Department of Tamil

M.A. Tamil

Courses Outcome

Courses	Outcome
Poetry	• Knowing the literary creators and works of the time and creating new works.
Grammer	• Understanding the basics of language.
Prose Literature	• Knowing the ancient cultural customs of the classical language.
Short Stories	• Assuming solutions to social problems and issues.
Literary History	• Understanding the Origin and Development of Decimal Types.
Poetry	• Announcement of devotional norms through religious literature.
Grammer	• Practice writing letters expressing the language structure.
Prose Literature	• Expressing moral thoughts through the texts of justice.
Life History	• Teaching and directing the biographies of the saints.
Literary History	• Introducing literature created by religions.
Poetry	• To know the life history of the ancient Tamils through epics.
Grammer	• Promoting the grammatical ability of the consecration team by teaching them the grammer.
Prose Literature	• Sowing literary study ability in the mind of the student.

Novel	• Instruction to live in an honest way.
Literary History	• Making history of epics and short stories.
Poetry	• To know the culture of the ancient Tamils.
Grammer	• Teaching subject grammer for biology.
Prose Literature	• Teaching biological virtues through literature.
Drama	• Motivation to create plays centered on historical backgrounds.
Literary History	• To know the history and individual features of Sangam literature.

DEPARTMENT OF MALAYALAM	
U.G.	
Course Outcome	
courses	Outcomes
Malayala Kavitha	We were able to understand different branches of poetry which deals with numerous social subjects.Poetry helps to build a very deep knowledge about todays social conditions.
Ghadya Sahithyam	The autobiographical study of different famous personalities ,the students were able to generate several good qualities.with the study of Basheers Balyakalasakhi Students were able to understand a lot more abiut cultural practices of our society.
Dhrisya kala sahithyam	Not only watching ,but by studying about movies students were introduced to a new world were they actually allowed to understand about what they are watching on big screen.with the study of different branches of drama students are getting deeper knowledge about it.
Vaartha madhyamangal(journalisam)	By the study of jouranalism students were taken to a new path of their career.

DEPARTMENT OF HINDI	
U.G.	
Course Outcome	
Programme specific outcome 1st semester Prose	• Short Story : Think for a few moments about a moment in your life. • Grammer: Know the basic of language. • Journalism : Though if may be interesting of even entertaining, the foremost value of news is as a utility to empower the formed. •
2nd semester Drama, Novel, Grammer	• Drama : To express the feelings. • Grammer: Know the basic of language. • Novel: A novel is help of thinking the life and get a life inspiration. • Develop the Communication skill. •
3rd semester Poetry, Play ,Transilation	• Poetry may be written as individual poems or included in other written forms as in dramatic poetry, hymns, or song lyrics. • One act Play : Express the Humanity. • Transilation : To know the new language and creative thinking. •
4th Semester Modern poetry, Indian Culture, Prosody and Poetics	• Know about the modern culture. • Deep knowledge of poetry.

COURSES OUTCOME	
courses	Outcomes
I B. A English	
I SEMESTER	
Tamil	• Knowing the literary creators and works of the time and creating new works. • Understanding the basics of language. • Knowing the ancient cultural customs of the classical language.
Malayalam MalayalaKavitha	• We were able to understand different branches of poetry which deals with numerous social subjects.Poetry helps to build a very deep knowledge about todays social conditions.
Part II English	• To enhance the communicative skills of students. • To enrich the knowledge of students in grammar usage. • To simulate real life situations in the classroom to practice real English dialogues and speeches to gain English language fluency.
Indian Writing in English I	• To know about the history of Indian Writing. • This Indian Writing in English helps the students to Learn about the culture, Tradition and Customs of Indians
British Fiction	• Students were aware of the various British authors and their writing style. • The works teach the students the importance of life.
Social History of England	• Students can learn belief out line of British History. • This subject helps the students to meet the exigency of examinations.
Professional English	• To develop communicative skills of the learners in listening, speaking, writing and reading. • To develop the abilities of students and make them independent, competent and confident.
Environmental studies	• Helps to gather knowledge about environment. • Learns to protect the environment.
II SEMESTER	
Tamil	• Announcement of devotional norms through religious literature. • Practice writing letters expressing the language structure.
Malayalam GhadyaSahithyam	• The autobiographical study of different famous personalities ,the students were able to generate several good qualities.with the study of BasheersBalyakalasakhi Students were able to understand a lot more abiut cultural practices of our society.
Part II English	• Helps to improve practical usage of English Grammar. • To help students overcome their fear and to speak in English in front of their peers and teachers.

Indian Writing in English II	• To know about famous authors • To Focus the basis idea in the Literature. • To Learn the culture, Tradition, Customer of India.
American literature	• Know about American History and authors. • To understand the culture of Americans. • To learn about American poetry, fiction and drama.
Literary forms	• To educate students in both the artistry and utility of the English language through the study of literature Know different genres of literature. • Know the history of each genre in literature.
Professional English	• Develop a confidential communication skill. • Learned different styles of writings, like prose, poetry and fiction. • Students will be able to enhance his or her familiarity and fluency with the language considerably.
Social Value Education	• To understand the social aspects of human life. • To learn co-operation, patriotism, and tolerance can help to mitigate the differences between the regions, states and countries.
II B. A English	
III SEMESTER	
Tamil	• To know the life history of the ancient Tamils through epics. • Promoting the grammatical ability of the consecration team by teaching them the grammer.
Malayalam Dhrisya kala sahithyam	• Not only watching ,but by studying about movies students were introduced to a new world were they actually allowed to understand about what they are watching on big screen.with the study of different branches of drama students are getting deeper knowledge about it.
Part II English	• to develop interest in and appreciation of Literature • To develop confidential communication skill. • To learn different styles of writings, like prose, poetry and fiction. • To understand practical usage of English Grammar.
History of English Literature II	• Students were aware of the rules and regulations of that followed particular period of Chaucer and other writers. • Critical thinking and attitudes relating to historical matters are enhanced.
British Poetry	• To develop the knowledge about British poetry. • To learn rhythm of the poems. • To understand the changes in various eras poetry.
Caribbean Literature	• To learn the writing of Caribbean. • To know sufferings and pain faced by the Caribbean. • To understand the authors in Caribbean Literature. • To know about the works like poetry, prose, novel and drama.
Phonetics and Spoken	• The students have learned how to differentiate British and

English	American pronunciation. • They decide to choose British tone, stress and intonation in their spoken context.
Consumer Awareness	• This paper gave a clear idea about consumers and consumerism. • It gives knowledge about consumer laws, which are useful for the well being of individuals.
IV SEMESTER	
Tamil	• To know the culture of the ancient Tamils • To know the history and individual features of Sangam literature.
Malayalam Vaarthamadhyamangal(journalisam)	• By the study of jouranalism students were taken to a new path of their career.
Part II English	• To develop Vocabulary and Pronunciation. • Students will be able to enhance his or her familiarity and fluency with the language considerably.
History of English Literature I	• Students were aware of the period of Dr. Johnson and other critical writers. • Students were aware of the rules and regulations of the particular culture and their achievement.
British Drama	• This paper helps the students of express themselves imaginatively and creatively. • Students understand main idea and details in different kinds of dramatic scripts. • Acquire good speaking and listening habits to understand enjoy and appreciate dramatic texts.
Chicano Literature	• Chicano Literature is written by Mexican American writers • Through this paper, the students learnt the sufferings of Mexican Americans
Eco English	• This paper helps to learn English through environmental issues • It also helps to improve the communicative skill of the students.
Human Rights	• The students learn the improve the various rights • The rules and regulations declared by the government for the welfare of the individuals
Computer for Digital Era	• Learn the basis of computer • MS word, PowerPoint, Excel spread sheet, email • Theoretical and practical study helped students to explore the new heights in computer learning
III B A English	•
V Semester	•
Non- Fiction	• The students got familiarized prose writings of the representative writers of English Literature.

	• The subject helped the students to learn different styles in writing different types of essays.
Literary critics and approaches	• Develops the critical sensibilities of the students. • It helps the students to apply concepts from literary theory and criticism in the analysis and interpretation of text • This paper helps the students to write critical responses in literary works
Canadian literature	• It helps the students to know the culture , tradition and manners of Canada. • The paper highlights the lifestyle of the people in Canada and their landscape.
Creative Writing	• Learned different styles of writings. • Helps the students of express themselves imaginatively and creatively.
World Literature in Translation	• Students get knowledge about new areas of literature. • Able to understand the cultural and moral precepts of various nations. • Various genres demonstrate an overall view of nations.
VI semester	○
Shakespeare	• It made students to understand the fine technical details of Elizabethan Drama. • This course dealt with various plays of Shakespeare, which gave the overall idea of Elizabethan Era.
South- Asian Literature in English	• It made the students to know about the countries comprising the South Asian subcontinent. • It dealt with the background of distinctions cultures and history of South Asia.
Short stories and one act Plays	• The subject has made the students to comprehend the thematic descriptions, characters and genre.
Regional Literature in English	• To understand various Indian Literature in English. • To know about the regional writers in English. • To know about Tamil writers and Tamil Literature. • To create a passion towards the students.
African literature	• To understood the role of African literature in establishing the identity of Africans • Helps the students to know about new writers, their works and about their discrimination which Africans faced in the hands of colonizers.

COURSES OUTCOME	
courses	Outcomes
I M A ENGLISH	
I semester	
Indian writing in English	• It helps the students to learn about the culture , tradition and history of India

	• It helps to find out the important authors and famous leaders in India
Romantic Period	• It helps the students to learn about the nature and the life of common people • It helps to learn about classical ideas and mythical imagination • It also helps to develop the important influence on hysteriography, education and natural beauty
Modern literature I	• helps the students to know about the great tragedies and comedies of English literature • The students come in touch with the classical works of English literature
Modern Literature II	• helps the students to know about British culture and tradition • It helps them to understand the great minds of English people • It creates interest towards the students to read more students
African literature	• Introduction to various writers from Africa , South, East and West • Becoming aware of social realities from those parts of the world • Learning the styles adopted by the African writers to expose and express their societies.
Literature and gender	• To Introduce feministic theory • Universalizing the suffering of women • To Introduce wide variety of genres
II Semester	○
Victorian Age and Age of Hardy	• The subject helped the students to know about Victorian age and the age of Hardy • It arouse interest towards the students to read more novels and dramas
American Literature	• Students got a proper knowledge about the background and history and politics of America • Learnt about the cultural diversity and the factors that kept America united • Emergence of tribal and subaltern studies as a part of American literature
Literary theory and criticism I	• The purpose was to create awareness regarding the major literary theories from 1950s to 1970s • To learn to apply these theories in the analysis of literary texts
Indian writing in English Translation	• The subject helped the students to know about the different works and authors of different regional languages. • The subject helped the students to know about the art of translating works
Communicative English	• To develop the communication skills • To develop the speaking and listening skills • To develop the knowledge of the communicative methods
North-east Indian English Literature	• It helps to develop knowledge of culture and language • It helps to learn about North-East Indian writers

II M. A ENGLISH	
III Semester	
Shakespeare	• This subject made students to understand the fine technical details of Elizabethan Drama. • It dealt with various plays of Shakespeare, which gave the overall idea of Elizabethan Era.
Literary Criticism and Theory	• Students get an understanding of the new theories post 1950 that have shaped correct thinking about literature. • Learn about approaches that can be applied to the analysis of literary texts.
World Literature in English Translation	• Students get knowledge about new areas of literature. • Able to understand the cultural and moral precepts of various nations. • Various genres demonstrate an overall view of nations.
Research Methodology	• Students learned to use the mechanics of Research writing. • Students understood that research is not a paper, but it is a lifeskill that is used throughout their life. • Learned the rules, regulations and formats that were mentioned in MLA Handbook for Research 8th Edition.
History of English Language and Linguistics	• Students know their ability in need of learning about language, literature, culture and society. • Students understand the difference of language, vocabulary, grammar in old, middle, and modern English
Common Wealth Literature	• Students learned about the common wealth countries and their sufferings during II World War. • Students understand the different perspectives of author and their countries. • It helps the students to overcome their own suppression by writing skills.
IV SEMESTER	•
Diasporic Women's Writing	• Students could understand the role and responsibility of women in the society. • Diaspora, not just as a part of literature but as a part of life. • Transformation of women from past to present.
Literature and Ecology	• Direct the students into a new focus of literature. • Students understand the relationship of literature with issues of nature. • Students will be aware of environmental issues and able to find out solution.
English Language Teaching	• It supports the students to understand the areas of grammar and pronunciation. And it engages them to practice through self- evaluation.
Post Colonial Literature	• This paper made students to understand all the colonized countries and their suppression even after World war. • This paper helps the students to know the problems and sufferings all around the world.
Dissertation	• To gain an understanding of the existing research and debates relevant to a particular topic or area of study.

