked list operation.
3. Implement the different types of trees and apply them to problem solutions.
4. Develop the graph structure and understand various operations on graphs and their applicability.
5. Analyze the various sorting and searching algorithms.

**Subject Code: 22OUCS42**

**(Global)**

**Course Name: Programming in JAVA**

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

1. Understand the basic concepts and fundamentals of platform independent object oriented language.
2. Ability to illustrate the operators, branching and looping statement.
3. Implement the classes, objects, arrays and Interface method.
4. Idea to approach the package & multithread programming.
5. Demonstrate the concepts of exception handling techniques and Applet.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUCS11**

**(National)**

**Course Name: Programming in C**

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

1. To familiarize the students with the Programming basics and the fundamentals of C, Datatypes in C, Mathematical and logical operations.
2. To understand the concept using if statements and loops.
3. This unit covers the concept of Arrays and Functions.
4. This unit covers the concept of Structures and unions and Preprocessors.
5. To understand the concept of implementing pointers.

**Subject Code: 23OUCSSECN1**

**(National)**

**Course Name: Fundamentals of Information Technology**

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

1. Understand basic concepts and terminology of information technology.
2. Have a basic understanding of personal computers and their operation
3. Be able to identify data storage and its usage
4. Get great knowledge of software and its functionalities
5. Understand about operating system and their uses.

**Subject Code: 23OUCSFC1**

**(Global)**

**Course Name: Problem Solving Techniques**

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

1. Familiarize with writing of algorithms, fundamentals of C and philosophy of problem solving.
2. Implement different programming constructs and decomposition of problems into functions.
3. Use data flow diagram, Pseudo code to implement solutions.
4. Define and use of arrays with simple applications.
5. Understand about operating system and their uses

**SEMESTER – II**

**Subject Code: 23OUCS21**

**(National)**

**Course Name: Data Structures and Algorithms**

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

1. Understand the concepts of oops and its applications.
2. Ability to understand the basic of Functions, Overloading, Class and Objects.

3. Apply the different types of Constructors, Destructors and Overloading functions.
4. Analyze the role of inheritance, polymorphism, dynamic binding and generic structures in building reusable code.
5. Develop the Console I/O operations, Stream Classes and File Handling

**Subject Code:** 23OUCSSECN2

**(National)**

**Course Name:** Office Automation

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

1. Understand the basics of computer systems and its components.
2. Understand and apply the basic concepts of a word processing package.
3. Understand and apply the basic concepts of electronic spreadsheet software.
4. Understand and apply the basic concepts of database management system.
5. Understand and create a presentation using PowerPoint tool.

**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**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OUIT11**

**(National)**

**Course Name: Object Oriented Programming with C++**

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

1. To comprehend object oriented programming concepts using C++.
2. To understand Class, objects and Constructors.
3. To use the operator overloading and inheritance in program development.
4. To describe the concept of Pointer to objects and pure virtual functions.
5. To apply the concepts of files and its stream operations.

**Subject Code: 22OUIT1P**

**(National)**

**Course Name: Object Oriented Programming with C++ Lab**

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

1. To impart the knowledge Default arguments and constructor.
2. To learn the organized structures of inheritance type and operator overloading.
3. To design a string manipulation and virtual function.
4. To learn the objects and classes for developing programs.
5. To design various object oriented concepts to solve different problems.

**Subject Code: 22OUITGEIT1**

**(Global)**

**Course Name: Digital Principles and Applications**

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

1. To gain knowledge of digital logic design including basic and universal Gates.
2. To design and analysis of digital electronic circuits, Boolean algebra and multi- variable Karnaugh map methods.
3. To study the small-scale combinational and sequential digital circuits.
4. To prepares time flow chart, logic symbol and truth table of RS, JK, and D type flip-Flops.
5. To categorize asynchronous and synchronous counters and register.

**Subject Code: 22OUITSE1P**

**(National)**

**Course Name: HTML and Office Automation Lab**

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

1. To create a table, graphics and link within a web page.

2. To review and apply formatting techniques to produce professional documents.
3. To determine layout to achieve desired formatting and calculations for accurate workbook design.
4. To determine and develop presentation content to create presentation slides by entering text, data and graphics.
5. To create and design the relational database using given data.

**Subject Code: 22OUITID1**

**(Global)**

**Course Name: Windows Tools and Applications**

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

1. To introduce tools and features to edit and view a text document.
2. To perform basic editing functions, formatting text, copy and moving objects and text.
3. To learn the use and utility of functions and formulas on excel spreadsheet.
4. To create slide presentations that includes text, graphics, animation, and transitions.
5. To add special effects to slide transitions to spice up your presentations.

## **SEMESTER – II**

**Subject Code: 22OUIT21**

**(Global)**

**Course Name: Operating System**

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

1. To enhance an overview of the various types of computing environments.
2. To identify CPU scheduling and basis of multi programmed operating system.
3. To gain knowledge on the description of deadlocks, sets of concurrent processes from completing their tasks.
4. To comprehend on main memory and secondary memory Management techniques.
5. To create awareness on the file system design tradeoffs including access methods, file sharing, file locking and directory structures.

**Subject Code: 22OUIT2P**

**(National)**

**Course Name: Linux Programming Lab**

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

1. To learn the fundamental commands of UNIX Operating System.
2. To gain important aspects related to the Shell Programming Environment.
3. Demonstrate Unix Program using AWK and functions.
4. To know File and Directory Handling Commands.
5. To demonstrate the knowledge of Linux commands and Programs.



**Subject Code: 22OUITGEMA2**

**(National)**

**Course Name: Resource Management Techniques**

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

1. To define and formulate linear programming problems and appreciate their limitations.
2. To solve optimization problems and Graphical method for LPP.
3. To introduce the students to the use of basic methodology for the solution of simplex, two- phase and Big-M-Method.
4. To expose them to various tools, techniques and methods available for decision making.
5. To determine the optimal solution for assignment problems.

**Subject Code: 22OUITSE2P**

**(National)**

**Course Name: Desktop Publishing Lab**

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

1. To work with various tools, platters and various templates.
2. To learn with various graphics, positioning, logo and page design.
3. To create advertising banner and designs for print media.
4. To create a drawing, set rulers, grid, guidelines, and view document in CorelDraw.
5. To build new shapes and reshaping objects with special effects.

**Subject Code: 22OUITID2**

**(Global)**

**Course Name: Introduction to Internet**

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

1. To describe the important features of the Web and Web browser software.
2. To find information of internet and search Engine
3. To know the concepts of Internet Addressing
4. To learn the various types of internet protocol
5. To communicate through Email with safety tips

### SEMESTER – III

**Subject Code: 22OUIT31**

**(National)**

**Course Name: RDBMS**

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

1. To understand and use data manipulation language to query, update, and manage a database.
2. To develop an understanding of essential RDBMS concepts such as database security, integrity, and concurrency.
3. To design and build a simple database system using E-R Model.
4. To describe the importance of and process of data normalization.
5. To understand the transactions and concurrent executions of transactions and identify the issues and supporting mechanisms of RDBMS.

**Subject Code: 22OUIT32**

**(National)**

**Course Name: Data Structure and Algorithms**

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

1. To study the systematic way of solving problems and various methods of organizing large amounts of data.
2. To design and implementation of advanced data structures such as Linear Lists, Stacks, Queues, Binary Trees and Graphs.
3. Student will be able to handle operations like Searching, Insertion, Deletion, Traversing mechanism on various data structures.
4. To understanding about writing algorithms and step by step approach in solving problems with the help of fundamental data structures.
5. To understand concepts about sorting techniques.

**Subject Code: 22OUIT3P**

**(National)**

**Course Name: RDBMS Lab**

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

1. To impart the to familiarize the participant with the degrees of database environments towards an information-oriented data-processing oriented framework
2. To learn a good formal foundation on the relational model of data
3. To design a to present the concepts and techniques relating to query processing by SQL engines

4. To learn the concepts of transaction processing
5. To design and implementation a project using embedded PL/SQL

**Subject Code: 22OUITGEIT3**

**(National)**

**Course Name: E-Commerce**

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

1. To learn the Fundamentals of e-Commerce.
2. To gain the knowledge on Network Infrastructure for E-commerce.
3. To understand the functions of web security of electronic commerce software.
4. To learn the various Electronic payment mechanisms.
5. To recognize the usage of Wireless technologies.

**Subject Code: 22OUITSE3P**

**(Global)**

**Course Name: PHP and MySQL Lab**

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

1. To impart the knowledge in scripting.
2. To learn the functions and their method of calls.
3. To understand the form action.
4. To learn the file handling mechanism.
5. To design a web page and Database connectivity.

#### **SEMESTER – IV**

**Subject Code: 22OUIT41**

**(National)**

**Course Name: Computer Graphics**

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

1. To comprehend the fields and system of Graphics system.
2. To understand the output primitives such as points and line drawing algorithms.
3. To use the attributes of output primitives in program development.
4. To describe the Transformation of an object such as Translation, Rotation and Scaling.
5. To apply the concepts of Graphics primitives and Two Dimensional Object Creation & Manipulation Techniques.

**Subject Code: 22OUIT4P**

**(Global)**

**Course Name: Computer Graphics Lab**

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

1. To impart the knowledge about basic Graphics programs.

2. To learn the various algorithms used in graphics.
3. To design a 2D/3D transformation
4. To learn the variations in filling algorithm.
5. To design simple animation using Transformations

**Subject Code: 22OUIT42**

**(National)**

**Course Name: Computer Organization**

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

1. To introduce the concepts of Computer Organization
2. To equip the students with the skills of computer oriented knowledge.
3. To comprehend the importance of the hardware-software interface.
4. To learn the different types of serial communication techniques.
5. To inquiry the Instruction execution stages.

**Subject Code: 22OUITGECOM4**

**(National)**

**Course Name: Financial and Cost Accounting**

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

1. To develop and understand the nature and purpose of financial statements in relationship to decision making.
2. To develop the ability to use the fundamental accounting equation to analyze the effect of business transactions on an organization's accounting records and financial statements.
3. To be able to interpret cost accounting statements and cost calculation using accounting methods.
4. To keep inactive, waste, surplus, scrap and obsolete items at the minimum level.
5. To estimate and ascertain profits or losses.

**Subject Code: 22OUITSE4P**

**(National)**

**Course Name: Tally Lab**

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

1. To impart knowledge regarding concepts of Financial Accounting.
2. To create company, enter accounting voucher entries including advance voucher entries, reconcile bank statement.
3. To learn basics of accountancy, its principles, concepts, conventions, recording procedures, Bank reconciliation.

4. To creating a company involves providing basic information about the company whose books of accounts are to be maintained in Tally.
5. To design information about the company, books, and details of currency

**Course Outcomes**  
**TANSCH - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUIT11**

**(National)**

**Course Name: Programming in C**

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

1. To learn and understand the basics program structure of C.
2. To learn the programming principles of the looping and the statements.
3. To understand the functions used in arrays and string functions.
4. To recall the methods of structures and union to implement in arrays.
5. To study the definition of pointers and different file methods.

**Subject Code: 23OUIT1P**

**(National)**

**Course Name: C Programming Practical**

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

1. To understand the basic syntax, data types and operators in C.
2. To learn the concepts of decision making statements.
3. To analyze the concepts of Arrays, Functions and Strings.
4. To describe the structure of pointers using different fields.
5. To evaluate the program for the pointers and files used in the list.

**Subject Code: 23OUITGEIT1**

**(Global)**

**Course Name: Digital Logic Fundamentals**

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

1. To understand the basic number systems and digital logic gates.
2. To acquire the knowledge on basic Boolean algebra and binary arithmetic operations.
3. To recognize the combinatorial circuits.
4. To gain the knowledge on sequential circuits and shift registers.
5. To analyze various counters and its operations.

**Subject Code: 23OUITSECN1**

**(National)**

**Course Name: Office Automation**

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

1. To understand the basic concepts of a computer system.
2. To know the features of word processing software.
3. To impart the knowledge on create chart and financial statements in Excel.
4. To recognize the database operations in MS-Access.
5. To familiarize with power points slide creation, transition and animation features.

**Subject Code: 23OUITFC1**

**(National)**

**Course Name: Fundamentals of Computers**

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

1. To understand the characteristics of Computers.
2. To recognize the main principles of system architecture.
3. To identify the ability to learn problem Solving concepts.
4. To examine the problem with appropriate solving techniques.
5. To analyze the problem solving with decision and loops.

## **SEMESTER – II**

**Subject Code: 23OUIT21**

**(National)**

**Course Name: Java Programming and Data Structures**

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

1. To understand the concepts of Data Structures and basics of object-oriented programming.
2. To solve problems using decision making and branching, looping and Arrays in Java.
3. To analyse the behaviour of simple programs involving different programming language techniques.
4. To develop a high-level applications using various problem-solving strategies involved in Java.
5. To design GUI based JDBC applications and able to develop Servlets using suitable OOP concepts and techniques.

**Subject Code: 23OUIT2P**

**(National)**

**Course Name: Java Programming and Data Structures Practical**

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

1. To Identify and explain the way of solving the simple problems
2. To gain practical expertise in coding Core Java programs
3. To organize and manipulate the data with the help of fundamental data structures
4. To impart hands on experience with java programming
5. To design and develop applications using different Java programming language techniques, JDBC &Servlets

**Subject Code: 23OUITDSE2**

**(Global)**

**Course Name: Big Data Analytics**

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

1. Understand the Big Data Platform and its Use cases, Map Reduce Jobs
2. To identify and understand the basics of cluster and decision tree
3. To study about the Association Rules, Recommendation System
4. To learn about the concept of stream
5. Understand the concepts of MySQL Databases

**Subject Code: 23OUITSEC3P**

**(National)**

**Course Name: Multimedia Lab**

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

1. To understand the basics of multimedia.
2. To acquire knowledge of image editing and animation techniques.
3. To solve various design and implementation issues materialize on the development of multimedia systems.
4. To apply multimedia concepts to real world projects.
5. To design and develop Multimedia Projects Using GIMP animation package and Flash.

DEPARTMENT OF  
TAMIL  
U.G.



## Department of Tamil – UG

Programme Code: T

Programme Name: B.A. Tamil

### Programme Outcomes

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2.:! ஸ்ரீத அம்! மடங்! –

ஸ ப் பங் சப் த வ ப்! ப ஸ்ரீ மந்! ரு ஸ ட்! மடங் ஸந்! ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ட்! ரு ஸ்ரீ த ஸ்! !

!! ஸ்ரீ ஸ்ரீ! ட ப வ் வ ட்! ர ஸ்ரீ ஸ்ரீ த ந ஸ்! ஸ்ரீ ஸ்ரீ ஸ்! !

3.:! ஸ்ரீ ஸ்ரீ ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ட்! ட த ஸ்ரீ ஸ்ரீ! ம் ஸ்ரீ ஸ்ரீ! ட ட ஸ்ரீ! ட த ஸ்ரீ ஸ்! !

4.:! ஸ்ரீ ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! !

5.:! மடங்! –

த வ ! ஸ்ரீ ஸ்ரீ! ட ப வ் ஸ்! !

ஸ ப் பங் சப் வ ஸ்! ப ஸ்ரீ ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! !

6.:! – ஸ ப் பங் சப் வ ஸ்! ப ஸ்ரீ மந்! ர ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! !

!! ஸ்ரீ ஸ்ரீ! !

7.:! மடங்! ஸ்ரீ! ட ஸ்ரீ! ட ஸ்ரீ! –

ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ! ட ஸ்ரீ! !

ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! !

!! ஸ்ரீ ஸ்ரீ! ட ஸ்ரீ ஸ்ரீ! !

8.:! ப ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! !

9.:! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! !

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!! ஸ்ரீ ஸ்ரீ! !

.:! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! !

!! ஸ்ரீ ஸ்ரீ! ட த ஸ்ரீ! !

21.:! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! ஸ்ரீ ஸ்ரீ! !

**Course Outcomes**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OUTA11**

**(National)**

**Course Name: தற் கால இலக்கியம்**

1. இலக்கணத் தின் வாயிலாக தமிழைப் பிழையின்றி எழுதும் திறன் பெறச் செய்தல்.
2. தமிழ் எழுத் துக்களின் வகைகளையும் ஒலிக்கும் முறையினையும் அதன் பிறப்பினையும் உணரச் செய்தல்.
3. பகுபத உறுப்பு, புணர்ச்சி விதிகளைக் கற்றுக் கொள்ளச் செய்தல்.
4. மொழியின் கட்டமைப்பை மாணவர்களுக்கு பயிற் றுவித் தல்.
5. எழுத்துக்கள் புணரும் விதத்தினை விளக்குதல்..

**Subject Code: 22OUTA12**

**(National)**

**Course Name: ,லக்கணம்- நன் னூல் - எழுத் ததிகாரம்**

1. இலக்கணத் தின் வாயிலாக தமிழைப் பிழையின்றி எழுதும் திறன் பெறச் செய்தல்.
2. தமிழ் எழுத் துக்களின் வகைகளையும் ஒலிக்கும் முறையினையும் அதன் பிறப்பினையும் உணரச் செய்தல்.
3. பகுபத உறுப்பு, புணர்ச்சி விதிகளைக் கற்றுக் கொள்ளச் செய்தல்.
4. மொழியின் கட்டமைப்பை மாணவர்களுக்கு பயிற் றுவித் தல்.
5. எழுத்துக்கள் புணரும் விதத்தினை விளக்குதல்

**Subject Code: 22OUTAGETA1**

**(National)**

**Course Name: சுற் றுலாவியல்**

1. சுற்றுலாவின் முக்கியத்துவத் தினை அறியச் செய்தல்.
2. சுற்றுலா பயணிகளின் வருகையினால் நாட்டில் ஏற் படுகின்ற பொருளாதார சூழலை உணர்ந்து கொள்ளச் செய்தல்.
3. சுற்றுலா செல்வதற் கான திட்டமிடல் குறித்த அறிவினைப் பெறச்செய்தல்.
4. வணிகத்தின் தன்மையை மதிப்பீடு செய்வர்.
5. தமிழ் இலக்கியத்தில் பயணநூல்கள் பெறுமிடம் குறித்து அறிவர்

**Subject Code: 22OUTAID1**

**(National)**

**Course Name: பயன்பாட்டுத் தமிழ்**

1. மொழிநடை மற்றும் உரைநடை பற்றி அறிந்து கொள்ளச் செய்தல்.
2. கட்டுரையின் பொருண்மைகள் மற்றும் வாக்கிய அமைப்பின் அடிப்படை விதிகளைத் தெரிந்து கொள்ளச் செய்தல்.
3. விமர்சனத் தின் படிநிலைகள் அணிந்துரை விளக்கம் முதலியவற்றைப் புரிந்து கொள்ளச்செய்தல்.
4. கடிதங் கள் எழுதுவதன் நோக்கம் கடிதங்களின் வகைகள் நோக்காணல் போன்றவற்றின் மதிப்பினை உணரச் செய்தல்.

5. நிகழ்ச்சி நிரல் தயாரித்தல் வருணனையாளரின் பண்புகள் செய்தித்தாள் அறிக்கை தயாரித்தல் முதலியவற்றின் அமைப்பு முறைகளைப் பகுத்துணர்ச் செய்தல்.

## SEMESTER – II

**Subject Code: 22OUTA21**

**(National)**

**Course Name: சிறுநிலக்கியம்**

1. சிறுநிலக்கிய வகைமை மற்றும் பாடுபொருள்களை அறியச் செய்தல்.
2. சிறுநிலக்கிய கால மக்களின் வாழ்வுமுறை தமிழ்ப்பண்பு கவிப்பண்புகளை அறியச் செய்தல்.
3. சோழ அரச பாரம்பரியம், பள்ளு இலக்கியத்தின் உட்பொருள் அமைப்புகளைப் புரிந்து கொள்ளச் செய்தல்.
4. மலைவளம் உலாவின் சிறப்பு பற்றி அறிவதுடன் அக்கால அணிகலன்கள் பற்றியும் மதிப்பிட்டுத் தெரிந்து கொள்ளச் செய்தல்
5. தலச்சிறப்பையும் பேரின்பக் காதலின் உயர்வையும் உணர்ந்து கொள்ளச் செய்தல்.

**Subject Code: 22OUTA22**

**(National)**

**Course Name: இலக்கணம் - நன்னூல் - சொல்லதிகாரம்**

1. பெயரிலக்கண மரபுகளை அறிந்து கொள்ளச் செய்தல்.
2. வினைச் சொற்களின் வகைகளையும் அதனை பயன்படுத்தும் விதத்தினையும் புரிந்து கொள்ளச்செய்தல்.
3. இலக்கியத் தொடரமைப்புகளை அமைக்கும் விதத்தினைக் கண்டறிதல்.
4. பேச்சு வழக்கு மற்றும் இலக்கிய தொடரமைப்புகளுக்கு இடையேயான வேறுபாடுகளைப் புரிந்து கொள்ளல்.
5. இடைச்சொல் மற்றும் உரிச்சொல் செய்யுளில் இடம் பெறுமாற்றை அறியச் செய்தல்.

**Subject Code: 22OUTAGETA2**

**(Global)**

**Course Name: பெண்ணியம்**

1. பெண்ணியத்தின் தோற்றமும் - வளர்ச்சியும் குறித்து விளக்கமாக அறியச் செய்தல்
2. மேலை நாடுகளில் பெண் விடுதலை இயக்கத்தால் பெண்ணியத்தில் ஏற்பட்டுள்ள வளர்ச்சிகளைப் பகுப்பாய்ந்து தெரியப்படுத்துதல்
3. பெண்ணியக் கோட்பாடுகளையும் இந்தியாவில் பெண்களின் சமூக நிலைகளையும் பற்றி அறியச் செய்தல்
4. பெண்ணுரிமைக் குறித்த சட்டங்களின் அறிவை விரிவாகப் பெறச் செய்தல்
5. இந்திய மற்றும் மேலை நாட்டுப் பெண்ணியத்தின் வேறுபாடுகளைப் பகுத்தறியும் அறிவைப் பெறச் செய்தல்.

**Subject Code: 22OUTAID2**

**(Global)**

**Course Name: ஊடகவியல்**

1. ஊடகங்ளின் வகைகளை அறிந்து கொள்ளச் செய்தல்
2. ஊடகத்துறையின் வளர்ச்சி மற்றும் பயன்பாட்டினைத் தெரிந்து கொள்ளச் செய்தல்
3. ஊடக சாதனங்களின் முக்கியத்துவத்தை மதிப்பிட்டுத் தெளியச் செய்தல்.
4. விளம்பரங்களின் அவசியத்தை உணர்ச் செய்தல்

5. திரைக்கதையின் வளர்ச்சியை அறிந்து பயன்பெற விழையச் செய்தல்.

### SEMESTER – III

**Subject Code: 22OUTA31**

**(National)**

**Course Name: சமய இலக்கியம்**

1. சைவ,சமயக்கொள்கைகளை அறியச்செய்தல்
2. வைணவம் வெளிப்படுத்தும் பக்தித் திறனைத் தெரிந்து கொள்ளல்.
3. சித்தர் பாடல்களில் உள்ள தத்துவங்களைப் புரிதல்
4. தனிப்பாடல்களின் சிறப்புக்களை உணரச் செய்தல்
5. கிறித்தவ இஸ்லாமிய கொள்கைகளைக் கற்றறியும் திறன் பெறுதல்

**Subject Code: 22OUTA32**

**(National)**

**Course Name: ,லக்கணம் - அகப் பொருள்**

1. திணை மற்றும் பொருள்களின் வகைகளை அறிந்து கொள்ளச் செய்தல்.
2. களவின் இலக்கணத் தையும் பிரிவுகளையும் தெரிந்து கொள்ளச் செய்தல்.
3. வரைவு நிலைப்பாட்டினை அறிந்து கொள்ளச் செய்தல்.
4. இவ்வாழ்க்கையின் சிறப்பினையும் பிரிவின் வகைகளையும் புரிந்து கொள்ளச் செய்தல்.
5. உள்ளுறை உவமம், இறைச்சிப் பொருள், திணைமயக்கம் ஆகியவற்றை அறியச் செய்தல்

**Subject Code: 22OUTAGETA3**

**(National)**

**Course Name: கல்வெட்டியல்**

1. கல்வெட்டின் மூலம் தொன்மை வரலாற்றினை அறிந்து கொள்ளச் செய்தல்.
2. கலை மற்றும்சமய வளர்ச்சியைத் தெரிந்து கொள்ளச் செய்தல்.
3. கல்வெட்டெழுத்துக்களின் வகைகளை அறிந்து கொள்ளல்.
4. தமிழ்மொழி இனத் தின் வரலாற்றை உணர்வர்.
5. பண்டைய தமிழ் வேந்தர்களின் அரசியல் முறைகளும் சமுதாய வாழ்க்கையும் நன்கு அறிவர்.

**Subject Code: 22OUTASE3**

**(National)**

**Course Name: படைப்பிலக்கியம்**

1. மாணவர்கள் தங்கள் எண்ணத்தை வெளிப்படுத்தும் வகையில் ஆர்வத் திணைத் தூண்டுதல்.
2. கற்பனை ஆற்றலின் வளர்ச்சியை மேம்படுத்துதல்
3. சிறுகதை படைப்புகள் மூலம் மாணவர்களின் படைப்பாற்றலை வெளிக்கொணர்தல்
4. மாணவர்கள் நடிப்பு குறித்தும் நாடக உத்திகள் குறித்தும் அறியும் படி செய்தல்
5. கவிதை- சிறுகதை – நாடகம் எழுத பயிற் சியளித்தல்

## SEMESTER – IV

**Subject Code: 22OUTA41**

**(National)**

**Course Name: காப்பிய இலக்கியம்**

1. காப்பியகால மக்களின் வாழ்க்கைநிலை,பண்பாடு,பழக்கவழக்கங்களை அறிவர்.
2. சைவக்காப்பியங்கள் களின் வழி சைவ அடியவர்களின் பக்திநெறியினை தெரிவர்.
3. இதிகாச மாந்தர்களின் பாத்திர பண்புகளை ஒப்பிடும் திறனைப் பெறுவர்.
4. காப்பிய சமய பொதுமைகளைக் கண்டுகொள்வர்.
5. தற் கால காப்பியங்களின் வளர்ச்சி பண்புகளை அறியும் திறனைப் பெறுவர்.

