A.P.C. MAHALAXMI COLLEGE FOR WOMEN, THOOTHUKUDI-2

PROGRAM OUTOME (PO)

PROGRAM OUTCOME UG	**THE UNDER GRADUATE STUDENTS WILL BE ABLE TO** ❖ **Apply the acquired knowledge of fundamental concepts in the field of science and to find solutions to various problems** ❖ **Inculcate innovative skills and team – work among students to meet societal¬ expectations Perform analysis to assess, interpret, and create innovative ideas through practical experiments** ❖ **Facilitate to enter multidisciplinary path to solve day-to-day scientific problems** ❖ **Carry out fieldworks and projects, both independently and in collaboration with others, and to report in a constructive way** ❖ **Improve communication ability and knowledge transfer through ICT aided learning integrated with library resources** ❖ **Transfer the knowledge to the other stakeholders through extensive community development programme** ❖ **Apply modern technology to solve any given problem**
PROGRAM OUTCOME PG	**THE POST GRADUATE STUDENTS WILL BE ABLE TO** ❖ **Apply the knowledge of Science & Arts to make queries and enhance the comprehension potential.** ❖ **Insist the significance of conserving a clean environment for perpetuation and sustainable development.** ❖ **To identify, formulate, perform research literature survey and analyze complex problems.**

	❖ **To collaborate in order to analyze and find solutions of existing problems of India and the world.** ❖ **To establish themselves in hot areas of research and contribute to the developmental needs of India and the world.** ❖ **To develop specific skills in planning and conducting advanced experiments recording and analyzing the data and draw the relevant¬ conclusions from it.**
PROGRAM OUTCOME M.PHIL	**THE M.PHIL STUDENTS WILL BE ABLE TO** ❖ **Create research atmosphere to undertake recent research, it makes them to acquire deep knowledge.** ❖ **Proceed towards research studies and become knowledge transfer agents of the society.** ❖ **Find realistic solutions for existing problems of the Society and position in Ph.D., Post Doctoral studies**

PROGRAM SPECIFIC OUTCOME (PSO)

PROGRAM SPECIFIC OUTCOME
CHEMISTRY
UG

- Learn about Atomic structure; wave mechanical concept, periodic properties.
- Interpret and understand behavior of molecules, nuclear chemistry
- Understand and acquire skills in volumetric analysis
- Explain and learn about nomenclature and derivative of functional groups
- Understand and know about basic concepts of Thermodynamics, chemical equilibrium
- Illustrate fuels, fertilizers, cement and glass
- Identify the common chemicals in medicine
- Principles of electrochemistry and the types of electrochemical cells
- Understand about heterocyclic compounds, Nano chemistry and Polymers

PROGRAM SPECIFIC OUTCOME
CHEMISTRY
PG

- Understand the concept of Aromaticity, Novel ring systems, Reaction Mechanism
- Recall nuclear chemistry and to study the applications of radio isotopes
- Understand the Principles of Thermodynamics of irreversible processes, Quantum mechanics and Statistical Thermodynamics
- Understand the Kinetics of second order reactions

- Understand the concept of by UV, FT-IR, ORD and CD spectral studies, Aromatic Nucleophilic substitution reaction, Intermediate, Natural Products
- Get the Knowledge about Quantum mechanics and Statistical Thermodynamics
- Understand the concept of literature survey, chemical abstract, problem choosing, characterization by using instrumental techniques, data analysis, computer searching for literature.

PROGRAM SPECIFIC OUTCOME
COMPUTER SCIENCE
UG

- Obtain knowledge about the structure of the programming language C and to develop the program writing and logical thinking skill.
- Gain the basic knowledge of object oriented programming concepts
- Understand the concept of digital systems, to operate on various number systems and simplify Boolean functions and to distinguish logical and combinational circuits.
- Know how to embed VB script in HTML and generation of programming language
- Tell the implementing file system and mass storage structure
- Recall the association rule mining and data mining

PROGRAM SPECIFIC OUTCOME
PHYSICS
UG

- Solve advanced problems involving the dynamic motion of classical mechanical systems.
- Understand of the thermodynamics laws and their statistical nature
- Know about surface tension and Viscosity, electricity and electromagnetism
- Know installation of electric equipment
- Understand the concepts of data abstraction & encapsulation
- Design and analyze the circuits of op-amps, diodes, BJTS & FETS using modern computing tools.
- Gain an extended knowledge of the principles and techniques of solid state

PROGRAM SPECIFIC OUTCOME
COMMERCE
UG

- Impart skills for recording various kinds of business transactions
- Enhance knowledge on recent economic trend
- Give real life opportunities to manage business accounts
- Understand the basic marketing concepts
- Create skills to develop marketing strategies based on product, price, place and promotion objectives.

- Understand the accounting treatment to be followed at the time of insolvency of an individual and while taking a lease of property.
- Know about the importance of human resource
- Enhance the knowledge of the fundamental and technical concepts of accounting.
- Acquire skills in reading, writing, comprehension and communication
- Know the procedures to be followed at the time of admission, retirement and death of a partner in a partnership business
- Explain the concept and role of accounting and financial reporting in the modern marketing economy
- Develop and strengthen the entrepreneurial quality among the students
- Acquire the basic knowledge of cost in business concern
- Understand the basic concepts of income tax

PROGRAM SPECIFIC OUTCOME
COMMERCE
PG

- Learn Modern Methods of Office Automation through computers
- Know the Management accounting practices used by Management for effective administration
- Create the knowledge of legal perspective and its practices to improve the business.
- Understand the changing environment around the business
- Use quantitative models in decision making

PROGRAM SPECIFIC OUTCOME
ENGLISH
UG

- Understand literary pieces from prose, poetry, short stories, one act plays, drama and fiction.
- Acquaint various genres in Indian Writing in English
- Enhance vocabulary and usage of English through reading
- Know Australian literary texts and approach them from a postcolonial perspective
- Know the social-cultural background on which a literary text is grounded
- Understand the dangers of Environmental threats due to various kinds of pollutions
- Know the rich literary tradition in Indian Writing in English
- Acquaint the growth and development of English drama from a historical perspective
- Know the historical movements that influenced the transformation of the literary tastes and standards.
- Know about the Age of Hardy through the close reading of the selected texts
- : Know Canadian literature through the close reading of the selected texts
- Learning the complexities of the region through its literature

PROGRAM SPECIFIC OUTCOME
HISTORY
UG

- Know the social condition of Tamilnadu & Land systems

- Know the Art and Education of Tamil Country
- History of India Upto **647 AD**
- Know the importance of accommodation
- Understand the dangers of Environmental threats due to various kinds of pollutions
- Bring about the direct and village participation of the villagers in development
- Indian Administrative System, Indian Constitution II
- Understand the reaction of Chinese towards the Europeans
- Learn the general course of human history in multiple areas of the world
- Understand the Effects of Science and Technology

PROGRAM SPECIFIC OUTCOME
MATHEMATICS
UG

- Find out the relationship between roots about coefficients
- Gain knowledge about first order higher degree equations
- Learn how to apply comparison, root, and Cauchys condensation test
- Understand the fundamental of binomial poisson and normal distributions
- Understand the concept of hyperbolic functions
- Understand the concept of vector differentiation and to evaluate the double & triple Integrals.
- Understand Computer Programming and its roles in program solving
- Understand Socially and Professionally, in formal and informal circumstances
- Understand and apply the fundamental concepts in graph theory

PROGRAM SPECIFIC OUTCOME
MATHEMATICS
PG

- Understand the existence, uniqueness, stability behaviour of the solutions of ODE
- Know the theory behind various numerical methods
- Develop the comprehensive idea about the underlying principles of Mathematical Analysis.
- Understand the key concepts and techniques of differential geometry
- Know the concepts of measure and integral with respect to a measure.
- Solve optimization problems, to use mathematical software to solve the proposal models.
- Understand the problem in geometry using techniques in differential calculations, integral calculations, linear algebra and multi linear algebra

PROGRAM SPECIFIC OUTCOME
ZOOLOGY
UG

- Understand the structure, functional organization, adaptations and the economic importance of lower and higher invertebrates.
- Understand the sequential change from cellular grade of organization to organ grade of organization in the development of Multicultural organisms

- Enable the students to understand the social realities
- Elucidate the structure and functions of the cell organelles
- Understand the structure and anatomy of earthworms
- Know the vermin culture and vermin composing methods for effective waste management
- Understand the Biotechnological equipment, its working mechanism and applications.
- Explore the scope for students in various biotechnological institutes
- Learn the utility and applications of Biotechnological instruments so as to study its role for human welfare.
- Know the basic bio-statistical methods for students to do project

A.P.C MAHALAXMI COLLEGE FOR WOMEN, THOOTHUKUDI-2

COURSE OUTCOMES/LEARNING OUTCOMES

I B.Sc. Chemistry/ Semester I

Inorganic Chemistry – I Sub.Code: SMCH11

At the end of the course the students will be able to

CO1: Distinguish the atomic structure from wave mechanical concept.

CO2: Find the arrangement of elements in the periodic table and the periodic properties.

CO3: Understand the different kinds of chemical forces in molecules.

CO4: Recall the nature of compounds formed by s- and p-block elements.

I B.Sc. Chemistry/ Semester I

Physical Chemistry Sub.Code: SMCH12

At the end of the course the students will be able to

CO1: Interpret the behavior of molecules in gaseous state.

CO2: Define the photochemistry.

CO3: Understand the various phenomenon of solid state.

CO4: Understand the basic concepts of Nuclear Chemistry.

CO5: Classify the properties of dilute solutions.

I B.Sc. Chemistry/ Semester I

Inorganic Quantitative Analysis -I **Sub.Code: SMCHP1**

At the end of the course the students will be able to

CO1: Understand the students to acquire the quantitative skills in volumetric analysis.

CO2: Explain experimental projects and execute them.

I B.Sc. Chemistry/ Semester I

Inorganic Quantitative Analysis **Sub.Code: SMCHP2**

At the end of the course the students will be able to

CO1: Understand the students to acquire the quantitative skills in volumetric analysis.

I B.Sc Chemistry /Semester II

Inorganic Chemistry- II **Sub.Code: SMCH21**

At the end of the course the students will be able to

CO1: Find out the basic principles of metallurgy and the chemistry of d- Block elements.

CO2: Recall the chemistry of f- Block elements.

CO3. Understand the basic concepts of coordination chemistry and early theory.

CO4: Define the basic analytical methods.