	Department of Mathematics
	B.Sc. Mathematics

COURSES OUTCOME

Courses	Outcomes
Poetry	• Knowing the literary creators and works of the time and creating new works.
Grammer	• Understanding the basics of language.
Prose Literature	• Knowing the ancient cultural customs of the classical language.
Short Stories	• Assuming solutions to social problems and issues.
Literary History	• Understanding the Origin and Development of Decimal Types.
Poetry	• Announcement of devotional norms through religious literature.
Grammer	• Practice writing letters expressing the language structure.
Prose Literature	• Expressing moral thoughts through the texts of justice.
Life History	• Teaching and directing the biographiesof the saints.
Literary History	• Introducing literature created by religions.
Poetry	• To know the life history of the ancient Tamils through epics.
Grammer	• Promoting the grammatical ability of the consecration team by teaching them the grammer.
Prose Literature	• Sowing literary study ability in the mind of the student.
Novel	• Instruction to live in an honest way.

Literary History	• **Making history of epics and short stories.**
Poetry	• **To know the culture of the ancient Tamils.**
Grammer	• **Teaching subject grammer for biology.**
Prose Literature	• **Teaching biological virtues through literature.**
Drama	• **Motivation to create plays centered on historical backgrounds.**
Literary History	• **To know the history and individual features of Sangam literature.**

Communicative English I	• To enhance the communicative skills of students. • To enrich the knowledge of students in grammar usage. • To simulate real life situations in the classroom to practice real English dialogues and speeches to gain English language fluency. • To build up the learners confidence in oral and interpersonal communication
Communicative English II	• Helps to improve practical usage of English Grammar. • To help students overcome their fear and to speak in English in front of their peers and teachers. • To build students self-confidence through various classroom activities
Part II General English	• To develop Vocabulary and Pronunciation. • To understand various styles of writings. • To enhance his or her familiarity and fluency with the language considerably.
Part II General English	• To develop interest in and appreciation of Literature. • To develop confidential communication skill. • To learn different styles of writings, like prose, poetry and fiction. • To understand practical usage of English Grammar.
Malayala Kavitha	We were able to understand different branches of poetry which deals with numerous social subjects. Poetry helps to build a very deep knowledge about todays social conditions.
Ghadya Sahithyam	The autobiographical study of different famous personalities ,the students were able to generate several good qualities.with the study of Basheers Balyakalasakhi Students were able to understand a lot more abiut cultural practices of our society.
Dhrisya kala sahithyam	Not only watching ,but by studying about movies students were introduced to a new world were they actually allowed to understand about what they are watching on big screen. with the study of different branches of drama students are getting deeper knowledgeabout it.
Vaartha madhyamanga l(journalisam)	By the study of jouranalism students were taken to a new path of their career.

PROFESSIONAL ENGLISH	Learning new concepts, new words, expressing and sharing further information, foreign words, the meaning words, and contextual usage of the underlying scientific terms. Learners will develop their skills in comparing, contrasting, skimming, and scanning, predicting will be activated as they are necessary for learning
Complex Analysis	- Compute sums, products, quotients, conjugate, modulus, and argument of complex numbers. - Calculate exponentials and integral powers of complex numbers. - Write equation of straight line, circle in complex form - Define reflection points, concyclic points, inverse points - Understand the significance of differentiability for complex functions and be familiar with the Cauchy-Riemann equations. - Determine whether a given function is analytic. - Define Bilinear transformation, cross ratio, fixed point. - Write the bilinear transformation which maps real line to real line, unit circle to unit circle, real line to unit circle. - Find parametrizations of curves, and compute complex line integrals directly. - Use Cauchy's integral theorem and formula to compute line integrals. - Represent functions as Taylor, power and Laurent series. - Classify singularities and poles. - Find residues and evaluate complex integrals, real integrals using the residue theorem

Real Analysis	Students will able to • Define countable, uncountable sets • Write Holders and Minkowski inequality • Define and recognize the concept of metric spaces, open sets, closed sets, limit points, interior point. • Define and Illustrate the concept of completeness • Determine the continuity of a function at a point and on a set. • Differentiate the concept of continuity and uniform continuity • Define connectedness • Describe the connected subset of R. • Define compactness • Characterize the concept of compactness in metric space. • Construct rigorous mathematical proofs of basic results in modern analysis
Algebra	• To classify numbers into number sets. • To combine polynomial by addition or subtraction. • To solve problems of simple Inequalities. • Interpret basic absolute value expression. • To simplify algebraic expressions, using the commutative, associative and Distributive properties.

Statics	Students will able to • Define Resultant, Component of a Force, Coplanar forces, like and unlike parallel forces, Moment of a force and Couple with examples. • Prove the Parallelogram of Forces, Triangle of Forces, Converse of the Triangle of Forces, Polygon of Forces, Lami's Theorem, Varignon's theorem of moments . • Find the resultant of coplanar couples, equilibrium of couples and the equation to the line of action of the resultant. • Discuss Friction, Forces of Friction, Cone of Friction, Angle of Friction and Laws of friction. • Define catenary and obtain the equation to the common catenary. • Find the tension at any point and discuss the geometrical properties of a catenary. Course Outcome of Dynamics Students will able to • Define Projectile, impulse, impact and laws of impact. • Prove that the path of a projectile is a parabola. • Find the direct and oblique impact of smooth elastic spheres. • Define Simple Hormonic Motion and find its Geometrical representation. • Find the Composition of Simple Hormonic Motion and the differential equation of a central orbit. • Find the law of force if the orbit is given and vice versa.
STATISTICS	• To Study the concept of measures of dispersion and measures of central tendencies. • To develop the concept Probability distributions. • It enables the students to 1.understand the Probability distributions Binomial, Poisson and normal. • know the importance of correlation and regression

ALGEBRA AND DIFFERENTIAL EQUATIONS	- To explain the simple concepts of the theory of equations. - Tofind the roots of the equation by using techniques in various methods. - It enables the students to - apply the methods to find the roots of the equation. - getself confidence to do the problems related to this
DIFFERENTIAL EQUATIONS& ANALYTICAL GEOMETRY OF THREEDIMENSIONS	- To explain ordinary differential equations with Constant and variable Coefficients. - To describe sphere, intersection of two spheres and tangency of spheres. - It enables the students to know the differential equation with constant & variable Coefficients. - understand the shape of a plane sphere in three dimensions.
Linear Algebra	Students will able to • Define Vector Space, Quotient space Direct sum, linear span and linear independence, basis and inner product. • Discuss the linear transformations, rank, nullity. • Find the characteristic equation, eigen values and eigen vectors of a matrix. • Prove Cayley- Hamilton theorem, Schwartz inequality, Gramschmidt orthogonalisation process. • Solve the system of simultaneous linear equations.

Numerical Analysis	Students will able to • Define Basic concepts of operators Δ, E, ∇ • Find the difference of polynomial • Solve problems using Newton forward formula and Newton backward formula. • Derive Gauss's formula and Stirling formula using Newton forward formula and Newton backward formula. • Find maxima and minima for differencial difference equation • Derive Simpson's 1/3 ,3/8 rules using trapezoidal rule • Find the solution of the first order and second order equation with constant coefficient • Find the summation of series finite difference techniques • Find the solution of ordinary differential equation of first by Euler,Taylor and Runge-Kutta methods Course Outcome of O.R Students will able to • Define nature and feature of Operations Research • Find the replacement period of equipment that fails suddenly/gradually • Define EOQ • Find inventory decisions costs using deterministic inventory problems with no shortages /with shortages • Find EOQ problems with price breaks • Define CPM and PERT • Define basic components of Network and find critical path • Define queue charecteristics , transient and steady state • Define Kendal notations solution of queue models (M/M/1):(∞/FIFO), (M/M/1):(N/FIFO) • Define Two persons sum games ,maximin-minimax principle, saddle points. • Find graphical solution of 2×n and m×2 games • Find general solution of m×n rectangular games
Statistics	They will be able to represent and statistically analyze data both graphically and numerically. Define probability density function, probability distribution Derive mathematical expectation, binomial, poisson, normal distribution Solve the problems of large samples and small samples • Discuss the moment generating functions, chi-square distribution Compute the analysis of variance, one way and two way classifications, Latin square design

Vector Calculus	Calculus Students will able to • Describe the various forms of equation of a plane, straight line, Sphere, Cone and Cylinder .• Find the angle between planes, Bisector planes, Perpendicular distance from a point to a plane, Image of a line on a plane, Intersection of two lines • Define coplanar lines and illustrate • Compute the angle between a line and a plane, length of perpendicular from a point to a line • Define skew lines • Calculate the Shortest distance between two skew lines • Find and interpret the gradient curl, divergence for a function at a given point. • Interpret line, surface and volume integrals • Evaluate integrals by using Green's Theorem, Stokes theorem, Gauss's Theorem

Department of Mathematics **Courses outcome**
M.Sc Mathematics

courses	outcomes
Topology	Topology uses to analyze complex networks Ex: Social networks, Biological networks, Internet etc. It applies Differential Topology to probability to identity multivariate interactions. This was used in neuro science recently to deduce how neurons are interacting. This paper discusses using cell phones to actually map out the topology of indoor spaces. Another cool application is in the world of chemistry where one can discuss the shape of molecules by an analysis of the topology of a related graph. There is also an application for medical imaging software and technology.
Graph Theory	They will able to model and solve real world problems using graphs and trees, both quantitatively and qualitatively.
Analysis	Students will able to • Determine the basic topological properties of subsets of the real numbers • Define connectedness and compactness, and prove a selection of related theorems. • Define the limit of a sequence, series and the Cauchy criterion • Test the convergence of series using Ratio, Root and comparison tests.

	• Define continuity of a function and uniform continuity of a function • Prove a theorem about continuous functions • Determine the continuity of a function at a point and on a set. • Differentiate the concept of continuity and uniform continuity • Define the derivative of a function • Prove a theorem about the derivatives of functions • Prove the Bolzano-Weierstrass theorem, Rolle's theorem, extreme value theorem, and the Mean Value theorem • Appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.
Algebra	Students will able to • Define Group and Subgroups, Normal Subgroups, Quotient Groups and Permutation Group with examples. • Prove Cayley'stheorem, Sylow's theorem. • Define Ring, Field, Extension Field, Euclidean Rings, Polynomial Rings and Vector Space with examples. • Find the roots and the derivatives of a Polynomial, irreducible polynomial, simple extension, automorphism of a Field. • Discuss the symmetric function, normal extension, splitting field, Galois Group.
Differential Geometry	Students will able to • Prove some necessary and sufficient conditions that a curve be a straight line and a curve be a plane curve. • Illustrate curvature and torsion of a curve. • Define involutes and evolutes. • Show fundamental theorem for space curves. • Analyse some properties of family of curves. • Find orthogonal trajectories of a family of curves. • Explain Geodesics and Normal property of Geodesics. • Prove Geodesic curvature theorems and Gauss – Bonnet theorem. • Derive some properties of Developable surface. • Prove Monge's theorem on developables associated with curves on surfaces
Classical Mechanics	Students will able to • Define D'Alembert's principle • Derive Lagrange's equation for holomonic and non holomonic constraints • Attain the applications of Lagranges formulation • Explain the symmetry properties • Classify orbits •Solve the problems of Kepler, Laplace. • Prove Virtual theorem, Bertrands theorem. • Find the solution of two body central force.