**Subject Code: 22OUTA42**

**(National)**

**Course Name: இலக்கணம் - புறப் பொருள்**

1. புறப்பொருள் வெண்பா மாலை கட்டமைக்கும் புற இலக்கண திணை, துறை மரபுகளை அறிந்து கொள்ளுதல்
2. புறப் பொருள் வெண்பா மாலை சுட்டும் போர் முறைகளைத் தெரிந்து கொள்ளுதல்
3. புற இலக்கியங்களுக்கும், புற இலக்கண மரபுகளுக்கும் உள்ள பொருத் தத்தை பகுத்தறிதல்.
4. திணை, துறை அடிப்படையில் புற இலக்கியங்களைப் புரிந்து கொள்ளுதல்.
5. புற வாழ்க்கைக்கான விழுமியங்களைத் தெரிந்து கொள்ளுதல்.

**Subject Code: 22OUTAGETA4**

**(National)**

**Course Name: நாட்டுப்புறவியல்**

1. நாட்டுப்புறவியல் சொல் விளக்கம் மற்றும் நாட்டுப்புறபாடல்களின் தன்மையை அறியச்செய்தல்.
2. நாட்டுப்புற இலக்கியங்கள் களின் சொல் மேலாண்மையை உணரச் செய்தல்.
3. நாட்டுப்புறமக்களின் பண்பாடு மற்றும் பழக்க வழக்கங்களைக் கண்டுணரச்செய்தல்.
4. நாட்டுப்புறவியல் சார்ந்த ஆய்வுக்களன்களைத் தெரிந்து கொள்ளச் செய்தல்.
5. நாட்டுப்புறவியல் குறித்த வரலாற்றினை அறியச் செய்தல்.

**Subject Code: 22OUTASE4**

**(National)**

**Course Name: ஆளுமைத் திறன்**

1. ஆளுமைக்கோட்பாடுகளை அறியச் செய்தல்..
2. தன்முனைப்பு உத்திகள் மூலம் தன்முனைப்பு தன்மையை பெறச்செய்தல்.
3. தலைமைப் பண்பிற்கான தகுதிகளை உருவாக்குதல்.
4. தகவல் பரிமாற்ற சிக்கல்களைக் கையாளச் செய்தல்.
5. பன்முகப் பண்பாட்டுச் சூழலில் சமூக நன்னடத்தையை உருவாக்குதல்

**Course Outcomes**  
**TANSCH - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUTA11**

**(National)**

**Course Name: இக்கால இலக்கியம்**

1. கற்றல் வரலாற்றுப் பின்னணியில் இக்காலத் தமிழ் இலக்கியங்களை அறிந்து கொள்ள வாய்ப்பளித்தல்
2. கவிதை, சிறுகதை, புதினம், நாடகம், கட்டுரை ஆகிய படைப்பியல் வகைகளைப் பற்றிய புலமையைப் பெருக்குதல்.
3. இக்காலத் தமிழ் இலக்கியங்களின் உள்ளடக்கம், வெளியீட்டுநெறி படைப்பியல் கொள்கை ஆகியவற்றை அறியச் செய்தல்
4. இலக்கியக் கொள்கையின் அடிப்படையில் இக்கால இலக்கியங்களைத் திறனாய்வு செய்யப் பயிற்சியளித்தல்
5. படைப்புத் துறையிலும் ஊடகத் துறையிலும் கல்விப்புலத் திலும் வேலை வாய்ப்பினைப் பெறுவதற்குத் துணை செய்தல்

**Subject Code: 23OUTA12**

**(National)**

**Course Name: தமிழக வரலாறும் பண்பாடும் குறிக்கோள்**

1. தமிழக வரலாற்றை அறிந்துகொள்ளுதல்.
2. தமிழரின் வாழ்வியல் தொன்மையை அறிதல்.
3. தமிழரின் பண்பாட்டினை அறிந்துகொள்ளல்
4. தமிழர்மேல் நிகழ்ந்த பிற பண்பாட்டுத் தாக்கங்களை அறிதல்
5. தமிழரின் உயர்வுக்கும் பின்னடைவுக்குமான காரணிகளைத் தெளிதல்

**Subject Code: 23OUTADSE1**

**(National)**

**Course Name: செம்மொழித் தமிழ்**

1. உலக மொழிகளில் செம்மொழித் தமிழின் சிறப்பை அடையாளம் காணச் செய்தல்
2. செம்மொழிப் போராட்டத் தில் தமிழ் அறிஞர்களின் பங்களிப்பை உணரச் செய்தல்.
3. செம்மொழித் தமிழின் தகுதிகளைப் பிற மொழிகளில் கண்டறியச் செய்தல்.
4. செம்மொழி தமிழ் இலக்கியங்களை அறிந்துகொள்ளுதல்.
5. இன்றைய நிலையில் செம்மொழித் தமிழின் பயன்பாட்டினை உணர்தல்

**Subject Code: 23OUTASECN1**

**(National)**

**Course Name: சுற்றுலாவியலும் உணவியலும்**

1. சுற்றுலாவியலை அறிமுகம் செய்வதோடு காலந்தோறும் வளர்ந்து வந்த சுற்றுலாவை உயரச் செய்தல்
2. சுற்றுலாவின் பயன்களையும் சுற்றுலாவைத் திட்டமிடுதல் மற்றும் செயற்படுத்துதலையும் அறியச்செய்தல்.

3. தமிழகத்தில் புகழ் மிக்க சுற்றுலாத் தலங்களை மாணவர்களுக்கு விரிவாகப் பயிற்றுவித்தல்
4. சுற்றுலாத்துறையில் உள்ள பணிவாய்ப்புகளை அறியச் செய்தல்.
5. காலந்தோறும் உணவும் உணவுப் பழக்கவழக்கங்களும் மாறிவருவதை அறிதல்.

**Subject Code: 23OUTAFC1**

**(National)**

**Course Name: தமிழில் சிறார் இலக்கியம்**

- 1.தமிழில் உள்ள சிறார் இலக்கியங்களை அறிதல், வகைப்படுத்தல்
- 2.சிறார் இலக்கியப்படைப்பாளர்கள், இலக்கிய வகைகளை அறிதல்
- 3.சிறார் இலக்கியங்களைப் படைத்தல்.

## SEMESTER – II

**Subject Code: 23OUTA21**

**(National)**

**Course Name: அற இலக்கியம்**

1. தமிழின் அற இலக்கிய வரலாற்றை அறிதல்.
2. பதினெண் கீழ் க்கணக்கில் இடம் பெற்றுள்ள அற இலக்கியங்களை ஆழ்ந்து கற்றல்.
3. திருக்குறள். நாலடியார் ஆகியவற்றில் சிறப்புப் பயிற்சி பெறுதல்.
4. அற இலக்கியங்கள் முன்வைக்கும் அறக்கருத்துகள், அற இலக்கியங்களின் இலக்கிய மதிப்புகள், இலக்கிய அழகுகள், யாப்பு வடிவம் போன்றவற்றை அறிந்து கொள்ளுதல்.
5. தமிழர்களின் பண்டைய அறவாழ்வு பெருமிதங்களை அறிந்து பின்பற்றும் விருப்பத்தைத் தூண்டுதல்

**Subject Code: 23OUTA22**

**(National)**

**Course Name: தமிழ் இலக்கிய வரலாறு**

1. சங்க இலக்கியங்கள் அவற்றின் தோற்றத் திற்கான அடிப்படைகளைப் பற்றி அறிந்து கொள்ளுதல்
2. அற இலக்கியங்கள் குறித்தும் அவற்றின் அக்காலதேவை குறித்தும் அறிந்து கொள்ளுதல்
3. பக்தி இலக்கியங்கள் காப்பியங்கள் சிறிலக்கியங்கள் தோற்றம் வளர்ச்சி நிலைகள் பற்றி அறிந்து கொள்ளுதல்
4. ஆங்கிலேயரின் வருகைக்குப் பின்னர் வளர்ந்த இலக்கியங்கள் நாடகங்கள் பற்றித் தெரிந்து கொள்ளுதல்
5. சமூகத்திற்கும், இலக்கியத் திற்குமான பிணைப்புகள் குறித்துத் தெரிந்து கொள்ளுதல்

**Subject Code: 23OUTADSE2**

**(National)**

**Course Name: தமிழின் மேலாண்மைச் சிந்தனைகள்**

- 1.மேலாண்மைத் திறன் என்பது அனைவருக்குமானது என்பதை உணர்தல்.
- 2.தமிழர் தம் மேலாண்மைச் சிந்தனைகளை அவர் தம் இலக்கியங்களின் வாயிலாக அறியச் செய்தல்
- 3.பழந்தமிழரின் பல்துறை அறிவையும் பன்முக ஆளுமையையும் உணர்த்துதல்.
- 4.இலக்கியங்களின் வழி அறியலாகும் தமிழ் - தமிழர் -தமிழகம் பற்றியும் தமிழர் மேலாண்மை குறித்தும் அறிந்து கொள்ளுதல்.
- 5.மரபுத்தொழில்களையும் அவற்றின் இன்றைய நீட்சியையும் அறியச்செய்தல்.
- 6.தற்கால மேலாண்மைச் சிந்தனைகளோடு பொருத்திக்காட்டுதல்

**Subject Code: 23OUTAS ECN2**

**(National)**

**Course Name: பேச்சுக்கலைத் திறன**

1. பொது இடங்களிலும் இமேடையிலும் கேட்போரைப் பிணைக்கும் வகையில் பேசும்திறன் பெறுதல்.
2. பேச்சு என்பது ஓர் கலை என்பதை உணர்த்துதல்.
3. பேச்சாளர் ஆவதற்குரிய ஆளுமையை வளர்த்தல்.
4. புகழ்பெற்ற பேச்சாளர்களின் மொழிஆளுமையை அறிதல்.
5. பொழிஞ்ராவதற்குரிய தகுதிகளை வளர்த்துக் கொள்ளல்.
6. மாணவர்களைப் பேச்சாளர்களாக உருவாக்குதல்

**Subject Code: 23OUTASEC3**

**(National)**

**Course Name: அறிவியல் தமிழ்**

1. தாய்மொழிவழியாக அறிவியல் பற்றிய சிந்தனைகளை வளர்த்தல்
2. அறிவியல் கலைச்சொல்லாக்கம் பற்றிய புரிந்துவிதல்
3. அறிவியல் தமிழ் மொழிபெயர்ப்பு குறித்து கற்பித்தல்
4. மாணவர்களுக்கு அறிவியல் பார்வையை ஏற்படுத்தல்
5. தமிழில் அறிவியல் படைப்பிலக்கியங்களை உருவாக்கத் தூண்டுதல்



DEPARTMENT OF PHYSICS  
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**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OUPH11**

**(National)**

**Course Name: Mechanics, Properties of Matter and Sound**

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

1. To learn the basic concepts of laws and forces.
2. To gain the knowledge of Moment of Inertia and concepts of dynamic bodies
3. To understand the concept of Gravitation field and Potential
4. To demonstrate practical knowledge in the Elastic and Viscosity properties.
5. To Study the behaviour of sound waves and also its properties.

**Subject Code: 22OUPHSE11**

**(National)**

**Course Name: Basic Electronics**

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

1. To study the basic concepts about resistors and capacitors.
2. To comprehend the theory of inductors.
3. To understand the basics and the special types of diodes.
4. To know the physics behind semiconductors and their types.
5. To understand the basic formation of transistor and its configuration

**Subject Code: 22OUPHSE12**

**(National)**

**Course Name: Skill Enhancement Course**

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

1. To understand the fundamentals of Ms-word.
2. To study the concepts of formatting workbooks.
3. To acquire the knowledge of power-point.
4. To apply the knowledge of using internet
5. To analyze the advantage of email.

**Subject Code: 22OUPHID1**

**(Global)**

**Course Name: Inter Disciplinary Course**

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

- 1.To learn the basic concepts of fundamentals of energy.

2. To gain the knowledge of application of solar energy.
3. To understand the concept of nature of winds.
4. To demonstrate knowledge in the biomass resources.
5. To study about the application of ocean energy.

**Subject Code: 22OUPH21**

**(National)**

**Course Name: Heat and Thermodynamics**

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

- 1.To Understand the fundamentals of Heat capacities.
2. To Study the concepts of conduction, convection,& radiation.
3. Acquire the knowledge various liquefaction process.
4. Apply the concept of kinetic theory of matter.
5. Analyze the relation of entropy in reversible & irreversible process.

**Subject Code: 22OUPHSE21**

**(National)**

**Course Name: Basic Instrumentation Skill**

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

1. To understand the concept of Ammeter, voltmeter, ohmmeter.
2. To study the concepts of Multimeter .
3. To study about transducers.
4. To acquire the knowledge of CRO.
5. To acquire the knowledge about measuring Instruments.

**Subject Code: 22OUPHSE22**

**(Global)**

**Course Name: Renewable Energy and Energy Harvesting**

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

1. To study the basic concepts of solar energy and its applications.
2. To understand the origin, nature and applications of wind power.
3. To acquire the knowledge about tidal energy.
4. To learn about the various aspects of biomass energy.
5. To Study the origin, distribution, types and application of geothermal energy

**Subject Code: 22OUPHID2**

**(National)**

**Course Name: Astrophysics**

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

1. To understand the concepts history of Astronomy.
2. To study the concepts of earth motion in space.
3. To learn about tidal dynamics and various moon phases.
4. To study the Milky Way Constellations and the starry universe.
5. To understand how stars are formed and their varied characteristics.

**Subject Code: 22OUMAGEPH1**

**(National)**

**Course Name: Physics-I Mechanics and Properties of Matter**

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

1. To acquire the knowledge about force, power and energy.
2. To understand the concepts of rotational motion.
3. To import the knowledge of gravitation.
4. To expose the knowledge of materials based on their moduli of elasticity
5. To understand the basic properties of Viscosity.

**Subject Code: 22OUMAGEPH2**

**(Global)**

**Course Name: Physics-II Thermal physics**

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

1. To comprehend the fundamental ideas behind thermal expansion and adiabatic change.
2. To learn about convection and conduction in relation to the atmosphere.
3. To acquire the knowledge about radiation laws.
4. To understand the concepts of kinetic theory of gases.
5. To study the various thermodynamics laws.

### **SEMESTER – III**

**Subject Code: 22OUPH31**

**(National)**

**Course Name: Electricity and Electromagnetism**

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

1. To understand the basic concepts of electric current.
2. To acquire the knowledge about the thermal effect of electric current.
3. To study the basic concepts of electromagnetic inductance.
4. To learn about AC and DC currents.
5. To study the Maxwell's equation and Electromagnetic waves

**Subject Code: 22OUCHGEPH3**

**(National)**

**Course Name: Physics-I Mechanics and Properties of Matter**

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

1. To acquire the knowledge about force, power and energy.
2. To understand the concepts of rotational motion.
3. To import the knowledge of gravitation.
4. To expose the knowledge of materials based on their moduli of elasticity
5. To understand the basic properties of Viscosity.

**Subject Code: 22OUMAGE PH3**

**(National)**

**Course Name: Physics-III Electricity and Electronics**

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

1. To understand the basic concepts of electric fields.
2. To acquire the knowledge about the magnetic fields.
3. To understand the properties of semiconductor materials.
4. To study the basic concepts of Transistor.
5. To learn about logic gates.

#### **SEMESTER – IV**

**Subject Code: 22OUPH41**

**(National)**

**Course Name: Optics and Spectroscopy**

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

1. To understand the basic concepts of dispersion of light.
2. To obtain the knowledge about interference.
3. To study the different types of Diffraction.
4. To acquire the knowledge of the effects of polarization of light.
5. To gain the basic knowledge of types of spectroscopy and its applications.

**Subject Code: 22OUCHGEPH4**

**(Global)**

**Course Name: PhysicsII Thermal physics**

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

1. To comprehend the fundamental ideas behind thermal expansion and adiabatic change.
2. To learn about convection and conduction in relation to the atmosphere.
3. To acquire the knowledge about radiation laws.

4. To understand the concepts of kinetic theory of gases.
5. To study the various thermodynamics laws.

**Subject Code: 22OUMAGEPH4**

**(National)**

**Course Name: Physics – IV Optics**

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

1. To study the basic concepts of geometrical optics.
2. To comprehend the theory of interference.
3. To understand the basics and the types of Diffraction.
4. To know the theory of Polarization of light.
5. To understand the basics of LASER.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUPH11**

**(National)**

**Course Name: Properties of Matter and Acoustics**

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

1. To understand the concepts of Elasticity of the materials.
2. To acquire the basic Knowledge of Bending of beams.
3. To understand the concepts of Fluid dynamics.
4. To Study the basic properties of Waves and Oscillations.
5. To acquire the knowledge about the Acoustics and Ultrasonic

**Subject Code: 23OUPHSECN1**

**(Global)**

**Course Name: Physics for Everyday Life**

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

1. To understand the concepts of mechanical objects.
2. To acquire the basic Knowledge of optical instruments and laser.
3. To understand the concepts behind the physics of home appliances.
4. To Study the basic properties of solar energy.
5. To acquire the knowledge about the Indian physicist and their contributions.

**Subject Code: 23OUPHFC1**

**(National)**

**Course Name: Introductory Physics**

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

1. To understand the concepts vectors.
2. To acquire the basic Knowledge of different forces, present in Nature
3. To understand the concepts of Quantify energy in different process.
4. To Study the basics of different types of motions.
5. To acquire the knowledge about the properties of matter.



## SEMESTER – II

**Subject Code: 23OUPH21**

**(National)**

**Course Name: Heat, Thermodynamics and Statistical Physics**

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

1. To understand the fundamentals of Heat capacities.
2. To acquire the basic Knowledge of Thermodynamic laws.
3. To understand the concept of entropy in reversible & irreversible process.
4. To Study the concepts of heat transfer.
5. To acquire the knowledge about different types of statistics.

**Subject Code: 23OUPHSECN2**

**(Global)**

**Course Name: Astrophysics**

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

1. To understand the concepts of telescope.
2. To acquire the basic Knowledge of solar system.
3. To understand the concepts of eclipses.
4. To Study about the classification of galaxies.
5. To acquire the knowledge about the activities in astro physics

**Subject Code: 23OUPHSEC3**

**(National)**

**Course Name: Electricity**

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

1. To understand the fundamentals of Electrostatics.
2. To get the basic Knowledge about current electricity.
3. To understand the concept of Capacitors.
4. To acquire the knowledge about AC.
5. To study the Thermo Electric Effects.

**Subject Code: 23OUMAGEPH1**

**(National)**

**Course Name: Allied Physics – I**

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

1. To understand the concepts of Waves and Ultrasonic.
2. To acquire the basic Knowledge of Elasticity and viscosity.
3. To understand the concepts of heat and thermodynamics.

4. To Study the basic contents of electricity and magnetism.
5. To acquire the knowledge about the digital electronics.

**Subject Code: 23OUMAGEPH2**

**(National)**

**Course Name: Allied Physics – II**

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

1. To understand the concepts of interference.
2. To acquire the basic Knowledge of atom models.
3. To understand the concepts of nuclear models.
4. To Study about the special theory of relativity.
5. To acquire the knowledge about the semiconductor physics.

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**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OUND11**

**(National)**

**Course Name: Food Science – I**

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

1. Acquire knowledge on the structure of food, its composition, processing and changes during cooking.
2. Understand the importance of various foods and composition of their nutrients.
3. Familiarize with different methods of cooking.
4. Characterize the basis for toxin production, to determine the mode of action and Prevention of selected toxins.
5. Study the different types of pigments.

**Subject Code: 22OUNDGEND1**

**(Global)**

**Course Name: Human Physiology**

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

1. Understand the integrated structure and functions of all systems.
2. Gain knowledge on human physiology.
3. Understand some of the relevant issues and topics of human physiology.
4. Learn the knowledge about reproductive and excretory system.
5. Study the mechanism of sensory organs.

**Subject Code: 22OUNDSE11**

**(National)**

**Course Name: Spices and Herbal Nutrition**

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

1. Gain basic knowledge of spices and herbs.
2. Understanding about culinary uses.
3. Acquire Knowledge on therapeutic value of spices and herbs.

**Subject Code: 22OUNDSE12**

**(Global)**

**Course Name: Community Nutrition**

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

1. Understand the concept of community nutrition.
2. To know about the various health intervention programmes in the community.
3. To understand national nutritional problems and their implications

**Subject Code: 22OUNDID1**

**(National)**

**Course Name: Basic Nutrition**

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

1. Understand the functions and sources of nutrients.
2. Acquire skills in the maintenance of good health
3. Know about the various deficiency disorders.

## **SEMESTER – II**

**Subject Code: 22OUND21**

**(National)**

**Course Name: Food Science – II**

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

1. Learn the structure, composition, selection of different food and their changes during cooking.
2. Gain knowledge on evaluation of food quality.
3. Know about the food adulteration and tests for detection.

**Subject Code: 22OUNDGEND2**

**(Global)**

**Course Name: Food Microbiology**

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

1. Acquire knowledge on the nature of microorganisms involved in food spoilage.
2. Understand the importance of microorganisms in food biotechnology.
3. Distinguish between food poisoning and infection.

**Subject Code: 22OUNDSE21**

**(National)**

**Course Name: Extension Education**

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

1. Understand the principles of extension and community development.
2. Prepare for higher studies in extension education.
3. Become effective home science extension worker.

**Subject Code: 22OUNDSE22**

**(National)**

**Course Name: Textiles and Clothing**

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

1. Understand properties and their uses of textile fibres
2. Know the concept of fabric finishes.
3. Gain basic knowledge of planning family clothing.

**Subject Code: 22OUNDID2**

**(Global)**

**Course Name: Food preservation**

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

1. Understand the basic principles underlying food preservation.
2. Develop the ability in preserving foods.

### **SEMESTER – III**

**Subject Code: 22OUND31**

**(National)**

**Course Name: Core: Fundamentals of Nutrition**

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

1. Acquire knowledge on the structure of basic terminology and several aspects of nutrition and the functions of food in healthy life sustenance.
2. Familiarize with the nutrient classification, nutrition during deficiency conditions.
3. Understanding of modern aspects of nutritional science.

**Subject Code: 22OUNDGEND3**

**(National)**

**Course Name: GEC: Bakery**

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

1. Understand the basic concepts of bakery and food preservation.
2. Familiarize with baking processes and operations.
3. Develop skills and techniques in baking.

### **SEMESTER – IV**

**Subject Code: 22OUND41**

**(National)**

**Course Name: Core: Nutritional Biochemistry**

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

1. Study the basic concepts of metabolism of proximate principles.
2. To learn the metabolic pathways of nutritional significance.

**Subject Code: 22OUNDGEND4**

**(Global)**

**Course Name: GEC: Food Preservation**

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

1. Gain knowledge on principles of food preservation of foods.
2. Understand the techniques used in processing foods to preserve their shelf life.
3. Apply skills learnt to develop preserved food product.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUND11**

**(National)**

**Course Name: Food Science**

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

1. Understand the science of food and factors that affect its quality, Nutritive value and shelf life.
2. Understand the physical, biological and chemical characteristics of various foods and their uses.
3. Apply knowledge of foods in planning diets and preparing meals that are safe, nutritious and palatable.

**Subject Code: 23OUND1P**

**(National)**

**Course Name: Basic cookery practical**

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

1. To enable the students to: Learn the principles and scientific methods of cooking.
2. Learn the best methods of cooking foods to preserve its nutrient content and minimize cooking time.
3. Apply the principles of cookery to prepare tasty and nutritious food.

**Subject Code: 23OUNDSECN1**

**(National)**

**Course Name: Basic Nutrition**

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

1. Understand the functions and sources of nutrients.
2. Acquire skills in the maintenance of good health
3. Know about the various deficiency disorders

**Subject Code: 23OUNDFC1**

**(Global)**

**Course Name: Women Health and Wellness**

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

1. To enable the students to: Understand the diverse factors that has a bearing on women's health. Highlight different aspects of health that contributes to a good lifestyle for women across the globe.



## SEMESTER – II

**Subject Code: 23OUND21**

**(National)**

**Course Name: Human Physiology**

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

1. To enable the students to: Gain basic understanding of human anatomy and physiology  
Learn the integrated functioning of cells, tissues, organs and systems.
2. Apply the principles of nutrition and dietetics on the basis of thorough understanding of human physiology.

**Subject Code: 23OUND22**

**(Global)**

**Course Name: Basics of Food Microbiology**

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

1. To enable the students to: Gain knowledge on the characteristics of micro-organisms in food and environment.
2. Understand the role of microorganisms in food spoilage, health and illness. Familiarize with the methods of controlling microorganisms.

**Subject Code: 23OUNDSEC2**

**(National)**

**Course Name: Consumer Education**

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

1. To enable the students to: Be familiar with the problems in buying and consumer legislations.
2. Become aware of marketing conditions and the means for problem redressal. Create awareness on various consumer buying problems

**Subject Code: 23OUNDSEC3**

**(National)**

**Course Name: House Keeping**

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

To enable the students to: Gain theoretical knowledge and practical applications of housekeeping  
Learn the layout and functions of guest room. Get acquainted with the attributes, qualities and skills required for proper functioning of the housekeeping department

# **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**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OUCA11**

**(National)**

**Course Name: Programming in C**

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

1. Understand the basic principles of C Programming
2. Apply the control statements to solve the mathematical problems.
3. Analyze different types of arrays and apply the concepts in Real time applications
4. Studies the concept of functions, types of functions, Union and Structures.
5. Comprehend the file concept and file creation using C.