CO5: Illustrate the chemistry of noble gases.

I B.Sc. Chemistry/ Semester I

Organic Chemistry **Sub.Code: SMCH22**

At the end of the course the students will be able to

CO1: Illustrate the classification and nomenclature of organic compounds.

CO2: Explain the hydrocarbons, halogen derivatives, alcohols and ethers.

I B.Sc. Chemistry/ Semester I

Skill Based – Agro Chemistry **Sub.Code: JSCH3A**

At the end of the course the students will be able to

CO1: Make use of the fertilizers, pesticides, and components of soil.

CO2: Match the applications of fertilizers and pesticides.

CO3: Tell about testing of soil.

I B.Sc. Chemistry/ Semester I

Allied Chemistry - I Sub.Code: JACH11

At the end of the course the students will be able to

CO1: Understand the atomic structure and bonding.

CO2: Find out the principles of reactions of organic compounds.

CO3: Summarize photochemical reactions.

CO4: Tell about the importance of polymers and polymer science.

CO5: Relate the lubricants and some cosmetics in the modern world.

II B.Sc., Chemistry- Semester III

Organic Chemistry Sub.Code: JMCH31

At the end of the course the students will be able to

CO1: Explain aldehydes and ketones

CO2: Interpret organometallic and organo sulphur compounds.

CO3: Recall active methylene compounds and tautomerism.

II B.Sc., Chemistry- Semester IV

Physical Chemistry Sub.Code: JMCH41

At the end of the course the students will be able to

CO1: Understand the concepts of Thermodynamics.

CO2: Tell about Chemical Equilibrium.

CO3: Know the basic concepts of Electrochemistry and electrochemical cells.

II B.Sc., Chemistry- Semester IV

Inorganic Quantitative Analysis Sub.Code: JMCHP2

At the end of the course the students will be able to

CO1: Understand various procedures in salt analysis.

CO2: Find out the awareness on ecofriendly approach in salt analysis.

II B.Sc., Chemistry- Semester IV

Allied Chemistry - II Sub.Code: JACH21

At the end of the course the students will be able to

CO1: Understand the chemistry of basic aromatic compounds.

CO2: Find out the nuclear particles and few nuclear reactions.

CO3: Know about carbohydrates, amino acids, proteins and nucleic acid.

CO4: Illustrate fuels, fertilizers, cement and glass.

CO5: Know about some common diseases and the drugs used.

Allied Practical - IV Quantitative Analysis Sub.Code: JACHP1

At the end of the course the students will be able to

CO1: Understand the quantitative skills in volumetric analysis.

II B.Sc., Chemistry- Semester IV- Skilled Based –II (A)

Chemistry in Medicine Sub.Code: JSCH4A

At the end of the course the students will be able to

CO1: Get knowledge of first aid and the important rules.

CO2: Identify the common chemicals in medicine.

CO3: Get awareness of common diseases.

CO4: Learn the diagnostic tests and to know the importance of vitamins.

III B.Sc., Chemistry- Semester V- Physical Chemistry Sub.Code: GMCH52

At the end of the course the students will be able to

CO1: Understand the kinetics of reactions.

CO2: Understand the concepts of thermodynamics.

CO3: Define the principles of electrochemistry and the types of electrochemical cells.

CO4: Relate the terms in phase rule and its application to various systems.

III B.Sc., Chemistry- Semester V- Organic Chemistry Sub.Code: GMCH51

At the end of the course the students will be able to

CO1: Explain optical, geometrical and conformational isomerism.

CO2: Relate aromaticity and aromatic sunbstitution.

CO3: Understand about heterocyclic compounds.

III B.Sc., Chemistry- Semester V -Polymer Chemistry Sub.Code: GMCH5A

At the end of the course the students will be able to

CO1: Understand the concept of polymerization and types of polymers.

CO2: Recall the characteristics of polymers.

CO3: Acquire knowledge about the polymerization techniques and polymer processing.

CO4: Know the chemistry of individual polymers.

CO5: Have an idea about the recent advances in polymer sciences.

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III B.Sc., Chemistry- Semester V -Analytical Chemistry Sub.Code: GMCH5C

At the end of the course the students will be able to

CO1: Understand the importance of analytical chemistry and to study about the different types of analytical techniques.

III B.Sc., Chemistry- Semester VI -Inorganic Chemistry – III Sub.Code: GMCH61

At the end of the course the students will be able to

CO1: Recall the theories in coordination chemistry.

CO2: Define the chemistry of metal carbonyls.

CO3: Understand the role of metal ions in biological systems.

CO4: Interpret the basic principles of photoinorganic chemistry.

III B.Sc., Chemistry- Semester VI- Organic Chemistry Sub.Code: GMCH62

At the end of the course the students will be able to

CO1: Identify the structure and functions of aldehexoses and keto hexoses.

CO2: Define the chemistry of carbonyl, hydroxyl and terpenoids.

CO3: Understand the basic aspects of alkaloids and terpenoids.

CO4: Understand basic of organic spectroscopy.

III B.Sc., Chemistry- Semester VI- Physical Chemistry Sub.Code: GMCH63

At the end of the course the students will be able to

CO1: Interpret the principles in Photochemistry.

CO2: Understand the principles of group theory as applied to simple molecules.

CO3: Know the importance of Nanochemistry.

III B.Sc., Chemistry (V&VI Semesters)

Gravimetric Estimation & Inorganic Preparations Sub.Code: GMCHP3

At the end of the course the students will be able to

CO1: Understand the various techniques in gravimetric estimations.

CO2: Illustrate inorganic complex preparations.

III B.Sc., Chemistry (V&VI Semesters)

Organic Analysis & Organic Preparation Sub.Code: GMCHP4

At the end of the course the students will be able to

CO1: Understand the various procedures in organic analysis and organic preparation.

CO2: Create an awareness on microscale experiments in organic chemistry practicals.

III B.Sc., Chemistry (V & VI Semesters)

Physical Chemistry Experiments Sub.Code: GMCHP5

At the end of the course the students will be able to

CO1: Understand the principles of physical chemistry experiments.

M.Sc Chemistry Organic Chemistry – I/Semester - I Sub.Code: PCHM 11

At the end of the course the students will be able to

CO1: Understand the concept of Aromaticity, Novel ring systems, Reaction Mechanism, stereochemistry and important reagents for synthetic uses.

Inorganic Chemistry – I / Semester - I **Sub.Code: PCHM12**

At the end of the course the students will be able to

CO1: Understand different type of bonds and to study different theories of bonding.

CO2: Understand the acid-base concept, reactions in non-aqueous medium and to study applications of redox potential in inorganic systems.

CO3: Define the crystal structures, defects in solid crystals, band theory of solids andsuper conductors.

CO4: Recall nuclear chemistry and to study the applications of radio isotopes.

CO5: Demonstrate the extraction of lanthanides and actinides from ores and to understand their properties.

Physical Chemistry – I / Semester - I **Sub.Code: PCHM13**

At the end of the course the students will be able to

CO1: Define Partial molar properties and Phase rule.

CO2: Understand the Principles of Thermodynamics of irreversible processes, Quantum mechanics and Statistical Thermodynamics

Physical Chemistry Practical-I (Semester - I) **Sub.Code: PCHL13**

At the end of the course the students will be able to

CO1: Explain the Principles of Conductometric Titrations.

CO2: Recall the Principles of Heat of solution.

CO3: Understand the Kinetics of second order reactions

Advanced Topics in Chemistry – I (Semester - I) **Sub.Code: PCHE11**

At the end of the course the students will be able to

CO1: Understand the concept of green and nano chemistry, applied electro- chemistryanalytical technique and industrial chemistry.

Organic Chemistry – II Semester-II **Sub.Code: PCHM21**

At the end of the course the students will be able to

CO1: Understand the concept of by UV, FT-IR, ORD and CD spectral studies,Aromatic Nucleophilic substitution reaction, Intermediate, Natural Products.

Inorganic Chemistry – II (Semester – II) Sub.Code: PCHM22

At the end of the course the students will be able to

CO1: Explain the nature of metal-ligand bond and to study various theories of bonding in coordination compounds.
CO2: Recall the stability, chemical reactions and magnetic properties of coordination compounds.
CO3: Illustrate the applications of electronic and infra-red spectroscopic techniques in coordination compounds.
CO4: Understand inorganic polymers and to study structures and bonding in metal clusters.

Physical Chemistry-II (Semester – II) Sub.Code: PCHM23

At At the end of the course the students will be able to

CO1: Get the Knowledge about Quantum mechanics and Statistical Thermodynamics.

CO2: Learn and understand the Principles of Electrochemistry.

CO3: Explain Photochemistry and Radiation chemistry.

Physical Chemistry Practical-II (Semester - II) Sub.Code: PCHL23

At the end of the course the students will be able to

CO1: Apply the Principles of Conductometric Titrations.

CO2: Understand and verify the Principles of Heat of solution.

CO3: Understand the Partition and distribution of a solute between two immiscible solvents.

Advanced Topics in Chemistry – II (Semester – II) Sub.Code: PCHE21

At the end of the course the students will be able to

CO1: Understand the concept of forensic and computer applications, nano materials, industrial polymer, medicinal chemistry and bio-organic chemistry.

Organic Chemistry – III (Semester-III) **Sub.Code: KCHM31**

At the end of the course the students will be able to

CO1: Understand the Aliphatic Nucleophilic substitutions, concept of NMR, Mass Spectroscopy.

CO2: Understand the photochemistry, pericyclic and Hetero cyclic reactions

Inorganic Chemistry – II / Semester – III **Sub.Code: KCHM32**

At the end of the course the students will be able to

CO1: Understand organometallic compounds and their catalytic applications in homogeneous and heterogeneous systems.

CO2: Know the applications of NMR and EPR techniques in inorganic systems.

CO3: Understands the basic principles and applications of thermo and spectroanalytical techniques.

CO4: Apply inorganic photochemistry and its applications in various systems.

Physical Chemistry- III Semester III **Sub.Code: KCHM33**

At the end of the course the students will be able to

CO1: Learn the concepts of Group Theory.

CO2: Understand the Principles and applications of various spectroscopy.

Scientific - Research Methodology Semester – III **Sub.Code: KCHM34**

At the end of the course the students will be able to

CO1: Understand the concept of literature survey, chemical abstract, problem choosing, characterization by using instrumental techniques, data analysis, computer searching for literature.