Discrete Mathematics	Mathematics Students will able to • Define Semigroups, Monoids, Homomorphism and Isomorphism. • Describe the TF statements, connectives, atomic and compound statements. • Illustrate Tautology, Tautological implication, Truth Tables, Normal Forms, Principal Normal Forms. • Discuss the theory of inference, quantifiers, predicate calculus. • Interpret Lattices, Boolean Algebra, Karnaugh Map, Switching Circuits.
ADVANCED CALCULUS	• Students will be able to perform the vector calculus operations by applying addition, subtraction, scalar multiplication, dot product, and cross product. • Students will be able to work with power series by applying the iterated derivatives. • Students will be able to take derivatives of multivariable functions by using appropriate rules. • Students will be able to use the chain rule by applying necessary rules. • Students will be able to take derivatives of multivariable functions by using appropriate rules. • Students will be able to perform vector calculus operations by partial derivatives, and matrix partial derivatives. • Students will be able to do double and triple integrals by applying appropriate methods and rules. • Students will be able to understand change of variables by applying the change of variable theorem. • Students will be able to differentiate vectors to understand gradient, divergence and curl by using the appropriate rules.

Department of Physics	
B.Sc. Physics	
Courses outcome	
Courses	**Outcomes**
Tamil Poetry Grammar Prose Literature Short Stories Literary History	- Knowing the literary creators and works of the time and creating new works. - Understanding the basics of language - Knowing the ancient cultural customs of the classical language - Assuming solutions to social problems and issues - Understanding the Origin and Development of Decimal Types
Malayalam Malayala Kavitha	Understand the different branches of poetry which deals with numerous social subjects. Poetry helps to build a very deep knowledge about today's social conditions.
Communicative English I	- To enhance the communicative skills of students - To enrich the knowledge of students in grammar usage. □To simulate real life situations in the classroom to practice real English dialogues and speeches to gain English language fluency. - To build up the learners confidence in oral and interpersonal communication
Properties of Matter and Mechanics	- Understand the elastic properties of matter. - Describe the properties of fluids such as surface tension and viscosity. - Understand the dynamics of rigid bodies. • Define pressure and thrust and discuss the laws of flotation.

Professional English I	• Use the language for speaking with confidence in an intelligible and acceptable way. • Understand the importance of reading in life. • Read independently unfamiliar texts with comprehension. • Understand the importance of writing in academic life • Write simple sentences without commit in error of spelling or grammar.
Major Practical I	• Develop the skill to measure the material constants such as, young's modulus, rigidity modulus and moment of inertia of the solid materials. • Get idea to measure gravitational acceleration using simple pendulum. Understand the principle and properties of sound through experiments. • Illustrate the properties of fluids such as viscosity and surface tension by simple experiments.
Allied Physics I	• Understand the properties of matter such as elasticity, surface tension and viscosity. • Correlate the concept of simple harmonic motion with vibration of strings. • Explain the theory and experimental methods of transfer of heat through conduction, convection and radiation. • Discuss the properties of light such as interference, diffraction and polarization.
Allied Practical I	• Demonstrate experimentally the Young's modulus of a beam and Rigidity modulus of a wire. • Determine the coefficient of viscosity of a liquid by Stoke's method. • Evaluate the thermal conductivity of a bad conductor by Lee's disc experiment. • Estimate the wavelength of light using spectrometer experiment and thickness of a wire using air wedge experiment.

Tamil II Poetry Grammar Prose Literature Life History Literary History	• Announcement of devotional norms through religious literature. • Practice writing letters expressing the language structure. • Expressing moral thoughts through the texts of justice. • Teaching and directing the biographies of the saints. • Introducing literature created by religions.
Malayalam Gadhya Sahithyam	• The autobiographical study of different famous personalities the students were ale generate several good qualities with the study of Basheer's Balyakalasakhi. • Students were able to understand a lot more about cultural practices of our society.
Communictive English II	• Helps to improve practical usage of English Grammar • To help students overcome their fear and to speak in English in front of their peers and teachers • To build students self-confidence through various classroom activities
Optics and Thermal Physics	• Understand the behavior of light in lenses, prisms and eyepieces. • Describe the properties of light such as interference, diffraction and polarization • Understand the theory of production and application of low temperature. • Understand the concepts of thermodynamics, various laws of thermodynamics and its applications
Professional English II	• To improve the reading and communication skills of students. • Special tasks to improve the vocabulary and grammar knowledge of students.
Major Practical II	• Skill to measure thickness of very thin ojects using Newton's rings and wavelength of visible light using grating. • Skills to measure AC frequency of voltage using sonometer.

	• Determine the specific heat capacity of a liquid by different experimental techniques. Understand the concepts of refractive index, dispersion, interference and diffraction through experiments.
Allied Physics II	• Apply Kirchoff's laws to electrical circuits. • Explain the concept of electromagnetism. • Understand diodes and transistors and the basic operation of logic gates. • Discuss the general properties of nucleus and laws of radioactivity. • Analyse the motion of a projectile and the concept of relativity
Allied Practical II	• Use a potentiometer to calibrate an ammeter and a low range voltmeter. • Demonstrate resonance phenomenon using series and parallel LCR circuits. • Understand the working of Zener diode and transistors and logic gates using simple experiments. • Determine the self inductance and mutual inductance through experiments.
Tamil III Poetry Grammar Prose Literature Novel Literary History	• • To know the life history of the ancient Tamils through epics. • Promoting the grammatical ability of the consecration team by teaching them the grammar. • Sowing literary study ability in the mind of the student. • Instruction to live in an honest way. • Making history of epics and short stories.
Malayalam Dhrishya kala sahithyam	• Not only watching, but by studying about movies students were introduced to a new world were they actually allowed to understand about what they are watching on big screen, with the study of different branches of drama students are getting deeper knowledge about it.

Part II General English	- To develop Vocabulary and Pronunciation - To understand various styles of writings - To enhance his or her familiarity and fluency with the language considerably
Electricity	• Provide a basic knowledge about electric charge, electric field and electric potential. • Understand the thermal effects occurring in a thermocouple and its applications Explains various chemical effects of electric current. • Understand about the steady and transient current along with the growth and decay of current in L, R and LCR circuits. • Analyse the behavior of alternating current in L, C, R and LCR circuits .
Maintenance of electrical appliances	• Understand the principle and working of measuring meters such as galvanometer, ammeter, voltmeter and multimeter. • Describe the construction, working and testing of transformers. • Trouble shoot household components such as electric lamb, fan, electric iron, washing machines, heaters and refrigerators. • Analyze AC and DC connections, house wiring and earthing. • Understand the mechanism of electrical protection and the operation of UPS, generator and motor.
Major practical III	- Use a potentiometer to calibrate an a low range voltmeter. - Construct the series resonance circuit to find out the self inductance of the coil. •Demonstrate experimentally the comparison of capacitances and figure of merit using Ballistic galvanometer. - Newton's law of cooling is verified. - Construct the parallel resonance circuit to find out the self inductance of the coil.
Tamil IV Poetry	To know the culture of the ancient

Grammar Prose Literature Drama Literary History	Tamils • Teaching subject grammar for Biology. • Teaching Biological virtues through literature • Motivation to create plays centered on historical backgrounds. • To know the history and individual features of Sangam literature.
Malayalam Vaartha Madhyamangal (Journalism)	• By the study of journalism students were taken to a new path of their career.
General English II	• To develop interest in and appreciation of Literature • To develop confidential communication skill. • To learn different styles of writings, like prose, poetry and fiction. • To understand practical usage of English Grammar
Electromagnetism	• Understand the magnetic effects of electric current and the basis of the electromagnetism. • Faraday's laws of electromagnetic induction. • Formulate Maxwell's equations for the propagation of electromagnetic waves. • Illustrate the behavior of electromagnetic waves and its applications.
Maintenance of electronic appliances	• Understand the functions of electronic components and familiarize with soldering and de-soldering techniques. • Explain the operations of multimeters, CRO and A/F&R/F Oscillators. • Discuss the working and uses of transducers. • Describe the basic operation of a communication system. • Understand photography and the related accessories.
Major Practical IV	• Use a potentiometer to find the specific resistance and emf of a thermocouple. •Demonstrate experimentally the comparison of emf's and high resistance by leakage using Ballistic galvanometer. Demonstrate experimentally to find the absolute

	capacity of a condenser using Ballistic galvanometer. • Evaluate the magnetic field along the axis of a coil and horizontal component of earth's magnetic field using vibration magnetometer. • Develop skill to determine the self inductance of the coil by Anderson's bridge. • Develop skill to calibrate the ammeter using potentiometer. • Acquire the knowledge of comparison of magnetic moments using deflection magnetometer in Tan A and Tan B position
Basic Electronics	• Analyze any linear circuit using Thevenin's theorem and Norton's theorem. • Familiarize with different types of diodes and their characteristics. • Understand the functions of transistor amplifiers and operation amplifiers. • Distinguish between oscillators and multivibrators.
Computer programming in C++	• Know the basics of programming in C++ and write simple programs. • Describe the principle of Object oriented Programming. • Develop programs using functions, Classes, operator overloading and inheritance. .
Atomic Physics	• Explain band theory of solids and classify solids based on band theory. • Understand the properties of positive rays and the experimental determination of e/m. • Analyse the various atom models and the coupling mechanisms. • Understand properties and uses of X-rays.
Spectroscopy	• Understand the basics of atomic and molecular spectroscopy. • Compare the principles and techniques of microwave, infrared, Raman and electronic spectroscopies. • Understand the instrumentation of IR spectroscopy.
Communication electronics	• Understand the principles of modulation in communication systems. • Compare amplitude and frequency modulation techniques.

	• Analyze transmission and reception of AM and FM modulation. • Explain the unique features of digital modulation techniques
Practical V Non-Electronics	• Demonstrate the conversion of a galvanometer into voltmeter. • Determine through experiment the absolute capacity of a capacitor and mutual inductance using Ballistic galvanometer. • Verify Thevenin's and Norton's theorems. • Evaluate Cauchy's constant experimentally. • Determine the young's modulus of the material using elliptical fringes.
Practical VI Electronics	• Study the V-I characteristics of PN junction diode and zener diode. • Analysing the percentage of regulation of a Full wave rectifier. • Demonstrate the operations of oscillators and multivibrators using transistor-based circuits. • Design circuits using OPAMPs to function as -Adder, Subtractor, differentiator, Integrator, -Low Pass And High Pass Filter
Digital Electronics	• Understand basic codes Boolean operation and logic gates • Construct Half adder,full adder, flip-flops and multivibrators. • Design logic circuits employing Karnaugh maps. • Design Shift registers and counters.
Quantum mechanics	• Understand wave-particle duality of matter. • Explain uncertainty principle. • Solve Schrodinger's 1D and 3D wave equations and evaluate eigen values. • Describe the applications of quantum mechanics.(tunneling, simple harmonic oscillator and particle in a box)
Nuclear Physics	• Understand the basic properties of nucleus. • Explain the kinematics of nuclear reactions. • Discuss the operations of nuclear detectors and particle accelerators. • Analyze the behavior of elementary particles and their fundamental interactions Solid state physics • Know the properties and structure of crystals. • Understand Miller indices and reciprocal

	lattice. • Explain the mechanisms of Magnetism and polarization in solids. • Compare different bonds in solids. • Understand the principle of superconductivity
Energy Physics	• Understand the various available energy sources. • Understand about the renewable and clean energy sources such as solar, hydrogen, wind, etc. • Understand the principle of photovoltaics and solar cells. • Explain the working of windmills.
Practical VII	• Evaluate Hartmann's interpolation formula and i 1-i 2 curve experimentally using spectrometer. • Design arithmetic circuits using OPAMPs. • Design astable and Monostable multivibrators using 555 Timer • Design A-D convertors and D-A convertors. • Use logic gates to design flip flops.
Practical VIII	Computer programming using C++ • Use the principles of object oriented program to construct computer programs for the solution of problems in physics. 　　• Develop program for solving the arithmetic operation. • Develop programs to find the sum of the series. • Develop a program in C++ to calculate the Young's modulus of a material. • Develop a program to solve the quadratic equation. Develop a program to evaluate the fibinoci series.