**Subject Code: 22OUCAID1**

**(National)**

**Course Name: Working Principles of Internet**

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

1. Understand the basics Concepts of Internet.
2. The students to access the usage of Web browsers.
3. Analyzes the Concept of internet addressing and Internet protocols.
4. Gain the knowledge of working with E-mail, Websites and Web Pages.
5. To recognize for accessing the usage of Social Networking.

**SEMESTER – II**

**Subject Code: 22OUCA21**

**(National)**

**Course Name: Object Oriented Programming with C++**

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

1. Understand the programming concept to develop applications
2. Apply the control statements and develop programs using different types of functions
3. Apply the concept of Constructor, destructor, Function Overloading and operator overloading.
4. Understand the Concept of inheritance and pointers
5. Identify the file, file modes and command line arguments

**Subject Code: 22OUCAID2**

**(Global)**

**Course Name: Web Designing**

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

1. Insight the students knowledge with basics of HTML.
2. Equip the students to create a web page using Lists.
3. Gain the knowledge of working with Table, Style sheets.
4. Make the students to design a web page using frames and forms.
5. To equip the students with Internet technologies.

### **SEMESTER – III**

**Subject Code: 22OUCA31**

**(Global)**

**Course Name: Java Programming**

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

1. Understand the basic concepts of OOPs.
2. Apply the looping statements to solve the mathematical problems.
3. Analyze different types of arrays and apply the concepts in Real time applications
4. Studies the concept of multithread and error.
5. Comprehend the Applet and java Servlet in java

**Subject Code: 22OUCA32**

**(Global)**

**Course Name: Relational Database Management System**

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

1. Master the basics of SQL and construct queries using SQL
2. Understand the relational database design principles.
3. Provide data integrity Constraints
4. Apply the Normal form and Functional Dependencies
5. Analyze the concept of Internet Applications in Database Management System

### **SEMESTER – IV**

**Subject Code: 22OUCA41**

**(National)**

**Course Name: Data Structures and Computer Algorithms**

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

1. Understand the basic concept to process the data
2. Apply array using linked list, queue and stack concept
3. Apply the concept of Trees and graphs
4. Understand the Algorithm concept to sort and find the minimum distance
5. Identify the Greedy method and Backtracking

**Subject Code: 22OUCA42**

**(Global)**

**Course Name: Data Communication and Computer Networks**

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

1. To understand the basic Concepts of Network architecture.
2. To study the data representation and error detection.
3. Access the concept of Wide area networks.
4. Understand the Concept of integrated services.
5. Identify the Network applications and security.

**Course Outcomes**  
**TANSCH - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUCA11**

**(National)**

**Course Name: Python Programming**

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

1. To make students understand the concepts of Python programming.
2. To apply the OOPs concept in Python programming.
3. To impart knowledge on demand and supply concepts
4. To make the students learn best practices in Python programming
5. To know the costs and profit maximization

**Subject Code: 23OUCADSE1**

**(National)**

**Course Name: Digital Logic Fundamentals**

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

1. Classify various gates, binary codes and illustrate laws and theorem's of Boolean Algebra

2. Convert numbers from one radix to another and build logic circuits with optimal design
3. Apply binary addition, subtraction 2's complement arithmetic to implement arithmetic Circuits
4. Assess the functioning of multiplexer, decoder, flip flop, register and memory
5. Design a digital circuit using the knowledge acquired from combinational logic, sequential logic, and K-map

**Subject Code: 23OUCASECN1**

**(National)**

**Course Name: Office Automation**

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

1. Understand the basics of computer systems and its components.
2. Understand and apply the basic concepts of a word processing package.
3. Understand and apply the basic concepts of electronic spreadsheet software.
4. Understand and apply the basic concepts of database management system.
5. Understand and create a presentation using PowerPoint tool.

**Subject Code: 23OUCAFC1**

**(National)**

**Course Name: Structured Programming in C**

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

1. To familiarize the students with the Programming basics and the fundamentals of C.
2. To understand the concept using if statements and loops
3. This unit covers the concept of Arrays
4. This unit covers the concept of Functions
5. To understand the concept of implementing pointers.

**Subject Code: 23OUCA21**

**(Global)**

**Course Name: Object Oriented Programming Concepts using C++**

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

1. Describe the procedural and object oriented paradigm with concepts of streams, classes, functions, data and objects
2. Understand dynamic memory management techniques using pointers, constructors, destructors, etc
3. Describe the concept of function overloading, operator overloading, virtual functions and polymorphism

4. Classify inheritance with the understanding of early and late binding, usage of exception handling, generic programming

5. Demonstrate the use of various OOPs concepts with the help of programs

**Subject Code: 23OUCAGECOM2**

**(National)**

**Course Name: Financial Accounting**

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

1. To understand the basic accounting concepts and standards.
2. To know the basis for accounts, Journals, Ledger
3. To know the basis for calculating profit and loss.
4. To learn the methods of creating company, ledger creation using Tally
5. To gain knowledge about voucher creation.

**Subject Code: 23OUCASEC3**

**(Global)**

**Course Name: Multimedia Systems**

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

1. Understand the definition of Multimedia
2. To study about the Image File Formats, Sounds Audio File Formats
3. Understand the concepts of Animation and Digital Video Containers
4. To study about the Stage of Multimedia Project
5. Understand the concept of Ownership of Content Created for Project Acquiring Talent



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**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OU1COM1**

**(National)**

**Course Name: Business Correspondence**

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

1. To enable the students to understand the Essential Parts of a Business Letter.
2. To identify the Contents of an order letter.
3. To help the students gain practical applications in the Procedure for Export and Import.
4. To make the learners aware of the Letters from the Customers to the Banker.
5. To create awareness on the Report writing and electronic communication.

**Subject Code: 22OUCCA1P**

**(National)**

**Course Name: M.S. Office Practical**

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

1. To enable the students in crafting professional word documents, excel spread sheets, power point presentations using the Microsoft office.
2. To familiarize the students in preparation of documents and presentations with office automation tools.
3. To understand and perform documentation.
4. To perform spreadsheet and report.
5. To practice the students to prepare power point presentation.

**Subject Code: 22OUCOM12**

**(National)**

**Course Name: Financial Accounting – I**

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

1. To enable the students to understand the Concepts of Final Accounts
2. To Identify the Errors of omission, Principle and Commission
3. To Help the students gain practical knowledge in final accounts of Non-Profit Organization
4. To make the learners to understand various depreciation Methods.
5. To create awareness on Recording Bill Transaction in Journal & Bill sent for collection

**Subject Code: 22OUCOMGECO1**

**(National)**

**Course Name: Computer Fundamentals**

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

1. To give basic knowledge about parts of computers and their functions.
2. To Identify and Solve the Number System.
3. To Populate and Evaluate the Type of Memory and Storage Devices.
4. To Understand and effectively explain Input Devices and Output Devices.
5. To Understand and basic concept of Network and Topology

**Subject Code: 22OUCCAID1**

**(Global)**

**Course Name: Operating System Concept**

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

1. To understand the services provided by and the design of an operating system.
2. To understand the structure and organization of the file system.
3. To learn about the Input/output and Memory Management system.
4. To understand what a process is and how processes are synchronized and scheduled.
5. To understand different approaches to memory management.

## **SEMESTER – II**

**Subject Code: 22OU1COM2**

**(National)**

**Course Name: Principles of Management**

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

1. To enable the students to understand the Concepts of Principles of Management
2. To help the students to know the evolution of management thought.
3. To understand the principles and practice of business management.
4. To make the learners aware of the theories of Motivation.
5. To create awareness on channel of communication and techniques of controlling.

**Subject Code: 22OUCCA2P**

**(National)**

**Course Name: Programming in C Lab**

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

1. To study about basic Programming Language.
2. To understand the concept of Arithmetic operation.
3. To study about programming concept like Looping, Branching and Array.
4. To help the students to understand the File Concept.
5. To Practice the students to write C Programs of their own

**Subject Code:** 22OUCOM22

**(National)**

**Course Name:** Financial Accounting – II

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

1. To enable the students to understand the Distinction between Sale and Consignment.
2. To identify the Recording in joint venture.
3. To Help the students gain practical knowledge in Single Entry System.
4. To make the learners aware of Cost price Method & Invoice Method.
5. To create awareness on Methods of Calculation of Interest.

**Subject Code:** 22OUCCAGECA2

**(National)**

**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

**Subject Code:** 22OUCCAID2

**(National)**

**Course Name:** E-Commerce

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

1. To Understand the Overview of E-Commerce.
2. To Learn about the Advantages and Disadvantages of E-Commerce.

3. To understand the concept of Commerce Business Model.
4. Understand and effectively explain about the Commerce Payment System.
5. Understand and Define the EDI Documents.

### SEMESTER – III

**Subject Code: 22OUCCA31**

**(National)**

**Course Name: Visual Basic**

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

1. Understand the benefits of using Microsoft Visual Basic 6.0 for Windows as an application tool.
2. Understand the Visual Basic event-driven programming concepts, terminology, and available tools.
3. Learn the fundamentals of designing, implementing, and distributing a Visual Basic application.
4. Learn to use the Visual Basic toolbox, modify object properties & object methods.
5. Design a complete program using visual programming concepts.

**Subject Code: 22OUCCA3P**

**(National)**

**Course Name: Visual Basic Lab**

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

1. To understand the benefits of using Microsoft Visual Basic 6.0 for Windows as an application tool.
2. To understand the Visual Basic event-driven programming concepts, terminology, and available tools.
3. To learn the fundamentals of designing, implementing, and distributing a Visual Basic application.
4. To learn Visual Basic toolbox, modify object properties & object methods.
5. To design a complete program using visual programming concepts.

**Subject Code: 22OUCCA32**

**(National)**

**Course Name: Financial Accounting-III**

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

1. To enable the students to understand the Fire Insurance claims

2. To Identify the Royalty Accounts of accounting treatment
3. To Help the students gain practical knowledge in Insolvency Accounts
4. To make the learners to understand various installments purchase system
5. To Create awareness on Contract Accounts

**Subject Code: 22OUCCA33**

**(Global)**

**Course Name: Costing**

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

1. To understand the various concepts and methods of costing.
2. To enable the students to compute the cost of products, cost of jobs and process
3. Help the students Computation Calculation of Simple Average Price method
4. Make the learners aware of System of wage payment
5. To Measurement of Solving a Machine hour rate method

**Subject Code: 22OUCCAGECA3**

**(National)**

**Course Name: GEC - III Business Statistics**

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

1. To understand various statistical tools used in business.
2. To equip the students with the application of statistical tools in the analysis of data for decision making.
3. To be able to calculate measures of central tendency, measures of dispersion
4. To gain working knowledge on correlation and regression
5. To acquire skills towards solving problems in Index and time series analysis

**Subject Code: 22OUCCASE3P**

**(National)**

**Course Name: SEC: Commerce Practical**

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

1. To acquire practical knowledge in the use of various forms used in GST, banking & Insurance sectors.
2. To train the students in drafting of advertisement copy and preparation of project report for entrepreneurship.

## SEMESTER – IV

**Subject Code: 22OUCCA41**

**(National)**

**Course Name: Web Technology**

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

1. To comprehend the basics of the internet and web terminologies.
2. To be familiar with HTML & DHTML.
3. To introduce scripting language concepts for developing client-side applications.
4. To practice server-side programming features – XML & DTD
5. To know the usefulness of ASP.

**Subject Code: 22OUCCA4P**

**(National)**

**Course Name: Tally Practical**

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

1. To develop an understanding of the Tally
2. To teach students stock maintenance through tally.
3. To make students to create order processing
4. To identify the appropriate features of tally.

**Subject Code: 22OUCCA42**

**(Global)**

**Course Name: Banking**

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

1. To enable the students to understand the relationship between a banker and customers.
2. To identify the different types of Negotiable Instruments.
3. To determine the duties and statutory protection to a paying bankers.
4. To make the learners aware of the principles of and types of lending.
5. To apply the recent trends in banking system.

**Subject Code: 22OUCCA43**

**(National)**



**Course Name: Partnership Accounts**

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

1. Enable the students to understand the fixed and fluctuating capital
2. To identify the Accounting standards
3. Enable the student treatment of goodwill
4. Make the learners aware of Garner versus Murray rules
5. To create awareness on the piece meal distribution

**Subject Code: 22OUCCAGECA4**

**(National)**

**Course Name: GEC -IV Business Mathematics**

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

1. To learn important mathematical concepts and tools
2. To acquire the mathematical skills and its application in business.
3. To examine the appropriate method for calculation of Interest.
4. To Compute small / micro differences using differential calculus.
5. To Solve problems in matrices

**Subject Code: 22OUCCASE4**

**(National)**

**Course Name: SEC: Financial Markets & Services**

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

1. To help the students to learn the various constituents of financial markets and their services.
2. To learn about the operations of Securities market.

**Subject Code: 22OUCCASE4P**

**(National)**

**Course Name: SEC: Desktop Publishing Practical**

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

1. To learn how to design various publications such as banner, brochure, viz.cards, books and book covers, booklets using Photoshop.
2. To apply various filter and color correction using Photoshop.
3. To understand the basic Page Maker tools.
4. To create Pamphlets, Bill books, Viz cards, Greeting card using Page Maker.
5. To know the basic knowledge of CorelDraw.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUCCA11**

**(National)**

**Course Name: Financial Accounting -1**

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

1. To understand the basic accounting concepts and standards.
2. To know the basis for calculating business profits.
3. To familiarize with the accounting treatment of depreciation.
4. To learn the methods of calculating profit for single entry system.
5. To gain knowledge on the accounting treatment of insurance claims.

**Subject Code: 23OUCCA12**

**(National)**

**Course Name: Principles of Management**

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

1. To understand the basic management concepts and functions
2. To know the various techniques of planning and decision making
3. To familiarize with the concepts of organisation structure
4. To gain knowledge about the various components of staffing
5. To enable the students in understanding the control techniques of management

**Subject Code: 23OUCCAGECA1**

**(National)**

**Course Name: PROGRAMMING IN C**

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

1. Describe the core syntax and semantics of C programming language.
2. Discover the need for working with the strings and functions.
3. Illustrate the process of structuring the data using matrix, struct.

**Subject Code: 23OUCCAGECA1P**

**(National)**

**Course Name: PROGRAMMING IN C LAB**

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

1. Understand problem statements and identify appropriate solutions.
2. Demonstrate the use of IDE and C Compiler.
3. Develop programs using C Programming Language.

**Subject Code: 23OUCCASECN1**

**(National)**

**Course Name: Operating System**

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

1. To understand the services provided by and the design of an operating system.
2. To understand the structure and organization of the file system.
3. To learn about the Input/output and Memory Management system.
4. To understand what a process is and how processes are synchronized and scheduled.
5. To understand different approaches to memory management.

**Subject Code: 23OUCCAFC1**

**(National)**

**Course Name: Basic Computer Knowledge**

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

1. To give basic knowledge about parts of computers and their functions.
2. To Understand and basic concept of Network and Topology

## **SEMESTER – II**

**Subject Code: 23OUCCA21**

**(National)**

**Course Name: Financial Accounting – II**

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

1. The students are able to prepare different kinds of accounts such higher purchase and Instalments System.
2. To understand the allocation of expenses under departmental accounts.
3. To gain an understanding about partnership accounts relating to Admission and retirement.
4. Provides knowledge to the learners regarding Partnership Accounts relating to dissolution of firm.
5. To know the requirements of international accounting standards

**Subject Code: 23OUCCA22**

**(National)**

**Course Name: Business Law**

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

1. To know the nature and objectives of mercantile law and the essentials of valid contract.
2. To gain knowledge on performance contracts.
3. To be acquainted with the rules of Indemnity and Guarantee
4. To make aware of the essentials of Bailment and pledge.
5. To understand the provisions relating to sale of goods.

**Subject Code: 23OUCCAGECA2**

**(National)**

**Course Name: PROGRAMMING IN C++**

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

1. To engender an appreciation for the need and characteristics of Object-orientation.
2. To impart knowledge of the C++ language grammar in order to design and implement programming solutions to simple problems by applying Object-oriented thinking

**Subject Code: 23OUCCASECN2**

**(National)**

**Course Name: E-Commerce**

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

1. Advantages to Customers - Advantages to Society- To understand the basic accounting concepts and standards.
2. To know the basis for calculating business profits.
3. To familiarize with the accounting treatment of depreciation.
4. To learn the methods of calculating profit for single entry system.
5. To gain knowledge on the accounting treatment of insurance claims.

**Subject Code: 23OUCCASEC3**

**(National)**

**Course Name: Data Structures**

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

1. To become familiar with the various data structures and their applications and to increase the understanding of basic concepts of the design and use of algorithm

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**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OUCH11**

**(National)**

**Course Name: General Chemistry -I**

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

1. To outline the fundamental concepts of organic chemistry.
2. To gain knowledge about electronic effects, bonding and its influences.
3. To understand about the atomic structure and periodic properties.
4. To compare the hybridization and shapes of simple inorganic molecules based on VB, VSEPR and MO theories.
5. To discuss the gas laws, various types of molecular velocities and explain the behavior of real gas

**Subject Code: 22OUCHSE11**

**(National)**

**Course Name: Good Laboratory Practices**

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

1. To outline the fundamental concepts of laboratory practices.
2. To gain knowledge about instrument techniques and laboratory preparation procedure.
3. To learn about gravimetric methods of analysis.
4. To study the purification techniques.
5. To acquire knowledge about principles and techniques of semi-micro methods.

**Subject Code: 22OUCHSE1**

**(Global)**

**Course Name: Pharmaceutical Chemistry**

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

1. To know the pharmaceutical terms, and find out the symptoms and drugs for chronic diseases.
2. To understand sulpha drugs in antibacterial.
3. To provide the importance of analgesics and its classifications, and study the antipyretic drugs, drugs that influences CNS.

4. To study anaesthetics and its classifications, and provide the important aspects of cancer antineoplastics, diabetes and blood related factors.
5. To study vitamins and its classifications, physiological functions of hormones and enzymes

**Subject Code: 22OUCHID1**

**(Global)**

**Course Name: Chemistry in Everyday Life**

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

1. To learn how to make soaps and detergents.
2. To understand importance of vitamins and minerals.
3. To acquire knowledge about cosmetics and plastics.
4. To understand the manufacturing technique for small-scale industrial chemicals.
5. To gain knowledge about plaster of Paris, gum and shoe polish.

## **SEMESTER – II**

**Subject Code: 22OUCH21**

**(National)**

**Course Name: General Chemistry-II**

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

1. To identify the composition and stability of the nucleus and types of nuclear reactions.
2. To understand the acid base reactions, oxidation number and valency.
3. To know about basic metallurgical processes.
4. To learn the preparation, properties and importance of aliphatic compounds.
5. To study the basic concepts of structure of solids and semiconductors.

**Subject Code: 22OUCHSE21**

**(Global)**

**Course Name: Industrial Chemistry**

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

1. To gain the knowledge on match industry and explosives.
2. To learn about manufacturing method of cement and glass.
3. To understand the various types of fertilizers and their uses.
4. To gain knowledge about the preparation and properties of rubber.
5. To acquire knowledge on plastics and paper industry.



**Subject Code: 22OUCHSE22**

**(National)**

**Course Name: Analytical Clinical biochemistry**

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

1. To understand biological importance of carbohydrates.
2. To gain knowledge on structures of proteins and mechanism of enzyme action.
3. To give the detailed aspects of functions of lipids, cholesterol, lipoproteins.
4. To discuss the structure of DNA and RNA.
5. To learn the functions of blood and estimate the constituents of pathological urine.

**Subject Code: 22OUCHID2**

**(National)**

**Course Name: Food Chemistry**

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

1. To learn about food and water.
2. To understand modern foods and beverages.
3. To acquire knowledge about food additives.
4. To study the food nutrition and balanced diet.
5. To gain knowledge about food adulteration and hygiene.

### **SEMESTER – III**

**Subject Code: 22OUCH31**

**(National)**

**Course Name: General Chemistry -III**

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

1. To study the preparation and chemical reactions of organo halogen compounds.
2. To understand the chemistry of s - block elements and its complexes.
3. To understand the characteristics of elements of Group III A and IVA and the Chemistry of Silicones.
4. To provide the detailed chemistry about p-block elements especially Nitrogen and Oxygen family.
5. To understand the nature of colloids.

**Subject Code: 22OUCH41**

**(National)**

**Course Name: General Chemistry -IV**

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

1. To know about aromaticity, aromatic electrophilic substitution and synthesis of some important aromatic compounds.
2. To get fundamental concepts on alcohols and phenol compounds.
3. To provide the detailed chemistry about halogen family.
4. To study about catalysis & surface chemistry.
5. To understand the kinetics and theories of reaction rates.

**Subject Code: 22OUNDGEC3**

**(National)**

**Course Name: Bio Chemistry**

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

1. To enable the students to understand the fundamental concepts of amino acids and proteins
2. To provide knowledge about vitamins and hormones.
3. To build on their knowledge of genetic information in DNA and RNA and its biological aspects.
4. To gain knowledge the principle of enzymes and factor influencing of enzyme activity.
5. To understand the fats are an essential components of homeostatic function of the human body.

## **SEMESTER – IV**

**Subject Code: 22OUNDGEC4**

**(Global)**

**Course Name: Environmental and Organic Chemistry**

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

1. To learn about environmental pollution and causes.
2. To learn waste management and recycling of water.
3. To gain the knowledge about radioactive pollution and anthropogenic sources of radiation.
4. To study about glucose, fructose and sucrose.
5. To provide the knowledge about dyes.

**Subject Code: 22OUPHGECH3**

**(National)**

**Course Name: Physical Chemistry**

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

1. To under the basic concept of gaseous state
2. To study the concepts of structure of solids
3. To understand Adsorption and catalysis.
4. To learn about rate, order and theories of reaction rate
5. To acquire knowledge about fundamentals of photochemistry

**Subject Code: 22OUPHGECH4**

**(National)**

**Course Name: Organic and Physical Chemistry**

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

1. To understand the importance of amino acids and proteins.
2. To get fundamental concept of glucose, fructose and sucrose.
3. To understand the importance of nuclear chemistry.
4. To gain knowledge of electrochemistry.
5. To understand the nature of colloids.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUCH11**

**(National)**

**Course Name: General Chemistry -I**

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

1. To gain knowledge about various atomic models and atomic structure
2. To understand about the wave particle duality of matter
3. To compare ionic bond and covalent bond.
4. To acquire knowledge about nature of chemical bonding,
5. To outline the fundamental concepts of organic chemistry

**Subject Code: 23OUCH1P**

**(Global)**

**Course Name: Quantitative Inorganic Estimation (titrimetric) and Inorganic Preparations**

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

1. To gain knowledge on laboratory safety methods.
2. To acquire knowledge on handling glass wares.
3. To provide knowledge about Quantitative estimation
4. To provide knowledge about preparation of inorganic compounds

**Subject Code: 23OUCHSECN1**

**(National)**

**Course Name: Food Chemistry**

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

1. To learn about food and water.
2. To understand modern foods and beverages.
3. To acquire knowledge about food additives.
4. To study the food nutrition and balanced diet.
5. To gain knowledge about food adulteration and hygiene.

**Subject Code: 23OUCHFC1**

**(National)**

**Course Name: Role of Chemistry in Daily Life**

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

1. To gain knowledge about importance of Chemistry in everyday life
2. To acquire knowledge about chemistry of building materials and food

3. To understand about Nutrition and cosmetics.
4. To outline the application of Fertilizers and Fuels.
5. To compare the chemistry of Drugs and pharmaceuticals

## SEMESTER – II

**Subject Code: 23OUCH21**

**(Global)**

**Course Name: General Chemistry-II**

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

1. To understand about chemistry of acids, bases and ionic equilibrium.
2. To illustrate and examine the properties of s and p-block elements.
3. To acquire knowledge about chemistry of hydrocarbons.
4. To learn about applications of acids and bases.
5. To discuss compounds of main block elements and hydrocarbons

**Subject Code: 23OUCH2P**

**(National)**

**Course Name: Qualitative Organic Analysis and Preparation of Organic compounds**

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

1. To gain knowledge about laboratory safety.
2. To understand knowledge about handling glass wares.
3. To acquire knowledge about analysis of organic compounds
4. To understand basic knowledge about preparation of organic compounds

**Subject Code: 23OUCHSECN2**

**(Global)**

**Course Name: Dairy Chemistry**

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

1. To understand chemistry of milk and milk products
2. To acquire knowledge about processing of milk
3. To gain knowledge about preservation and formation of milk products.
4. To learn about special milk
5. To outline the fermented and other milk products

**Subject Code: 23OUCHSEC3**

**(National)**

**Course Name: Cosmetics and Personal Grooming**

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

1. To gain the knowledge about formulations of various types of cosmetics and their significance
2. To understand the knowledge about hair, skin and dental care
3. To acquire the knowledge about makeup preparations and personal grooming
4. To learn about perfumes classification
5. To provide knowledge about Beauty Treatments Facials

**Subject Code: 23OUNDGEC1**

**(National)**

**Course Name: Chemistry for Biological Sciences-I**

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

1. To gain knowledge about basics of atomic orbitals, chemical bonds, hybridization and fundamentals of organic chemistry and nuclear chemistry.
2. To understand about the nuclear chemistry and industrial chemistry.
3. To acquire knowledge about fundamental concept of organic chemistry.
4. To outline the importance of Drug and speciality chemicals.
5. To discuss the separation and purification techniques

**Subject Code: 23OUNDGEC2**

**(National)**

**Course Name: Chemistry for Biological Sciences-II**

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

1. To study the nomenclature of coordination compounds.
2. To acquire the knowledge about carbohydrates.
3. To gain the knowledge about Amino Acids and Essential elements of biosystem.
4. To understand the concepts of electrochemistry
5. To provide fundamentals of photochemistry

DEPARTMENT  
OF  
COMMERCE(PA)  
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**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OU1CPA1**

**(National)**

**Course Name: Modern Business Correspondence and Office Management**

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

1. Enable the students to understand the Essential Parts of a Business Letter.
2. To identify the Contents of an order letter.
3. Help the students gain practical applications in the Procedure for Export and Import.
4. Make the learners aware of the Letters from the Customers to the Banker. 5. To create awareness on the Report writing and electronic communication.