Organic Chemistry – IV Semester – IV **Sub.Code: PCHM41**

At the end of the course the students will be able to

CO1: Understand the intermediate reactions, conformational, synthetic analysis, important Reagents in organic synthesis and the Steroid compounds.

Inorganic Chemistry- IV Semester – IV **Sub.Code: PCHM42**

At the end of the course the students will be able to

CO1: Recall the applications of Mossbauer, photoelectron and nuclear quadrupole resonance spectroscopic techniques in inorganic systems.

CO2: Interpret the applications of ORD and CD to determine absolute configuration of chelate complexes.

CO3: Tell about bioinorganic chemistry and the role of metalloporphrins and metalloenzymes in various biological processes.

CO4: Get an insight into material science.

Physical Chemistry- IV Semester – IV Sub.Code: PCHM43

At the end of the course the students will be able to

CO1: To understand the Principles and applications of Vibrational and Raman spectroscopy

CO2:To obtain Knowledge Fast reaction study

CO3:To learn the Theories and applications of Kinetics

CO4:To Know the Principles of Surface Chemistry and Catalysis

Physical Chemistry Practical-IV Semester – IV Sub.Code: PCHL43

At the end of the course the students will be able to

CO1: Obtain and improve the Knowledge of Potentiometric Titrations.

CO2: Understand the Principles and applications of Adsorption.

(B.Sc. Computer Science) / Semester – I

Programming in C++ Sub.Code: SMCS21

At the end of the course the students will be able to

CO1: Obtain knowledge about the structure of the programming language C and to develop the program writing and logical thinking skill.

(B.Sc. Computer Science) / Semester – I

Digital Design Sub.Code: SACS21

At the end of the course the students will be able to

CO1: Apply basic concepts for clear understanding of digital design principles and to solve

practical problems.

(B.Sc. Computer Science) / Semester – II

Object Oriented Programming in C++ Sub.Code: JMCS41

At the end of the course the students will be able to

CO1: Gain the basic knowledge of object oriented programming concepts.

CO2: Understand the detail idea of C++ streams, Inheritance, Overloading of operators, functions, constructors, File Handling and templates concepts of C++ programming.

(B.Sc. Computer Science) / Semester – II / Major Practical - II

Programming in C++

At the end of the course the students will be able to

CO1: Gain knowledge about the object oriented programming concepts and C++ streams, Inheritance, Overloading of operators, functions, constructors, File Handling and templates concepts of C++ programming by implementing sample programs.

(B.Sc. Computer Science) / Semester – II

Multimedia applications & Technology Sub.Code: JMCS4A

At the end of the course the students will be able to

CO1: Understand the concept of digital systems, to operate on various number systems and simplify Boolean functions and to distinguish logical and combinational circuits.

(B.Sc. Computer Science) / Semester – II / Ecommerce Sub.Code: JACS41

At the end of the course the students will be able to

CO1: Understand the concept of e-commerce and e-security.

(B.Sc. Computer Science) / Semester – III/ Web technology Sub.Code: JMCS31

At the end of the course the students will be able to

CO1: Understand the use of internet .

CO2: Know how to embed VBscript in HTML.

(B.Sc. Computer Science) / Semester – III/ Java Sub.Code: JMCS32

At the end of the course the students will be able to

CO1: Know the data type, arrays and variables.

CO2: Understand the package and interfaces.

(B.Sc. Computer Science) / Semester – III/ Computer Architecture

Sub.Code: JACS31

At the end of the course the students will be able to

CO1: Know the computer organization and Design.

CO2: Understand input output organization and advanced processing.

(B.Sc. Computer Science) / Semester – IV/ Basic program Design Sub.Code: JNCS4A

At the end of the course the students will be able to

CO1: Understand the evolution and generation of programming language.

CO2: Create the computer software.

(B.Sc. Computer Science) / Semester – V/ Operating system Sub.Code: GMCS61

At the end of the course the students will be able to

CO1: Define the data structure oriented design and software development project.

CO2: Know the user interface design and coding and testing.

(B.Sc. Computer Science) / Semester – V

Computer Graphics and Multimedia Sub.Code: GMCS52

At the end of the course the students will be able to

CO1: Understand the graphics and multimedia.

(B.Sc. Computer Science) / Semester – VI

Operating System Sub.Code: GMCS61

At the end of the course the students will be able to

CO1: Illustrate Synchronization and memory management.

CO2: Tell the implementing file system and mass storage structure

(B.Sc. Computer Science) / Semester – VI

Data Mining Sub.Code: GMCS63

At the end of the course the students will be able to

CO1: Recall the association rule mining and data mining.

CO2: Understand the cluster analysis.

I B.Sc., Physics/Semester –I

Mechanics and Relativity Sub.Code: SMPH11

At the end of the course the students will be able to

CO1: To know how to use Newton's laws of motion.

CO2: To solve advanced problems involving the dynamic motion of classical mechanical systems.

I B.Sc., Physics/Semester –I

Properties of Matter and Acoustics Sub.Code: SMPH12

At the end of the course the students will be able to

CO1: Deal with forces and energy between atoms and molecules.

CO2: Understand the mechanical properties of matter.

I B.Sc., Physics/Semester –II

Thermal Physics and Statistical Mechanics Sub.Code: SMPH21

At the end of the course the students will be able to

CO1: Understand thermodynamics laws and their statistical mechanics.

CO2: Understand of the thermodynamics laws and their statistical nature.

I B.Sc., Physics/Semester –II/ Optics Sub.Code: SMPH22

At the end of the course the students will be able to

CO1: Know about the object of abstract study of a body knowledge for design.

(B.Sc.Physics) / Semester – I / Allied Physics – I

At the end of the course the students will be able to

CO1: Know about surface tension and Viscosity

CO2: Understand elasticity and bending moment.

Semester – II / Allied - II Allied Physics – II

At the end of the course the students will be able to

CO1: Know about electricity and electromagnetism.

CO2: Get knowledge about electronics and nuclear physics.

(B.Sc. Physics)/Semester-III/ Electricity and Magnetism Sub.Code: JMPH31

At the end of the course the students will be able to

CO1: Understand the concepts in electrical magnetism reinforce, general problem solving skills and apply knowledge of electricity and magnetism.

CO2: Explain natural physical processes.

(B.Sc. Physics)/Semester-III/ Maintanance of Electrical Appliances Sub.Code: JSPH3A

At the end of the course the students will be able to

CO1: Know installation of electric equipment.

CO2: Test the electrical equipment.

CO3: Understand the various types of electrical equipment.

(B.Sc. Physics)/Semester-IV/Programming with C++ Sub.Code: JMPH41

At the end of the course the students will be able to

CO1: Understand the concepts of data abstraction & encapsulation.

CO2: Learn how to overload function and operates in C++

(B.Sc. Physics)/Semester-IV/ Maintenace of Electric Equipment Sub.Code: JSPH4A

At the end of the course the students will be able to

CO1: Know installation of electrical equipment

CO2: Test electrical equipment.

CO3: Understand the various types of electrical equipment.

(B.Sc. Physics)/Semester-V/ Atomic Physics **Sub.Code: GMPH51**

At the end of the course the students will be able to

CO1: Understand the electronic structure of atoms and molecules.

CO2: Know the properties of atomic and molecular spectra.

(B.Sc. Physics)/Semester-V/ Basic Electronics **Sub.Code: GMPH52**

At the end of the course the students will be able to

CO1: Acquire the basic engineering technique.

CO2: Design and analyze the circuits of op-amps, diodes, BJTS & FETS using modern computing tools.

(B.Sc. Physics)/Semester-V/ Quantum Mechanics **Sub.Code: GMPH5B**

At the end of the course the students will be able to

CO1: Connect the historical development of quantum mechanics.

CO2: Learn the basic properties of quantum world.

(B.Sc. Physics)/Semester-V/ Solid state Physics **Sub.Code: GMPH5C**At the end of the course the students will be able to

CO1: Gain an extended knowledge of the principles and techniques of solid state.

CO2: Explain the basic mathematical tools.

(B.Sc. Physics)/Semester-VI/ Nuclear Physics **Sub.Code: GMPH61**

At the end of the course the students will be able to

CO1: Understand the fundamental principles of conceps governing nuclear particle.

(B.Sc. Physics)/Semester-VI/ Spectroscopy **Sub.Code: GMPH62**

At the end of the course the students will be able to

CO1: Provide an increased knowledge of advanced chemical principles.

CO2: Understand how lights interact with matter.

(B.Sc. Physics)/Semester-VI/ Digital electronics **Sub.Code: GMPH63**At the end of the course the students will be able to

CO1: Know how analogs signal are used to represent digital values in different logic families

CO2: Describe the combinational logic function.

(B.Sc. Physics)/Semester-VI/Energy Physics **Sub.Code: GMPH6B**

At the end of the course the students will be able to

CO1: Understand the various forms of conventional energy resources their potential.

CO2:Learn the present Energy Scenario.

I B.Com /I Semester

Financial Accounting **Sub.Code: SMCO11**

CO1: To acquire conceptual knowledge of financial accounting.

CO2: To impart skills for recording various kinds of business transactions.

I B.Com /I Semester

Business Organisation **Sub.Code: SMCO12**

At the end of the course the students will be able to

CO1: Understand business and its role in society.

CO2: Undertake business activities.

I B.Com /I Semester

Business Economics **Sub.Code: SACO11**

At the end of the course the students will be able to

CO1: Identify the role of supply and demand in a market economy.

CO2: Enhance knowledge on recent economic trend.

I B.Com / II Semester

Financial Accounting II Sub.Code: SMCO21

At the end of the course the students will be able to

CO1: Enhance critical and analytical approach to different types of accounting.

CO2: Give real life opportunities to manage business accounts.

I B.Com / II Semester

Principles of Management Sub.Code: SMCO22

CO1: Define the concepts and principles of management.

CO2: Impart knowledge on the functions of management.

I B.Com / II Semester/ Marketing Sub.Code: SACO21

At the end of the course the students will be able to

CO1: Understand the basic marketing concepts.

CO2: Create skills to develop marketing strategies based on product, price, place and promotion objectives.

II B.Com / III Semester

ADVANCE FINANCIAL ACCOUNTING-I Sub.Code: JMCO31

At the end of the course the students will be able to

CO1: Know the system of accounting followed in branches and department of business organization.

CO2: Know the pattern of recording transactions in hire purchase and installment purchase systems.

CO3: Understand the accounting treatment to be followed at the time of insolvency of an individual and while taking a lease of property.