M. Sc. Physics	
Course Outcome	
Courses	**Outcomes**
Classical Mechanics	- Understand the Lagrangian and Hamiltonian approaches in classical mechanics and its application with symmetry properties and conservation laws. - To get the idea about classification of orbits and kepler's laws. - The classical background of Quantum mechanicsand get familiarized with Poisson brackets and Hamilton -Jacobi equation - Kinematics and Dynamics of rigid body in detail and ideas regarding Euler's equations of motion - Theory of small oscillations in detail along with basis of Free vibrations. - Basic ideas about theory of relativity in a detailed manner.
Mathematical Physics I	- Learn about Gradient, Divergence and Curl in orthogonal curvilinear and their typical applications in physics. - Learn about special type of matrices that are relevant in physics and then learn about tensors. - Get introduced to Special functions like Gamma function, Beta function, Delta function, Dirac delta function, Bessel functions and their recurrence relations - Learn different ways of solving second order differential equations and familiarized with singular points and Frobenius method. - Learn the fundamentals and applications of Fourier series, Fourier and Laplace transforms,their inverse transforms etc
Integrated Electronics	- Understanding of manufacturing technology of Intergrated circuits and its components on substrate. - Understanding digital circuit components such as logic gates, flip

	flops, registers, etc. • Basic operational amplifier characteristics, OPAMP parameters ,applications as inverter, integrator, differentiator etc • Digital electronics baiscsusing logic gates and working of major digital devices like flip flops, CMOS ,CCD etc.
Non- Linear Dynamics	. • Know the importance of nonlinearity. • Learn the mathematical implication of NLD.. • Understand about bifurcation. • Acquire the skill of NLD phenomenon in Electronic circuits • Apply the concepts of NLD in various types of physical equations .
	•
Practical I General Physics Experiments I	• Describe the methodology of finding the susceptibility of the liquid using Quinke's method. • Practice the methodology of finding the cauchy's constant. • Acquire necessary skill to find the wavelength of the source by Michelson's interferometer. • Understand the determination of the self inductance of the coil
Practical II Electronics Experiments	• Develops the skill in the construction of voltage regulator. • Setting up Schimitt trigger using transistor. • Construction of triangular and ramp wave generator using op-amp. • Construction of counters and decoders • Construction of Analog and Digital convertors • Designing of constant current source. • Study the FET characteristics.
Mathematical Physics II	• Analyses various complex functions. • . Gain ability to apply group theory to

	physics problems, which is a pre-requisite for deeper understanding of crystallography, particle physics, quantum mechanics and energy bands in solids. • Understand the concept of Legendre polynomial and Hermite polynomials. • Develop partial differential equation in various applications such as heat flow, etc • Develop skill for tensor analysis.
Condensed Matter Physics	• Understand the importance of superconductivity both in scientific and technical way. • Attains the knowledge of the electronic structure of solids, especially, metals, semiconductors and dielectrics. • Attains the knowledge about the phonons and their thermal properties. • Get idea about free electron theory. • Develops skill about identifying different types of magnetic behavior.
Microprocessor and Microcontroller	• Study the Organization and internal architecture of the Intel 8085, • Understanding of how the processor works, nature of instructions and execution of instruction. • Learn the applications of microprocessor 8085 and microcontroller 8051
Numerical Methods and C++ programming	• Derive numerical methods for various mathematical operations and tasks, such as interpolation, differentiation, integration, the solution of linear and nonlinear equations, and the solution of differential equations. • Analyse and evaluate the accuracy of common numerical methods. • describe the advantages of a high level language like C++, the programming process, and the compilation process • To describe and use software tools in the programming process. ...

	• To apply good programming principles to the design and implementation of C++ programs.
Practical III General Physics Experiments II	• Ability to determine the young's modulus of the material by hyperbolic fringes • Determine the velocity of ultrasonic waves in liquid • Skill to determine the wavelength of the given source using young's double slit method. • Study of mutual inductances of the coils on varying certain factors. • Understand XRD- crystallographic parameters • Under the fibre optic characteristics
Practical IV Electronics Experiments II	• Develops the skill of designing and construction of II order active filters. • Study the characteristics of UJT • Design the phase shift oscillator using op-amp • Construction of D/A convertor using op-amp • Study of SCR characteristics • Construction of code convertors.
Quantum mechanics I	• Attains wave mechanical basic concepts and Schrodinger and Heisenberg formulations. • Solves various eigen value problems. • Describes different operators and matrix theory in quantum mechanics. • Understand the Theory of angular momentum and spin matrices, orbital angular momentum and Clebsh Gordan Coefficient • Understand the time dependant and independent perturbation theory.
Electromagnetic Theory	• Understand electric and magnetic fields • Apply the principles of Coulomb's Law and Gauss's law to electric fields in various coordinate systems. • Attain the knowledge of physical

	interpretation and the ability to apply Maxwell's equation to determine field waves. • Develop the skill of measuring voltage induced by time varying magnetic flux.
Statistical Mechanics	• Understand the fundamentals of thermodynamics, laws of thermodynamics, thermodynamic potentrode, etc. • **Able to deal systematically with complete Classical and two types of quantum statistics explaining fully the basic properties of Statistical Mechanics.** • Explain the classical and quantum theories of specific heat of solids and gases. • Understand about the phase transitions. • Attains complete idea about the physical properties during phase transition.
Research Methodology	• Identify and discuss the complex issues inherent in selecting a research problem • Selecting an appropriate research design, and implementing a research project. • Attains the skill of writing the thesis • Develops the skill of using the origin and Latex software.
Practical V Advanced Experiments I	• Develop the skill to find the magnetic susceptibility of the given sample • Ability to determine the young's modulus, bulk modulus and rigidity modulus of the given material using elliptical fringes • Develops the skill of forming the equipotential lines and to determine the electric field between the lines. • Ability to determine the temperature coefficient of forward biased diode. • Undergo characteristic study on photodiode • Calibrate hall probe into gauss meter.

Practical VI Microprocessor Experiments	• Develop skill in the arithmetic operation and data manipulation • Design interfacing circuits with 8085 • Design and implement 8051 microcontroller based systems • To Understand the concepts related to I/O and memory interfacing
Quantum Mechanics II	• Understand the approximation methods for time-independent problems to solve Schroginger equation. • Attains the knowledge of Theory of scattering and calculation of scattering cross section, optical theorem ,Born and Elkonal approximation, partial wave analysis etc. • Understand the Theory of identical particles and effects of spin on energy states. • Develops the skill of solving the equation of motion, brackets and various symmetries. • Understand the Relativistic Quantum Mechanics using Dirac equation, Dirac matrices etc.
Spectroscopy	• Learn the origin of spectrum and spectroscopy. • Understandthe existence of various EM waves and their related spectra., • Understand the concept of IR, UV and Resonance spectra. • Analyse different spectra of NMR, XPS and Raman. • Acquire the skill of interpreting several types of spectra in real time experiment.
Nuclear and Particle Physics	• have a basic knowledge of nuclear size ,shape , bindingenergy.etc and also the characteristics of nuclear force in detail. • be able to gain knowledge about various nuclear models and potentials associated. • acquire knowledge about nuclear decay processes and their outcomes. Have a

	wide understanding regarding beta and gamma decay. • Grasp knowledge about Nuclear reactions, Fission and Fusion and their characteristics. • understand the basic forces in nature and classification of particles and study in detail conservations laws and quark models in detail
Practical VII Advanced Physics Experiments	• To gain practical knowledge to determine temperature co-eficient and band gap using carey foster bridge • To learn more about hall effect. • Understand the principle of four probe and its application. • To develop the skill in ultrasonic diffraction • Understand about two probe and its applications.

COURSES OUTCOME	
DEPARTMENT OF CHEMISTRY	
COURSES	**OUTCOMES**
Part I Tamil(Semester I) Poetry	• Knowing the literary creators and works of the time and creating new works.
Grammer	• Understanding the basics of language.
Prose Literature	• Knowing the ancient cultural customs of the classical language.
Short Stories	• Assuming solutions to social problems and issues.
Literary History	• Understanding the Origin and Development of Decimal Types.
Part I Tamil(Semester II) Poetry	• Announcement of devotional norms through religious literature.
Grammer	• Practice writing letters expressing the language structure.
Prose Literature	• Expressing moral thoughts through the texts of justice.
Life History	• Teaching and directing the biographiesof the saints.
Literary History	• Introducing literature created by religions.
Part I Malayalam MalayalaKavitha	• We were able to understand different branches of poetry which deals with numerous social subjects.Poetry helps to build a very deep knowledge about todays social conditions.
GhadyaSahithyam	• The autobiographical study of different famous personalities ,the students were able to generate several good qualities.with the study of BasheersBalyakalasakhi Students were able to understand a lot more abiut cultural practices of our society.
Dhrisya kala sahithyam	• Not only watching ,but by studying about movies students were introduced to a new world were they actually allowed to understand about what they are watching on big screen.with the study of different branches of drama students are getting deeper knowledge about it.
Vaarthamadhyamangal(journalisam)	• By the study of jouranalism students were taken to a new path of their career.
Communicative English I	• To enhance the communicative skills of students. • To enrich the knowledge of students in grammar usage. • To simulate real life situations in the classroom to practice real English dialogues and speeches to gain English language fluency. To build up the learners confidence in oral and interpersonal communication

Communicative English II	- Helps to improve practical usage of English Grammar. - To help students overcome their fear and to speak in English in front of their peers and teachers. - To build students self-confidence through various classroom activities
Part II General English	- To develop Vocabulary and Pronunciation. - To understand various styles of writings. - To enhance his or her familiarity and fluency with the language considerably.
Part II General English	- To develop interest in and appreciation of Literature. - To develop confidential communication skill. - To learn different styles of writings, like prose, poetry and fiction. - To understand practical usage of English Grammar.
Inorganic Chemistry I	- To improve the level of understanding of the chemistry of organometallic compounds, metal carbonyls and metal clusters. - To impart essential theoretical knowledge on atomic structure, periodic properties, chemical bonding, and nuclear chemistry.
Professional English I	- To improve the level of understanding of Grammar and also how to use grammar in their comprehensions by using number of practices.
Physical ChemistryI	- To provide an insight into the characteristics of different types of solutions and electrochemical phenomena. To learn ionic equilibria and electrical properties of ions in solution. To learn the concepts of acids and bases, pH and buffer solutions.
Professional English II	- To improve the level of understanding of Grammar and also how to use different styles of writings, like grammar .
Organic Chemistry I	- The students will understand some fundamental aspects of organic chemistry. - To enable the students to understand and study Organic reaction mechanisms.
Food Chemistry	- To apply practical skills, technical knowledge in major streams such as chemistry, manufacturing, processing, and to application areas in food industries.
Physical ChemistryII	- To provide an insight into the characteristics of different types of solutions and electrochemical phenomena. To learn the concepts of thermodynamics.
Chemistry in Medicine	- To make the students aware of chemicals used for manufacturing medicines and its effects, uses, manufacturing techniques etc.
Professional English	- To improve the level of understanding of Grammar and also how to use grammar in their comprehensions by using number of practices.
Organic Chemistry II	- To impart the students a thorough knowledge about the various mechanisms of groups.
Physical ChemistryIII	- To provide an insight into the characteristics of different types of

	solutions and electrochemical phenomena. To learn ionic equilibria and electrical properties of ions in solution. To learn the concepts of acids and bases, pH and buffer solutions.
Polymer Chemistry	• Explain the basics of polymers, helps to study the preparation and properties of polymers, its uses.
Inorganic chemistry II	• To study various bioinorganic complexes and its applications. • To study the mechanisms of various complex and determine the geometry of complex.
Organic Chemistry III	• To study various mechanisms of organic molecules. To impact the study of heterocyclic compounds.
Physical Chemistry IV	• Enable the students to predict the point group of important molecules and to know how they are classified. • To get an idea about spectroscopic applications.
Analytical Chemistry	• Explain the fundamentals of analytical chemistry and steps of a characteristic analysis. • Compare qualitative and quantitative analyses. • Expresses the quantitative analysis methods and qualitative analysis methods.
Green Chemistry	• Students learn the basic principles of green and sustainable chemistry. They must be able to do and understand stoichiometric calculations and relate them to green process metrics. They learn alternative solvent media and energy sources for chemical processes.
Personality development	• To improve the personality of students and also get idea about how to face interviews

COURSES OUTCOME	
MSC CHEMISTRY	
COURSES	**OUTCOMES**
Organic Chemistry I	• To impart the students a thorough knowledge about the mechanisms of reactions of some selected functional groups in organic compounds and also to give an outline of applied organic chemistry and the applications of organic chemistry in various spheres of chemical sciences.
Inorganic ChemistryI	• To understand the functions and applications of bioorganic compounds .