**Subject Code: 22OUCPA11**

**(National)**

**Course Name: Business Statistics**

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

1. To enable the students to understand the Concepts of business statistics
2. To identify Dispersion and Variability.
3. To help the students Computation of Correlation Co-efficient from Regression Coefficient.
4. To make the learners aware of Theory of probability
5. To measurement of Time Series and Index Numbers

**Subject Code: 22OUCPA12**

**(National)**

**Course Name: Financial Accounting - I**

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

1. To enable the students to understand the Concepts of Accounting, Journal, Ledger, Cash Book and Trial Balance.
2. To help the students to gain practical knowledge in final accounts of Sole Trading Concern
3. To understand the Bank Reconciliation Statement and the concept of Rectification of Errors.
4. To Help the students gain practical knowledge in final accounts of Non-Profit Organization
5. To make the learners aware of Depreciation and Recording Bill Transactions.

**Subject Code: 22OUCPAGEPA1**

**(National)**

**Course Name: Business Economics**

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

1. To enable the students to understand the Concepts of Business Economics
2. To identify the Business Economics Elasticity of Demand and Factors affecting Elasticity of Demand.
3. To help the students gain Demand Forecasting: Meaning knowledge in Factors Involved, Methods of Forecasting, Established Product and New product.
4. To make the learners aware of Price Analysis, Methods of pricing, Differential pricing and Product line pricing.
5. To create awareness on Profit Planning and Control

**Subject Code: 22OUCPAID1**

**(National)**

**Course Name: Human Resource Management**

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

1. To understand the Nature and Scope of Human Resource Management
2. To understand the Methods of Training
3. To explain how Purpose and Use of Performance Appraisal
4. To understand what a process is and how processes are Essentials of a successful trade union.
5. To understand different approaches to Human Resource Management Research and Audit.

## **SEMESTER – II**

**Subject Code: 22OU1CPA2**

**(National)**

**Course Name: Principles of Management**

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

1. To make the students to understand the Concepts of Principles of Management
2. To help the students to know the evolution of management thought.
3. To understand the principles and practice of business management.
4. To make the learners aware of the theories of Motivation -X Theory, Y Theory and Z Theory.
5. To create awareness on channel of communication and techniques of controlling.

**Subject Code: 22OUCPA21**

**(National)**

**Course Name: Financial Accounting - II**

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

1. To enable the students to understand accounts for consignment
2. To identify the Accounting for joint ventures
3. To help the students to understand the concept of single entry system
4. To understand the concept of Lease Accounting
5. To make the learners aware of Branch and Department Accounts

**Subject Code: 22OUCPA22**

**(National)**

**Course Name: Marketing**

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

1. To enable the students to understand the level of Marketing and marketing functions.
2. To identify the product and pricing with the help of product life cycle and kinds of pricing
3. To help the students to understand the standardization, grading warehouse and storages of products.
- 4 To make the learners to know the promotion and physical distribution of marketing.
5. To create awareness on the recent trends in marketing.

**Subject Code: 22OUCPAGEPA2**

**(National)**

**Course Name: Business Mathematics**

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

1. To build the students to understand the Concepts of business Mathematics
2. To identify Laws of logarithms and Change of base Formula.
3. To help the students Compute Calculation period for banker's discount.
4. To make the learners aware of Differential calculus
5. To measurement of solving a system of linear equation using matrix inversion.

**SEMESTER – III**

**Subject Code: 22OUCPA31**

**(National)**

**Course Name: Auditing and Assurance**

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

1. Help the students to develop auditing work.
2. Enable the students of understand the detection and prevention of errors and Frauds in the books of accounts.
3. To impart the knowledge of auditing principles and procedures.
4. To understand the nature of present day auditing in India.

5. To learn the meaning and importance of developments in the practices of Auditing in India.

1. To understand the objectives and Features of advertising

**Subject Code: 22OUCPA32**

**(National)**

**Course Name: Financial Accounting III**

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

1. To understand the Royalty Accounts.
2. To develop the skill of students on various kinds of Hire purchase and Installment system
3. Help the students gain practical applications in the Insolvency accounts
4. Make the learners aware of Contract Accounts
5. To create awareness on Insurance claims and also Accounting Standards

**Subject Code: 22OUCPA33**

**(National)**

**Course Name: Banking**

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

1. To enable the students to understand the Concepts of Banking
2. To learn the process and working of Indian banking System.
3. To train the students about the Procedures and systems followed in banking sector.
4. To make the learners aware of the Kinds of crossing-General Crossing, Special, Not Negotiable, A/c Payee, Double Crossing.
5. To create awareness on Traditional banking and E- Banking.

**Subject Code: 22OUCPA34**

**(National)**

**Course Name: Goods and Services Tax**

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

1. To enable the students to understand the Classification of Taxes
2. To identify the different types of GST
3. To Determine Taxable supply of goods/services under GST Act
4. To make the learners aware of the procedure in registration
5. To create awareness on the eligibility and conditions in GST

**Subject Code: 22OUCPA3 EPA3**

**(National)**

**Course Name: GEC-III Security Analysis and Portfolio Management**

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

1. The main objectives of paper is to explain the investment decision making and investment process.
2. To provide conceptual insights into the valuation of securities.
3. To analyze the students with the stock markets need and process of portfolio selection.

4. To learn the theories of portfolio management and also the tools and techniques for efficient portfolio management.

**Subject Code: 22OUCPASE3P**

**(National)**

**Course Name: SEC-Commerce Practical**

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

1. To acquire practical knowledge in the use of various forms used in GST, banking & Insurance sectors.
2. To train the students in drafting of advertisement copy and preparation of project report for entrepreneurship.

**Subject Code: 22OUCPA41**

**(National)**

**Course Name: Principles of Insurance**

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

1. To understand the conceptual framework of insurance.
2. To familiarize the students to determine the Life insurance policy and their procedures.
3. To provide the subject matters of Marine insurance.
4. To analyze the procedures for Fire insurance and Rate fixing of Fire insurance.
5. To understand the Concept of Insurance Regulatory and Development Authority of India (IRDA)

**Subject Code: 22OUCPA42**

**(National)**

**Course Name: Partnership Accounting**

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

1. To enable the students to understand the fixed and fluctuating capital
2. To identify the Accounting standards
3. To enable the students treatment of goodwill
4. To make the learners aware of Garner versus Murray rules
5. To create awareness on the piece meal distribution

**Subject Code: 22OUCPA43**

**(National)**

**Course Name: Costing**

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

1. To understand the concepts and methods of costing in relations to manufacturing environment
2. To familiarize the tools of Cost Accounting.
3. To formulate the various methods of allocation and apportionment of cost.
4. To enable the students to analyze the cost of both the process and operations.

5. To make them understand the usage of cost information in decision-making.

**Subject Code: 22OUCPA44**

**(National)**

**Course Name: Auditing Practices**

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

1. To enable the students to understand the Concepts of Auditing practices
2. To learn the process and working of auditors.
3. To train the students about the Procedures and systems followed in auditing practices.
4. Make the learners aware of the different types of audit
5. To create awareness on the liabilities of an auditor.

**Subject Code: 22OUCPAGEPA4**

**(National)**

**Course Name: GEC-IV Strategic Management**

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

1. Enable the students to understand the basic Concepts of business and the strategies.
2. Apply the various strategies their business and guide other entrepreneurs.
3. To train the students about the decision making abilities and strategies to be followed in Work life.
4. Assist employers to create and develop new strategies.

**Subject Code: 22OUCPASE4P**

**(National)**

**Course Name: SEC-Practical on Filing of Internship Report**

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

1. To understand the method of Income and ITR.
2. To familiarize the method of GST.
3. To create the awareness about of filing form of different type of TDS.
4. To analyze the Bank loan statement of business people.
5. To analyze the final account preparation, income & expenditure statement, balance sheet.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUCPA11**

**(National)**

**Course Name: Financial Accounting -1**

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

1. To understand the basic accounting concepts and standards.
2. To know the basis for calculating business profits.
3. To familiarize with the accounting treatment of depreciation.
4. To learn the methods of calculating profit for single entry system.
5. To gain knowledge on the accounting treatment of insurance claims.

**Subject Code: 23OUCPA12**

**(National)**

**Course Name: Principles of Management**

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

1. To understand the basic management concepts and functions
2. To know the various techniques of planning and decision making
3. To familiarize with the concepts of organisations structure
4. To gain knowledge about the various components of staffing
5. To enable the students in understanding the control techniques of management

**Subject Code: 23OUCPAGEPA1**

**(National)**

**Course Name: Business Economics**

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

1. To understand the approaches to economic analysis
2. To know the various determinants of demand
3. To gain knowledge on concept and features of consumer behaviour
4. To learn the laws of variable proportions
5. To enable the students to understand the objectives and importance of pricing policy

**Subject Code: 23OUCPASECN1**

**(National)**

**Course Name: Human Resource Management**

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

1. To understand the Nature and Scope of Human Resource Management

2. To understand the Methods of Training
3. To explain how Purpose and Use of Performance Appraisal
4. To understand what a process is and how processes are Essentials of a successful trade union.
5. To understand different approaches to Human Resource Management Research and Audit.

**Subject Code: 23OUCPAFC1**

**(National)**

**Course Name: Basic Commerce Knowledge**

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

1. To gain knowledge on Trade and Industry.
2. To know the forms of business Organization sectors

## **SEMESTER – II**

**Subject Code: 23OUCPA21**

**(National)**

**Course Name: Financial Accounting-II**

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

1. The students are able to prepare different kinds of accounts such higher purchase and Instalments System.
2. To understand the allocation of expenses under departmental accounts.
3. To gain an understanding about partnership accounts relating to Admission and retirement.
4. Provides knowledge to the learners regarding Partnership Accounts relating to dissolution of firm.
5. To know the requirements of international accounting standards

**Subject Code: 23OUCPA22**

**(National)**

**Course Name: Business Law**

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

1. To know the nature and objectives of Mercantile law and the essentials of valid contract
2. To gain knowledge on performance contracts.
3. To be acquainted with the rules of Indemnity and Guarantee
4. To make aware of the essentials of Bailment and pledge
5. To understand the provisions relating to sale of goods

**Subject Code: 23OUCPAGEPA2**

**(National)**

**Course Name: Insurance and Risk Management**



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

1. To know the concepts and principles of contract of insurance
2. To understand the basic concepts of life insurance
3. To gain knowledge on the principles of general insurance
4. To examine the Insurance Regulatory and Development Authority 1999 (IRDA)
5. To know the risk management process
5. To analyze the final account preparation, income & expenditure statement, balance sheet.

**Subject Code: 23OUCPA SECN2**

**(National)**

**Course Name: Advertising and Salesmanship**

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

1. To understand the objectives and Features of advertising.
2. To understand the features of Salesmanship

**Subject Code: 23OUCPASEC3**

**(National)**

**Course Name: Financial Markets and Services**

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

1. To help the students to learn the various constituents of financial markets & their services.
2. To learn about the operations of Securities market.

DEPARTMENT  
OF  
COMPUTER SCIENCE  
(DATA SCIENCE AND  
ANALYTICS)  
U.G

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OUCSD11**

**(Global)**

**Course Name: Python Programming**

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

1. To make students understand the concepts of Python programming.
2. To apply the OOPs concept in Python programming.
3. To impart knowledge on demand and supply concepts.
4. To make the students learn best practices in Python programming.
5. To know the Python File Handling.

**Subject Code: 23OUCSD1P**

**(National)**

**Course Name: Python Programming Lab**

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

1. Be able to design and program Python applications.
2. Be able to create loops and decision statements in Python.
3. Be able to work with functions and pass arguments in Python.
4. Be able to build and package Python modules for reusability.
5. Be able to read and write files in Python.

**Subject Code: 23OUCSDSECN1**

**(National)**

**Course Name: Fundamentals of Information Technology**

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

1. Understand basic concepts and terminology of information technology.
2. Have a basic understanding of personal computers and their operation.
3. Be able to identify data storage and its usage.
4. Get great knowledge of software and its functionalities.
5. Understand about operating system and their uses.

**Subject Code: 23OUCSDFC1**

**(National)**

**Course Name: Problem Solving Techniques**

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

1. Familiarize with writing of algorithms, fundamentals of C and philosophy of problem solving.

2. Implement different programming constructs and decomposition of problems into functions.
3. Use data flow diagram, Pseudo code to implement solutions.
4. Define and use of arrays with simple applications
5. Understand about operating system and their uses

## **SEMESTER – II**

**Subject Code: 23OUCSD21**

**(National)**

**Course Name: Data Structures & Algorithms**

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

1. Understand the meaning asymptotic time complexity analysis and various data structures
2. To enhancing the problem solving skills and thinking skills
3. To write efficient algorithms and Programs
4. To make the students learn best practices in PYTHON programming
5. To understand how to handle the files in Data Structure

**Subject Code: 23OUCSDSECN2**

**(National)**

**Course Name: Computer fundamentals**

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

1. Discuss the Introduction about Computer and its Components.
2. To Perform the Microsoft Word, Excel, PowerPoint and its operations.
3. To get Knowledge about the Internet and Intranet
4. Insert heading levels within a web page.
5. Insert ordered and unordered lists within a web page. Create a web page.

**Subject Code: 23OUCSDSEC3P**

**(Global)**

**Course Name: Open Source Software Technologies Lab**

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

1. Able to Acquire and understand the basic concepts in Java,application of OOPS concepts.
2. Acquire knowledge about operators and decision-making statements.
3. To Identify the significance and application of Classes, arrays and interfaces and analyzing java arrays
4. Understand about the applications of OOPS concepts and analyze overriding and packages through java programs.
5. Can Create window-based programming using applet and graphics programming.

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: 22OPMA11**

**(National)**

**Course Name: Abstract Algebra**

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

1. To develop working knowledge of group and ring theory and skill for applying to construct certain field.
2. To acquire knowledge of polynomial Rings
3. To learn deep concepts in algebra such as splitting field, normal and separable extensions.
4. To understand Galois Theory
5. To know about solvability by radicals

**Subject Code: 22OPMA12**

**(Global)**

**Course Name: Real Analysis**

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

1. To introduce the fundamental of Mathematical Analysis
2. To understand the concepts of continuity, differentiability and integrality.
3. To study the new concept of Riemann Stieljes integral
4. Apply the techniques of Power series.
5. To know about the primitive mapping

**Subject Code: 22OPMA13**

**(National)**

**Course Name: Differential Equations**

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

1. Develop strong background on finding solutions to linear differential equations with variable coefficients and also with singular points.
2. Study the existence and uniqueness of the solutions of first order differential equations.
3. Finding various solutions to first order linear and nonlinear Partial Differential equations (PDE's).
4. To solve the nonlinear Partial Differential Equations by Charpit's Method and Jacobi's Method
5. To learn Euler Method.

**Subject Code: 22OPMA14**

**(National)**

**Course Name: Differential Geometry**

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

1. To impart knowledge of curves on surfaces, curvature and torsion.
2. To develop the concept of metric spaces and orthogonal trajectories.
3. To demonstrate the construction of new surface Geodesic.
4. To know the concept of second fundamental form and its principal curvature
5. To analyze the structure of developable and minimal surface

**Subject Code: 22OPMADSE1A**

**(Global)**

**Course Name: Number Theory and Cryptography**

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

1. To know about fundamental algorithms for integer arithmetic and greatest common divisor calculation.
2. To find modular arithmetic and other number theoretic computations.
3. To derive algorithms and linear congruence
4. To Analyze Quadratic Residues and Diophantine equation
5. To explore applications of number theory in cryptography.

**Subject Code: 22OPMADSE1B**

**(National)**

**Course Name: Fluid Dynamics**

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

1. To develop an application for properties of Newtonian Fluid.
2. To Study analytical solution to variety of simplified problems.
3. To understand the dynamics of fluid flows and governing the non-dimensional parameters.
4. To give fundamental knowledge of fluid, its properties and behavior under various conditions of internal and external flows.
5. To describe the principles of motion for fluids.

**Subject Code: 22OPMAID1**

**(National)**

**Course Name: Teaching& Research Aptitude Paper - I**

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

1. To enhance the problem solving skills.
2. To improve the basic mathematical skills



3. To help to clear the students who are preparing for any type of competitive exams
4. To identify number in logical reasoning
5. To apply the number in related test

## SEMESTER – II

**Subject Code: 22OPMA21**

**(National)**

**Course Name: LINEAR ALGEBRA**

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

1. To familiarize with linear system and matrices
2. To understand the concepts of polynomials, Determinants and their properties
3. To learn, how linear algebra is ubiquitous in Mathematics
4. To acquire idea to know linear transformation and its algebra
5. To impact the knowledge of rational forms and Jordan forms

**Subject Code: 22OPMA22**

**(Global)**

**Course Name: Measure and Integration**

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

1. To familiarize with the Measurable sets and Measurable Functions
2. To understand the concepts of Abstract Measure Space and LP Space
3. To acquire idea to know functions of several variables
4. To obtain the knowledge of the Lebesgue measure and integral
5. To know the Radon – Nikodym theorem

**Subject Code: 22OPMA23**

**(National)**

**Course Name: Graph Theory with Applications**

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

1. To enable the students to apply Graph Theoretical Techniques in Applications.
2. To demonstrate knowledge of Connectivity.
3. To study relationship between Euler Tours and Hamilton Cycles.
4. To make familiarity with Directed Graphs.
5. To assist the students to explore social network analysis software.

**Subject Code: 22OPMA24**

**(National)**

**Course Name: Advanced Statistics-I**

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

1. To enable the students to apply Statistical Techniques in decision making.
2. To demonstrate knowledge of probability and distributions.
3. To study relationship between some special distributions.
4. To make familiarity with statistical methods the business and academic environment.
5. To assist the students to conduct a Statistical investigation.

**Subject Code: 22OPMADSE2A**

**(Global)**

**Course Name: Fuzzy Sets and Logic**

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

1. To understand fundamental of fuzzy set.
2. To learn fuzzy set, Arithmetic operation on fuzzy set.
3. To understand fuzzy notation
4. To know about fuzzy relation.
5. To apply fuzzy logic in real world problem.

**Subject Code: 22OPMADSE2B**

**(National)**

**Course Name: Automata Theory& Formal Languages**

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

1. To identify different formal language classes and their notation strips.
2. To design grammars and recognizes for different formal languages.
3. To prove or disprove theories in automata theory using its properties
4. To understand the regular expression in UNIX.
5. To acquire the idea about regular languages and Pumping Lemma

**Subject Code: 22OPMAID2**

**(National)**

**Course Name: TEACHING & RESEARCH APTITUDE PAPER - II**

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

1. To enhance the employability skill.
2. To learn and analyze Information and Communication Technology.
3. To analyze data.
4. To understand the shortcuts for the competitive exams.
5. To gain knowledge about value education.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OPMA11**

**(National)**

**Course Name: Algebraic Structures**

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

1. To introduce the concepts and to develop working knowledge on class equation, solvability of groups, finite abelian groups, linear transformations, real quadratic forms.

**Subject Code: 23OPMA12**

**(National)**

**Course Name: Real Analysis I**

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

1. To learn about advanced topics in Riemann's Stieltjes Integrals.
2. To understand the concepts of infinite series and products.

**Subject Code: 23OPMA13**

**(Global)**

**Course Name: Ordinary Differential Equations**

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

1. Develop strong background on finding solutions to linear differential equations with constant and variable coefficients and also with singular points.
2. Study the existence and uniqueness of the solutions of first order differential equations.
3. To solve the second order and n-th order Initial value problems.
4. Introduce the students to the technique of solving various problems of engineering and science.
5. Study the concepts relating to the order and linearity of ODEs, analytic and computational solution methods for ODEs

**Subject Code: 23OPMADSE1A**

**(National)**

**Course Name: Number Theory and Cryptography**

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

1. To provide an introduction to analytic number theory and recent topics or Cryptography with applications

**Subject Code: 23OPMADSE1C**

**(National)**

**Course Name: Mathematical Programming**

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

1. To introduce the revised simplex method and to make them perform parametric analysis.

2. To make them understand the limitations of simplex method in deriving integer solution to linear programming problems.
3. To illustrate various dynamic programming models and their applications in solving a decision problem.
4. To introduce the concept of classical optimization techniques.
5. To appreciate the use of some of the non-linear programming techniques such as quadratic and separable programming.

**Subject Code: 23OPMADSE1B**

**(Global)**

**Course Name: Graph Theory and its Applications**

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

1. To enable the students to apply Graph Theoretical Techniques in Applications.
2. To demonstrate knowledge of Connectivity.
3. To study relationship between Euler Tours and Hamilton Cycles.
4. To make familiarity with Directed Graphs.
5. To assist the students to explore social network analysis software.

**Subject Code: 23OPMADSE1D**

**(National)**

**Course Name: Fuzzy Sets and their Applications**

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

1. To understand fundamental of fuzzy set.
2. To learn fuzzy set, Arithmetic operation on fuzzy set.
3. To understand fuzzy notation
4. To know about fuzzy relation.
5. To apply fuzzy logic in real world problem.

**Subject Code: 23OPMA21**

**(National)**

**Course Name: Advanced Algebra**

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

1. To study field extension, roots of polynomials, Galois Theory, finite fields, division rings, solvability by radicals and to develop computational skill in abstract algebra.

**Subject Code: 23OPMA22**

**(National)**

**Course Name: Real Analysis II**

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

1. To learn about advanced topics in Fourier series and Fourier Integrals.
2. To acquire idea to know functions of several variables.
3. To obtain the knowledge of the Lebesgue measure & integral.

**Subject Code: 23OPMA23**

**(Global)**

**Course Name: Partial Differential Equations**

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

1. Develop strong background on finding various solutions to first order linear and nonlinear Partial Differential Equations (PDE's).
2. To solve the nonlinear PDE's by Char pit's method and Jacobi's method.
3. To focus the formulation of first and second orders PDE's.
4. To classify and solving for three basic types namely Hyperbolic, Parabolic and Elliptic PDE's. Solving of PDEs which include heat, wave and Laplace's equation that arise in various physical systems.

**Subject Code: 23OPMADSE2A**

**(National)**

**Course Name: Modelling and Simulation with Excel**

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

1. To introduce the concepts and to develop working knowledge on Excel, Calculation in Excel, Formatting the Spread sheet, working with tables and Charts.

**Subject Code: 23OPMADSE2C**

**(National)**

**Course Name: Mathematical Statistics**

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

1. To know the desirable qualities for an estimator and learn a number of techniques for finding minimum variance
2. To understands the elements of hypothesis test and be able to carry out a number of different hypothesis test.
3. To Formulate, test and interpret various hypothesis tests.
4. To Characterize, compare, and contrast different nonparametric hypothesis tests.

**Subject Code: 23OPMADSE2D**

**(National)**

**Course Name: Stochastic Process**

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

1. Acquire intense knowledge on the underlying concepts of stochastic processes
  2. Familiarize with Markov chain and system
  3. Obtain in-depth understanding of birth and death process
  4. Develop the acquaintance with applications of Markov process
- Comprehend the concept of renewal process

**Subject Code: 23OPMASEC2**

**(Global)**

**Course Name: Office Automation and ICT Tools**

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

1. Understand the basics of computer systems and its components.
2. Understand and apply the basic concepts of a word processing package.
3. Understand and apply the basic concepts of electronic spreadsheet software.
4. Understand and apply the basic concepts of database management system.

**Subject Code: 23OPMADSE2C**

**(National)**

**Course Name: Mathematical Statistics**

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

1. To know the desirable qualities for an estimator and learn a number of techniques for finding minimum variance
2. To understands the elements of hypothesis test and be able to carry out a number of different hypothesis test.
3. To Formulate, test and interpret various hypothesis tests.
4. To Characterize, compare, and contrast different nonparametric hypothesis tests.

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: 22OPIT11** (National)

**Course Name: Computer Architecture**

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

1. To introduce the fundamental concepts underlying modern computer organization and architecture.
2. To comprehend the importance of the hardware-software interface.
3. To familiarize about hardware design of basic structure and behavior of the various functional modules of the computer.
4. To make the students know about the importance of multiprocessor and multi computers.
5. To give the students an elaborate idea about the different memory systems and buses.

**Subject Code: 22OPIT12** (National)

**Course Name: Object Orientated Programming with C++**

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

1. Comprehend object oriented programming concepts using C++.
2. Understand Class, objects and Constructors.
3. Use the operator overloading and inheritance in program development.
4. Describe the concept of Pointer to objects and pure virtual functions.
5. Apply the concepts of files and its stream operations.

**Subject Code: 22OPIT13** (National)

**Course Name: Data Structure and Algorithms**

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

1. To study the systematic way of solving problems, various methods of organizing large amounts of data.
2. To solve problems using data structures such as linear lists, stacks, queues, hash tables, binary trees, binary search trees, and graphs and writing programs for these solutions.
3. To employ the different data structures to find the solutions for specific problems.
4. To apply the Graph Algorithms on related applications.
5. To design optimized algorithms with efficacy.