II B.Com / III Semester

BUSINESS STATISTICS Sub.Code: JMCO32

CO1: Gain the basic knowledge of statistical techniques as are applicable to business.

CO2: Apply statistical techniques for quantification of data in business.

II B.Com / III Semester

BANKING Sub.Code: JMCO33

At the end of the course the students will be able to

CO1: Create an idea of modern banking.

CO2: Know the banking activities.

II B.Com / III Semester

HUMAN RESOURCE MANAGEMENT Sub.Code: GACO31

At the end of the course the students will be able to

CO1: Know about the importance of human resource.

CO2: Illustrate the techniques of performance appraisal of employees.

CO3: Know the methods to redress the grievances of employees

II B.Com / III Semester

COMPANY ORGANISATION Sub.Code: JACO321

At the end of the course the students will be able to

CO1: Give a fundamental exposure to students on the basic concepts of a company.

CO2: Learn about the functioning of a company.

II B.Com / III Semester

NME - INTRODUCTION TO ACCOUNTANCY Sub.Code: JNCO3A

At the end of the course the students will be able to

CO1: Prepare and provide accounting information to the interested parties.

CO2: Enhance the knowledge of the fundamental and technical concepts of accounting.

II B.Com / III Semester

BUSINESS COMMUNICATION **Sub.Code: JSCO3A**

At the end of the course the students will be able to

CO1: Acquire skills in reading, writing, comprehension and communication.

CO2: To make them use electronic media for business communication.

II B.Com /IV Semester

ADVANCED FINANCIAL ACCOUNTING –II **Sub.Code: JMCO41**

At the end of the course the students will be able to

CO1: Understand the nature and system of accounting followed in partnership firm.

CO2: Know the procedures to be followed at the time of admission, retirement and death of a partner in a partnership business.

CO3: Know the procedures to be followed of dissolution of partnership

II B.Com /IV Semester

BUSINESS MATHEMATICS **Sub.Code: JMCO42**

At the end of the course the students will be able to

CO1: Acquire basic knowledge of mathematical techniques as are applicable to business.

CO2: Find out practical solutions for the managerial problems.

II B.Com /IV Semester

COMPUTER APPLICATIONS IN BUSINESS **Sub.Code: JACO41**

At the end of the course the students will be able to

CO1: Know the applications of E-Commerce.

CO2: Know online trading.

CO3: Understand E-Payment methods.

II B.Com /IV Semester

NME -FINANCIAL ACCOUNTING **Sub.Code: JNCO4A**

At the end of the course the students will be able to

CO1: Explain the concept and role of accounting and financial reporting in the modern marketing economy.

CO2: Explain the regulatory frame work for the operation of fundamental accounting.

II B.Com/IV Semester

ENTREPERNEURSHIP DEVELOPMENT **Sub.Code: JSCO4C**

At the end of the course the students will be able to

CO1: Develop and strengthen the entrepreneurial quality among the students.

CO2: Know the sources of help and support available for starting a small scale.

III B.Com /V Semester

CORPORATE ACCOUNTING – I **Sub.Code: GMCO51**

At the end of the course the students will be able to

CO1: Tell the issue, allotment and forfeiture of shares of companies.

CO2: Prepare final accounts according to companies Act, 2013.

CO3: Know how to value the goodwill and shares.

III B.Com /V Semester

COST ACCOUNTING **Sub.Code: GMCO52**

At the end of the course the students will be able to

CO1: Acquire the basic knowledge of cost in business concern.

CO2: Understand the techniques of cost control.

III B.Com /V Semester

BUSINESS LAW **Sub.Code: GMCO53**

At the end of the course the students will be able to

CO1: Understand the definition of business law.

CO2: Recall the scope and boundaries of business law.

III B.Com /V Semester

INCOME TAX LAW AND PRACTICAL - I **Sub.Code: GMCO5A**

At the end of the course the students will be able to

CO1: Understand the basic concepts of income tax.

CO2: Know the provisions regarding computation of first three heads of income.

III B.Com /V Semester

APPLICATION OF TALLY IN ACCOUNTING **Sub.Code: GMCO5C**

At the end of the course the students will be able to

CO1: Utilize practical knowledge regarding the concepts of financial accounting.

CO2: Get placement for students in different offices as well as companies.

III B.Com /VI Semester

CORPORATIVE ACCOUNTING – II **Sub.Code: GMCO61**

At the end of the course the students will be able to

CO1: Know the preparation of liquidator's final statement of accounts.

CO2: Prepare the final accounts of banking company in a schedule form.

CO3: Prepare final accounts under double account system.

III B.Com /VI Semester

MANAGEMENT ACCOUNTING **Sub.Code: GMCO62**

At the end of the course the students will be able to

CO1: Understand the basic management accounting concepts and their applications in managerial decision-making.

III B.Com /VI Semester

INDUSTRIAL LAW **Sub.Code: GMCO63**

At the end of the course the students will be able to

CO1: Acquaint knowledge on industrial relations framework in our country.

CO2: Know various rights and benefits available to the workmen under the legislation.

III B.Com /VI Semester

AUDITING **Sub.Code: GMCO64**

At the end of the course the students will be able to

CO1: Know the importance of audit in commercial and non commercial organization.

CO2: Understand the procedure to be followed while auditing the business organization.

III B.Com /VI Semester

INCOME TAX LAW AND PRACTICE – II **Sub.Code: GMCO6A**

At the end of the course the students will be able to

CO1: Know the procedure for assessment and types of assessment.

CO2: Understand the computation of tax liability of individuals.

I M.Com /I Semester

Modern Marketing Management **Sub.Code: PKCM15**

At the end of the course the students will be able to

CO1: Impart the Modern Marketing Management practices.

I M.Com /I Semester

Office Automation **Sub.Code: PKCM14**

At the end of the course the students will be able to

CO1: Learn Modern Methods of Office Automation through computers.

I M.Com /I Semester

Management Concepts and Organizational Behaviour

At the end of the course the students will be able to

CO1: Understand the conceptual frame work of management and organizational behaviour.

I M.Com /I Semester

Advanced Business Statistics **Sub.Code: PKCM12**

CO1: To acquaint students with some important satisfied techniques for managerial decision making.

I M.Com /I Semester

Management Accounting **Sub.Code: PKCM11**

At the end of the course the students will be able to

CO1: Know the Management accounting practices used by Management for effective administration.

I MCom /II Semester

Financial Management **Sub.Code: PKCM21**

At the end of the course the students will be able to CO1: To make the students acquainted with modern principles of financial management.

I MCom /II Semester

QUANTITATIVE TECHNIQUES FOR DECISION MAKING **Sub.Code: PKCM22**

At the end of the course the students will be able to

CO1: Use quantitative models in decision making.

I MCom /II Semester

Local Framework Of Business **Sub.Code: PKCM23**

At the end of the course the students will be able to

CO1: Create the knowledge of legal perspective and its practices to improve the business.

I MCom /II Semester

Business Environment **Sub.Code: PKCM24**

At the end of the course the students will be able to

CO1: Understand the changing environment around the business.

I BA English /I Semester

Part II ENGLISH **Sub.Code: S2EN11**

At the end of the course the students will be able to

CO1: Exposure to standard literary pieces from prose, poetry, short stories, one act plays,drama and fiction.

CO2: Write correct and good English.

CO3: Correct build up the vocabulary.

I BA English /I Semester

INDIAN WRITING IN ENGLISH – I **Sub.Code: SMEN11**

At the end of the course the students will be able to

CO1: Learn the rich literary tradition in Indian Writing in English.

CO2: Acquaint various genres in Indian Writing in English.

I BA English /I Semester

BRITISH FICTION **Sub.Code: SMEN12**

At the end of the course the students will be able to

CO1: Recall evolution of the genre of fiction in Britain.

CO2: Enhance vocabulary and usage of English through reading.

I BA English /I Semester

AUSTRALIAN LITERATURE **Sub.Code: SMEN13**

At the end of the course the students will be able to

CO1: Know Australian literary texts and approach them from a postcolonial perspective.

CO2: Make him approach selected texts for their literary value and cultural importance.

I BA English /I Semester

SOCIAL HISTORY OF ENGLAND **Sub.Code: SAEN11**

At the end of the course the students will be able to

CO1: Understand the historical movements and the cultural politics of England.

CO2: Know the social-cultural background on which a literary text is grounded.

I BA English /I Semester

ENVIRONMENTAL STUDIES Sub.Code: SEVS11

At the end of the course the students will be able to

CO1: Know the various aspects of Eco-system and importance of conservation.

CO2: Understand the dangers of Environmental threats due to various kinds of pollutions.

I BA English /II Semester

Part II ENGLISH Sub.Code: S2EN21

At the end of the course the students will be able to

CO1: Give an exposure to standard literary pieces from prose, poetry, short stories, one act plays, drama and fiction.

CO2: Write correct and good English.

CO3: Correct build up the vocabulary.

I BA English /II Semester

INDIAN WRITING IN ENGLISH – II Sub.Code: SMEN21

At the end of the course the students will be able to

CO1: Know the rich literary tradition in Indian Writing in English.

CO2: Learn the various genres in Indian Writing in English.

I BA English /II Semester

AMERICAN LITERATURE Sub.Code: SMEN22

At the end of the course the students will be able to

CO1: Know different literary era, movements and authors relating to American history and literature.

CO2: Enhance communicative and creative skills through literature.

I BA English /II Semester

ENGLISH GRAMMAR AND USAGE Sub.Code: SMEN23

At the end of the course the students will be able to

CO1: Enhance the communicative competence by improving the grammatical skills.

CO2: Strengthen the writing skills by augmenting the grammatical skills.

CO3: Use English correctly and confidently.

I BA English /II Semester

LITERARY FORMS Sub.Code: SAEN21

At the end of the course the students will be able to

CO1: Know various genres and forms of literature.

CO2: Learn different literary forms.

I BA English /II Semester

VALUE BASED EDUCATION/SOCIAL HARMONY Sub.Code: SVBE21

At the end of the course the students will be able to

CO1: Understand the social realities and to inculcate an essential value system towards building a healthy society.

CO2: Understand the social realities.

CO3: Inculcate an essential value system towards building a health society.

II BA English /III Semester

Part II ENGLISH Sub.Code: J2EN31

At the end of the course the students will be able to

CO1: Give an exposure to standard literary pieces from prose, poetry, short stories, one act plays, drama and fiction.

CO2: Write correct and good English.

CO3: Build up the vocabulary.