	• To gave a basic idea about nuclear Chemistry and its applications. • To understand the magnetic properties of complexes and to know how magnetic moments can be employed for the interpretation of their structure
Physical ChemistryI	• To impart a thorough knowledge of the fundamentals of microwave, infra red, Raman, electronic and magnetic resonance spectroscopy, mass spectrometry and photochemistry. • To know the basic concepts in classical thermodynamics and to learn the thermodynamic aspects of various processes and reactions.
Advanced Topics in Chemistry-I	• This program helps to develop professional, ethical graduates whose competence in problem-solving, legal analysis and application, quantitative reasoning, investigation and scientific laboratory procedures can be applied to advanced study.
Organic Chemistry II	• To give an elementary idea of organic spectroscopy and photochemistry. • To identify organic compound using UV, IR and PMR spectroscopic techniques and to study about the synthesis and various properties of natural products and biomolecules.
Inorganic ChemistryII	• To understand the magnetic properties of complexes and to know how magnetic moments can be employed for the interpretation of their structure. • To get an idea about spectroscopic applications of inorganic compounds.
Physical ChemistryII	• To know the basic concepts in classical thermodynamics and to learn the thermodynamic aspects of various processes and reactions. • To study the application of Quantum mechanics to various atoms.
Advanced Topics in Chemistry II	• This program helps to study the applications of nanomaterials , industrial polymers . • It also helps to know the uses of chemicals in medical field.
Organic Chemistry III	• To impart the students a thorough knowledge about the various mechanisms of groups. • It also helps to know the pericyclic reactions and photochemical reactions in various compounds.
Inorganic ChemistryIII	• To understand the functions and applications of organometallic compounds. · • To gave a basic idea about photo Chemistry and its applications. • To understand the spectral methods applied to various inorganic

	compounds.
Physical ChemistryIII	• Enable the students to predict the point group of important molecules and to know how they are classified. • To get an idea about spectroscopic applications.
Research Methododology	• To impact the students how to write thesis, use search engines, how to write chemical abstracts. • Helps to study various thermoanalytical methods.
Organic Chemistry IV	• To study intermediate reactions, conformational and synthetic analysis. • Enable the students to know the uses of various organic reagents and steroid compounds.
Inorganic Chemistry IV	• To understand the functions and applications of bioinorganic compounds. · • To gave a basic idea about Chemistry of Inorganic materials. • To understand the spectral methods applied to various inorganic compounds.
Physical Chemistry IV	• To understand the principles and applications of vibrational and raman spectroscopy. To learn the theories and applications of Kinetics.

Course Outcome	
B.Sc. Computer Science	
Courses	**Outcome**
Tamil I	- Knowing the literary creators and works of the time and creating new works. - Understanding the basics of language. - Knowing the ancient cultural customs of the classical language. - Assuming solutions to social problems and issues. - Understanding the Origin and Development of Decimal Types
Malayalam I	- We were able to understand different branches of poetry which deals with numerous social subjects. - Poetry helps to build a very deep knowledge about todays social conditions. - The autobiographical study of different famous personalities, the students were able to generate several good qualities.with the study of BasheersBalyakalasakhi - Students were able to understand a lot more abiut cultural practices of our society.
Communicative English I	- To build up learners confidence in oral and interpersonal communication - To enhance the communicative skills of students. - To enrich the knowledge of students in grammar usage - To simulates real life simulate real life situations in the classroom to practice real English dialogue and speeches to gain English language fluency
Programming in C	- Also by learning the basic programming constructs they can easily switch over to any other language in future - The course is designed to provide complete knowledge of C language.

	Students will be able to develop logics which will help them to create programs, applications in C.
Programming in C Lab	- Ability to work with textual information, characters and strings - Ability to define and manage data structures based on problem subject domain - Understanding a functional hierarchical code organization
Professional English for Physical Sciences – I	- Learning new concepts, new words, expressing and sharing further information, foreign words, the meaning words and contextual usage of the underlying scientific terms - Learners develop their skill in comparing, contrasting, skimming and scanning; predicting will be activated as they are necessary for learning
Discrete Mathematics	After learning the course the students should be able to: Construct mathematical arguments using logical connectives and quantifiers. Verify the correctness of an argument using propositional and predicate logic and truth tables. Demonstrate the ability to solve problems using counting techniques and combinatory in the context of discrete probability. Solve problems involving recurrence relations and generating functions. Use graphs and trees as tools to visualize and simplify situations. Perform operations on discrete structures such as sets, functions, relations, and sequences

Environmental Studies	- The course will empower the undergraduate students by helping them to: - Gain in-depth knowledge on natural processes that sustain life, and govern economy. - Predict the consequences of human actions on the web of life, global economy and quality of human life. - Develop critical thinking for shaping strategies for environmental protection and conservation of biodiversity, social equity and sustainable development. - Acquire values and attitudes towards understanding complex environmental-economic social challenges, and participating actively in solving current environmental problems and preventing the future ones
Tamil II	- Announcement of devotional norms through religious literature. - Practice writing letters expressing the language structure. - Expressing moral thoughts through the texts of justice. - Teaching and directing the biographiesof the saints. - Introducing literature created by religions.
Malayalam II	- By the study of journalism students were taken to a new path of their career. - Not only watching ,but by studying about movies students were introduced to a new world where they actually allowed to understand about what they are watching on big screen.with the study of different branches of drama students are getting deeper knowledge about it.

Communicative English II	• Helps to improve practical usage of grammar. • To help Students overcome their fear and to speak in front of their peers and teachers. • To build students self-confidence through various class room activities.
Object Oriented Programming in C++	• Able to make use of objects and classes for developing programs. • Identify importance of object oriented programming and difference between structured oriented and object oriented programming features. • Able to use various object oriented concepts to solve different problems
Object Oriented Programming in C++ Lab	• Articulate the principles of object-oriented problem solving and programming. • Apply the concepts of class, method, constructor, instance, data abstraction, function abstraction, inheritance, overriding, overloading, and polymorphism. • Analyze, write, debug, and test basic C++ codes using the approaches introduced in the course. • Analyze problems and implement simple C++ applications using an object-oriented software engineering approach
Professional English for Physical Sciences – II	• Develop their competence in the use of English with particular reference to the workplace situation. • Enhance the creativity of the students, which will enable them to think of innovative ways to solve issues in the workplace. • Help students with a research bent of mind develop their skills in writing reports and research proposals. • Develop their competence and competitiveness and thereby improve their employability skills.

Linux	- Students will be able to understand the basic commands of linux operating system and can write shell scripts. - Students will be able to create file systems and directories and operate them
Value Based Education	- Students will understand the importance of value based living - Students will gain deeper understanding about the purpose of their life. - Students will understand and start applying the professionals.
Java Programming	- Use an integrated development environment to write, compile, run, and test simple object-oriented Java programs. - Read and make elementary modifications to Java programs that solve real-world problems. Validate input in a Java program. - Identify and fix defects and common security issues in code
Java Programming Lab	- Students will write Java application programs using OOP principles and proper program structuring - Created Multithreaded program - Develop Graphical user interface with AWT
Digital Design	- Students have to understanding the fundamental concepts and techniques used in digital electronics. - To understand and examine the structure of various number systems and its application in digital design.

	- The ability to understand, analyze and design various combinational and sequential circuits. - The ability to identify and prevent various hazards and timing problems in a digital design - Ability to identify basic requirements for a design application and propose a cost effective solution.
Scripting Languages	- To master the theory behind scripting and its relationship to classic programming. - To survey many of the modern and way cool language features that show up frequently in scripting languages. - To gain some fluency programming in Ruby, JavaScript, Perl, Python, and related languages - To design and implement one's own scripting language
Scripting Languages Lab	- Design and test programs to solve mathematical problems. - Develop programs Using Ruby Script. Develop Programs Using TCL Script. - Develop Programs Using Perl Script
Introduction to Big Data analytics	- Students to Understand the Big Data challenges & opportunities, its applications - Gain conceptual understanding of NOSQL Database. Understanding of concepts of map and reduce and functional programming - Gain conceptual understanding of Hadoop Distributed File System
Mathematics for Competitive Examinations- I	- To provide awareness to the students about the various types of jobs offered both in the Central and State Government.

	• To help the students to choose the area where they are interested. • To develop competitive skills through various types of objective tests. • To train them by conducting aptitude test based on verbal and quantitative skills. • To enhance their ability to speak in English and face an interview.
Data Structures	• Develops skills in implementations and applications of data structures. • Implements basic algorithms for sorting and searching. Implements basic data structures such as stacks, queues and trees. • Applies algorithms and data structures in various real-life software problems.
Data Structures lab	• The course is designed to develop skills to design and analyze simple linear and non linear data structures. • It strengthen the ability to the students to identify and apply the suitable data structure for the given real world problem. • It enables them to gain knowledge in practical applications of data structures
Computer Architecture	• To understand the structure, function and characteristics of computer systems. • To understand the design of the various functional units and components of computers. • To explain the function of each element of a memory hierarchy. To identify and compare different methods for computer I/O.
Open Source Technologies	• Implement various applications using build systems. • Understand the installation of various packages in open source operating systems.

Machine Learning	- Understand the concepts of computational intelligence like machine learning. - Ability to get the skill to apply machine learning techniques to address the real time problems in different areas. - Understand the Neural Networks and its usage in machine learning application.
Personality Development and Yoga	- To help the students appreciate the essential 'VALUES' and 'SKILLS' to ensure sustained happiness and prosperity, which are the core aspirations of all human beings. - To facilitate the development of a Holistic perspective among students towards life and profession as well as towards happiness and prosperity based on a correct understanding of the Human reality and the rest of Existence. Such a holistic perspective forms the basis of Universal Human Values and movement towards value-based living in a natural way. - To highlight plausible implications of such a Holistic understanding in terms of ethical human conduct, trustful and mutually fulfilling human behavior and mutually enriching interaction with Nature. Thus, this course is intended to provide a much needed orientation input in value education to the young enquiring minds.
Mathematics for Competitive Examinations- II	- Prepare and motivate students for research studies in mathematics and related fields. - Provide knowledge of a wide range of mathematical techniques and application of mathematical methods/tools in other scientific and engineering domains.

	• Provide advanced knowledge on topics in pure mathematics, empowering the students to pursue higher degrees at reputed academic institutions. • Strong foundation on algebraic topology and representation theory which have strong links and application in theoretical physics, in particular string theory. • Good understanding of number theory which can be used in modern online cryptographic technologies
Relational Database Management System	• Defines the basics of the relational data model. Lists the database design process steps. • Will be able to design and implement properly structured databases that match the standards based under realistic constraints and conditions. • Develops an Entity-Relationship model based on user requirements.
Data communication and Computer Networks	• This *course* is to provide students with an overview of the concepts and fundamentals of *data communication* and *computer networks*.
PHP and mySQL	• Analyze the basic structure of a PHP web application and be able to install and maintain the web server, compile, and run a simple web application • Learn how databases work and how to design one, as well as how to use php MyAdmin to work with MySQL.
PHP and mySQL Lab	• After the completion of course, students will get hands on experience on various techniques of web development and will be able to design and develop a complete website.

PYTHON Lab	- Examine Python syntax and semantics and be fluent in the use of Python flow control and functions. - Demonstrate proficiency in handling Strings and File Systems. - Create, run and manipulate Python Programs using core data structures like Lists. Dictionaries and use Regular Expressions. - Interpret the concepts of Object-Oriented Programming as used in Python
Cloud Computing	- Ability to understand various service delivery models of a cloud computing architecture. - Ability to understand the ways in which the cloud can be programmed and deployed. - Understanding cloud service providers.
Computer for Digital Era	- To create the awareness about the digital India among the student community. - To make the student to understand the role of computer in the day to day living. - To create the awareness about the e-learning and security issues.
Web Technology	The students will be able to: - Analyze a web page and identify its elements and attributes. - Create web pages using XHTML and Cascading Style Sheets. - Build dynamic web pages using JavaScript (Client side programming). - Create XML documents and Schemas.
Web Design using HTML Lab	The students should be able to: Design and implement dynamic websites with good aesthetic sense of designing and latest technical know-how's.