**Subject Code: 22OPITDSE1A**

**(National)**

**Course Name: Discrete Mathematics**

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

1. Simplify and evaluate basic logic statements including compound statements, implications, inverses, converses, and the properties of logic.
2. Identify and apply basic concepts of set theory, arithmetic, logic, proof techniques, binary relations, graphs and trees.
3. Demonstrate the ability to write and evaluate a proof or outline the basic structure of and give examples of each proof technique described.
4. Recognize the importance of Coding Theory.
5. Apply the knowledge and skills obtained to investigate and solve a variety of discrete mathematical problems.

**Subject Code: 22OPITDSE1B**

**(National)**

**Course Name: System Analysis and Design**

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

1. This course introduces established and evolving methodologies for the analysis, design, and development of an information system.
2. Emphasis is placed on system characteristics, managing projects, prototyping and systems development life cycle phases.
3. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.
4. Implement the Forms Design – File Organization and Data Base Design.
5. Illustrate the Role of the Data Processing Auditor

**Subject Code: 22OPIT11P**

**(Global)**

**Course Name: C++ and Data Structure Lab**

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

1. Impart the knowledge Default arguments and constructor.
2. Learn the organized structures of inheritance type and operator overloading.
3. Design a string manipulation and virtual function.
4. To learn the organized structures of Stack, Queues, Linked list and Tree.
5. To design algorithms for Sorting with efficacy.

## SEMESTER – II

**Subject Code: 22OPIT12P**

**(National)**

**Course Name: PHP Programming Lab**

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

1. Develop program using control statement
2. Perform operation based on arrays and functions
3. Develop programs by applying various object oriented concepts
4. Use form controls with validation to collect user's input.
5. Perform database operations in PHP

**Subject Code: 22OPITID1**

**(Global)**

**Course Name: Photo Designing**

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

1. Identify the major regions of the Photoshop workspace.
2. Explain the function of each: Menu bar and context menus, Options bar, Toolbox, palettes, and document window(s).
3. Demonstrate knowledge of design principles, elements, and image composition.
4. Explore Photoshop Help, and use it to find out more about the tools in the Toolbox shapes and adjust layers.
5. To transform Images with Filters.

**Subject Code: 22OPIT21**

**(National)**

**Course Name: Operating System Concepts**

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

1. To give an overview of the many types of computing environments.
2. To introduce CPU scheduling and basis of multi programmed operating system.
3. To develop a description of deadlocks, which prevent sets of concurrent processes from completing their tasks.
4. To have an understanding of the main memory and secondary memory Management techniques.
5. To discuss file system design tradeoffs, including access methods, file sharing, file locking, and directory structures.

**Subject Code: 22OPIT22**

**(National)**

**Course Name: Digital Image Processing**

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

1. Identify the image fundamentals and mathematical transforms necessary for image processing
2. Learn the functionalities of spatial and frequency filters for image enhancement.
3. To identify the requirements of various image segmentation methods and object recognition models for various real-time applications.
4. Get broad exposure to and understanding of color image processing models.
5. To analyze the functionalities of Morphological Image processing method.

**Subject Code: 22OPIT23**

**(Global)**

**Course Name: Data Communication and Networking**

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

1. To understand the general principles of data communication.
2. To familiarize the transmission media, flow control and error detection and correction.
3. To acquire the knowledge of the basic protocols involved in wired and wireless communication process.
4. To gain core knowledge of network layer routing protocols and IP addressing.
5. To motivate the need for network security practices in organizational units

**Subject Code: 22OPITDSE2A**

**(Global)**

**Course Name: Android Programming**

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

1. To understand the basics of activities and multiple layouts.
2. To understand the usage of menus in designing widgets.
3. To explore the App architecture with fragments.
4. To acquire knowledge in handling database, files and notifications.
5. To impart graphics and animation process.

**Subject Code: 22OPITDSE2B**

**(National)**

**Course Name: Theory of Computation**

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

1. To give an overview of the theoretical foundations of deterministic finite automata and non - deterministic finite automata.
2. To apply transformation between multiple representations of finite automata.

3. To illustrate Context Free Grammar, Relationship between Derivation and Derivation Tree.

4. To familiarize the various Properties of Context Free Languages.

5. To explain Turing Machines to solve problems in computing.

**Subject Code: 22OPIT21P (National)**

**Course Name: Linux Programming Lab**

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

1. To learn the fundamental concepts of Linux Operating System and its File System.

2. To gain an understanding of important aspects related to the Shell and the process.

3. Demonstrate Linux commands for file handling and process control.

4. To create the directory, change and remove the directory.

5. To demonstrate the basic knowledge of Linux commands and file handling utilities by using Linux shell environment.

**Subject Code: 22OPIT22P (Global)**

**Course Name: Digital Image Processing Lab**

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

1. To develop program for extract image attributes and image negation.

2. To cover the fundamentals of digital image processing.

3. To perform image enhancement techniques.

4. Use image processing operations that process digital images and mapping technique.

5. To develop image Chain Coding procedure

**Subject Code: 22OPITID2 (National)**

**Course Name: Technologies of Internet**

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

1. To impart the knowledge of basics of Internet.

2. Learning the various aspects of internet design and functionalities.

3. To learn the concept of sending and receiving the Email.

4. To familiarize the concept of Computer Security.

5. To provide the knowledge of computer Viruses, Bombs and Worms.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OPIT11 (National)**

**Course Name: Python Programming**

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

1. To acquire skill in core Python Programming and identify Python Objects.
2. To learn the functions and functional programming in Python.
3. To gain the knowledge on Object Oriented Programming and Exception handling.
4. To expertise on GUI Programming using Widgets in Python.
5. To develop Database Applications in Python

**Subject Code: 23OPIT11P (National)**

**Course Name: Practical : Python Programming Lab**

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

1. To know the concept of functions in Python.
2. To use basic flow control, including for loops and conditionals read data from text files.
3. To understand the modules and string processing method are design.
4. To analyze the sets, class, object polymorphism for code reusability function.
5. To create the multiple form inheritance, GUI application and connect the working with data.

**Subject Code: 23OPIT12P (National)**

**Course Name: Practical : Web Development using Word Press Lab**

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

- se Objectives:
1. To understand the Content management system (CMS)
  2. To learn the method of Free and Open-source
  3. To build it allows you to host and build websites.
  4. To learn the Plugin architecture
  5. To create template system, so you can customize any website to fit your business, blog, portfolio, or online store

**Subject Code: 23OPITDSE1A (Global)**

**Course Name: Computer System Architecture**

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

1. To understand the structure, function and characteristics of computer systems.
2. To learn the design of the various functional units and operations of computers.

3. To identify the elements of modern instructions sets and impact on processor design.
4. To identify and compare different methods for computer I/O.
5. To gain the knowledge on functions of each element of a memory hierarchy.

**Subject Code:** 23OPITDSE1B (National)

**Course Name:** Principles of Compiler Design

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

1. To acquire knowledge Structure of Compiler design, Lexical Analysis and Syntax Analysis.
2. To learn the Finite Automata from regular expression.
3. To classify the derivation and parse trees.
4. To acquire knowledge on constructing SLR parsing tables, gain various algorithm techniques like Backtracking and Branch and Bound.
5. To analyze the Representing Scope information of Code Optimization.

**Subject Code:** 23OPITDSE1C (National)

**Course Name:** Data Structures and Algorithms

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

1. To understand the concept of Trees and Graphs.
2. To learn the various Hashing Techniques and Priority Queues.
3. To differentiate and classify the various Binary Search Trees.
4. To acquire knowledge on dynamic Programming and basic Traversal and Search.
5. To gain various algorithm techniques like Backtracking and Branch and Bound.

**Subject Code:** 23OPITDSE1D (Global)

**Course Name:** Object Oriented Analysis and Design

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

1. To understand the concept of object oriented Systems development Methodology.
2. To learn the various Object oriented system development life cycle (SDLC).
3. To Identify UML dynamic modeling, model management, OOA process
4. To acquire knowledge on Object oriented design process a design axioms.
5. To Know various object oriented design philosophy and UML object constraint.

**Subject Code:** 23OPIT21 (National)

**Course Name:** Database Systems

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

1. To understand the relational databases and uses of PL/SQL.

2. To apply Schema, ER-Model, normalization, transaction, concurrency and recovery on tables using SQL and PL/SQL.
3. To analyze and manage the distributional database, transaction, concurrency control and query languages.
4. To access database based on models and normal forms.
5. To design and construct tables and manipulate it effectively using PL/SQL database objects.

**Subject Code:** 23OPIT21P (National)

**Course Name:** Practical: RDBMS Lab

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

1. To learn and implement SQL & PL/SQL.
2. Choose appropriate SQL queries and PL/SQL block for the database.
3. Implement SQL and PL/SQL blocks for the given problem effectively.
4. Analyze the problem and Exception using queries and PL/SQL blocks.
5. Design database tables, create Procedures, User- defined functions and Triggers.

**Subject Code:** 23OPIT22P (National)

**Course Name:** Practical: Open Source Technologies Lab

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

1. To understand a PHP can generate dynamic page content.
2. To select an open-source server-side scripting language used for dynamic web development and can be embedded into HTML codes.
3. To create a PHP programs to open, read, write, delete, and close files on the server.
4. To demonstrate the Ruby is mainly used to build web applications and is useful for other programming projects.
5. To test and debug the creation of classes and objects.

**Subject Code:** 23OPITDSE2A (National)

**Course Name:** Digital Image Processing

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

1. Identify the image fundamentals and mathematical transforms necessary for image processing
2. Learn the functionalities of spatial and frequency filters for image enhancement.
3. To identify the requirements of various image segmentation methods and object recognition models for various real-time applications.
4. Get broad exposure to and understanding of color image processing models.



5. To analyze the functionalities of Morphological Image processing method.

**Subject Code: 23OPITDSE2B (National)**

**Course Name: Operating Systems**

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

1. To give an overview of the many types of computing environments.
2. To introduce CPU scheduling and basis of multi- programmed operating system.
3. To develop a description of deadlocks, which prevent sets of concurrent processes from completing their tasks.
4. To have an understanding of the main memory and secondary memory Management techniques.
5. To discuss file system design tradeoffs, including access methods, file sharing, file locking, and directory structures.

**Subject Code: 23OPITDSE2C (National)**

**Course Name: Human Computer Interaction**

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

1. To know the definition of interactive design and human computer interaction.
2. To learn the design process and design goals.
3. To gain the knowledge on Screen based controls and components.
4. To learn the key concepts and terms used in evaluation.
5. To develop interactive models

**Subject Code: 23OPITDSE2D (National)**

**Course Name: Advanced Software Engineering**

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

1. Analyze the approach to designing, developing, operating, and maintaining a software system.
2. Design a managing the technical aspects of the project, managing the project team, and managing the cost and schedule.
3. Recognize a Seeking an opportunity to work as a design engineer with an established company.
4. Determine a test strategy is to produce an understanding of the complete approach, tools, targets, and timing of test activities to be performed.
5. Examine the project's scope and feasibility to finalize and allocate the budget of a construction project.

**Subject Code: 23OPITSEC21**

**(National)**

**Course Name: Multimedia**

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

1. To familiarize the students with various approaches, methods of Animation Technology using Flash.
2. To enable students to manage animation from its conceptual stage to the final object creation.
3. To train students in applying Free transform tool to edit an object.
4. To develop competencies and skills needed to produce stills and moving images using Color and Text tools.
5. To apply Motion tweening Technique to an Animation Project.

**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: 22OPCA11**

**(National)**

**Course Name: Mathematical Foundation of Computer Applications**

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

1. To learn set theory and Notation.
2. To understand mathematical logic
3. To apply mathematic logic in real world problem
4. To ability to solve problem using probability
5. Graph Theory fundamental applications of those tools in IT industry

**Subject Code: 22OPCA12**

**(National)**

**Course Name: Object Oriented Programming using C++**

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

1. The core of the pure object-oriented programming is to create an object, in code, that has certain properties and methods.
2. To learn the fundamental programming concepts and methodologies which are essential to building good C++ programs.
3. To practice the fundamental programming methodologies in the C++ programming language via laboratory experiences.
4. To code, document, test, and implement a well-structured, robust computer program using the C++ programming language.
5. To write reusable modules (collections of functions).

**Subject Code: 22OPCA13**

**(Global)**

**Course Name: Relational Database Management Systems**

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

1. To primarily concerned with the purpose and view of data that have relational query and operation capabilities.
2. To learn the fundamental Structure of SQL Queries , Procedure and Triggers
3. To practice the fundamental ER Model , Database design, and functional dependencies Using relational queries and operations.
4. To code, document, test, and implement a well-structured file system using RDBMS
5. To write reusable modules of RDBMS transactions and Recovery systems

**Subject Code: 22OPCA14**

**(Global)**

**Course Name: Data Structures and Algorithms**

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

1. To impart the knowledge on fundamental ADTs.
2. To study the organized structures of Trees and Hashing.
3. To understand the concepts of updatable Priority Queues and Sorting
4. To apply the Graph Algorithms on related applications.
5. To design optimized algorithms with efficacy.

**Subject Code: 22OPCADSE1A**

**(National)**

**Course Name: Operating Systems**

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

1. To be aware of the evolution and fundamental principles of Operating System.
2. To understanding the various Operating System components such as Process management and scheduling.
3. To solve the principles of concurrency scheduling algorithms and deadlocks.
4. To move process around in memory without it affecting its execution.
5. To provide the process of manipulating files in operating system.

**Subject Code: 22OPCADSE1B**

**(Global)**

**Course Name: Enterprise Resource Planning**

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

1. The core of ERP is to planning for justifying ERP investments and to explain the benefits of ERP
2. To learn the fundamental ERP and its Related technologies to building excellent software domain
3. To practice the implementation life cycle to build transaction and package selection.
4. To execute the team members, consultants and to predicts success and failure implementation of ERP
5. To apply the ERP domain in present and future enhancements.

**Subject Code: 22OPCA11P**

**(Global)**

**Course Name: Data Structures and Algorithms using C++ Lab**

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

1. Create code using Reusability Techniques.
2. Classify different types of Polymorphism.
3. Work out Programs using different Data Structures Concepts.

4. To learn the structures of Trees and Hashing.
5. To understand the concepts of updatable Stack and Queue

**Subject Code: 22OPCA12P**

**(National)**

**Course Name: RDBMS Lab**

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

1. Generate command using DDL & DML Queries.
2. Categorize different types of Conditional, Iterative, and Sequential controls
3. Work out Programs using different Data base connectivity.
4. To learn the structures various types of multiple connection of records.
5. To apply all concepts of RDBMS files to the application programs

**Subject Code: 22OPCAID1**

**(National)**

**Course Name: Front End Web Development**

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

- 1.To understand the basic concept of HTML.
- 2.To learn the various styles and design of CSS.
- 3.To study the JavaScript variables, statements and functions
- 4.To apply exception handling and cookies on related programs.
- 5.To evaluate data validation with DHTML.

## **SEMESTER – II**

**Subject Code: 22OPCA21**

**(National)**

**Course Name: Open Source Technology**

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

1. To be aware of the evolution and fundamental concepts of Data types and variables
2. To classify various Functions and String Manipulation
3. To practice the fundamental programming methodologies in the PHP programming Language via laboratory experiences.
4. To code, document, test, and implement a well-structured, robust computer program using the PHP language.
5. To performing database queries and building Form Submission to a Database

**Subject Code: 22OPCA22**

**(Global)**

**Course Name: Advanced Java Programming**

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

- 1.To understand the basic Java programming constructs
- 2.To handle Packages, Exception and Multithread Programming

3.To create String Handling and Networking Concepts.

4.To Develop Event Handling, AWT

5.To Design event driven GUI and Java Beans

**Subject Code: 22OPCA23**

**(National)**

**Course Name: Software Engineering**

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

1.The core of Software engineering is to create a Model and agility that has certain design and patterns

2.To learn the fundamental software engineering concepts of estimation, scheduling and risk management which are essential to building excellent software

3.To practice the deep Architectural design and requirement engineering to build good software

4.To implement good Software testing strategies and conventional testing applications can improve internal and external testing software

5. To engrave reusable Quality and good configuration for improve the software Accessibility

**Subject Code: 22OPCADSE2A**

**(Global)**

**Course Name: Data Mining and Data Warehousing**

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

1. To acquire knowledge about Data Mining and warehousing,

2. To study the various steps in data pre-processing and Association mining.

3. To understand the basic and advanced concept of Classification technique.

4. To learn the different methods of Clustering.

5., To analyse the data mining trends and various application of data mining.

**Subject Code: 22OPCADSE2B**

**(National)**

**Course Name: Artificial Intelligence**

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

1. To enable computers to perform such intellectual tasks as decision making, problem solving, perception, understanding human communication.

2. Artificial intelligence shapes the future of every company.

3. Artificial intelligence creates synergy between humans and AI

4. Artificial intelligence helps with planning

5. Artificial intelligence performs more complex tasks



**Subject Code: 22OPCA21P**

**(National)**

**Course Name: Open Source Technology Lab**

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

1. To be aware of the evolution and fundamental concepts of Data types and variables
2. To Classify various Functions and String Manipulation
3. To practice the fundamental programming methodologies in the PHP programming language via laboratory experiences.
4. To code, document, test, and implement a well-structured, robust computer program using the PHP language.
5. To performing database queries and building Form Submission to a Database

**Subject Code: 22OPCA22P**

**(National)**

**Course Name: Advanced Java Programming Lab**

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

1. To Implement basic Java programs
2. To write coding for constructor overloading and inheritance
3. To built programs using package and method overriding.
4. To Develop programs for exception handling, interface and file I/O
5. To design Applet programs, AWT and event driven GUI

**Subject Code: 22OPCAID2**

**(Global)**

**Course Name: E- Commerce**

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

1. To learn the basic concepts of E-Commerce
2. To study the architecture and technologies of E-Commerce
3. To understand the business and process models
4. To analyse the B2B business models
5. To evaluate the Impacts of E-Commerce

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OPCA11**

**(National)**

**Course Name: Discrete Mathematics**

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

1. To know the concepts of relations and functions
2. To distinguish among different normal forms and quantifiers
3. To solve recurrence relations and permutations & combinations
4. To know and solve matrices, rank of matrix & characteristic equations
5. To study the graphs and its types

**Subject Code: 23OPCA12**

**(Global)**

**Course Name: Linux and Shell Programming**

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

1. To teach principles of operating system including File handling utilities, Basic Linux commands, Scripts and filters.
2. To familiarize fundamentals of shell (bash), shell programming, pipes, Control structures, arithmetic in shell interrupt processing, functions, debugging shell scripts.
3. To impart fundamentals of file concepts kernel support for file, File structure related system calls (file API's).
4. To facilitate students in understanding Inter process communication, semaphore and shared memory.
5. To explore real-time problem solution skills in Shell programming.

**Subject Code: 23OPCA13**

**(National)**

**Course Name: Python Programming**

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

1. To acquire programming skills in core Python
2. To learn Strings and function
3. To develop object oriented skills in Python
4. To comprehend various Python Packages
5. To develop web applications using Django

**Subject Code: 23OPCADSE1AP**

**(National)**

**Course Name: Data Engineering and Management Lab**

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

1. To acquire basic scripting knowledge in MongoDB.
2. To learn CRUD Operation on MongoDB database.

3. To comprehend MongoDB using DbVisualizer.
4. To be familiar with Zoho CRM features.
5. To customize your application using Zoho CRM.

**Subject Code: 23OPCADSE1BP**

**(Global)**

**Course Name: Architecture and Frameworks Lab**

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

- 1.To understand and implement the basic concepts of Software architecture and its functions.
2. To acquire programming skills to develop Implement various technologies and services associated with network protocols along with the challenges of data transfer.
- 3.To Implement the importance and functioning of Routing Protocols over communication service.
- 4.To acquire skills to connect two routers and any two switches.
- 5.To comprehend related to SSH protocols and accessing the remote device

**Subject Code: 23OPCADSE1CP**

**(Global)**

**Course Name: Software Development Technologies Lab**

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

1. To understand the concept of DevOps with associated technologies and methodologies.
2. To be familiarized with Jenkins, which is used to build & test software Applications
3. To understand Continuous integration in Devops environment.
4. To understand Docker to build, ship and run containerized images
5. To use Docker to deploy and manage Software applications running on Container.

**Subject Code: 23OPCADSE1DP**

**(National)**

**Course Name: Soft Computing Lab**

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

1. To implement various Supervised Neural Network-based approaches
2. To apply the fuzzy-based logical operations and arithmetic operations
3. To implement unsupervised neural network approaches.
4. To solve a problem using a simple genetic algorithm
5. To implement logic gates.

**Subject Code: 23OPCA21**

**(National)**

**Course Name: Data Structures and Algorithms**

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

1. To get a clear understanding of various ADT structures.
2. To understand how to implement different ADT structures with real-time scenarios.
- 3 To analyze the various data structures with their different implementations.

4. To get an idea of applying right models based on the problem domain.
- 5 To realize, and understand how and where to implement modern data structures with Python language.

**Subject Code: 23OPCA22**

**(National)**

**Course Name: Big Data Analytics**

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

1. To introduce big data tools & Information Standard formats.
2. To understand the basic concepts of big data.
3. To learn Hadoop, HDFS and MapReduce Concepts.
4. To teach the importance of NoSQL.
5. To explore the big data tools such as Hive, HBase and Pig.

**Subject Code: 23OPCA21P**

**(National)**

**Course Name: Data Structures and Algorithms Lab**

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

1. To understand Stack, Queue and Doubly Linked ADT structures.
2. To implement different ADT structures with real-time scenarios.
3. To analyze the recursion concepts.
4. To apply different sorting and tree techniques.
5. To implement modern data structures with Python language

**Subject Code: 23OPCADSE2BP**

**(National)**

**Course Name: Computer Vision Lab**

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

1. To get an idea of how to build a computer vision application with Python language.
2. To learn the basic image handling and processing
3. To get familiar with various Computer Vision fundamental algorithms and how to implement and apply.
4. To get an idea of how to implement the image transforms.
5. To understand various image segmentation algorithms.

**Subject Code: 23OPCADSE2CP**

**(National)**

**Course Name: Cryptography and Network Security Lab**

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

1. To develop in classical encryption techniques and advanced encryption standards.
2. To acquire programming skills to implement various cryptographic algorithms including secret key cryptography.

3. To develop hashes, message digests and public key algorithms.
4. To Implement different encryption and decryption techniques.
5. To comprehend related to confidentiality and authentication techniques

**Subject Code: 23OPCADSE2DP**

**(National)**

**Course Name: Block Chain Technologies Lab**

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

1. To learn the basics of Blockchain and apply cryptographic algorithms
2. To design, build, and deploy smart contracts and distributed applications,
3. To deploy Private Blockchain and smart contracts on Ethereum.
4. To understand and deploy cryptocurrencies and their functions in applications
5. To implement Blockchain for various use cases.

**Subject Code: 23OPCASEC21**

**(National)**

**Course Name: Block Chain Technologies**

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

1. Block chain increases trust, security, transparency, and the traceability of data shared across a business network
2. Block chain can be used to track information over time, enabling a secure, reliable audit of information
3. Block chain-verified data is highly secure and trustworthy, meaning transactions can be processed much faster than in today's world without compromising security.
4. Block chain is a database system that maintains and records data in a way that allows multiple organizations and individuals to confidently share access to the same data in real-time,
5. The encryption is done through cryptography to eliminate vulnerabilities such as unauthorized data tampering.

**Subject Code: 23OPCADSE2BP**

**(National)**

**Course Name: Computer Vision Lab**

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

1. To get an idea of how to build a computer vision application with Python language.
2. To learn the basic image handling and processing
3. To get familiar with various Computer Vision fundamental algorithms and how to implement and apply.
4. To get an idea of how to implement the image transforms.
5. To understand various image segmentation algorithms.

DEPARTMENT 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.

**Course Outcomes**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OPCCA11**

**(National)**

**Course Name: Research Methodology**

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

1. To develop an understanding of the basic framework of Research Process.
2. To examine the various Research Designs and Sampling Techniques.
3. To classify the various sources of Data Collection.
4. To identify the appropriate testing of Hypothesis and Interpretation.
5. To teach students to write a Research Report.

**Subject Code: 22OPCCA12**

**(National)**

**Course Name: Marketing Management**

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

1. To enable the students to understand the concept and strategies of Marketing.
2. To sketch the major P'S of marketing of goods.
3. To familiarized on the recent trends in marketing.
4. To understand the importance of sales promotion.
5. To develop the students with the concepts of advertising and salesmanship.

**Subject Code: 22OPCCA13**

**(National)**

**Course Name: Advanced Corporate Accounting**

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

1. To understand the knowledge on corporate accounting methods
2. To enable the students to understand the procedures of accounting
3. To gain the knowledge about company accounts and accounting standards.
4. To develop skills in the preparation of accounting statements and their analysis.
5. To access the preparation of accounts of banking companies

**Subject Code: 22OPCCADSE1A**

**(Global)**

**Course Name: Object Oriented Programming with C++**

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



1. Learn the basic concepts of OOPs.
2. Create a simple program using classes and objects
3. Understand the containment and inheritance in Object Oriented Programming
4. Explain the concept of Constructors and Destructors.
5. Develop the fundamental programming methodologies in Virtual Function and Polymorphism.

**Subject Code: 22OPCCADSE1B**

**(National)**

**Course Name: Multimedia**

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

1. Learn the basics concepts of Multimedia.
2. Explain the Multimedia components and Tools.
3. Develop the skills in multimedia techniques.
4. Learn all multimedia communication networks.
5. Understand integrated multimedia systems.

**Subject Code: 22OPCCA1P**

**(Global)**

**Course Name: Programming with C++ Lab**

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

1. Create a simple program using classes and objects
2. Understand the containment and inheritance in Object Oriented Programming
3. Explain the concept of Constructors and Destructors.
4. Develop the fundamental programming methodologies in Virtual Function and Polymorphism.
5. Practice the students to write C++ Programs of their own.