II BA English /III Semester

BRITISH POETRYSub.Code: JMEN31

At the end of the course the students will be able to

CO1: Provide a historical perspective of British poetry.

CO2: Interpret the selected texts from the genre of poetry.

II BA English /III Semester

History of English Literature – I **Sub.Code: JAEN31**

At the end of the course the students will be able to

CO1: Give clear systemic understanding of the national changes and developments that influenced the transformation of the literary tastes and standards.

II BA English /III Semester

PHONETICS AND SPOKEN ENGLISH Sub.Code: JSEN3A

At the end of the course the students will be able to

CO1: Impart proficiency in pronunciation and oral communication.

CO2: Use appropriate language skills for various communicative functions in different socio-cultural contexts.

II BA English /III Semester

ENGLISH FOR EMPLOYABILITY Sub.Code: JNEN3A

At the end of the course the students will be able to

CO1: Enhance the language skill.

CO2: Enhance the employability skills.

II BA English /IV Semester

Part II ENGLISH Sub.Code: J2EN41

At the end of the course the students will be able to

CO1: Give an exposure to standard literary pieces from prose, poetry, short stories, one act plays drama and fiction.

CO2: Write correct and good English.

CO3: Build up the vocabulary.

II BA English /IV Semester

BRITISH DRAMA Sub.Code: JMEN41

At the end of the course the students will be able to

CO1: Acquaint the growth and development of English drama from a historical perspective.

CO2: Accustom various dramatic devices and techniques used in the genre.

II BA English /IV Semester

HISTORY OF ENGLISH LITERATURE – II Sub.Code: JAEN41

At the end of the course the students will be able to

CO1: Give a clear and systemic understanding of the national changes and developments that influenced British Literature.

CO2: Know the historical movements that influenced the transformation of the literary tastes and standards.

II BA English /IV Semester

ECO ENGLISH Sub.Code: JSEN4A

At the end of the course the students will be able to

CO1: Improve their communicative competence in English both speaking and writing.

CO2: Read fast with better understanding.

CO3: Express clearly and concisely using right words in right places.

II BA English /IV Semester

BUSINESS COMMUNICATION Sub.Code: JNEN4A

At the end of the course the students will be able to

CO1: Impart the basic concepts and practices of business communication and their application in the business world today.

CO2: Write report and proposal.

III BA English/V Semester

PRE-RAPHAELITE Sub.Code: GMEN51

At the end of the course the students will be able to

CO1: Know the Pre-Raphaelite writings.

CO2: Develop a sense of Pre-Raphaelite appreciation.

III BA English/V Semester

AGE OF HARDY Sub.Code: GMEN52

At the end of the course the students will be able to

CO1: Know about the Age of Hardy through the close reading of the selected texts.

CO2: Make the approach selected texts for their literary value of the ages.

III BA English/V Semester

CANADIAN LITERATURE Sub.Code: GMEN5A

At the end of the course the students will be able to

CO1: Know Canadian literature through the close reading of the selected texts.

CO2: Make the approach selected texts for their literary value and cross cultural importance.

III BA English/V Semester

WOMEN's WRITING Sub.Code: GMEN53

At the end of the course the students will be able to

CO1: Know about the problems women face in the patriarchal cultural milieu.

CO2: Analyse issues and questions relating to women's experience and empowerment.

III BA English /VI Semester

SHAKESPEARE Sub.Code: GMEN61

At the end of the course the students will be able to

CO1: Acquaint the dramatic and theatrical conventions of Shakespeare.

CO2: Analyse plot, characters and stage craft of his plays.

III BA English /VI Semester

SOUTH-ASIAN LITERATURE IN ENGLISH

At the end of the course the students will be able to

CO1: Learning the complexities of the region through its literature.

CO2: An understanding of South Asia's social, historical, local and global contexts.

CO3: Learning to read texts critically in order to analyse the distinctive literary strategies and devices deployed in these texts.

III BA English /VI Semester

CONTEMPORARY LITERATURE **Sub.Code: GMEN62**

At the end of the course the students will be able to

CO1: Know the contemporary literature and the authors.

CO2: Acquaint with contemporary texts.

III BA English /VI Semester

LITERARY CRITICISM AND THEORY **Sub.Code: GMEN63**

At the end of the course the students will be able to

CO1: Understand the various genres and forms of literary criticism.

CO2: Know different literary theories.

III BA English /VI Semester

REGIONAL LITERATURE IN ENGLISH **Sub.Code: GMEN64**

At the end of the course the students will be able to

CO1: Know the rich cultural and literary heritage of the native literature.

CO2: Acquaint a flair to enjoy and appreciate native literature.

III BA English /VI Semester

AFRICAN LITERATURE **Sub.Code: GMEN6A**

At the end of the course the students will be able to

CO1: Understand the cross-cultural and historical approaches to the works by major writers of Africa.

CO2: Understand the role of African literature in developing a national identity in the former colonies of Africa.

I BA HISTORY/I Semester

HISTORY OF TAMILNADU UPTO 1336 AD **Sub.Code: SMHI12**

At the end of the course the students will be able to

CO1: Know the social condition of Tamilnadu.

CO2: Understand the Land systems.

CO3: Know the Art and Education of Tamil Country

I BA HISTORY/I Semester

HISTORY OF INDIA UPTO 647 AD **Sub.Code: SMHI11**

At the end of the course the students will be able to

CO1: Know the history of India.

CO2: Understand the society of India.

CO3: Understand the study of Antiquities.

I BA HISTORY/I Semester

PRINCIPLES OF TOURISM **Sub.Code: SMHI13**

At the end of the course the students will be able to

CO1: Understand the concept of tourism.

CO2: Know the importance of accommodation.

CO3: Find out the various travel agencies.

I BA HISTORY/I Semester

ENVIRONMENTAL STUDIES **Sub.Code: SEVS11**

At the end of the course the students will be able to

CO1: Know the various aspects of Eco-system and importance of conservation.

CO2: Understand the dangers of Environmental threats due to various kinds of pollutions.

I **BA HISTORY /II Semester**

HISTORY OF INDIA (647AD – 1526 AD) **Sub.Code: SMHI21**

CO1: Reveal Socio-Economic and cultural changes occurred in the Decanic kingdom.

CO2: Know the salient features of the Western and Eastern influences.

CO3: Highlight the influence of important Battles on Indian history.

I **BA HISTORY /II Semester**

MODERN CONSTITUTIONS **Sub.Code: SAHI21**

At the end of the course the students will be able to

CO1: Develop understanding of evolution of modern legal system in India.

CO2: Examine the evolution of Indian administration.

CO3: Inculcate the spirit of the constitution among the students.

I BA HISTORY /II Semester

VALUE BASED EDUCATION **Sub.Code: SVBE21**

At the end of the course the students will be able to

CO1: Understand the social realities.

CO2: Inculcate an essential value system towards building a health society.

II BA HISTORY /III SEMESTER

PANCHAYAT RAJ INDIA WITH A REFERENCE TO TAMILNADU

Sub.Code: JSHI3B

At the end of the course the students will be able to

CO1: Bring about the direct and village participation of the villagers in development.

CO2: evaluate the rural development activities of gram Panchayat.

CO3: Give suggestions for the better implementation of policies and development.

II BA HISTORY /III SEMESTER

MODERN POLITICAL THOUGHT **Sub.Code: JAHI31**

At the end of the course the students will be able to

CO1: Create awareness about the distinctive features of political theory and Modern political thought of India.

CO2: Know about the contributions of the modern Indian Thinkers and the relative autonomy of Indian political thought.

II BA HISTORY /IV SEMESTER

EPIGRAPHY **Sub.Code: JSHI4B**

At the end of the course the students will be able to

CO1: Know about the ancient world and inscribed texts.

CO2: Identify and select sources, using traditional and modern techniques.

CO3: Insight into the theories, key concepts, apparatus, research methods and techniques of epigraphy.

II BA HISTORY /IV SEMESTER

INDIAN ADMINISTRATIVE SYSTEM **Sub.Code: JAHI41**

At the end of the course the students will be able to

CO1: Know the importance of Indian economic plan.

CO2: Understand the functions of Indian Government.

II BA HISTORY /IV SEMESTER

INDIAN CONSTITUTION II **Sub.Code: JNHI4B**

At the end of the course the students will be able to

CO1: Know historical background of constitution.

CO2: Tell the unique features of the constitution.

CO3: Understand the political scenario behind the origin of the constitution.

III BA HISTORY/V SEMESTER

HISTORY OF FAR EAST **Sub.Code: GMHI5C**

At the end of the course the students will be able to

CO1: Know the opening of Chinese civilization to the European.

CO2: Understand the reaction of Chinese towards the Europeans.

CO3: Assess the causes, nature, consequences of Opium war in China.

III BA HISTORY/V SEMESTER

HISTORY OF EUROPE **Sub.Code: GMHI52**

At the end of the course the students will be able to

CO1: Learn the general course of human history in multiple areas of the world.

CO2: Explain how and why important events happen and change over time occurs.

CO3: Create knowledge and communicate it to others both orally and in writing.

III BA HISTORY/V SEMESTER

HISTORY OF TAMILNADU **Sub.Code: GMHI51**

At the end of the course the students will be able to

CO1: Know the scope of the study of ancient history of Tamilnadu.

CO2: Understand the origin of the religion.

CO3: Understand the political ideas.

III BA HISTORY/V SEMESTER

FREEDOM MOVEMENT IN INDIA **Sub.Code: GMHI5B**

At the end of the course the students will be able to

CO1: Understand the need of freedom movement.

CO2: Know the courses of freedom movement.

CO3: Know and feel the people's conditions of the British rule in India.

III BA HISTORY/V SEMESTER

PERSONALITY DEVELOPMENT **Sub.Code: GCSB5A**

At the end of the course the students will be able to

CO1: Know the basic concept of personality.

CO2: Understand the nature of personality and factors contributing the formationof personality.

CO3: Understand the basic theories of personality.

III BA HISTORY/VI SEMESTER

HISTORY OF SCIENCE AND TECHNOLOGY **Sub.Code: GMHI63**

At the end of the course the students will be able to

CO1: Know about the origin of the Science and Technology.

CO2: Know the development of Indian Science.

CO3: Understand the Effects of Science and Technology.

III BA HISTORY/VI SEMESTER

INTERNATIONAL RELATIONS **Sub.Code: GMHI6B**

At the end of the course the students will be able to

CO1: Understand the Foreign policy of India.