	• Have a Good grounding of Web Application Terminologies, Internet Tools, E – Commerce and other web services. • Get introduced in the area of Online Game programming.
Visual Basic	• Students code visual programs by using Visual Basic work environment. • Distinguish and compose events and methods. Recognize and arrange control structures. • Design a complete program using visual programming concepts.
Visual Basic Lab	• This course introduces computer science and no major students to fundamental programming skills using the Visual Basic Integrated Development environment. • Students will learn program design, the fundamentals of event driven object-oriented programming, arrays, validation of user input, and how to create menu driven programs and multiple form applications. • This course may be taken by those not majoring in Computer Information Systems
Information Security	The students should be able to: • Define what information is • Appreciate the value of information to the modern organization • Understand the CIA triad of Confidentiality, Integrity and Availability • Appreciate the difficulties that arise when valuable information needs to be shared identify the five leading-edge resources that

	have up-to-date information on information secure
Software Engineering and Testing	- Basic knowledge and understanding of the analysis and design of complex systems. - Ability to apply software engineering principles and techniques
E-Commerce	- Understand the basic concepts and technologies used in the field of management information systems - Have the knowledge of the different types of management information systems - Understand the processes of developing and implementing information systems - Be aware of the ethical, social, and security issues of information systems
Dot NET Technologies	- Evaluate C# and the .NET framework namespace contents. - Develop the console and GUI applications using C# .Net. - Set up various navigation techniques for integrating web pages within the site. - Create the dynamic web page using ASP.NET Controls which interact with databases. - Manage cookies and sessions as state management techniques
Dot NET Lab	Create user interactive web pages using ASP.Net. Create simple data binding applications using ADO.Net connectivity. Performing Database operations for Windows Form and web applications.

Personality Development	• Develop and exhibit and accurate sense of self. Develop and nurture a deep understanding of personal motivation. • Develop an understanding of and practice personal and professional responsibility.
Operating System	• Understands the different services provided by operating System at different level. • They learn real life applications of Operating System in every field. • Understands the use of different process scheduling algorithm and synchronization techniques to avoid deadlock. • They will learn different memory management techniques like paging, segmentation and demand paging
Computer Graphics and Visualization	• Understand the basics of computer graphics, different graphics systems and applications of computer graphics. • Discuss various algorithms for scan conversion and filling of basic objects and their comparative analysis. • Use of geometric transformations on graphics objects and their application in composite form • Extract scene with different clipping methods and its transformation to graphics display device.
Data Warehousing and Data Mining	• Data preprocessing and data quality. • Modeling and design of data warehouses. • Algorithms for data **mining**. • Be able to design data warehouses.

Computer Graphics Lab	- Using OpenGL for Graphics. - Programming User-interface issues. Concepts of 2D & 3D object representation. - Implementation of various scan & clipping algorithms
Oracle	- Develop efficient PL/SQL programs to access Oracle databases - Use some of the Oracle supplied PL/SQL packages to generate screen and file outputs - Design modular applications using packages - Invoke native dynamic SQL to build runtime SQL statements
Internet of Things	- Able to understand the application areas of IOT - Able to realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks - Able to understand building blocks of Internet of Things and characteristics.
Design and Analysis of Algorithms	- Apply design principles and concepts to algorithm design. - Have the mathematical foundation in analysis of algorithms. - Understand different algorithmic design strategies. - Analyze the efficiency of algorithms using time and space complexity theory.
Advanced Java Programming	- Develop error-free, well-documented Java programs; develop and test Java network, search engine, and web framework programs. - Learn how to write, test, and debug advanced-level Object-Oriented programs using Java

Advanced Java lab	• The course covers Graphical User Interface (GUI) networking, and database. The Student will be able to use advanced technology in Java such as manipulation, Inter nationalization, and Remote method Invocation. • Student will be able to develop web application using Java Servlet and Java. • Student will learn how to work with JavaBeans.
Mathematical Foundation for Computer Science	• Ability to apply mathematical logic to solve problems. Understand sets, relations, functions, and discrete structures. • Able to use logical notation to define and reason about fundamental mathematical concepts such as sets, relations, and functions
Object Oriented Systems Development	• After successful completion of this course, student will be able to demonstrate the importance of modelling in the software development life cycle. • Become familiar with the Unified modelling Language Understand the object-oriented approach to analyzing and designing systems and software solutions. • Employ the Unified modelling Language notations to create effective and efficient system designs.
Distributed Computing	• To provide hardware and software issues in modern distributed systems. • To get knowledge in distributed architecture, naming, synchronization, consistency and replication, fault tolerance, security, and distributed file systems.

Web Application Development	- Develop skills in client-side web application development technologies. - Design a web application using web programming patterns based on data analytics to enhance the front end user experience. - Apply features to create a functioning web application.
Advanced Data Base Management System	- Explain and evaluate the fundamental theories for advanced database architectures and query operators. - Design and implement parallel database systems with evaluating different methods of storing, managing of parallel database. - Assess and apply database functions of distributed database. - Evaluate different database designs and architecture.
Security in Computing	- Acquire background on well known network security protocols such as IPSec, SSL, and WEP. - Understand vulnerability analysis of network security. - Acquire background on hash functions; authentication; firewalls; intrusion detection techniques.
Soft Computing	- Upon successful completion of the course, students will have an understanding of the basic areas of Soft Computing including Artificial Neural Networks, Fuzzy Logic and Genetic Algorithms. - Provide the mathematical background for carrying out the optimization associated with neural network learning.
Software Testing	- Discuss about the functional and system testing methods. - Distinguish characteristics of structural testing methods. Demonstrate the integration testing which aims to uncover interaction and compatibility problems as early as possible.

	• At the end of this course student will list a range of different software testing techniques and statergies and be able to apply specific (automated) unit testing method to the projects. • Demonstrate various issues for object oriented testing.
Advanced Computer Networks	• To develop an understanding of computer networking basics. • To develop an understanding of different components of computer networks, various protocols, modern technologies and their applications.
Research Methodology	• Identify and discuss the complex issues inherent in selecting a research problem, selecting an appropriate research design, and implementing a research project. • Identify and discuss the concepts and procedures of sampling, data collection, analysis and reporting.
Mobile Computing	• Graduates will demonstrate the ability to design a system, component or process as per needs and specifications. • Graduate will develop confidence for self education and ability for lifelong learning
Image Processing Using MATLAB	• Understand the relevant aspects of digital image representation and their practical implications. • Have the ability to design pointwise intensity transformations to meet stated specifications. Understand 2-D convolution, the 2-D DFT, and have the ability to design systems using these concepts. • Understand 2-D convolution, the 2-D DFT, and have the ability to design systems using these concepts.

Department of Zoology

Courses outcome

Course	outcome
Tamil	• Poetry, Grammar, Prose Literature, Short Stories, Literary History Knowing the literary creators and works of the time and creating new works.Understanding the basics of language. Knowing the ancient cultural customs of the classical language. Assuming solutions to social problems and issues. Understanding the Origin and Development of Decimal Type
Malayalam - Malayala Kavitha	• Understand the different branches of poetry which deals with numerous social subjects. Poetry helps to build a very deep knowledge about today's social conditions.
Communicative English I	• To enhance the communicative skills of students. To enrich the knowledge of students in grammar usage. To simulate real life situations in the classroom to practice real English dialogues and speeches to gain English language fluency. To build up the learners confidence in oral and interpersonal communication
Invertebrate	• To identify the Molluscan species with respect to economic importance . To describe general characters of platethelminthes and their parasitic Adaptation
Practical- Invertebrate	• Develop insight and improve their analytical communication and professional skills. Understanding the morphology and functional characteristics at cellular and sub-cellular (molecular) level. Enhancing the technical skills for experimental purposes
Professional English for life sciences –I	• Develop the language skill of the students by offering adequate practices in professional contexts. To sharpen the students critical thinking and make the students culturally aware of the target situation.
Plant diversity and medicinal Botany	• Knowledge and understanding of the range of plant diversity in terms of structure, function and environmental relationships, the evaluation of plant diversity, plant classification and the flora of Maharashtra, the role of plants in the functioning of the global ecosystem, a selection of more specialized, optional topics and statistics as applied to biological data
Practical- Plant diversity and medicinal Botany	• Students learn to carry out practical work, in the field and in the laboratory, with minimal risk. They gain introductory experience in applying each of the following skills and gain greater proficiency in a selection of them depending on their choice of optional modules. Interpreting plant morphology and anatomy. Plant identification and vegetation analysis techniques.
Tamil II	• Announcement of devotional norms through religious literature. Practice writing letters expressing the language

	structure. Expressing moral thoughts through the texts of justice. Teaching and directing the biographies of the saints. Introducing literature created by religions
Malayalam- Gadhya Sahithyam	• The autobiographical study of different famous personalities the students were ale generate several good qualities with the study of Basheer's Balyakalasakhi. Students were able to understand a lot more about cultural practices of our society.
Communictive English II	• Helps to improve practical usage of English Grammar.To help students overcome their fear and to speak in front of their peers and teachers. To build students self-confidence through various classroom activities.
Environmental Studies	• Helps to preserve the environment and its biological diversity. Concern the disturbances and the impact through society. The important aspects of environmental values.
Chordata	• To identify the characters of Amphibia and its parental care. To describe the Phylum Mammalia and its aquatic adaptations
Practical- Chordata	• Apply their skills for conservation, sustainable development, economical utilization and its potentials in technological prospects.
Plant physiology, anatomy and biotechnology	• Apply reasoning informed by the contextual knowledge to assess plant diversity, its importance for society, health, safety, legal and environmental issues and the consequent responsibilities relevant to the biodiversity conservation practice
Practical- Plant physiology, anatomy and biotechnology	• Students will be able to identify the major groups of organisms with an emphasis on plants and be able to classify them within a phylogenetic framework. Students will be able to compare and contrast the characteristics of plants, algae, and fungi that differentiate them from each other and from other forms of life.
Professional English for life sciences –II	• Enhance the creativity of the students, which will enable them to think of innovative ways to solve issues in the workplace. To help the students with a research bent of mind develop their skill in writing reports and research proposals.
Value Based Education	• Value Based Education Imported Social, moral, cultural, spiritual and human values. It build a person's overall character.
Tamil III	• To know the life history of the ancient Tamils through epics. Promoting the grammatical ability of the consecration team by teaching them the grammar. Sowing literary study ability in the mind of the student. Instruction to live in an honest way. Making history of eipics and short stories
Malayalam- Dhrishya kala sahithyam	• Not only watching, but by studying about movies students were introduced to a new world where they actually allowed to understand about what they are watching on big screen, with the study of different branches of drama students are getting deeper knowledge about it.