**Subject Code: 22OPCCAID1**

**(Global)**

**Course Name: Internet and its Applications**

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

1. Explore the basics of the Internet
2. 2. Able to browse Internet using search engines
3. 3. Learn how to download files multiple files.
4. 4. Study about various types of Protocols
5. 5. Send and receive emails through an email account and store and retrieve addresses from the address book

## SEMESTER – II

**Subject Code: 22OPCCA21 (National)**

**Course Name: Advanced Business Statistics**

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

1. To enable the students to apply Statistical Techniques in decision making.
2. To demonstrate knowledge of probability and the standard statistical distributions
3. To study relationship between different facts
4. To make familiarity with statistical methods to carry out in the business and academic environment
5. To assist the students to conduct a Statistical investigation.

**Subject Code: 22OPCCA22 (National)**

**Course Name: Cost and Management Accounting**

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

- 1.To understand the various concepts, methods of costing, techniques and Management accounting with their application in business.
- 2.To know the application of Process Costing.
- 3.To identify the financial statements analysis.
- 4.To understand knowledge of Marginal Costing, break even analysis and budgets.
- 5.To analyse standard Costing and Variances

**Subject Code: 22OPCCA23 (National)**

**Course Name: Human Resource Management**

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

1. To familiarize the students with the human resource management processes.
2. To understand the importance of Human Resource Management in meeting the challenging requirements of highly skilled and competent human resources due to Globalization.
3. To enable teach various aspect of Human development related issues.
4. To furnish the various job-related aspects.
5. To evaluate the quality aspect of Human resource

**Subject Code: 22OPCCADSE2A (Global)**

**Course Name: Web Designing**

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

1. Understand the concept of Internet and Protocols.
2. Identify the language of the web: HTML and CSS.
3. Develop basic programming skills using Java script.
4. Learn the concept of XML and DTD in detail.
5. Develop skills in analyzing the usability of a web site.

**Subject Code: 22OPCCADSE2B**

**(National)**

**Course Name: Management Information System**

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

1. Understand the Importance of Management Information System.
2. Study the benefits and limitations of the steps and deliverables used in information Systems projects.
3. Learn the various concepts hardware and software technologies.
4. Identify the theoretical models used for System Development Approaches.
5. Learn the concept of Decision Making and Support system

**Subject Code: 22OPCCA2P**

**(National)**

**Course Name: Web Designing Lab**

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

1. Learn the language of the web: HTML and CSS.
2. Develop basic programming skills using Java script.
3. Learn the concept of XML and DTD in detail.
4. Become familiar with graphic design principles that relate to web design and learn how to implement theories into practice.
5. Develop skills in analyzing the usability of a web site

**Subject Code: 22OPCCAID2**

**(National)**

**Course Name: Desk Top Publishing**

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

1. To impart the basics of Desktop Publishing.
2. To give the students a hands-on experience on PageMaker and Photoshop.
3. To give students the skills to create business cards, pamphlets, banners, calendars etc
4. To understand the fundamentals & concepts of Adobe Photoshop
5. To give students the skills to work with multiple layers

**Course Outcomes**  
**TANSCH - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OPCCA11**

**(National)**

**Course Name: Business Finance**

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

1. To outline the fundamental concepts in finance
2. To estimate and evaluate risk in investment proposals
3. To evaluate leasing as a source of finance and determine the sources of startup financing
4. To examine cash and inventory management techniques
5. To appraise capital budgeting techniques for MNCs

**Subject Code: 23OPCCA12**

**(National)**

**Course Name: Digital Marketing**

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

1. To assess the evolution of digital marketing
2. To appraise the dimensions of online marketing mix
3. To infer the techniques of digital marketing
4. To analyse online consumer behaviour
5. To interpret data from social media and to evaluate game based marketing

**Subject Code: 23OPCCA13**

**(National)**

**Course Name: Banking and Insurance**

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

1. To understand the evolution of new era banking
2. To explore the digital banking techniques
3. To analyse the role of insurance sector
4. To evaluate the mechanism of customer service in insurance and the relevant regulations
5. To analyse risk and its impact in banking and insurance industry

**Subject Code: 23OPCCADSE1A**

**(National)**

**Course Name: Introduction to Industry 4.0**

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

1. To enable the students to comprehend the change from industry 1.0 to 4.0

2. To gain knowledge on the challenges and future prospects of applying artificial intelligence
3. To learn the applications of big data for industrial growth and development
4. To understand the applications of IoT in various sectors
5. To understand why education has to be aligned with industry 4.0

**Subject Code: 23OPCCADSE1B**

**(National)**

**Course Name: Big Data Analytics**

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

1. To understand the various aspects of data science and applying them in health care
2. To learn the applications of big data for industrial growth and development
3. To understand the characteristics of 5 V's
4. To know the big data problems
5. To understand the Hadoop

**Subject Code: 23OPCCADSE1C**

**(National)**

**Course Name: Enterprise Resource Planning**

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

1. To learn the history and growth of ERP
2. To understand the risks involved while using ERP
3. To gain knowledge on the various ERP technologies
4. To learn the dynamics of ERP marketplace
5. To choose appropriate ERP solutions or packages

**Subject Code: 23OPCCADSE1D**

**(National)**

**Course Name: Database Management System**

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

1. To introduce the basic concepts of Relational Database Management System and the working knowledge of Linux environment
2. To understand designing databases and queries in SQL
3. To learn RDBMS
4. To up skill the functions and operators
5. To understand the constraints, locks and MySQL

**Subject Code: 23OPCCA21**

**(National)**

**Course Name: Strategic Cost Management**

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

1. To analyse the aspects of strategic and quality control management
2. To analyse and select cost control techniques
3. To apply activity based costing for decision making
4. To utilize transfer pricing methods in cost determination
5. To apply cost management techniques in various sectors

**Subject Code: 23OPCCA22**

**(National)**

**Course Name: Corporate Accounting**

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

1. To understand the accounting treatment for issue of shares
2. To determine profits for fire and marine insurance
3. To prepare consolidated financial statements
4. To account for price level changes
5. To adopt financial reporting standards

**Subject Code: 23OPCCA23**

**(National)**

**Course Name: Setting up of Business Entities**

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

1. To understand the startup landscape and it's financing
2. To analyse the formation and registration of Section 8 company
3. To outline the concept of LLP and business collaboration
4. To understand the procedure for obtaining registration and license
5. To create awareness about the legal compliances governing business entities

**Subject Code: 23OPCCADSE2A**

**(National)**

**Course Name: Data Mining and Data Interpretation**

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

1. To understand the basic concepts, principles and need of data warehousing
2. To gain knowledge on the data warehouse architecture, modelling and its implementation.

3. To understand steps in implementing data mart and its various dimensions
4. To learn the features, types and challenges of data mining
5. To aid the students to understand the various data mining tools and techniques

**Subject Code: 23OPCCADSE2B**

**(National)**

**Course Name: Technology in Banking**

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

1. To understand the network essentials for an operational core banking system
2. To provide an overview of customer centric electronic banking.
3. To understand the evolution of electronic fund transfer systems in the banking sector
4. To analyse the digital technologies offered in banking services.
5. To understand the information security system

**Subject Code: 23OPCCADSE2C**

**(National)**

**Course Name: Financial Analytics (Practicals)**

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

1. To understand the statistical concepts relating to Probability, decision making under uncertainty and analysis of exploratory data
2. To learn the use of regression, time series analysis and building of models using accounting data
3. To gain knowledge on R and python programming
4. To prepare, analyse and forecast financial statements using cash flow statements
5. To gain knowledge on concept, application, and issues in capital budgeting

**Subject Code: 23OPCCA22**

**(National)**

**Course Name: Corporate Accounting**

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

1. To understand the accounting treatment for issue of shares
2. To determine profits for fire and marine insurance
3. To prepare consolidated financial statements
4. To account for price level changes
5. To adopt financial reporting standards

**Subject Code: 23OPCCADSE2D**

**(National)**

**Course Name: Management Information System**

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

1. To understand the basic concept of Information system
2. To identify the importance of MIS
3. To understand the Functional Management Information System
4. To learn the role of system analyst
5. To apply the concept of Enterprise Resource Planning

**Subject Code: 23OPCCASEC21**

**(National)**

**Course Name: Internet & Its Applications**

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

1. Explore the basics of the Internet
2. Able to browse Internet using search engines
3. Learn how to download files multiple files.
4. Study about various types of Protocols
5. Send and receive emails through an email account and store and retrieve addresses from the address book



**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)**  
**SEMESTER – I**

**Subject Code: 22OPEN11**

**(National)**

**Course Name: Language and Linguistics**

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

1. To enumerate the pedagogical skills to the students by acquainting them with the structure of modern English, history of English language, linguistics and methods of teaching English
2. To discuss the challenges of English Language Teaching and Testing
3. To develop the ability to study and analyze languages in general
4. To devise strategies to see how language operates.
5. To measure the students' learning

**Subject Code: 22OPEN12**

**(Global)**

**Course Name: British Literature**

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

1. To recognize to be a writer in various genre through learning the cultural thoughts and sociological aspect of Britain.
2. To understand the moralistic, rhetoric, cultural elements in prose.
3. To identify, that emotions are the major part of language by analyzing the human characters in the play.
4. To prioritize the skill of imagination, narrative, interpretation, discourse and be a novelist.
5. To develop descriptive, persuasive, expository, creative writing through reading critical essays.

**Subject Code: 22OPEN13**

**(National)**

**Course Name: Indian Writing in English**

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

1. Recall the diverse forms of Indian writing in English and develop a critical understanding of the large body of works from the days of colonial past to the present day
2. Showing the wider range of works in Indian Literature in English

3. Constructing a balanced textual study of established and contemporary writers.
4. Develop a holistic perception of Indian Literature in English
5. Creating familiarity with Indian writing in English during different time periods and their characteristic features.

**Subject Code: 22OPEN14**

**(National)**

**Course Name: ELT & ICT**

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

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

**Subject Code: 22OPENDSE1A**

**(National)**

**Course Name: World Short Stories**

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

1. To recognize the foundation to the study of World English Short Stories.
2. To discuss the elements of the short story in American short stories.
3. To find the characterization of short story in commonwealth literature.
4. To analyze the coherence in the plots, sub plots, themes of the short stories.
5. To create a short story of their own imagination and creativity.

**Subject Code: 22OPENDESE1B**

**(Global)**

**Course Name: African- American Literature**

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

1. To recognize the role of African Americans within the larger American society.
2. To summarize the African American culture, racism, slavery and social inequality.
3. To utilize the post colonial themes in the literature of minority community writers.
4. To analyze the distinction between the literature of freed slaves and the literature of free blacks.

5. To measure the political and social autonomy in the face of resistance from the white public through literature.

**Subject Code: 22OPENID1 (National)**

**Course Name: Grammar for Communication**

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

1. To examine the grammatical competence of students by revisiting certain rudimentary concepts in English Grammar
2. To generalize the students with the necessary language skills specifically for academic purpose
3. To modify students' level of understanding in usage of tenses
4. To organize them to use appropriate words/phrases for correct sentence constructions
5. To discover the students' LSRW skills

## **SEMESTER – II**

**Subject Code: 22OPEN21 (National)**

**Course Name: American Literature**

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

1. To identify some Prominent American Poets and Recap some common themes of American Poetry.
2. To explain the other realms and time through the texts they read
3. To develop the mindset of empathizing with characters, to feel their joys and pain, thereby, cultivating wisdom and worldview
4. To examine various messages of life, even those separated from us by time and social barriers.
5. To appraise another's culture and learn humility as they interact across cultures

**Subject Code: 22OPEN22 (National)**

**Course Name: Literary Theory & Criticism**

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

1. To define the students with important schools of literary criticism with the help of representative essays.
2. To associate the students with different trends and bearings of literary criticism and help them grasp methods and techniques of interpreting literature.

3. To Experiment them to the major trends in contemporary Literary Criticism
4. To devise the students to get acquainted with the knowledge of history of criticism, its trends and kinds of schools.
5. To recommend a critical perspectives and interpretive skills on various theoretical frameworks, and gain practical knowledge of application of these literary structures in different textual Contexts.

**Subject Code: 22OPEN23**

**(National)**

**Course Name: Shakespeare**

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

1. To identify the students to learn how to stage their performance making them to understand the presence of mind, characterization.
2. To discover the essence of life through tragic elements is molding humanity
3. To apply the historical life of British people with the approaches and strategies.
4. To focus on moralistic, historical, psychological approach through criticism.
5. To criticize acting by providing information about staging practices in Shakespeare days

**Subject Code: 22OPEN24**

**(National)**

**Course Name: Comparative Literature: Theory & Practice**

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

1. To define the terms of comparative literature and different schools of comparative literature
2. To demonstrate the knowledge of influence, Reception and Parallel Studies.
3. To associate the themes, genres, period and movement of several literature.
4. To correlate literature with other arts like sociology, psychology and philosophy
5. To compare two works of arts of poetry, drama and novel.

**Subject Code: 22OPENDSE2A**

**(National)**

**Course Name: Translation Studies**

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

1. To identify an awareness among the students to treat translation as part of being a social being
2. To explain the students the scientific processes in the making of a translated work, a creative work

3. To develop the complete evaluation of Tamil literature through with English literature
4. To analyze the sociological and political perspectives of interpretation of Tamil literature.
5. To prioritize awareness on how to evaluate personal language skills.

**Subject Code: 22OPENDSE2B**

**(National)**

**Course Name: Human Rights in Literature**

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

1. To relate the values and virtues promoting human rights domestically as well as internationally.
2. To associate, contextualize and use information about human rights situation in a given country
3. To utilize the legal, political and other debates involving human rights in a knowledgeable and constructive way
4. To analyze ways of pursuing academic career in human rights
5. To recommend interdisciplinary approaches and contributions to topics such as gender, race, poverty, violence and post colonialism within a human rights framework..

**Subject Code: 22OPENID2**

**(National)**

**Course Name: Mass Communication and Journalism**

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

1. Identify how to write for Media, the history of Media, the pattern, the flare and how to produce newsworthy content.
2. Associate with knowledge in various fields such as politics, sports, entertainment, technology and much more
3. Experiment skills on Public Relations on how to build and promote brand image
4. Focus in skills required in the art of advertising by creating content of high creativity and interest.
5. Appraise social media advancements so as to use the platform to efficiently share information.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OPEN11**

**(National)**

**Course Name: English Poetry**

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

1. To familiarize students with English Poetry starting from Medieval England to 17th Century.
2. To focus on the evolution of Poetic forms such as Sonnet, Ballad, Lyric, Satire, Epic etc.
3. To enhance the knowledge of History of English literature
4. To differentiate among the various stages of English could be identified by students.
5. To understand the approaches towards various literary forms.

**Subject Code: 23OPEN12**

**(National)**

**Course Name: English Drama**

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

1. To acquaint the students with the origin of drama in Britain
2. To learn different stages of British Drama and its evolution in the context of theatre can be understood by the students.
3. To Comprehend the Socio-cultural scenario through a study of representative texts from the Elizabethan age to 20th century.
4. To evaluate different forms of drama from the historical background could be learnt.
5. To understand dramatic techniques implied by the pioneers of English drama

**Subject Code: 23OPEN13**

**(Global)**

**Course Name: English Fiction**

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

1. To familiarize the students with the origin and development of the British Novel up to the 20th Century To throw light on various concepts and theories of the novel.
2. To understand the social background base on the prescribed novels.
3. To identify and differentiating various forms of novels.
4. To write a piece of work on their own.



**Subject Code: 23OPENDSE1A**

**(National)**

**Course Name: Indian Writing in English**

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

1. To enable the students to understand the evolution of Indian Writing in English.
2. To empower the learners to get exposed to the historical movements of the Indian subcontinent.
3. To comprehend different genres through the representation of different texts.
4. To inculcate in the students the cultural significance of Indian English literature.
5. To comprehend Indian writing in English with its dual focus on the influence of classical Indian tradition and the impact of the West.

**Subject Code: 23OPENDSE1B**

**(National)**

**Course Name: World Short Stories**

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

1. To recognize the foundation to the study of World English Short Stories.
2. To discuss the elements of the short story in American short stories.
3. To find the characterization of short story in common wealth literature.
4. To analyze the coherence in the plots, sub plots, themes of the short stories.
5. To create a short story of their own imagination and creativity.

**Subject Code: 23OPENDSE1C**

**(National)**

**Course Name: Theatre Art**

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

1. To understand a broad range of theatrical disciplines and experiences
2. To familiarize theatre as an art form
3. To introduce the concepts of directing and stage management
4. To inculcate in the students, the role of theatre in society
5. To familiarize the students with the components of acting

**Subject Code: 23OPENDSE1D**

**(National)**

**Course Name: Human Rights in Literature**

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

1. To relate the values and virtues promoting human rights domestically as well as internationally.

2. To associate, contextualize and use information about human rights situation in a given country
3. To utilize the legal, political and other debates involving human rights in a knowledgeable and constructive way
4. To analyze ways of pursuing academic career in human rights
5. To recommend interdisciplinary approaches and contributions to topics such as gender, race, poverty, violence and post colonialism within a human rights framework.

**Subject Code: 23OPEN21**

**(Global)**

**Course Name: American Literature**

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

1. To introduce the learners to the development of American literature
2. To familiarize social and political events that have a bearing on American writing
3. To introduce the concepts and emerging themes in American literature
4. To inculcate the movements and trends that shaped American literature
5. To familiarize the students with the relation between aesthetics and racism in Fiction.

**Subject Code: 23OPEN22**

**(Global)**

**Course Name: Shakespeare Studies**

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

1. To examine, understand and enjoy Shakespeare's plays and Criticism of Theatre.
2. To analyze the context of Elizabethan England from the evolving contemporary perspective down the ages
3. To undertake textual analysis of Shakespeare's Plays and Sonnets
4. To appraise Shakespeare's contribution to English language and literature
5. To understand the appreciations by critics on Shakespeare

**Subject Code: 23OPEN23**

**(National)**

**Course Name: Post-Colonial Theory and Literature**

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

1. To examine, understand current socio-political mood in 'third-world' countries through the study of their fiction and poetry.
2. To familiarize students about the basic concepts and theories related to post Colonialism as expressed in different literary genres

3. To focus on the problems and consequences of the decolonization of a country, especially relating to the political and cultural independence of formerly subjugated people.
4. To emphasis will be laid on tracing the development of post-colonial literatures and theory.
5. To understanding the critical perspectives in Post -colonial literatures.

**Subject Code: 23OPENDSE2A (Global)**

**Course Name: Approaches to English Language Teaching**

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

1. To enhance the learning and teaching skills of English
2. To familiarize students about the basic concepts and theories relate to English language teaching
3. To focus on the problems and consequences on language teaching
4. Emphasis will be laid on tracing the development of language teaching skills
5. Understanding the teaching aspects.

**Subject Code: 23OPENDSE2B (National)**

**Course Name: Women Studies**

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

1. To understand various issues related to women across the world.
2. To apprehend the theoretical perspectives of women writer.
3. To appreciate the non-canonical women writers.
4. To identify the emergence of the New Woman.
5. To recognize the works of contemporary women writers.

**Subject Code: 23OPENDSE2C (National)**

**Course Name: A Glimpse of Nobel Laureates**

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

1. To introduce the learners to the Nobel Laureates of various genres of Literature
2. To familiarize students on various Nobel Laureates
3. To focus on interpreting the works of various Nobel Laureates
4. To evaluate critically and aesthetically the prescribed texts
5. To understand the Nobel Laureates' contribution to the society.

**Subject Code: 23OPENDSE2D**

**(National)**

**Course Name: Classical Literature**

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

1. To discover the classical works that transcends time and culture and have a universal appeal.
2. To explore reading and comparing authors such as Homer, Virgil, Milton, Alice V Oswald, and Derek Walcott.
3. To recognize and appraise the concepts of ancient literature world-wide.
4. To experiment and focus on imbibing critical perception and understanding classical literature.
5. To analyze the ancient environment through classical literature

**Subject Code: 23OPENSEC21**

**(National)**

**Course Name: Technical Writing**

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

1. To understand and know how to follow the stages of the writing process and apply them to technical and workplace writing tasks.
2. To be able to produce a set of documents related to technology and writing in the workplace and will have improved their ability to write clearly and accurately.
3. To understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.
4. To be Familiar with basic technical writing concepts and terms, such as audience analysis, jargon, format, visuals, and presentation.
5. To be able to read, understand, and interpret material on technology.

DEPARTMENT OF PHYSICS  
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: 22OPPH11**

**(National)**

**Course Name: Mathematical Physics I**

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

1. To understand the concepts of vectors and its applications
2. Study the Significant theorems of matrices
3. To acquire the knowledge about tensor
4. Apply the complex variables in solving integrals
5. To analyze the concept of Group theory

**Subject Code: 22OPPH12**

**(National)**

**Course Name: Classical Mechanics**

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

1. To study the Lagrangian methods.
2. To learn about the central field motion.
3. To study the Hamiltonian formulations.
4. To study the mechanics of small oscillations.
5. To learn about Hamilton – Jacobi Theory

**Subject Code: 22OPPH13**

**(National)**

**Course Name: Advanced Electronics**

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

1. To understand the basis of semiconductor devices.
2. To study the concepts of Operational amplifier.
3. To review IC 555 Timers.
4. To develop knowledge about karnaugh map and combinational circuit.
5. To learn about flip flop and counters

**Subject Code: 22OPPHDSE1A**

**(National)**

**Course Name: Numerical methods**

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

1. To provide suitable and effective methods called Numerical Methods, for obtaining approximate representative numerical results of the problems.
2. To analyze different interpolation techniques.
3. To recall the curve fitting procedures.
4. To rejuvenate the concepts of numerical integration and differentiation.
5. To solve partial differential equations. 1

**Subject Code: 22OPPHDSE1B**

**(National)**

**Course Name: Programming in C++**

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

1. The course is designed to provide the knowledge of C++ language.
2. To develop skill for developing the different programs.
3. To appreciate and apply the programming concepts.
4. To know overloading, inheritance concepts.
5. The student will be able to envelop logical thinking.

**Subject Code: 22OPPHID1**

**(National)**

**Course Name: Renewable Energy Resources**

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

1. To study the Fundamentals of Energy sciences.
2. To understand Formation and applications of different forms of solar Energy.
3. To learn energy produce from wind energy.
4. Production and use of biomass energy. Study the main application for geothermal Energy.
5. To create several self-employment opportunities in non- conventional energy Resources.

## **SEMESTER – II**

**Subject Code: 22OPPH21**

**(National)**

**Course Name: Mathematical Physics II**

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

1. Understanding the basic concept of differential equations
2. To Gain the knowledge about Bessel and Legendre functions
3. Study the concept of hermite functions
4. Apply the partial differential equation to solve the problem
5. To Learn the properties Fourier series and transform

**Subject Code: 22OPPH22**

**(Global)**

**Course Name: Thermodynamics and Statistical Mechanics**

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

1. Understand the phase space and ensembles
2. Gain the knowledge about method of ensembles
3. Discuss the different types of statistical distribution
4. Know more about the ideal Fermi dirac gas and ideal bose Einstein gas
5. Learn the concept of phase transistions



**Subject Code: 22OPPH23**

**(National)**

**Course Name: Electromagnetic theory**

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

1. To understand the concepts of electrostatic fields.
2. To study the concepts of magnetostatics.
3. To acquire the knowledge of Maxwell's equations.
4. To apply the electromagnetic wave propagation.
5. To analyze the electrodynamics and relativity.

**Subject Code: 22OPPHDSE2B**

**(Global)**

**Course Name: Medical physics**

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

1. To Know about the system of human body
2. To Understand the concepts of diagnostic X-ray
3. To Gain knowledge about the medical instruments
4. To Study the type of medical equipment's
5. To Learn about advanced bio-medical instrumentation

1. To know about the Oscilloscope.
2. To understand the Signal Generators.
3. To gain knowledge about Measuring Instruments.
4. To study the type of Recorders
5. To learn about the Transducers

**Subject Code: 22OPPHID2**

**(National)**

**Course Name: Astronomy & Astrophysics**

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

1. To understand the concepts history of Astronomy.
2. To study the concepts of earth motion in space.
3. To acquire the knowledge of the moon.
4. To apply the scientific language the origin of the solar system.
5. To analyze the major constellations to the stars.

**Subject Code: 22OPPH21P**

**(National)**

**Course Name: General physics practical -I**

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

To expose the students to experiments in the Mathematical modeling, optics, and properties of matter

**Subject Code: 22OPPH22P (National)**

**Course Name: Electronics practical –I**

Upon completion of the course, the students will be able to  
To expose the students to understand the fundamental concepts of diode, OP AMP and ICs for the application of various instruments with practical observations.

**Course Outcomes**  
**TANSCH - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OPPH11 (National)**

**Course Name: Mathematical Physics**

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

1. To equip students with the mathematical techniques needed for understanding theoretical treatment in different courses taught in their program.
2. To extend their manipulative skills to apply mathematical techniques in their fields.
3. To help students apply mathematics in solving problems of Physics

**Subject Code: 23OPPH12 (Global)**

**Course Name: Classical Mechanics and Relativity**

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

1. To study the Lagrangian methods.
2. To learn about the central field motion.
3. To study the Hamiltonian formulations.
4. To study the mechanics of small oscillations.
5. To learn about Hamilton – Jacobi Theory.

**Subject Code: 23OPPH1P (National)**

**Course Name: Practical-I**

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

1. To expose the students to experiments in the Mathematical modeling, optics, and properties of matter.

2. To expose the students to understand the fundamental concepts of diode, OP-AMP and ICs for the application of various instruments with practical observations.