CO2: Trace the relationship of India with the neighbouring states.

CO3: Identify the role of India in SAARC.

(B.Sc. Mathematics) / Semester – I / Core – 2

CLASSICAL ALGEBRA **Sub.Code: SMMA12**

At the end of the course the students will be able to

CO1. Gain the knowledge about theory of equations.

CO2. Find out the relationship between roots about coefficients.

(B.Sc. Mathematics) / Semester – I

CALCULUS **Sub.Code: SMMA11**

At the end of the course the students will be able to

CO1. Gain foundation about curvature.

CO2. Know about the pedal equation.

(B.Sc. Mathematics) / Semester – II

Analytical geometry of 3D Sub.Code: SMMA21

At the end of the course the students will be able to

CO1. Define the foundation of analytical geometry of 3D coordinate system.

CO2. Know about the plane in different forms.

(B.Sc. Mathematics) / Semester – II

Differential Equations Sub.Code: SMMA22

At the end of the course the students will be able to

CO1. Gain knowledge about first order higher degree equations.

CO2. Gain idea about partial different equations.

(B.Sc. Mathematics) / Semester – III/Real analysis I Sub.Code: JMMA31

At the end of the course the students will be able to

CO1. Learn how to apply comparison, root, and Cauchys condensation test.

CO2. Calculate the limit superior , limit inferior and limit of a sequence.

(B.Sc. Mathematics) / Semester – III/Statistics I Sub.Code: JAST11

At the end of the course the students will be able to

CO1. Expose the concepts of moments, skewness, kwtosis, Correlation

CO2. Understand the fundamental of binomial poisson and normal distributions.

CO3. Apply these distribution in day to day problems.

(B.Sc. Mathematics) / Semester – III/ Vector Calculus (SBE) Sub.Code: JSM3A

At the end of the course the students will be able to

CO1. Calculate the divergence of a vector field.

CO2. Evaluate line, surface and volume integrals and apply them to solve problems.

(B.Sc. Mathematics) / Semester – III/Algebra & Differential equations (Allied –I)

At the end of the course the students will be able to

CO1. Understand the concept of classification of datas.

CO2. Apply basic statistics in our day to day life.

(B.Sc. Mathematics) / Semester – IV/ Abstract Algebra Sub.Code: JMMA41

At the end of the course the students will be able to

CO1. Understand the concept of groups and rings.

CO2. Know the art of proof writing.

(B.Sc. Mathematics) / Semester – IV/ Statistics II Sub.Code: JAST21

At the end of the course the students will be able to

CO1. Perform and analyze a variety of statistical inference procedures.

CO2. Discuss when particular procedures can be applied and how to choose the most appropriate test.

(B.Sc. Mathematics) / Semester – IV

Trignometry, Laplace transform and Fourier series (SBE) Sub.Code: JSMA4A

At the end of the course the students will be able to

CO1. Expand the trigonometric functions.

CO2: Understand the concept of hyperbolic functions.

CO3. Know about the concept of fourier series.

Fundamental of Statistics II (NME) Sub.Code: JNMA4B

At the end of the course the students will be able to

CO1. Understand the concept of theory of attributes.

CO2. Learn characteristics of index numbers and find index numbers using various methods.

(B.Sc. Mathematics) / Semester – IV/Vector Calculus & Fourier Series (Allied)

At the end of the course the students will be able to

CO1. Understand the concept of vector differentiation and to evaluate the double & triple integeals.

CO2. Learn about the line, surface and volume integeals.

(B.Sc. Mathematics) / Semester – V/Linear Algebra Sub.Code: GMMA51

At the end of the course the students will be able to

CO1. Understand the fundamental concepts of linear algebra culminating in abstract vector paces and linear transformations.

(B.Sc. Mathematics) / Semester – V/Real Analysis Sub.Code: GMMA52

At the end of the course the students will be able to

CO1. Gain a knowledge in basic set theory, the real numbers and their basic properties.

(B.Sc. Mathematics) / Semester – V/Combination Mathematics Sub.Code: GMMA5B

At the end of the course the students will be able to

CO1. Know how to use these structures to represent mathematical and applied questions.

CO2. Analyze combinational structures.

(B.Sc. Mathematics) / Semester – V/Programming in C Sub.Code: GMMA5D

At the end of the course the students will be able to

CO1. Understand Computer Programming and its roles in program solving.

CO2. Understand and develop well structured programs using C language.

(B.Sc. Mathematics) / Semester – V/Personality Development Sub.Code: GCSB5A

At the end of the course the students will be able to

CO1. Build Self-confidence, enhance Self-esteem.

CO2. Understand Socially and Professionally, in formal and informal circumstances.

(B.Sc. Mathematics) / Semester – VI/Complex Analysis Sub.Code: GMMA61

At the end of the course the students will be able to

CO1. Understand the fundamental ideas of the functions of complex variables and developing.

(B.Sc. Mathematics) / Semester – VI/Linear Programming Sub.Code: GMMA62

At the end of the course the students will be able to

CO1. Obtain an overview of the kinds of problems linear programming.

CO2. Solve two variable linear programming models.

(B.Sc. Mathematics) / Semester – VI/Mechanics Sub.Code: GMMA63

At the end of the course the students will be able to

CO1. Develop the capacity to predict the effects of force and motion.

CO2. Develop this ability to visualize.

(B.Sc. Mathematics) / Semester – VI/Graph Theory Sub.Code: GMMA64

At the end of the course the students will be able to

CO1. Understand and apply the fundamental concepts in graph theory.

(B.Sc. Mathematics) / Semester – VI/Number Theory Sub.Code: GMMA6A

At the end of the course the students will be able to

CO1. Identify and apply various properties of and relating to the integers.

CO2. Understand the concept of a congruence and use various results related to congruences.

(M.Sc. Mathematics) / Semester – I/Algebra Sub.Code: PMAM11

At the end of the course the students will be able to

CO1. Give foundation in Algebraic structures like Groups, Rings.

CO2. Define problem solving in Algebra.

(M.Sc. Mathematics) / Semester – I

Ordinary Differential Equations Sub.Code: PMAM14

At the end of the course the students will be able to

CO1. Give an in-depth knowledge of Differential Equations and their applications.

CO2. Understand the existence, uniqueness, stability behaviour of the solutions of ODE.

(M.Sc. Mathematics) / Semester – I

Analytic Number Theory **Sub.Code: PMAM13**

At the end of the course the students will be able to

CO1. Know the charm, niceties and nuances in the world of numbers.

CO2. Highlight some of the applications of the Theory of Numbers.

(M.Sc. Mathematics) / Semester – I/Numerical Analysis Sub.Code: PMAM15

At the end of the course the students will be able to

CO1. Know the theory behind various numerical methods.

CO2. Apply the methods to solve the mathematical problems.

(M.Sc. Mathematics) / Semester – II/Algebra II Sub.Code:PMAM21

At the end of the course the students will be able to

CO1. To introduce the concepts and working knowledge of various structures like rings and fields.

CO2. To develop computational skills in algebra.

(M.Sc. Mathematics) / Semester – II/Analysis II Sub.Code: PMAM22

At the end of the course the students will be able to

CO1. Develop the comprehensive idea about the underlying principles of Mathematical Analysis.

CO2. Analyse abstract thinking

.

(M.Sc. Mathematics) / Semester – II/Graph Theory Sub.Code: PMAM25

At the end of the course the students will be able to

CO1. Know the fundamental concepts in graph theory such as flows and connectivity.

CO2. Develop the concepts of graphs, Hamiltonian graphs, Tress, plannar graphs, matrix representation, matching and vertex colouring.

(M.Sc. Mathematics) / Semester – II/Classical Mechanics Sub.Code: PMAMQ3

At the end of the course the students will be able to

CO1. Know the various aspects of Classical Mechanics.

CO2. Develop skills in formulating and solving physics problems.

(M.Sc. Mathematics) / Semester – II/Differential Geometry Sub.Code: PMAM24

At the end of the course the students will be able to

CO1. Understand the key concepts and techniques of differential geometry.

CO2. Improve the ability to read and communicate about mathematical concepts and proofs.

(M.Sc. Mathematics) / Semester – II/Programming in C++ Sub.Code: PMAE21

At the end of the course the students will be able to

CO1. Inculcate the techniques of Programming concepts.

CO2. Have an in-depth knowledge of Algorithms and Programs in C++.

(M.Sc. Mathematics) / Semester – III/Measure and Integration Sub.Code: KMAM31

At the end of the course the students will be able to

CO1. Know the concepts of measure and integral with respect to a measure.

CO2. Provide a basis for further studies in Analysis, Probability and Dynamical System.

(M.Sc. Mathematics) / Semester – III/Topology Sub.Code: KMAM32

At the end of the course the students will be able to

CO1. Know the Introduction to Topology is to be familiar with basic concepts of topology.

CO2. Gain mathematical maturity, to become competent in writing proofs.

(M.Sc. Mathematics) / Semester – III/Research Methodology Sub.Code: KMAM33

At the end of the course the students will be able to

CO1. Emphasize how aims are to be accomplished.

CO2. Address the more immediate project outcomes.

(M.Sc. Mathematics) / Semester – III/Operations Research Sub.Code: KMAE32

At the end of the course the students will be able to

CO1. Identify and develop operational research models.

CO2. Solve optimization problems, to use mathematical software to solve the proposal models.

(M.Sc. Mathematics) / Semester – IV/Complex Analysis Sub.Code: KMAM42

At the end of the course the students will be able to

CO1. Investigate function of Complex numbers.

CO2. Use algebraic geometry, number theory, analytic combinations and in physics including the branches of hydrodynamics, thermodynamics & particularly quantum mechanics.

(M.Sc. Mathematics) / Semester – IV/Functional Analysis Sub.Code: KMAM41

At the end of the course the students will be able to

CO1.Core of this subject is vector spaces endowed with some kind of limit related structure such as innerproduct norm topology etc.,

CO2. Use differential and integral equations.

(M.Sc. Mathematics) / Semester – IV/Differential Geometry Sub.Code: KMAM43

At the end of the course the students will be able to

CO1. Understand the problem in geometry using techniques in differential calculations, integral calculations, linear algebra and multi linear algebra.