General English	• To develop Vocabulary and Pronunciation. To understand various styles of writings. To enhance his or her familiarity and fluency with the language considerably
Developmental Zoology	• To identify the poisonous and non poisonous snakes. To write down classification of Aves and Flight adaptation in birdsTo identify the formation of foetal membranes in chick embryo and their function.
Practical- Developmental Zoology	• Recognise the basic concepts of development stage of animals
Nutrition and Dietetics	• The classification and types of nutrients and food stuffs. Understand the nutritive value and metabolism of food materials.
Tamil IV	• To know the culture of the ancient Tamils Teaching subject grammar for Biology. Teaching Biological virtues through literature. Motivation to create plays centered on historical backgrounds. To know the history and individual features of Sangam literature.
Malayalam- Vaartha Madhyamangal (Journalism)	• By the study of journalism students were taken to a new path of their career.
General English II	• To develop interest in and appreciation of Literature. To develop confidential communication skill. To learn different styles of writings, like prose, poetry and fiction. To understand practical usage of English Grammar.
Cell and Molecular biology	• Cell cycles and its regulation and molecular biology techniques. Structure and functions of cell organelles. Properties of cancer cell and preventive measures
Practical- Cell and Molecular biology	• The course has been devised to familiarize students with Molecular Biology which chiefly deals with interactions among various systems of the cell, including those between DNA, RNA and proteins and learning how these are regulated.
Vermitechnology	• Find out vermicomposting is an eco-friendly, economically and socially acceptable technology. Utilize vermitechnology to improve the soil texture,soil aeration, improve the water retention capacity in the soil
Ecology and Toxicology	• To Describe Environmental Pollution and its control measures. To understand methods of wildlife and conservation and endangered species
Practical - Ecology and Toxicology	• This course has been designed to acquaint students with bioresources, their traditional and nontraditional uses, current status and recent developments in value addition and future prospects.
Genetics	• Understands about various concepts of genetics and its importance in human health. Apply the knowledge and understanding of Zoology to one's own life and work. Develops empathy and love towards the animals

Practical - Genetics	• The students will able to explain the segregation and assortment of chromosomes during inheritance of characters with colour beads and prove chi-square test.
Animal Physiology	• To describe the types of Digestion. To explain the process of carbohydrates, protein, lipid digestion To describe the structure of mammalian lungs
Practical - Animal Physiology	• Develop a working knowledge of major physiological systems and be able to associate anatomical areas with their specific function.
Animal biotechnology	• To describe the structure and functioning of Blood .To give the Importance of Biopsy and Autopsy To explain the scope of Biotechnology
Practical - Animal biotechnology	• The objectives of this course are to teach students with various approaches to conducting genetic engineering and their applications in biological research as well as in biotechnology industries.
Immunology & Microbiology	• Understand the mechanism of immune system and the types of lymphoid organs . Functions of immunoglobulins
Practical - Immunology & Microbiology	• The objectives of this laboratory course are to make students develop an understanding about practical aspects of the components of the immune system as well as their function. Basic as well as advanced methods will be taught to detect different antigen and antibody interactions, isolation of different lymphocyte cells etc. and how they can be used in respective research work
Personality Development	• It improve the personality, behaviour,etc. It Develops self awareness and identify the strength and weakness, help to setting the goal. It improves the leadership quality.
Biostatistics &Computer Application	• To understand the mathematical principles of biological systems and bioinfromatics
Practical -Biostatistics & Computer Application	• The objective of this laboratory course is to provide the students with practical skills in basic biochemical calculations, identification of biomolecules and certain cell biology techniques.
Sericulture	• Learned how to rear silkworm, varieties of mulberry plants , diseases of silk worm , maintain silkworm scientifically and know the reeling of silk.
Apiculture	• Understand about selection, rearing and maintenance of apiary.
Practical - Apiculture & Sericulture	• On completion of the Sericulture course, students will be able to understand overall aspects of Sericulture, namely, Mulberry and nonmulberry silkworms and their food plants, Rearing of the silkworm, Silkworm pathology, Process of silkworm seed production and silk technology

DEPARTMENT OF PHYSICAL EDUCATION	
B.Sc. Physical Education	
Course	**outcome**
Part I Tamil(Semester I) Poetry	• Knowing the literary creators and works of the time and creating new works.
Grammer	• Understanding the basics of language.
Prose Literature	• Knowing the ancient cultural customs of the classical language.
Short Stories	• Assuming solutions to social problems and issues.
Literary History	• Understanding the Origin and Development of Decimal Types.
Part I Tamil(Semester II) Poetry	• Announcement of devotional norms through religious literature.
Grammer	• Practice writing letters expressing the language structure.
Prose Literature	• Expressing moral thoughts through the texts of justice.
Life History	• Teaching and directing the biographies of the saints.
Literary History	• Introducing literature created by religions.
Part I Malayalam Malayala Kavitha	• We were able to understand different branches of poetry which deals with numerous social subjects. Poetry helps to build a very deep knowledge about todays social conditions.
GhadyaSahithyam	• The autobiographical study of different famous personalities ,the students were able to generate several good qualities with the study of BasheersBalyakalasakhi Students were able to understand a lot more abiut cultural practices of our society.
Dhrisya kala sahithyam	• Not only watching ,but by studying about movies students were introduced to a new world were they actually allowed to understand about what they are watching on big screen with the study of different branches of drama students are getting deeper knowledge about it.
Vaarthamadhyamanga l(journalisam)	• By the study of jouranalism students were taken to a new path of their career.
Communicative English I	• To enhance the communicative skills of students. • To enrich the knowledge of students in grammar usage. • To simulate real life situations in the classroom to practice real English dialogues and speeches to gain English language fluency. To build up the learners confidence in oral and interpersonal communication
Communicative English II	• Helps to improve practical usage of English Grammar. • To help students overcome their fear and to speak in English in front of their peers and teachers. • To build students self-confidence through various classroom activities

Part II General English	- To develop Vocabulary and Pronunciation. - To understand various styles of writings. - To enhance his or her familiarity and fluency with the language considerably.
Part II General English	- To develop interest in and appreciation of Literature. - To develop confidential communication skill. - To learn different styles of writings, like prose, poetry and fiction. - To understand practical usage of English Grammar.
Principles of physical literacy	Understand the basic concept of movement education and physical literacy. Know about motor skills and movement pattern
Yoga	To know to do various asanas and its benefits
badminton, ball badminton, tennis) practical	To learn the skills and techniques , tactics of these games.
Tamil	To Demonstrate an initial understanding of the language
English	To Demonstrate an initial understanding of the language
Organization and administration in physical education	Learn the scheme of physical education and understand the layout of play fields . Know budgeting , maintenance of records and registers
Fitness and wellness	Understand the essential of life long wellness , physical fitness. Over come fitness barriers and involve physical activity.
Sports psychology and sociology	Orient the student in basic concepts of psychology study about the concept of sports sociology
Sports biomachanics and kinesiology	The student would be oriented with the skeletal structure of human body by identifying the origin and insertion of various muscles
Computer for digital era	To known the basic knowledge of computer
Teaching practice practical	To learn how to teach the physical education classes and sports and games
Exercise physiology	The student would be empowered with the applicable knowledge of physiology in physical activity and sports. Analyze the factors affecting skills motor ability
Test measurement and evaluation in physical education and sports	The students will be able to recognize and related the concept of test , measurement and evaluation in the context of physical education
Theories of track and field	Critically reflect on IAAF events . learning the running , jumping and throwing through athletic ,practices
Personality development	To know the personality traits , theories of personality

Sports journalism	• The student will be oriented in basic art of mass communication and reporting of sports events through various mediums
Measurement and evaluation in human performance (practical)	• The students will be able to recognize and related the concept of test , measurement and evaluation in the context of physical education
Theories of games (basket ball, foot ball , hockey , cricket, volley ball)	• To learn basic skills and rules, techniques of these games
Games of specialization	• To acquire practical knowledge on games
Project & viva	• Student to submit an individual project report and will be assessed by a viva

DEPARTMENT OF BUSINESS ADMINISTRATION	
Course outcome– BBA	
Course	**Outcome**
Pothu Tamil - I (A1TL11)	• Understanding the Origin and Development of Decimal Types, Knowing the literary creators and works of the time and creating new works, Understanding the basics of language, literature knowing the ancient cultural customs of the classical language and assuming solutions to social problems and issues
Malayala Kavitha (A1MY11)	• We are able to understand different branches of poetry which deals with numerous social subjects. Poetry helps to build a very deep knowledge about today's social conditions.
Communicative English I (A2EN11)	• Enhances the communicative skills of students, enriches the knowledge of students in grammar usage, simulates real life situations in the classroom to practice real, to gain English language fluency through English dialogues and speeches and to build up the learner's confidence in oral and interpersonal communication.
Business Statistics (AMBA11)	• The students will be able to appreciate the importance and the worth of the application of the principlesof Business Statistics in the use of scientific methodology of management. Helps to understand the various issues involved in the collection, analysis andarriving at conclusive decisions regarding quantitative data, helps to understand and appreciate the practical relevance of various basic statistical tools in the field of finance, economics, marketing, human resources,manufacturing and so on**.**
Professional English for Commerce and Management – I (APCM11)	• Recognize their own ability to improve their own competence in using the language, Use language for speaking with confidence in an intelligible and acceptable manner, Understand the importance of reading for life, Read independently unfamiliar texts with comprehension, Understand the importance of writing in academic

	life, Write simple sentences without committing error of spelling or grammar
Environment of Business (AABA11)	• Familiarizes with the nature of business environment and its components, the students will be able to demonstrate and develop conceptual framework of business environment and generate interest in international business and understand the definition of ethics and the importance and role of ethical behavior in the business world today.
Environmental Studies (AEVS11)	• The learners understands the complexity of ecosystems and possibly how to sustain them, understands the relationships between humans and the environment and helps to understand major environmental problems including their causes and consequences.
Pothu Tamil – II (A1TL21)	• Announcement of devotional norms through religious literature, Practice writing letters expressing the language structure, Literature Expressing moral thoughts through the texts of justice, Teaching and directing the biographies of the saints and Introducing literature created by religions.
Ghadya Sahithyam (A1MY21)	• The autobiographical study of different famous personalities, the students were able to generate several good qualities with the study of Basheers Balyskalasakthi, Students were able to understand a lot more about cultural practices of our society.
Communicative English II (A2EN21)	• Helps to improve practical usage of English Grammar, to help students overcome their fear and to speak in English in front of their peers and teachers and to build students self-confidence through various classroom activities.
Principles of Management (AMBA21)	• Recognizes the role of a manager and how it relates to the organization's mission. • Define management, its four basic functions and skills, Knows critical management theories and philosophies and how to apply them, Recognizes the concept of social responsiveness and its benefits, Understands the relationship between strategic, tactical, and operational plans, Identify the stages of team development and the skills a team must acquire to become effective, Recognizes the part communication plays in the management function, Create awareness on change management and explain where it fits in the management function.

Professional English for Commerce and Management – I (APCM21)	• The Professional Communication Skills Course is intended to help the business Administration students, Develop their competence in the use of English with particular reference to the workplace situation and Enhance the creativity of the students, which will enable them to think of innovative ways to solve issues in the workplace
Managerial Economics (AABA21)	• Understand the internal and external decisions to be made by managers, Analyze real-world business problems with a systematic theoretical framework, Analyze the demand and supply conditions and assess the position of a company and Design competition strategies, including costing, pricing, product differentiation, and market environment according to the natures of products and the structures of the markets.
Value Based Education (AVBE21)	• Students will understand the importance of value based living, Students will gain deeper understanding about the purpose of their life, Students will understand and start applying the essential steps to become good leaders, Students will emerge as responsible citizens with clear conviction to practice values and ethics in life, Students will become value based professionals and Students will contribute in building a healthy nation.
Principles of Management (SMBA31)	• Recognizes the role of a manager and how it relates to the organization's mission. Define management, its four basic functions and skills, Knows critical management theories and philosophies and how to apply them, Recognizes the concept of social responsiveness and its benefits, Understands the relationship between strategic, tactical, and operational plans, Identify the stages of team development and the skills a team must acquire to become effective, Recognizes the part communication plays in the management function and Create awareness on change management and explain where it fits in the management function.
Business Law (SMBA32)	• Understands and analyzes about the framework of Indian Business Laws, Be acquainted about the legal aspects of business, Familiarizing with case law studies related to Business Laws, The learners will understand the important term in the Indian Contract Act 1872, Sale of goods Act 1930 and Gets an exposure to the Partnership Act 1932 and Negotiable Instrument Act.
Financial Accounting (SABA33)	• Show proficiency in basic accountingconcepts, conventions and understanding of the accounting process, Understand the process and preparation of financial statements for Sole