**Subject Code: 23OPPHDSE1A**

**(National)**

**Course Name: Linear and Digital ICs and Applications**

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

1. To introduce the basic building blocks of linear integrated circuits.
2. To teach the linear and non-linear applications of operational amplifiers.
3. To introduce the theory and applications of PLL.
4. To introduce the concepts of waveform generation and introduce one special function ICs.
5. Exposure to digital IC's.

**Subject Code: 23OPPHDSE1B**

**(National)**

**Course Name: Physics of Nanoscience and Technology**

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

1. Physics of Nanoscience and Technology is concerned with the study, creation, manipulation and applications at nanometer scale.
2. To provide the basic knowledge about nanoscience and technology.
3. To learn the structures and properties of nanomaterials.
4. To acquire the knowledge about synthesis methods and characterization techniques and its applications.

**Subject Code: 23OPPHDSE1C**

**(National)**

**Course Name: Energy Physics**

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

1. To learn about various renewable energy sources.
2. To know the ways of effectively utilizing the oceanic energy.
3. To study the method of harnessing wind energy and its advantages.
4. To learn the techniques useful for the conversion of biomass into useful energy.
5. To know about utilization of solar energy.

**Subject Code: 23OPPHDSE1D**

**(National)**

**Course Name: Communication Electronics**

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

1. To understand about antennas and wave propagation.

2. To acquire the knowledge about microwaves.
3. To understand about radar.
4. To study about the optical fiber.
5. To acquire the knowledge about the satellite communication

**Subject Code: 23OPPH21**

**(Global)**

**Course Name: Statistical Mechanics**

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

1. To acquire the knowledge of thermodynamic potentials and to understand phase transition in thermodynamics
2. To identify the relationship between static and thermodynamic quantities
3. To comprehend the concept of partition function, canonical and grand canonical ensemble
4. To grasp the fundamental knowledge about the three types of statics.
5. To get in depth knowledge about phase transition and fluctuation of thermodynamic properties vary with time.

**Subject Code: 23OPPH22**

**(National)**

**Course Name: Quantum Mechanics -I**

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

1. To develop the physical principles and the mathematical background important to quantum mechanical descriptions
2. To describe the propagation of a particle in a simple, one-dimensional potential.
3. To formulate and solve the Schrodinger's equation to obtain eigenvectors and energies for particle in a three-dimensional potential.
4. To explain the mathematical formalism and the significance of constants of motion, and see their relation to fundamental symmetries in nature
5. To discuss the Approximation methods like perturbation theory, Variational and WKB methods for solving the Schrödinger equation.

**Subject Code: 23OPPH2P**

**(National)**

**Course Name: Practical-II**

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

1. To expose the students to experiments in the Mathematical modeling, optics, and properties of matter.

2. To expose the students to understand the fundamental concepts of diode, OP-AMP and ICs for the application of various instruments with practical observations.

**Subject Code: 23OPPHDSE2A (National)**

**Course Name: Plasma Physics**

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

1. To understand the cross section of charged particles and to able to correlate the magnetic effect of ion and electrons in plasma state.
2. To learn the magneto-hydrodynamics concepts applied to plasma.
3. To explore the oscillations and waves of charged particles and thereby apply the Maxwell's equation to quantitative analysis of plasma.
4. To analyze the different principle and techniques to diagnostics of plasma.
5. To Study the possible applications of plasma by incorporating various electrical and electronic instruments.

**Subject Code: 23OPPHDSE2B (National)**

**Course Name: Advanced Optics**

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

1. To discuss the transverse character of light waves and different polarization phenomenon.
2. To discriminate all the fundamental processes involved in laser devices and to analyze the design and operation of the devices
3. To Study the important characteristics of holograms and its applications.
4. To demonstrate the basic configuration of a fiber optic – communication system and advantages
5. To identify the properties of nonlinear interactions of light and matter.

**Subject Code: 23OPPHDSE2C (National)**

**Course Name: Solar Energy Utilization**

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

1. To impart fundamental aspects of solar energy utilization.
2. To give adequate exposure to solar energy related industries
3. To harness entrepreneurship skills
4. To understand the different types of solar cells and channelizing them to the different sectors of society

5. To develop an industrialist mind set by utilizing renewable source of energy

**Subject Code: 23OPPHDSE2D**

**(National)**

**Course Name: Bio physics**

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

1. To understand the physical principles involved in cell function maintenance.
2. To understand the fundamentals of macromolecular structures involved in propagation of life.
3. To understand the biophysical function of membrane and neuron.
4. To understand various kinds of radiation and their effects on living system and to know the hazards posed by such radiations and the required precautions.
5. To understand the physical principles behind the various techniques available for interrogating biological macromolecules.

**Subject Code: 23OPPHSEC21**

**(National)**

**Course Name: Microprocessor 8085 and Microcontroller 8051**

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

1. To provide an understanding of the architecture and functioning of microprocessor 8085A.
2. To learn the methods of interfacing I/O devices and memory to microprocessor.
3. To study the concepts of 8085A programming function and their applications.
4. To Acquire the architecture and instruction sets of microcontroller 8051.

DEPARTMENT OF  
TAMIL  
P.G.

**Department of**  
**Tamil**

**Programme Code: OPT**

**Programme Name: B.A. Tamil**

**Programme**  
**Outcomes**

1. தெரிந்த தமிழையே ஆ ஸைம தை  
றையின இ தமையே ஸை இல ஸைய வ வ  
ஸை தைறன தெரிச தைறையின  
வள! த .
2. தமையே சை !”த ஆ ஸை  
ஸைம தெரினே மு ப மை ணவ! ஸை  
உவையே மூத .
3. ஸைமையே தைற மகூ பையிட- தை  
றையின ஸைம ப- - 0த .
4. தமையே 1 மூ பைறையே மூமையே  
தெரிதையே 1! பையினையே 3 தெரிச த .
5. தமையே இல யை இல ஸை அறையே நையே பையே ம  
ணவ! ஸையே உவையே மூத
6. தமையே இல ஸைய வையையையே  
ஏகூ ப- - மையே கூற ஸை அறையே தை  
றையின வள! த .
7. தமையே இல ஸைய ஸை வையே 0 அற  
ஸை உணர தெரிச வௌ ச8 இ  
அரசய இ பையே - - ஆயவகூறையே ஸைத!”த மையே  
ணவ! ஸையே உவையே மூத .



**Course Outcomes**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OPTA11**

**(National)**

**Course Name: இக்கால இலக்கியம்**

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

1. மரபுக் கவிஞர்கள் புதுக்கவிஞர்களின் காலவரிசையினை புரிந்து தகாள்ளச் தசய் ல்.
2. சமு ாயச் சிக்கல்களை கவிர் களின் மூலமாக அறிந்து தகாள்ளச் தசய் ல்.
3. ொைகப் வபாக்கின் வழி சமூகசிக்கல்களைத் த ரிந்து தகாள்ளச் தசய் ல்.
4. ெவ ின இலக்கிய அரமப்பிரை அறியத்தசய் ல்.
5. உரரெரையின் வழி பரைப்பாளர்களின் உரரவளத் ிரன எடுத்துரரத் ல்.

**Subject Code: 20PTA12**

**(National)**

**Course Name: சைல்காப்பியம் எழுத்தைிகாைம்**

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

1. த ால்காப்பிய எழுத் ிலக்கண மரபுகளை அறிந்துதகாள்ள ல்.
2. எழுத் ிலக்கணக் கூறுகளின் வளர்ச்சிெிரலயிரனத் புரிந்துதகாள்ள ல்.
3. பழந் மிழ் இலக்கியப் பனுவல்களில் தைம்தபற்றுள்ள புணர்ச்சி வி ிகளை வரகப்படுத் ி அறியத் தசய் ல்.
4. இலக்கண நூல்களுக்கு இரைவயயான ஒற்றுரம வவற்றுரமகளை ஒப்பீடு தசய் ல்.

5. இலக்கண அடிப்பரையில் பழந் மிழ் இலக்கியங்கள் அரமந்துள்ளர ம  
ிப்பீடு தசய் ல்.

Subject Code: **22PTA13**

(National)

Course Name: **சிற்றிலக்கியம**

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

1. சிற்றிலக்கிய கால வரிசயிரனயும் அரமப்பிரனயும் அறியச் தசய் ல்.
2. உழவர்களின் வாழ்வியல் கூறுகளயும் சிக்கல்களயும் எடுத்துரரத் ல்.
3. தூது இலக்கிய அரமப்பிரனயும் தூது தபாருட்களின் சிறப்பிரனயும் விளக்கு ல்.
4. குறவஞ்சி இலக்கிய ொகை அரமப்பிரன எடுத்துக் கூறு ல்.
5. சிற்றிலக்கியங்கள் கூறும் அரசர்களின் தபருமயிரன எடுத்துரரத் ல

Subject Code: **22OPTA14**

(National)

Course Name: **இலக்கியத் ிறனாய்வியல்;**

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

1. ிறனாய்வாளர்களயும் ிறனாய்வின் வரககளயும் அறிந்துதகாள்ளல்.
2. ிறனாய்வு அணுகுமுறககளப் புரிந்து தகாள்ளல்.
3. தமாழியியல் அறிவியல் வழி அணுகுமுறககளத் லித் ியம் தபண்ணியம் வபான்ற அணுகுமுறயுைன் ஒப்பிடும் ிறன் தபறு ல்.
4. ிறனாய்வுத் த்துவ தெறிகளின் பார்ரவயில் பிற இலக்கியங்ககளயும் ம ிப்பீடு தசய்யும் ிறன் தபறு ல்.
5. ிறனாய்வு வரலாற்றிரனக் காலந்வ ாறும் உள்ள இலக்கியங்ககளின் வரலாற்றுைன் பகுத் ாய்வு தசய் ல்.

Subject Code: **22PTAE1A**

(National)

Course Name: **இழியல**

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

1. இந் ிய இ ழ்களின் வரலாற்றிரன அறிந்து தகாள்ளு ல்.
2. இ ழ்களின் முக்கியத்துவத்ர த் த ரிந்து தகாள்ளு ல்.
3. இ ழ்களின் ப ிப்புச் சட்ைங்கரளஅறியச் தசய் ல்.
4. தசய் ிகளின் வரககள் மற்றும் ஆசிரியர்களின் பணிகரளப் பற்றி அறிவிரனப் தபறச்சதசய் ல்.
5. இ ழ்களுக்குப் பரைப்புகரள வழங்கும் ிறன்கரளப் புரிந்துதகாள்ளு ல்.

Subject Code: **22OPTAE1B**

(National)

Course Name: **நாட்டுப்புறவியல்;**

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

1. கிராமப்புற மக்களின் பழக்க வழக்கங்கரள அறிந்து தகாள்ளச் தசய் ல்.
2. சிறு த ய்வ வழிபாடுகள் குறித்து த ரிந்து தகாள்ளச்சதசய் ல்.
3. உறவுகளின் முக்கியத்துவத்ர புரிந்து தகாள்ளச்சதசய் ல்.
4. ொட்டுப்புற இலக்கியங்கள் எழந் காலச் சூழரல எடுத்துரரத் ல்.
5. ொட்டுப்புற மக்களின் ெம்பிக்ரககரள அறியச்சதசய் ல்

Subject Code: **22OPTAID1**

(National)

Course Name: **மைழ் இலக்கிய வைலாறு -1**

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

1. சங்க இலக்கியங்களின் வரகரமயிரன அறிந்து தகாள்ளச் தசய் ல்.
2. அறநூல்களின் கருத் ரமவிரனத் த ரிந்துதகாள்ளச் தசய் ல் .
3. காப்பியங்களின் வ ாற்றம் வளர்ச்சி பற்றி அறியச்சதசய் ல்.
4. பக் ி இலக்கியங்களின் ஆளுரம ிறத்ர அறிந்து தகாள்ளச்சதசய் ல்.
5. சிற்றிலக்கியம் மற்றும் பிற்காலப்; புலவர்களின் வரலாறு பற்றிய அறிவிரனப் தபறச்சதசய் ல்.

**Subject Code: 22OPTA21**

**(National)**

**Course Name: சமய இலக்கியம்**

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

1. சமயங்களின் மறுமலர்ச்சியிரன அறிந்து தகாள்ளல்.
2. ரசவ சமயத்தகாள்ரககரள அறியத்தசய் ல்.
3. ரவணவம் தவளிப்படுத்தும் பக் ித் ிறரன த ரிந்துதகாள்ளல்.
4. சித் ர் பாைல்களில் உள்ள த்துவங்கரளப் புரி ல்.
5. கிறித் வ, இஸ்லாமியக் தகாள்ரககரளக் கற்றறியும் ிறன் தபறு ல்.

**Subject Code: 22OPTA22**

**(National)**

**Course Name: சைல்காப்பியம் - சசால்லெலிகாமை**

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

1. தசாற்களின் வரககரளயும், வவற்றுரமயிரனயும் அறிந்து தகாள்ளல்.
2. வவற்றுரம உருபுகள் தசாற்களில் மயங்கிவரும் ெரிலப்பாட்டிரனப் புரிந்து தகாள்ளல்.
3. தபயர்ச் தசால் மற்றும் விரனத்தசால்லின் வரகயிரன ஒப்பிடும் ிறன் தபறு ல்.
4. வாக்கிய அரமப்பில் இரைத்தசால் மற்றும் உரித்தசால் பங்கிரனயும் த ாரகத்தசாற்களின் பயன்எச்சங்களின் வரக இவற்றின்மூலம் மரபிலக்கணத் ின் ன்ரமரயப் புரி ல்.
5. த ால்காப்பியத்ர ென்னுவலாடு ஒப்பிட்டுப் பார்க்கும் ிறன்தபறு ல்.

**Subject Code: 22OPTA23**

**(National)**

**Course Name: காப்பிய இலக்கியம்**

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

1. மிழில் காப்பியங்கள் வ ான்றிய கால வரிசயிரன அறிந்து தகாள்ளச் தசய் ல்.
2. தபருங்காப்பிய மரபிரன அறியச் தசய் ல்.
3. புராண இ ிகாச மரபுகளின் வழி காப்பிய வளர்ச்சியிரன அறியச் தசய் ல்.
4. காப்பிய சமய தபாதுரமகரளக் கண்டுதகாள்ளச் தசய் ல்.
5. முற்கால, பிற்கால காப்பியங்கரள ஒப்பிடும் ிறன் தபறுவர்.

**Subject Code: 22OPTA24**

**(National)**

**Course Name: இலக்கிய உதையாசிரியர்கள்**

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

1. உரரநூற்களின் வ ரவரய அறிந்து தகாள்ளச் தசய் ல்.
2. இலக்கிய உரரயாசிரியர்களின் உரரத் ிறரன அறியச் தசய் ல்.
3. ிருக்குறள் உரரகளின் னித் ன்ரமரய எடுத்துரரத் ல்.
4. காப்பிய உரரகளின் வழி சமு ாயப் பின்னணிரயப் புரிந்து தகாள்ளச் தசய் ல்.
5. ;சமய மற்றும் ற்கால உரரயாசிரியர்களின் இலக்கியத் ிறரன எடுத்துரரத் ல்.

**Subject Code: 22OPTAE2A**

**(National)**

**Course Name: ஊடகத்ைமிழ்**

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

1. ஊகங்களின் வரககரள அறிந்து தகாள்ளத்தசய் ல்
2. ஊகத்துரறயின் வளர்ச்சி மற்றும் பயன்பாட்டிரனத் த ரிந்து தகாள்ளத்தசய் ல்;
3. ஊக சா னங்களின் முக்கியத்துவத்ர ம ிப்பிட்டுத் த ளியத்தசய் ல் .
4. விளம்பரங்களின் அவசியத்ர உணரச் தசய் ல்

5. ிரரக்கர யின் வளர்ச்சிரய அறிந்து பயன்தபற விரழயச் தசய் ல்.

**Subject Code: 22OPTAE2B**

**(National)**

**Course Name: பயண இலக்கியம்;**

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

1. பயண இலக்கியம் கற்ப ன் மூலம் பயணம் தசய்ய ஆர்வம் தபறு ல்.
2. பல்வவறு ொட்டு மக்களின் பண்பாடுகளையும் வாழ்வியரலையும் அறி ல்.
3. கல்வி சார்ந் த ாழில் வவரல வாய்ப்புகரள அறிமுகம் தசய் ல்.
4. பல்வவறு ொடுகளின் வரலாற்றிரன அறியச் தசய் ல்.
5. பல்வவறு ொடுகளின் கால ெிரல மாற்றங்கரள எடுத்துரரத் ல

**Subject Code: 22OPTAID2**

**(National)**

**Course Name: ெமிழ் இலக்கிய வைலாறு - 2**

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

1. இக்கால இலக்கியங்களின் வழி மரபுக்கவிர புதுக்கவிர யிரன அறியச் தசய் ல்.
2. சிறுகர இலக்கியத் கவல்கரளையும் ஆசிரியர்கரளையும் ொவல் சிறப்பிரனையும் த ரிந்துதகாள்ளச் தசய் ல்.
3. ொைகத் ிரனையும் ொைக இலக்கிய ஆசிரியர்களின் சிறப்புகரளையும் அறியச் தசய் ல்.
4. இ ழ்களின் பயன்பாடுகள் பல்கரலக்கழகங்கள் விருதுகள் பற்றி அறியச் தசய் ல்.
5. மிழ்தமாழியின் தசம்தமாழிச் சிறப்ப

**Course Outcomes**  
**TANSCH - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OPTA11**

**(National)**

**Course Name: ,க்கால இலக்கியம்**

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

1. இக்கால இலக்கியத் தில் ஆழமானபுலமைபெறுதல். 2. இக்காலத் தமிழ்க் கவிதை (மரபுக் கவிதை,புதுக் கவிதை) புனைகதை (சிறுகதை,புதினம்)ஆகியவற்றைத் தேடிவாசித்தல் 3. இக்காலத் தமிழ்க் கவிதை,புனைகதைஆகியவற்றின் போக்குகளையும் பின்புலங்களையும் உணர்தல். 4. இக்காலத் தமிழ் மரபுக் கவிதை,புதுக் கவிதை,சிறுகதை,புதினம் ஆகிய வகைகளில் இலக்கியநலம் பெறல். 5. சமூகவியல் நோக்கில் அணுக,மதிப்பிடப் பயிற்சிபெறல்.

**Subject Code: 23OPTA12**

**(National)**

**Course Name: அற இலக்கியம்**

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

1. தமிழின் அற இலக்கிய வரலாற்றை அறிதல். 2. பதினெண் கீழ் க்கணக்கில் இடம் பெற்றுள்ள அற இலக்கியங்களை ஆழ்ந்து கற்றல் 3. திருக்குறள்,நாலடியார் ஆகியவற்றில் சிறப்புப் பயிற்சி பெறுதல். 4. பதினெண் கீழ் க்கணக்கில் இடம் பெற்றுள்ள பிற அற இலக்கியங்களைப் பயிலல். 5 அறஇலக்கியங்கள் முன்வைக்கும் அறக்கருத்துகள் அறஇலக்கியங்களின் இலக்கிய மதிப்புகள் இலக்கிய அழகுகள், யாப்பு வடிவம் அற இலக்கியப் புலவர்களின் தனித்திறன் முதலியவற்றில் சிறந்த புலமை பெறுதல்.

**Subject Code: 23OPTA13**

**(National)**

**Course Name: தொல்காப்பியம் - எழுத் ததிகாரம்**

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

1. சதால்காப்பிய எழுத்திலக்கண ாரபுகமள அறி ்துசகாள்ளுதல்.
2. எழுத்திலக்கணக் கூறுகளின் வளர்ச்சி ிமலயிமனப் புரி ்து சகாள்ளுதல்.
3. பை ்தமிழை் இலக்கியப் பனுவல்களில் இை்்சபற்றுள்ள புணர்ச்சி விதிகமள வமகப்படுத்தி அறியச் சசய்தல்.

4. இலக்கண நூல்களுக்கு இமைபய்யான ஒற்றுமை  
பவற்றுமைகமள ஒப்பீடு சசய்தல். ஒப்பீடு சசய்தல்.

**Subject Code: 23OPTADSE1A**

**(National)**

**Course Name: இந்திய இலக்கியம்**

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

1. இந்திய மொழிகளில் உள்ள இலக்கியங் களை அறிமுகம் செய்தல்.
2. இந்திய மொழிகளில் உள்ள இலக்கியங்களின் மரபுகளையும், அறநெறிகளையும் கற  
பித்தல்.
3. தமிழுக்கும் பிற மொழிப் படைப்புகளிடையேயும் காணப்படும் வேறுபாடுகளை  
இனங்காணுதல்.
4. பிறமொழி இலக்கியங்களைக் கறப் பதன் மூலம் பன்மொழி கற்கும் ஆர்வத் தை ஏற  
படுத்துதல்.
5. பன்மொழி இலக்கியங்களைக் கறப் பதன் மூலம் படைப்பாற் றலை உருவாக்குதல்.

**Subject Code: 23OPTADSE1B**

**(National)**

**Course Name: தலபுராணங்கள்**

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

1. தமிழில் தலபுராணங்கள் தோன்றிய வரலாற்றை அறியச் செய்தல்
2. தேவாரப் பாடல்கள் வழி சைவத் தல புராணங்களின் வளர்ச்சியினை எடுத்துரைத் தல்.
3. ஆழ்வார்களின் பாடல்கள் வழி வைணவ தல புராணங் களின் வளர்ச்சியினை  
எடுத்துரைத் தல்.
4. மலை நாடு மற்றும் துளுவ நாட்டுத் தலபுராணங்கள் தமிழில் இடம்பெறுமாற் றை  
விளக்குதல்.
5. தமிழ்ப் புராணங் களில் தலபுராணங் கள் இடம் பெறுமாற்றை மதிப்பிடுதல்.

**Subject Code: 23OPTADS E1C**

**(National)**

**Course Name: உரையாசிரியர்கள்**

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

1. இலக்கிய இலக்கண உரையாசிரியர்களின் ஆராய்ச்சி வரலாற்றினை அறிந்து  
கொள்ளுதல்.
2. உரையாசிரியர்களின் உரைகளுக்கு இடையேயான வேறுபாட்டினைக் கண்டறிதல்.
3. இலக்கிய இலக்கணத் திற்குப் புதிய உரை எழுதுவதற் கான திறன் பெற்று எழுதுதல்.

**Subject Code: 23OPTADSE 1D**

**(National)**

**Course Name: தனிப்பாடல் இலக்கியம்**



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

1. சிபலமை அமைப்பிமனத்நிபயச் சசய்தல்
2. விருத்தைத் பாடுண் விதத்திமன அறியச் சசய்தல்
3. வள்ளல்கள் பற்றி அறியச் சசய்தல்
4. அரசர்கமள; பாடிய விதத்திமன அறியச் சசய்தல்
5. பண் மை தமிழை புலவர்களின் பாடுண்; இயல்மப அறியச் சசய்தல்

**Subject Code: 23OPTA21**

**(National)**

**Course Name: பக்தி இலக்கியம்**

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

1. பக்தி இலக்கிய வரலாற்றையும் வளத்தையும் அறிதல்.
2. சைவ இலக்கியங்களின் நோக்கையும் போக்கையும் இலக்கிய அழகுகளையும் அறிய முதன்மையான சைவ இலக்கியப் பனுவற் பகுதிகளைக் கற்றல்.
3. வைணவ இலக்கியங்களின் நோக்கையும் போக்கையும் இலக்கிய அழகுகளையும் அறிய முதன்மையான வைணவ இலக்கியப் பனுவற் பகுதிகளைக் கற்றல்.
4. பிற்காலப் பக்தி இலக்கியப் போக்கினை உணரும் வகையில் அருணகிரிநாதர், தாயுமானவர், இராமலிங்கர் ஆகிய முப்பேரும் ஆளுமைகளின் பனுவற் பகுதிகளைப் பயிலல்
5. இசுலாமிய, கிறித்தவப் பக்தி இலக்கியப் போக்கை அறியச் செய்தல் பக்தி நெறிகளைப் பயிலல்.

**Subject Code: 23OPTA22**

**(National)**

**Course Name: காப்பிய இலக்கியம்**

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

1. உலகளாவியநிலையில் காப்பியவகை இலக்கியங்களை அறிதல்.
2. தமிழில் காப்பிய இலக்கியத்தின் தோற்றம், வளர்ச்சி, வளம் ஆகியவற்றை அறிதல்.
3. காப்பிய இலக்கியத்தின் அமைப்பு, இலக்கியநலன்கள், தனித் தன்மைகள் முதலியவற்றை அறிதல்.
4. சிலப்பதிகாரம் தொடங்கி தமிழில் தோன்றியுள்ள முதன்மையான காப்பியங்களின் தெரிவுசெய்தபகுதிகளைக் கற்றல்.
5. தமிழ்க் காப்பிய இலக்கியங்களில் பரந்தநிலையிலும் ஆழமானநிலையிலும் புலமைபெறல்.

**Subject Code: 23OPTA23**

**(National)**

**Course Name: தொல்காப்பியம் - சொல்லதிகாரம்**

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

1. தமிழ்ச் சொற்களின் அமைப்புஇ அவற்றின் செயல்பாடுகளைத் தொல்காப்பியத் தின் வழியே புரிந்துகொள்ளுதல்.
2. வேர்ச் சொற்களின் அமைப்பையும் தமிழ்மொழியில் இடம் பெறும் பெயர்ச்சொற்கள் காரணப்பெயராகஅமைவதைஅடையாளப்படுத்திஇ இன்றைய நவீன உலகிற்கு ஏற பகலைச் சொற்களை உருவாக்கஊக்குவித் தல் .
3. விளிமரபின் செய்திகளைவிவரித் தல் .
4. சொல் இலக்கணக் கோட்பாடுகளை விளக்குதல்.