,sq;fiy – jkpo; - ghlj;jpl;lk; Kjyhkhz;L Kjw;gUtk;

,yf;fzk; - ed;Dhy; - vOj;jjpfhuk; (nghJg;ghapuk;> rpwg;Gg;ghapuk; ePq;fyhf)

Nehf;fk;: jkpo; ,yf;fpa khztHfs; vOj;jpyf;fz mwpTngWjy; vOj;J gpwf;Fk; Kiwfis, ,lq;fis czHjy;> vOj;Jfis tifg;gLj;Jjy; gFgjk;> gfhgjk; mwpjy;> epiynkhop – tUnkhopg; GzHr;rp> cUGg;GzHr;rp Kjyhd vOj;Jfspd; ,yf;fz mwpT ngWjy;.

Kjyhkhz;L Kjw;gUtk; Jizikg; ghlk; GATA11

Nehf;fk; : ehl;Lg;Gwtpaiyg; gw;wp mwpar; nra;jy;.

Kjyhkhz;L ,uz;lhk; gUtk; Jizikg; ghlk; ehl;Lg;Gwtpay;

Nehf;fk;: ehl;Lg;Gw kf;fspd; fiyfis mwpjy;. ehl;Lg;Gw kf;fspd; tho;tpaypy; ek;gpf;iffisAk;> nghOJNghf;F epfo;TfisAk;.

(B.A. Tamil) Semester-III/

Kjd;ikg; ghlk; ,yf;fzk; - ahg;G> mzp

Nehf;fk; : gilg;ghsh;fs; ,yf;fpaq;fspy; Gide;Js;s RitfisAk;> ,d;gq;fisAk; khzth;fs; mwpe;J nfhs;Sjy;.

Skilled based -I (A)/ (Optional)

jpwd; tsh; ghlk; fy;ntl;bay;

Nehf;fk;: jkpo; ,yf;fpak; gapYk; khzth;fs; ,uz;lhapuk; Mz;Lfl;Fk; Kw;gl;l ePz;l neba ghuk;ghpaKila jkpoh;fspd; ghuk;ghpaj;ij gz;ila ,yf;fpaq;fs; %yk; mwpe;J tUfpd;wdh;. rq;f ,yf;fpa E}y;fs; gw;wpa Fwpg;GfSk;> rq;f ,yf;fpaq;fspy; fhzg;gLk; ghly; thpfSk; fy;ntl;Lfspy; gy ,lq;fspy; vLj;jhsg;gl;Ls;sd. vdNt khzth;fs; fy;ntl;Lfs; %ykhfTk; jkpof tuyhw;iw mwpe;J nfhs;s Ntz;Lk; vd;w Nehf;fj;Jld; ,g;ghlk; mikf;fg;gl;Ls;sJ.

Semester-III/Ppr.no.18 (A)/ Non-Major Elective-I (A)

Jiwrhuh ghlk; (gpw Jiw khzth;fSf;F) ehl;Lg;Gwtpay; mwpKfk;

Nehf;fk;: ehl;Lg;Gwtpaiyg; gw;wp mwpe;Jnfhs;Sjy;. ehl;lhH ,yf;fpaq;fisj; njhFf;fTk;> mtw;iwg; ghJfhf;fTk; Mh;tj;ij Vw;gLj;Jjy;. gz;ila> jw;fhy kf;fspd; tho;f;ifKiwiaAk;> gz;ghl;ilAk; mwpe;J nfhs;s Cf;fg;gLj;Jjy;. gad;: kf;fsplk; Gije;J fplf;Fk; ehl;Lg;Gwtpay; $Wfis mwpe;J nfhz;L> ,yf;fpaq;fisj; njhFj;Jg; ghJfhf;f tpopg;Gzh;it Vw;gLj;Jjy;.

Semester-III/Ppr.no.18 (B)/ Non-Major Elective-I (B)

Jiwrhuh ghlk; (gpw Jiw khzth;fSf;F) Clfj;jkpo; ghl Nehf;fk;: Clfg; gad;ghl;bd; rpwg;gpid mwpAk; tif

(B.A. Tamil) Semester-IV/Ppr.no.21/Core-6

Kjd;ikg; ghlk; nghUs; ,yf;fzk; - mfk;> Gwk; Nehf;fk; : 1. jkpoh; ,yf;fpaf; Nfhl;ghl;ilf; fw;wy;

2. ,yf;fpaf; Nfhl;ghL top gz;ilj; jkpoh; tho;f;if newpfis mwpjy;

Semester-IV/ Ppr.no.24 (B) / Non-Major elective-II (B)/(Optional)

Jiwrhuh ghlk; mwptpay; jkpo;

Nehf;fk; : 1. jha;nkhop topf; fy;tpapd; rpwg;G fUjp mwptpay; jkpio mwpKfk; nra;jy; 2. mwptpay; njhopy; El;g mwpitj; jkpo; topapy; Nghjpj;jy; 3. jkpo;nkhop tuyhw;wpy; mwptpay; jkpopd; gq;if ntspg;gLj;Jjy;.

Ie;jhk; gUtk; - Kjd;ik tpUg;gg; ghlk;

gaz ,yf;fpak;

Nehf;fk; kf;fs; Nkw;nfhs;Sk; gazq;fspd; topahf mt;tplq;fspd; rpwg;igAk; kf;fspd; gy;Jiwr; rhh;e;j nra;jpfiAk; Ghpe;Jnfhs;s toptif nra;jy;.

V Semester Kjd;ik tpUg;gg; ghlk;

Major Elective; - jd; tuyhw;wpay; lhf;lh; c.Nt.rhtpd; rhpj;jpuk; Nehf;fk; gyfhykhfg; Gije;J fple;j jkpo; E}y;fisj; Jyf;fp jkpOyfk; fz;L fw;W ,d;Gwr; nra;jg; GyikAk; Muha;r;rpAk; gjpg;ghw;wYk; Neh;ikAk; cila ngUk;Gytuhd lhf;lh; - c.Nt.rhkpehijahh; mth;fspd; tho;ehs; tuyhw;wpd; rpy epidTfs; jkpo; ,yf;fpa khzth;fs; gbj;J ,d;GWjy;. mwpT El;gKk; Ez;khd; EioGyKk; fbd ciog;Gk; ,ize;jhy; jhd; nghpa fhhpaq;fisr; rhjpf;f KbAk; vd;gij ,yf;fpa khzth;fs; czUtjw;Fk; ,yf;fpa Mh;tj;ijj; Jz;Ltjw;Fk; c.Nt.rhtpd; Ra rhpj;jpuk; toptFf;Fk;.

VI Semester – Mwhhk; gUtk; Kjd;ikg; ghlk; **Major** – jhs; **XI**

,yf;fpa tuyhW GMTA63

Nehf;fk; jkpopd; ,yf;fpa tsj;ijg; Ghpe;J nfhs;s cjTjy;.

VI Semester – Mwhhk; gUtk; Kjd;ikg; ghlk;

Major – jhs; **XII** ,yf;fpaj;jpwdha;T GMTA64

Nehf;fk; : ,yf;fpaj; jpwdha;T gw;wpa mbg;gil mwpitg; Gfl;Ljy;

M.A. TAMIL/SEMESTER- I/CORE-1 HTLM11

,f;fhy ,yf;fpak; ftpijAk; ehlfKk;

Nehf;fk;

1) ftpijapd; tbtq;fisAk;> ftpijf;fhd fsq;fisAk; mwpKfk; nra;jy;

2) ftpij vOJk; Mw;wYf;fhd mbj;jsj;ij cUthf;Fjy;.

3) ehlf ,yf;fpaj;jpd; gd;Kfj;jd;ikia mwpar; nra;jy;

M.A. TAMIL/SEMESTER- I

,yf;fzk; - njhy;fhg;gpak; - vOj;J HTLM12

Nehf;fk; 1. jkpo;nkhop mikg;GUthf;fj;ij mwpjy;

2. vOj;Jf;fspd; tiffis mwpjy;

3. nkhop GzUk; ,ay;Gfis mwpe;J nkhopiag; gpioapd;wp vOJjy;

M.A. TAMIL/SEMESTER- I

,f;fhy ,yf;fpak; GidfijAk; ciueilAk;

Nehf;fk;

1. Gidfijfspd; tsHr;rpepiy> gilg;Gj;jpwd; ,tw;iw mwpjy;.

2. ciueilj;jpwid ntspf; nfhzHjy;.

M.A. TAMIL/SEMESTER- I

mw ,yf;fpak; HTLM14

Nehf;fk;

1. mw ,yf;fpaq;fis mwpe;J nfhs;Sjy;.

2. tho;tpaYf;F mbg;gil mw ,yf;fpaq;fs; vd;w vz;zj;ij typAWj;Jjy;.

3. xOf;f newpfis typAWj;Jjy;.

4. rKjha tpOkpaq;fisg; NgZtjw;F topfhl;Ljy;.

M.A. TAMIL/SEMESTER- I

ehl;lhH tof;fhw;wpay; mbg;gilfs;

Nehf;fk; 1. ehl;lhH tof;fhw;wpay; Gyj;ij mwpKfk; nra;jy;. 2. ekJ kz;zpd; kuGfisg; Ghpe;J nfhs;Sjy; 3. ,g;Gyj;ij xU r%f mwptpay; Gykhf mwpjy;.

M.A. TAMIL - SEMESTER I/rpwg;Gj;jhs; - 2

Clfj;jkpo;

Nehf;fk;:

1. Clfq;fspd; tuyhw;iw mwpar;nra;jy;

2. Clfq;fspd; gzpfisg; Gyg;gLj;Jjy

nkhop tuyhW

M.A. TAMIL - SEMESTER II

Nehf;fk;:

1. nkhopapd; Njhw;wk;> tsHr;rp gw;wpf; fw;gpj;jy;.

2. jkpo;nkhopapd; tuyhw;iw mwpar; nra;jy;.

3. nkhopfspy; epfo;fpd;w khw;wq;fisf; fw;gpj;jy;.

M.A. TAMIL - SEMESTER II

,yf;fzk; - njhy;fhg;gpak; - nrhy; HTLM22
Nehf;fk;

1. jkpo; ,yf;fzj;jpy; ,lk;ngWk; nrhw;fspd; tifikfisAk;> tUif KiwfisAk; mwpjy;. 2. jkpo;r;nrhw;fl;likg;gpd; Moj;ijAk; tsh;;r;rpepiyfisAk; mwpjy;.

3. ,yf;fz E}y;fspy; fhzg;gLk; NtWghLfismwpe;Jnfhs;sy;.

M.A. TAMIL - SEMESTER II

gf;jp ,yf;fpak; HTLM23

Nehf;fk; :

1. Md;kpfj;jpd; rpwg;igAk;> cz;ikiaAk; czur; nra;jy;.

2. rka ey;ypzf;fj;ij Vw;gLj;Jjy;.

M.A. TAMIL - SEMESTER II

rpw;wpyf;fpak;

Nehf;fk;:

1. rpw;wpyf;fpaj;jpd; ,yf;fpa eaj;ij mwpKfg;gL;j;Jjy;

2. rpw;wpyf;fpaq;fs; thapyhfg; gy;NtW fhyq;fspd; murpay; #o;epiy – kf;fspd;csg;gz;G>tho;f;if epiy Mfpatw;iw mwpjy;.

M.A. TAMIL - Semester II / rpwg;Gj;jhs; - 4

ehl;lhh; gz;ghl;L kuGfs;

Nehf;fk; : 1. ehl;lhh; kuGfis mwpKfk; nra;jy;

2. ehl;lhh; kuGfs; r%fg; gz;ghl;L tho;NthL nfhz;Ls;s njhlh;Gfis czh;j;Jjy;.

3. kuGfspd; njhd;ikiaAk; mtw;wpd; epfo;fhyg; ghpkhzq;fisAk; mwpar;nra;jy;.

M.A. TAMIL - Semester II /,izaj; jkpo;

Nehf;fk;:

1.jkpo; ,izaq;fs; Fwpj;j Ghpjiy cUthf;Fjy;

2.,izaj;jsq;fs; jkpo; fy;tpf;F cjTk; tifia czh;j;Jjy;

M.A.(Tamil) / Semester-III / Ppr.no.11 / Core-9 fhg;gpa ,yf;fpak; KTLM31

Nehf;fk;: jkpo;f; fhg;gpa ,yf;fzq;fis mwpjy;> jkpo;f; fhg;gpa tiffis czh;j;Jjy;> fhg;gpa ,yf;fpak; r%fr; #oiy cs;thq;fp tsh;r;rpaile;Js;s jpwid mwpjy;

M.A.(Tamil) / Semester-III KTLM32

,yf;fzk;; -

-njhy;fhg;gpak; - nghUs; -

I (mfk; - Gwk; - fsT - fw;G - nghUspay;) Nehf;fk;: nghUs; ,yf;fz kugpidj; njspthf czh;jy;. fsT> fw;G> Fwpj;jhd Nfhl;ghLfisf; fz;lwpjy;. Nghh; newpapd; rpwg;Gfisf; fz;lwpjy;.

M.A.(Tamil) / Semester-III

Muha;r;rp newpKiwfs;. KTLM33

Nehf;fk;:

1. Ma;T czh;it cz;lhf;Fjy;

2. Muha;r;rpf;F mbg;gilahd newpKiwfisf; fw;gpj;jy;

3. Kiwg;gbahd Ma;Ntl;il cUthf;f topg;gLj;Jjy;

M.A.(Tamil) Semester-III / Ppr.no.14 / Core - 12 ciu kuG

Nehf;fk;: 1.ciuahrphpah;fs;> ,yf;fpak; kw;Wk; ,yf;fzj;jpd; capNuhl;lj;jpw;F mspj;j khngUk; gq;fpid mwpar; nra;jy;.

2.ciu kuG> ciuj; jpwd; Mfpatw;wpd; rpwg;Gfisg; Gyg;gLj;Jjy;.

3. ciuapd; gaid czh;j;Jjy;.

M.A.(Tamil) Semester-III /

khdpltpay; mbg;gilfs; Nehf;fk;:

1. khdpltpay; Gyj;ij mwpKfk; nra;jy;

2. khdpltpaypd; mbg;gilfis mwpjy;

3. ,yf;fpa Ma;Tf;F khdpltpaypd; Njitia czh;jy;

M.A.(Tamil) Semester-III /

gz;il ,yf;fpak; Nehf;fk;:

1. rq;f fhy kf;fspd; tho;tpaiy mwpe;J nfhs;sy;

2. rq;f ,yf;fpaj;jpd; nra;As; El;gq;fis mwpjy;

3. jpizf; Nfhl;ghLfis mwpjy;.

M.A.(Tamil) Semester-IV KTLM42

,yf;fzk; - **IV -** njhy;fhg;gpak; - nghUs; - **II** (nka;g;ghl;bay; - ctktpay; - nra;Aspay; - kugpay;) Nehf;fk;:

1. nghUsjpfhuj;ijj; njspthfg; Ghpjy;

2. nghUsjpfhuj;jpy; mlq;fpAs;s ghtpay; mbg;gilfis mwpjy;.

M.A.(Tamil) Semester-IV KTLM43

,yf;fpaj; jpwdha;tpay; Nehf;fk;:

1. ,yf;fpaf; Nfhl;ghLfisAk; nfhs;iffisAk; mwpjy;

2. ,yf;fpaj; jpwdha;tpd; tiffisj; njspTwg; Ghpjy;

3. ,yf;fpaj; jpwdha;tpd; gad;fis mwpe;J nfhs;Sjy

M.A.(Tamil) Semester-IV

,yf;fpa khdpltpay;

Nehf;fk;: ,yf;fpa khdpltpay; Gyj;ij mwpKfk; nra;jy;> ,yf;fpa thrpg;gpw;F khdpltpaypd; Njitia czh;j;Jjy;;> khdpltpay; mbg;gilapy; ,yf;fpaq;fis mh;j;jg;gLj;j fw;gpj;jy;

I B.Sc Zoology /I Semester

ANIMAL DIVERSITY I – INVERTEBRATA Sub.Code: SMZO11

At the end of the course the students will be able to

CO1: Elucidate the importance of taxonomy to know the methods of nomenclature.

CO2: Realize the differences between Protozoa and Metazoa.

CO3: Understand the structure, functional organization, adaptations and the economic importance of lower and higher invertebrates.

I B.Sc Zoology /I Semester/ ANIMAL DIVERSITY II – CHORDATA
Sub.Code: SMZO12

At the end of the course the students will be able to

CO1: Exemplify the intermediate position of prochordates between invertebrates and vertebrates.

CO2: Define the structure, functional organization, adaptations and the economic importance of lower and higher chordates.

I B.Sc Zoology /II Semester

DEVELOPMENTAL ZOOLOGY **Sub.Code: SMZO21**

At the end of the course the students will be able to

CO1: Understand the sequential change from cellular grade of organization to organ grade of organization in the development of Multicultural organisms.

I B.Sc Zoology /II Semester

ECDOGY AND TOXICOLOGY **Sub.Code: SMZO22**

At the end of the course the students will be able to

CO1: Interpret the interaction and interdependence among environmental factors and living organisms.

CO2: Enumerate the ill-effects and the health hazards of toxic agents released to the environment.

CO3: Discern the evolutionary significance of animals, theories origin of species and significance.

I B.Sc Zoology /II Semester

VALUE BASED EDUCATION **Sub.Code: SVBE21**

At the end of the course the students will be able to

CO1: Enable the students to understand the social realities.

CO2: Illustrate an essential value system towards building a healthy society.

II B.Sc Zoology / III Semester

CELL AND MOLECULAR BIOLOGY **Sub.Code: JMZO31**

At the end of the course the students will be able to

CO1: Elucidate the structure and functions of the cell organelles.

II B.Sc Zoology / III Semester

NUTRITION AND DIETETICS **Sub.Code: JSZO3B**

At the end of the course the students will be able to

CO1: Understand the importance stuff on one side and to study malnutrition, nutrition related diseases and special diets for persons suffering from diseases on the other.

II B.Sc Zoology /IV Semester

GENETICS **Sub.Code: JMZO41**

At the end of the course the students will be able to

CO1: To exemplify the concept of genetics, the principles of inheritance and the role of genes determining characters.

II B.Sc Zoology /IV Semester

VERMITECHNOLOGY **Sub.Code: JSZO4B**

At the end of the course the students will be able to

CO1: Understand the structure and anatomy of earthworms.

CO2: Know the vermiculture and vermicomposing methods for effective waste management.

III B.Sc Zoology /V Semester

ANIMAL PHYSIOLOGY **Sub.Code: GMZO51**

At the end of the course the students will be able to

CO1: Carve an integral approach to chemistry related to the functional significance of the various organs and organ systems of animals.

III B.Sc Zoology /V Semester

ANIMAL BIOTECHNOLOGY **Sub.Code: GMZO52**

At the end of the course the students will be able to

CO1: Understand the principles of Biotechnology.

CO2: Understand the Biotechnological equipment, its working mechanism and applications.

CO3: Explore the scope for students in various biotechnological institutes.

III B.Sc Zoology /V Semester

SERICULTURE **Sub.Code: GMZO5A**

At the end of the course the students will be able to

CO1: Explore the scope for students adopting sericulture as a vocation after their graduation as it is rural based and welfare oriented agro based industry.

III B.Sc Zoology /V Semester

APICULTURE **Sub.Code: GMZO5D**

At the end of the course the students will be able to

CO1: Examine the scope for self employment opportunities after their graduation account of the rural based and welfare oriented nature of this vocation.

III B.Sc Zoology /V Semester

PERSONALITY DEVELOPMENT **Sub.Code: GCSB5A**

At the end of the course the students will be able to

CO1: Utilize communication skills, negotiation skills.

CO2: Develop behavioural tactisms, emotional intelligence and table manners.

III B.Sc Zoology /VI Semester

APPLIED BIOTECHNOLOGY **Sub.Code: GMZO61**

At the end of the course the students will be able to

CO1: Learn the utility and applications of Biotechnological instruments so as to study its role for human welfare.

III B.Sc Zoology /VI Semester

IMMUNOLOGY AND MICROBIOLOGY **Sub.Code: GMZO62**

At the end of the course the students will be able to

CO1: Learn the structure and functions of Lymphoid organs.

CO2: Know the contagious diseases and its prevention methods.

CO3: Learn vaccination schedule for various pathological microbes.

III B.Sc Zoology /VI Semester

BIOSTATISTICS, COMPUTER APPLICATIONS AND BIOINFORMATICS

Sub.Code: GMZO63

At the end of the course the students will be able to

CO1: Know the basic bio-statistical methods for students to do project.

CO2: Know the applications of computer for students.

CO3: Illustrate the applications of Bioinformatics and its practices in India.

III B.Sc Zoology /VI Semester

AQUACULTURE **Sub.Code: GMZO6A**

At the end of the course the students will be able to

CO1: Illustrate Aqua cultural potential and practices in India and augment food production from acquatic resources through Aquaculture.