**Subject Code: 23OPTADSE2A**

**(National)**

**Course Name: நாட்டார் மரபுகள்**

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

1. நாட்டார்வழக்காற்றியல் புலத்தைஒருசமூகஅறிவியல் புலமாகஅறிமுகம் செய்தல்.
2. இப்புலம் தமிழியல் புலத்திற்குநல்கியுள்ளபங்களிப்பைஅறியச்செய்தல் மற்றும் இப்புலத்தின் இன்றையதேவையைஅறிதல்.
3. வாய்மொழி இலக்கியங்கள் குறித்தபரந்தஅறிமுகத்தைப் பெறுதல்.
4. நிகழ்த்துகலைகள் குறித் ததெளிவானஅறிவைப் பெறுதல்.
5. இதன் வழி மண்ணின் மரபுகளைப் புரிந்துகொள் ளல்.

**Subject Code: 23OPTADSE2B**

**(National)**

**Course Name: பயை இலக்கியம்;**

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

1. பயண இலக்கியை கற்பதன் மூலை பயணை சசய்ய ஆர்வை சபறுதல்.
2. பல்பவறு ாடை்டு டைக்களின் பண் பாடுகமளயுடை் வாடை்வியமலயுடை் அறிதல்.
3. கல்வி சார் த் சதாழில் பவமல வாய்ப்புகமள அறிமுடை் சசய்தல்.
4. பல்பவறு ாடுகளின் வரலாற்றிமன அறியச் சசய்தல்.

5. பல்பவறு ாடுகளின கால ிமல ைாற்றங்கமள  
எடுத்துமரத்தல்.

**Subject Code:** 23OPTADSE2C

**(National)**

**Course Name:** தொல்லியல்

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

1. தொல்லியல் சிறப்பினை அறிதல்
2. தொல்லியல் வளர்ச்சியினைப் புரிந்து கொள்ளல்
3. தொல் பொருளியல் பயன்பாடுகளை அறிதல்
4. தொல்லியல் ஆய்வுகளை அறிதல்
5. தொல்லியல் வரலாற்றினை அறியச் செய்தல்

**Subject Code:** 23OPTADSE2D

**(National)**

**Course Name:** தமிழும் கைனியும

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

1. கணினி இமணயைப்பற்றியஅடிப்பமைஅறிமவசபறச்சசய்தல்
2. தைpை்கற்றலில் இமணயத்தின் பயன்  
பாை்மைஉணர்த்துதல்
3. தமிழை்வளர்ச்சியில் இமணயத்தின் பங்களிப்பமபஅறியச்சசய்தல்
4. மின்dz சதாைர்பியல் பற்றி அறி ஂதுசகாள்வர்
5. கணினிவழிசைாழி இலக்கிய ஆக்கங்கமளg ; பமைக்குை் திறன்  
சபறுவர்.

**DEPARTMENT OF HISTORY**  
**P.G.**

## **DEPARTMENT OF HISTORY-PG**

**Programme Code: OPH**

**Programme Name: M.A.History**

### **Programme Outcomes**

1. Disseminate in-depth knowledge of the subject and reflective thinking. (Global)
2. Empower the social concern through bridging the academic intelligence and moral justice. (National)
3. Sustain the cultural heritage and ethics with an empathetic view. (National)
4. The skill to recognize and articulate the diversity of human experience, including ethnicity, race, language, sex, gender, as well as political, economic, social, and cultural structures over time and space. (Global)
5. After completion of this course it helps to grow ethical values among history students. (Global)
6. They gather knowledge about the socio-cultural heritage of India and the world as well. (Global)
7. This course helps to grow intellectual values among history students and to develop liberal values among them. (National)

### **Programme Specific Outcomes**

**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 research oriented activities (National)
3. Undertake competitive examinations and qualify examinations with confidence and gusto. (National)
4. Engage as educators in elementary schools, secondary schools and postsecondary, historic Sites and Museum etc. as a researcher they will be associated in several fields like, Museums and Historical Organizations, Cultural Resources Management and Historic Preservationist. (National)
5. Directly engage in different ranks of the Archaeological Survey of India according to their performances like as Heritage Manager, Historic buildings inspector or conservation Officer, Museum education Officer etc. (National)

**Course Outcomes**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OPHI11**

**(National)**

**Course Name: Socio - Cultural History of India (upto 1206 A.D)**

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

- 1.To acquire the knowledge of Socio- Cultural History during Pre history
2. To understand the cultural Level of Vedic Age.
3. To develop the research aptitude among the doctrines of Jainism and Buddhism
4. To study the contributions of Asoka during his reign
5. To analyze the Sociological factors during Mauryas, Guptas and Harsha reign

**Subject Code: 22OPHI12**

**(National)**

**Course Name: History of Tamilnadu from Pre-history to Cholas**

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

- 1.To acquire the knowledge of ancient civilization in Tamilnadu with Sources.
2. To learn the Socio- Cultural condition of early Sangam Age
3. Acquaint the Administration, art and architecture of Cholas
4. To analyse the contributions of Saivism and Vaishnavism
5. To develop the cultural condition of Pallavas.

**Subject Code: 22OPHI13I**

**(National)**

**Course Name: International Relations (1914A.D. - 2001A.D.) 4**

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

1. To understand the various approaches and Diplomacy to International Relations
2. To recognize most significant trends in International Relations between two world wars
3. To be familiar with the activities of UNO
- 4.To develop the concept of LPG
- 5.To analyse the International efforts on Environment Issues

**Subject Code: 22OPHI14**

**(National)**

**Course Name: World Civilizations (Excluding India)**

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

1. To learn the massive spans of time during pre history in the world
2. To enable the students to understand the concepts of World Civilizations
3. To inculcate the knowledge of Daughter of the Nile.
4. To analyze the culture of classical civilization in the World.

5.To acquire various philosophical thought of Middle ages

**Subject Code: 22OPHIDSE1A**

**(National)**

**Course Name: Principles and Methods of Archaeology**

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

1. To get overview on subject of Archaeology and its disciplines
2. To explain the contributions of Archaeologists for the Level of archaeology in India
3. To obtain familiarity of the exploration and excavation techniques in Archaeology
4. To know the various Dating Techniques in Archaeology
5. To acquire information on important archaeological sites in Tamilnadu

**Subject Code: 22OPHIDSE1B**

**(National)**

**Course Name: History of U.S.A (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. Outline the consequences of 1812 war and its impact
- 4.Analyze the relationship between Red Indians and Americans and administrative system of Andrew Jacson
5. Evaluate the role of President in USA From Van Buren to James Buchanan

**Subject Code: 22OPHIID1**

**(National)**

**Course Name: History for Competitive Examinations – Paper-I**

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

1. To understand the sources and lithic ages of India
2. To Prepare the self-motivated and life-long wisdom to get shaped in the modern changing culture
3. To acquire the knowledge on the significance of ancient emperors
4. To recognize the importance of religious and social toleration
5. To.know the administrative Levels during medieval period.

## **SEMESTER – II**

**Subject Code: 22OPHI21**

**(National)**

**Course Name: Socio- Cultural History of India (1206 A.D - 1707 A.D)**

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

- 1.To familiarize with the society of Sultanates of Medieval India
2. To understand the socio - culture of Mughals
3. To obtain the knowledge over the society and customs of Vijayanagar Empire
4. To analyze the various religious movements and its impacts on Medieval Society

5. To acquire the progress of architectural style in Medieval India

**Subject Code: 22OPHI22**

**(National)**

**Course Name: Freedom Movement in India**

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

- 1.To know about early causes after the rise of Nationalism
- 2.To obtain knowledge on early organizations of freedom struggle
3. To familiarize with the strategies of Moderates and Extremists.
4. To identify the various phases of National Movement and the significance of Gandhiji's
5. To encourage the patriotism among the younger generation by understanding the noble sacrifices of patriots.

**Subject Code: 22OPHI23**

**(National)**

**Course Name: Socio-Cultural History of Tamilnadu (1565 A.D - 2006A.D)**

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

1. To enable the students to learn the Level of Tamil society
2. To realize the contributions of Christian Missionaries in Tamilnadu
3. To enable the students to learn the Level of Tamil Society.
4. To understand the concept of legislative system
5. To inspire the students to understand the social welfare schemes of Tamilnadu

**Subject Code: 22OPHI24**

**(National)**

**Course Name: Tourism Product in India**

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

1. To understand the definition and various products of Tourism
2. To learn the Indian Cultural, Tradition, Customs Fairs and Festivals
3. To develop an understanding Natural Tourism Products of India



4. To expose the significance of National Parks, Birds Animals Sanctuaries of India
5. To create awareness on Important Heritage

**Subject Code: 22OPHIDSE2A (National)**

**Course Name: Public Administration Paper – 1**

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

1. To make the students to learn the fundamental principles and various theories of Public Administration
2. To enable the relationship of Public Administration with Social Science Subjects
3. To identify the principles of organisations and its powers
4. To understand the administrative functions along with executive efficiency
5. To acquaint the importance of separation of powers in India

**Subject Code: 22OPHIDSE2B (National)**

**Course Name: Human Rights**

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

1. Visualize the evolution of Human Rights and its generations
2. Familiarized with the important declarations on Human Rights
3. Identified with the powers and functions of Human Rights Organizations
4. Analyse the Human Right Violations in various field
5. Evaluate the role of NGO'S on safeguarding Human Rights

**Subject Code: 22OPHIID2 (National)**

**Course Name: History for Competitive Examination – Paper-II**

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

1. To have the shallowness knowledge on Medieval India.
2. To familiarize with the advent of European and the establishment of British Colonialism
3. To analyze the causes and impacts the revolt of 1857
4. To understand the policies of Viceroys and the Expansion of British in India
5. To analyze the key historical events towards Indian Independence

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OPHI11**

**(National)**

**Course Name: History of Ancient and Early Medieval India - Prehistory to 1206 CE**

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

1. Explain the sources and the features of Pre and Proto history at the national and regional level
2. Understanding of the social, political and economic life in the Vedic age and the Post- Vedic polity and religion.
3. An account of Mauryan and Post- Mauryan period
4. The chief features of the Age of Guptas and its legacy
5. Knowledge of the history of the Peninsular India under various dynasties.

**Subject Code: 23OPHI12**

**(National)**

**Course Name: Socio Cultural History of Tamil Nadu upto 1565 CE**

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

1. Present the early history of Tamil Nadu
2. Detail the history of Pallavas and their contribution
3. Highlight the impact of the Chola rulers's administration
4. Give an account of the history of Pandyas of Madurai
5. Explain the society and culture under Madurai Sultanate and Vijayanagara rulers

**Subject Code: 23OPHI13**

**(Global)**

**Course Name: History of world Civilizations (Excluding India)**

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

1. Explain the concepts of civilization and culture and brief history of pre- historic period
2. Present different features of various ancient civilizations
3. Explain the main West Asian civilizations
4. Compare the features of Chinese and Japanese civilizations
5. Study and compare Greek and Roman Civilizations

**Subject Code: 23OPHIDSE1A**

**(National)**

**Course Name: Indian Art and Architecture**

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

1. Detail the art and architectural forms during the Harappan and Mauryan periods
2. Explain the impact of Buddhism on art forms
3. Discuss the evolution of art and architecture under Pallavas and the Cholas

4. Highlight the features of Islamic architecture particularly under Mughlas
5. To point out the salient features of colonial architecture

**Subject Code: 23OPHIDSE1B**

**(National)**

**Course Name: Freedom Struggle in Tamil Nadu**

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

1. To present the early resistance to colonial rule
2. To detail the factors for the emergence of national consciousness and the role of socio- political organisations
3. To explain the activities of Indian National Congress in Tamil Nadu under various rulers; also the role of national press
4. To detail the activities of moderate and revolutionary leaders and the impact of Gandhi
5. To point out the role of Tamil Nadu in the latter phase of the freedom struggle

**Subject Code: 23OPHIDSE1C**

**(National)**

**Course Name: Administrative History of Tamil Nadu**

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

1. To examine the administration of Justice Party
2. To highlight the achievements of Congress rule
3. To explain the major achievements of governments after 1967
4. To point out working of governments under AIADMK party
5. To highlight the cumulative impact since independence

**Subject Code: 23OPHIDSE1D**

**(National)**

**Course Name: Cultural Heritage of India**

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

1. Explain the meaning and the concepts of the course title and the dynamism inherent in its evolution, using, initially, Harappan and Vedic Ages
2. Highlight the massive impact of religions on culture with examples drawn from Jainism and Buddhism
3. Throw light on the importance of Royalty and it's patronage on cultural transformation
4. Analyse the impact of Islam and the Muslim rulers on the emergence of new forms and motifs in Indian Art and architecture
5. Critically evaluate the colonial compulsions and consequential impact on Indian Art and Architecture

## SEMESTER – II

**Subject Code: 23OPHI21**

**(National)**

**Course Name: History of Medieval India - 1206 -1707CE**

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

1. Examine the establishment of centralized monarchy
2. Evaluate the contributions of Alauddin Khalji and Muhammad bin Tughlaq
3. Analyse the Mughal religious and Deccan policy.
4. Outline the advancements in art and architecture
5. Explain the economic and socio-cultural life in medieval India

**Subject Code: 23OPHI22**

**(National)**

**Course Name: Socio Cultural History of TamilNadu 1565- 2000 C.E**

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

1. Narrate the social condition during the Nayak period
2. Describe the contributions of Marathas to the culture of the Tamil region
3. Analyse the Contribution of Sethupathis of Ramnad to Tamil society.
4. Appreciate the Growth of Western Education
5. Examine the contribution of Dravidian movement to social transformation

**Subject Code: 23OPHI23**

**(Global)**

**Course Name: Historiography and Historical Methods**

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

1. To explain the concepts related to history and its relationship with other disciplines.
2. To discuss various philosophies and interpretations of history
3. To explain the processes and procedures involved in the conduct of historical research
4. To examine the evolution of historical writing in the West
5. To examine the contribution of various historians to the development of Indian historiography

**Subject Code: 23OPHIDSE2A**

**(National)**

**Course Name: History of Journalism**

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

1. To explain the concepts related to history and its relationship with other disciplines
2. To discuss various philosophies and interpretations of history
3. To explain the processes and procedures involved in the conduct of historical research
4. To examine the evolution of historical writing in the West
5. To examine the contribution of various historians to the development of Indian historiography

**Subject Code: 23OPHIDSE2C**

**(National)**

**Course Name: Indian Constitution**

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

1. Explain the historical background of the Indian Constitution.
2. Compare and contrast the fundamental rights, directive principles of state policy and fundamental duties.
- 3 Evaluate the nature of Indian federalism and the rationale for emergency provisions.
4. Describe the powers and functions of the various units of the government.
5. Evaluate the nature of the State constitutional machinery and its functions

**Subject Code: 23OPHIDSE2D**

**(National)**

**Course Name: Environmental History of India**

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

1. Examine the various schools of thought in ecological studies.
2. Trace the impact of eco systems from a historical perspective.
3. Evaluate the impact of British ecological imperialism.
4. Detail India's environmental policy
5. Examine the role and impact of various movements

**Subject Code: 23OPHIDSE21**

**(National)**

**Course Name: Introduction to Epigraphy**

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

- 1 .Define epigraphy and explain its significance.
2. Identify the varieties of materials used
3. Explain the types of inscriptions
4. Trace the origin of writing in South India
5. Explain the use of inscriptions as historical sources

DEPARTMENT OF COMMERCE

P.G

## **DEPARTMENT OF COMMERCE**

**Programme Code: OPD**

**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

**Course Outcomes**  
**Outcome Based Education (OBE)**  
**SEMESTER – I**

**Subject Code: 22OPCOM11**

**(National)**

**Course Name: Research Methodology**

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

1. To develop an understanding of the basic framework of Research Process.
2. To examine the various Research Designs and Sampling Techniques.
3. To classify the various sources of Data Collection.
4. To identify the appropriate testing of Hypothesis and Interpretation.
5. To teach students to write a Research Report.

**Subject Code: 22OPCOM12**

**(National)**

**Course Name: Advanced Financial Accounting**

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

1. To understand the accounting Standards.
2. To know about single entry system of accounting
3. To learn the accounting system of hire purchase and instalment purchase
4. To understand the concept of insolvency and voyage accounting
5. To gain the knowledge of partnership accounting.

**Subject Code: 22OPCOM13**

**(National)**

**Course Name: Applied Cost Accounting**

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

1. To understand the basic concept of cost accounting system.
2. To identify, analysis and classify the cost components to facilitate managerial decision making.
3. To know about the cost accounting standards.
4. To identify knowledge in different methods of cost accounting.
5. To ascertain knowledge and skill in the estimation of cost through Costing Principles and Techniques.

**Subject Code: 22OPCOM14**

**(National)**

**Course Name: Financial Markets and Services**

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



1. To impart knowledge and skill in the estimation of finance through financial marketing principles and services
2. To compare primary and secondary market
3. To Enable the students to study the Share market and Depository system
4. To impart the knowledge of Mutual Funds
5. To study the functions and progress of merchant banking and factoring

**Subject Code: 22OPCOMDSE1A**

**(National)**

**Course Name: Auditing and Assurance**

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

1. Help the students to Develop auditing work.
2. Enable the students to understand the Detection and prevention of errors and frauds in the books of accounts.
3. To study the system of internal check.
4. To study the Assurance Standards.
5. Students understand the types of liabilities of an auditor.

**Subject Code: 22OPCOMDSE1B**

**(National)**

**Course Name: Retail Marketing**

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

1. Help the students to know about Retail Marketing.
2. Enable the students to understand the Business Model.
3. To study the Customer Relationship Management
4. To study the Service Operation
5. Students understand the marketing channel system

**Subject Code: 22OPCOMID1**

**(National)**

**Course Name: Practical Banking**

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

1. To learn the relationship between Banker and Customer.
2. To train the students about the depository system
3. To understand the various kinds of cheque.
4. To learn the concept crossing and endorsement.
5. To gain the knowledge about E-Banking.

## SEMESTER – II

**Subject Code: 22OPCOM21**

**(National)**

**Course Name: Advanced Business Statistics**

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

1. To enable the students to apply Statistical Techniques in decision making.
2. To demonstrate knowledge of probability and the standard statistical distributions
3. To study relationship between different facts
4. To make familiarity with statistical methods to carry out in the business and academic environment
5. To assist the students to conduct a Statistical investigation.

**Subject Code: 22OPCOM22**

**(National)**

**Course Name: Human Resource Management**

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

1. To familiarize the students with the human resource management processes.
2. To understand the importance of Human Resource Management in meeting the challenging requirements of highly skilled and competent human resources due to Globalization.
3. To enable teach various aspect of Human development related issues.
4. To furnish the various job related aspects.
5. To evaluate the quality aspect of Human resource

**Subject Code: 22OPCOM23**

**(National)**

**Course Name: Advanced Corporate Accounting**

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

1. To understand the knowledge on corporate accounting methods
2. To enable the students to understand the procedures of accounting
3. To gain the knowledge about company accounts and accounting standards.
4. To develop skills in the preparation of accounting statements and their analysis.
5. To access the preparation of accounts of banking companies

**Subject Code: 22OPCOM24**

**(National)**

**Course Name: Insurance and Risk Management**

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

1. To orient the basic knowledge of insurance.
2. To enable the students to understand the life insurance and its types.
3. To access the other type of insurance.
4. To understand the concept of risk management.
5. To identify risk management and control.

**Subject Code: 22OPCOMDSE2A (National)**

**Course Name: Marketing Management**

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

1. To enable the students to understand the concept and strategies of Marketing.
2. To sketch the major P'S of marketing of goods.
3. To familiarized on the recent trends in marketing.
4. To understand the importance of sales promotion.
5. To develop the students with the concepts of advertising and salesmanship

**Subject Code: 22OPCOMDSE2B (National)**

**Course Name: Services Marketing**

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

1. Help the students to know about Service Marketing.
2. Enable the students to understand the Bank and Insurance Marketing
3. To study the Customer Relationship Management
4. To study the Tourism Marketing
5. Students understand the Service Marketing channels

**Subject Code: 22OPCOMID2 (National)**

**Course Name: MS Excel**

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

1. Create basic worksheets using Microsoft Excel.
2. Perform calculations in an Excel worksheet.
3. Modify an Excel worksheet.
4. Modify the appearance of data within a worksheet.
5. Manage Excel workbooks.

**Course Outcomes**  
**TANSCHÉ - CBCS with OBE**  
**SEMESTER – I**

**Subject Code: 23OPCOM 11**

**(National)**

**Course Name: Business Finance**

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

1. To outline the fundamental concepts in finance
2. To estimate and evaluate risk in investment proposals
3. To evaluate leasing as a source of finance and determine the sources of startup financing
4. To examine cash and inventory management techniques
5. To appraise capital budgeting techniques for MNCs

**Subject Code: 23OPCOM12**

**(National)**

**Course Name: Digital Marketing**

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

1. To assess the evolution of digital marketing
2. To appraise the dimensions of online marketing mix
3. To infer the techniques of digital marketing
4. To analyse online consumer behaviour
5. To interpret data from social media and to evaluate game based marketing

**Subject Code: 23OPCOM13**

**(National)**

**Course Name: Banking and Insurance**

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

1. To understand the evolution of new era banking
2. To explore the digital banking techniques
3. To analyse the role of insurance sector
4. To evaluate the mechanism of customer service in insurance and the relevant regulations
5. To analyse risk and its impact in banking and insurance industry

**Subject Code: 23OPCOMDS E1A**

**(National)**

**Course Name: Security Analysis and Portfolio Management**

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

1. To become familiar with various Investment avenues and Portfolio Construction
2. To understand the Equity Shares, Preference Shares and Bonds valuation models
3. To learn about long-term and short-term investment analysis tools.
4. To analyse with Portfolio theories.

5. To gain knowledge in Portfolio performance methods

**Subject Code: 23OPCOMDSE 1B**

**(National)**

**Course Name: Operations Research**

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

1. To outline the fundamentals of Operations Research
2. To use OR models for problem solving
3. To examine the role of sequencing and game theory
4. To design and apply network analysis
5. To apply modelling techniques

**Subject Code: 23OPCOMDSE1C**

**(National)**

**Course Name: Labour Law**

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

1. To Understand the provisions of Trade Unions Act
2. To gain knowledge on various measures and provisions relating to employees as per the Factories Act and Equal Remuneration Act
3. To become familiar with compensation payable to workmen under different situations and understand the provisions of the Employees State Insurance Act
4. To learn different provisions relating to payment of wages and minimum wages to employees
5. To understand employee welfare measures with respect to provident fund, gratuity and Bonus

**Subject Code: 23OPCOMDSE1D**

**(National)**

**Course Name: Strategic Human Resource Management**

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

1. To appreciate the importance of HR Masafield of study and asacentral management function
2. To understand the implication of HRM on Government regulations and corporate decisions
3. To analyse the key elements of the HR functions
4. To gain knowledge about the elements, key concepts and terminology of HRM

5. To apply the principles and techniques of HRM to the discussion of major personnel issues in case studies.

## SEMESTER – II

**Subject Code: 23OPCOM21**

**(National)**

**Course Name: Strategic Cost Management**

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

1. To analyse the aspects of strategic and quality control management
2. To analyse and select cost control techniques
3. To apply activity based costing for decision making
4. To utilise transfer pricing methods in cost determination
5. To apply cost management techniques in various sectors

**Subject Code: 23OPCOM22**

**(National)**

**Course Name: Corporate Accounting**

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

1. To understand the accounting treatment for issue of shares
2. To determine profits for fire and marine insurance
3. To prepare consolidated financial statements
4. To account for price level changes
5. To adopt financial reporting standards

**Subject Code: 23OPCOM23**

**(National)**

**Course Name: Setting up of Business Entities**

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

1. To understand the startup landscape and its financing
2. To analyse the formation and registration of Section 8 company
3. To outline the concept of LLP and business collaboration
4. To understand the procedure for obtaining registration and license
5. To create awareness about the legal compliances governing business entities

**Subject Code: 23OPCOMDSE2A**

**(National)**

**Course Name: Business Ethics and Corporate Sustainability**

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

1. To understand the concept and importance of business ethics

2. To enable ethical decision making based on various theories
3. To gain knowledge on moral issues relating to business, marketing, advertising, finance, HR and environmental protection
4. To understand the concepts of corporate sustainability
5. To analyse sustainability information and prepare reports

**Subject Code: 23OPCOMDSE2B (National)**

**Course Name: Audit and Due Diligence**

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

1. To understand different types of audit
2. To gain knowledge on secretarial audit
3. To understand the basics of due diligence
4. To analyse different types of due diligence
5. To understand due diligence for take overs and due diligence report

**Subject Code: 23OPCOMDSE2C (National)**

**Course Name: Rural And Agricultural Marketing**

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

1. To understand the concepts of Rural marketing and its environments
2. To understand the buying behaviour of rural consumers
3. To gain knowledge on strategies relating to rural product, branding, packaging, etc
4. To analyse the functioning of food processing industry including distribution and promotion in the rural market.
5. To understand the principles and functioning of cooperative marketing

**Subject Code: 23OPCOMDSE2D (National)**

**Course Name: Logistics and Supply Chain Management**

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

1. To identify the primary differences between logistics and supply chain management
2. To understand the individual processes of supply chain management and their interrelationships within individual companies and across the supply chain.
3. To evaluate the management components of supply chain management
4. To analyse the tools and techniques applied in implementing supply chain management.
5. To create awareness about the professional opportunities in supply chain management.

**Subject Code: 23OPCOMSEC21**

**(National)**

**Course Name: Practical Banking**

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

1. To learn the relationship between Banker and Customer.
2. To train the students about the depository system
3. To understand the various kinds of cheque.
4. To learn the concept crossing and endorsement.
5. To gain the knowledge about E-Banking.