		Proprietorship and Company and Departmental Business Organizations
Organizational Behaviour (SABA34)	•	Analyzes individual and group behaviour, and understand the implications of organizational behaviour on the process of management. Helps to identify different motivational theories and evaluate motivational strategies used in a variety of organizational settings. Evaluates the appropriateness of various leadership styles and conflict management strategies used in organizations, Describes and assess the basic design elements of organizational structure and evaluate their impact on employees. Explains how organizational change and culture affect working relationships within organizations.
Advertising (SABA31)	•	The student will be able to Demonstrate an understanding of the overall role advertising plays in the business world, Demonstrate an understanding of advertising strategies and budgets, Identify and understand the various advertising media, Demonstrate an understanding of how an advertising agency operates.
Introduction to Banking (SSBA3A)	•	Provides an understanding of the Indian Banking & Insurance Sector, To make the students comprehend, the latest offerings and the day to day operations in Banking & Insurance.
Yoga (SYOG3A)	•	Demonstrate basic skills associated with yoga activities including strength and flexibility, balance and coordination. Demonstrate the ability to perform yoga movements in various combination and forms. Understand and apply the knowledge of basic sequencing, and effective group management. Demonstrate the ability to create and present various yoga sequences. Demonstrate an understanding of health-related fitness components.
Cost Accounting	• •	Enables the students to conceptualize various methods and techniques of cost accounting and its application. Understand various costing systems and management systems, Analyse and provide recommendations to improve the operations of organisations through the application of Cost and Management accounting techniques Evaluate the costs and benefits of different conventional and contemporary costing systems, Differentiate methods of schedule costs as per unit of production, Differentiate methods of calculating stock consumption, identify the specifics of different costing methods, Analyze cost-volume-profit techniques to determine optimal managerial decisions, Apply cost accounting methods for both manufacturing and service industry.
Industrial Law	• •	Students should able to elaborate the concept of Industrial Relations. The students should able to illustrate the role of trade union in the

	industrial setup.
	• Students should able to outline the important causes & impact of industrial disputes.
	• Students should able to elaborate Industrial Dispute settlement procedures.
	• Student should be able to summarize the important provisions of Wage Legislations, in reference to Payment of Wages Act 1936, Minimum Wages Act 1948 & Payment of Bonus Act 1965 CO6 Student should able to summarize the important provisions of Social Security Legislations, in reference to Employees State Insurance Act 1948, Employees Provident Fund Act 1952, Payment of Gratuity Act 1972.
Financial Services	• Understand the role and function of the financial system in reference to the macro economy.
	• Demonstrate an awareness of the current structure and regulation of the Indian financial services sector.
	• Evaluate and create strategies to promote financial products and services.
Salesmanship	• Students will demonstrate a working level knowledge of core business functions in international business, legal and social environment, marketing, and management. Students will analyze a complex business situation, identify relevant functional business issues and suggest viable courses of action, Students will possess the interpersonal and communication skills necessary to succeed in business, Students will deliver professional quality oral presentations B. Students will deliver professional quality written presentations, Students will analyze a complex business situation and identify relevant ethical issues and suggest viable courses of action.
Secretarial Practice	• Summarize Procedure for incorporation of the company. Analyze Sources of raising capital. Evaluate Role and importance of Company Secretary and key managerial personnel. Discuss Matters to be stated in the prospectus. Define Demat and Re-mat of securities.
Case Analysis (SMBA51)	• Describe an individual situation (case), e.g. a person, business, organisation, or institution, Identify the key issues of the case (your assignment question should tell you what to focus on), Analyse the case using relevant theoretical concepts from your unit or discipline, Recommend a course of action for that particular case (particularly for problem-solving case studies).
Marketing Management (SMBA52)	• Students will demonstrate strong conceptual knowledge in the functional area of marketing management. Students will demonstrate effective understanding of relevant functional areas of

	marketing management and its application. Students will demonstrate analytical skills in identification and resolution of problems pertaining to marketing management.
Management Accounting (SMBA53)	• Apply management accounting and its objectives in facilitating decision making. Apply and analyze different types of activity-based management tools through the preparation of estimates. Analyze cost-volume-profit techniques to determine optimal managerial decisions. Perform cost variance analysis and demonstrate the use of standard costs in flexible budgeting. Prepare analyses of various special decisions, using relevant management techniques. Calculate various accounting ratios, reports and relevant data. Prepare a master budget and demonstrate an understanding of the relationship between the components. Prepare Cash Flow and Funds Flow statements this helps in planning for intermediate and long-term finances.
Research Methodology (SMBA54)	• Develop understanding on various kinds of research, objectives of doing research, research process, research designs and sampling. Identify and discuss the role and importance of research in the social sciences. Identify and discuss the issues and concepts salient to the research process. Identify and discuss the complex issues inherent in selecting a research problem, selecting an appropriate research design, and implementing a research project. Identify and discuss the concepts and procedures of sampling, data collection, analysis and reporting. Have basic knowledge on qualitative research techniques, Have adequate knowledge on measurement & scaling techniques as well as the quantitative data analysis, Have basic awareness of data analysis-and hypothesis testing procedures
Production Management (SEBA54)	• Gaining knowledge about managing production processes, How to run operations effectively. Better understanding of modern production techniques. Better understanding of quality management. Management skills needed for the effective operations management.
Personality Development (SCSB5A)	• Projecting the Right First Impression, Polishing manners to behave appropriately in social and professional circles, Enhancing the ability to handle casual and formal situations in terms of personal grooming, dining and entertaining etiquette, Developing and maintaining a positive attitude and being assertive, Mastering Cross Cultural Etiquette, Handling difficult situations with grace, style, and professionalism
Retail Management (SMBA61)	• Understand the impact of retailing on the economy. Comprehend retailing's role in society and, conversely, society's impact on retailing. See how retailing fits within the broader disciplines of business and marketing. Recognize and understand the operations-

	oriented policies, methods, and procedures used by successful retailers in today's global economy. Know the responsibilities of retail personnel in the numerous career positions available in the retail field.
Financial Management (SMBA62)	• Explain the concept of fundamental financial concepts, especially time value of money. Apply capital budgeting projects using traditional methods. Analyze the main ways of raising capital and their respective advantages and disadvantages in different circumstances, Integrate the concept and apply the financial concepts to calculate ratios and do the capital budgeting
Human Resource Management (SMBA63)	• To develop the understanding of the concept of human resource management and to understand its relevance in organizations. To develop necessary skill set for application of various HR issues. To analyse the strategic issues and strategies required to select and develop manpower resources. To integrate the knowledge of HR concepts to take correct business decisions.
Entrepreneurship (SEBA6A)	• Understand the nature of entrepreneurship, Understand the function of the entrepreneur in the successful, commercial application of innovations, Confirm an entrepreneurial business idea, Identify personal attributes that enable best use of entrepreneurial opportunities, Explore entrepreneurial leadership and management style.

Courses outcome	
B.COM	
Courses	**Outcomes**
Part I Tamil(Semester I) Poetry	• Knowing the literary creators and works of the time and creating new works.
Grammer	• Understanding the basics of language.
Prose Literature	• Knowing the ancient cultural customs of the classical language.
Short Stories	• Assuming solutions to social problems and issues.
Literary History	• Understanding the Origin and Development of Decimal Types.
Part I Tamil(Semester II) Poetry	• Announcement of devotional norms through religious literature.
Grammer	• Practice writing letters expressing the language structure.
Prose Literature	• Expressing moral thoughts through the texts of justice.
Life History	• Teaching and directing the biographiesof the saints.
Literary History	• Introducing literature created by religions.
Part I Malayalam MalayalaKavitha	• We were able to understand different branches of poetry which deals with numerous social subjects.Poetry helps to build a very deep knowledge about todays social conditions.
GhadyaSahithyam	• The autobiographical study of different famous personalities ,the students were able to generate several good qualities.with the study of BasheersBalyakalasakhi Students were able to understand a lot more abiut cultural practices of our society.
Dhrisya kala sahithyam	• Not only watching ,but by studying about movies students were introduced to a new world were they actually allowed to understand about what they are watching on big screen.with the study of different

	branches of drama students are getting deeper knowledge about it.
Vaarthamadhyamangal(journalisam)	• By the study of jouranalism students were taken to a new path of their career.
Communicative English I	• To enhance the communicative skills of students. • To enrich the knowledge of students in grammar usage. • To simulate real life situations in the classroom to practice real English dialogues and speeches to gain English language fluency. To build up the learners confidence in oral and interpersonal communication
Communicative English II	• Helps to improve practical usage of English Grammar. • To help students overcome their fear and to speak in English in front of their peers and teachers. • To build students self-confidence through various classroom activities
Part II General English	• To develop Vocabulary and Pronunciation. • To understand various styles of writings. • To enhance his or her familiarity and fluency with the language considerably.
Part II General English	• To develop interest in and appreciation of Literature. • To develop confidential communication skill. • To learn different styles of writings, like prose, poetry and fiction. • To understand practical usage of English Grammar.
Professional English I	• To improve the level of understanding of Grammar and also how to use grammar in their comprehensions by using number of practices.
Professional English II	• To improve the level of understanding of Grammar and also how to use different styles of writings, like grammar .
Research Methodology	• To understand the basic concepts of research and its methodologies. • To organize and conduct research in a more appropriate manner.

Income Tax Law & Practice-I	• To understand the basic concepts of income tax • To study the provisions regarding computation of first three heads of income i.e., salary, house property and business income.
Mini Project	• To enable the students to apply their conceptual knowledge in a practical situation. • To learn the act of conducting a study and presenting its findings in the form of a rational report.
Corporate accounting -II	• To know the preparation of liquidators final statement of accounts. • To prepare the final accounts of banking company in a schedule form • To train the students to prepare final accounts under double account system
Management Accounting	• To familiarise the students with the basic management accounting concepts and their applications in managerial decision-making
Industrial law	• To acquaint knowledge on industrial relations framework in our country • To study various rights and benefits available to the workmen under the legislations.
Auditing	• To know the importance of audit in commercial and non-commercial organizations. • To understand the procedures to be followed while auditing the business organizations.
Income Tax Law & Practice -II	• To know the procedure for assessment and types of assessment • To understand the computation of tax liability of individuals
Major Project	• To impart knowledge and develop understanding of research methodology and its applications • To study the methods of data collection and its interpretation to develop analytical skills in generalization of things and concepts

Courses outcome	
M.COM	
Courses	**Outcomes**
Advanced Business Statistics	- Understands basic statistical tools. - Students shall test hypothesis on their own - Understand the underlying concept of P-value. - Learn more about non-parametric tests. - Make the different conditions.
Management Concepts and Organisational Behaviour	- Ability to execute managerial tasks of planning, organizing and controlling. - Understanding of different styles of leadership and its impact on decision making process. - In-depth understanding of emotional labour and different types of emotions. - Ability to analyze challenges and opportunities in the field of organization behavior
Computer Literacy	- Microsoft Office, including Word, PowerPoint, Excel, Access, and Outlook. - Improve Keyboarding & 10-Key techniques. - Efficient Internet Research. - Spelling, Punctuation, and Grammar. - General Office Skills; File Management, Record Filing, Telephone & Email Etiquette.
Modern Marketing Mangment	- Students can identify how consumer behaves differently. - Able to understand how a product passesed from different stages. - Able to understand the difference between trademark and branding. - Able to describe the customer segmentation, target marketing and positioning. - Understand different methods of sale promotion.
Advanced Corporate Accounting	- After the completion of the course, Students will be able to - Know about the companies all accounts. - Get the Knowledge of banking system. - Learn about working format of companies.

	• Understand Mutual funds investments.
Income Tax Law and Practice	• After conclusion of study the students will be able to: • Define the procedure of direct tax assessment. • Able to file IT return on individual basis. • Able to compute total income and define tax complicacies and structure. • Able to understand amendments made from time to time in Finance Act. • Differentiate between direct and indirect tax assessment.
E-Commerce	• After the completion of the course, Students will be able to • Logically observed and experienced the main activities of E-Commerce. • Learned and evaluated about the various components of E-Commerce. • Conceptually learned the concept of online shopping and models of Electronic market. • Thoroughly learned the concepts of instant messaging and Electronic Data Exchange. • Learned about the implementation of HTTP and Secure Electronic transaction
Human Resource Management	• After the completion of the course, Students will be able to • Learn the qualities of human resource manager in an organization. • Analysis the importance of different methods of training given to the employees in organization. • Memorize the difference between on the job training and of the job training. • Learn the participant of industrial relation and recruitment of good industrial relation programme.
Research Methodology	• Able to find out a research problem and carry out research to find a solution to the problem. • Clear idea about sampling design and size is known and thereby able to select the appropriate method of sampling. • The students learns the method of data collection. • Students are able to apply statistical tools in finding out a solution.

	• Learn to analyse the data and interpret.
Banking	• Students successfully completing this course will be able to: • Demonstrate a comprehension of the principles of banking law and its relationship to banks and customers. • Demonstrate an awareness of law and practice in a banking context. • Engage in critical analysis of the practice of banking law from a range of perspectives. • Organize information as it relates to the regulation of banking products and services.
Financial Management	• After Completion of this course the student would be able to- • Use business finance terms and concepts when communicating. • Explain the financial concepts used in making financial management decision. • Use effective communication skills to promote respect and relationship for financial deals. • Utilize information by applying a variety of business and industry software and hardware to major financial function. • Demonstrate a basic understanding of financial management.
Quantitative Techniques for Decision Making	• Find out solution for practical decision making issues using linear programming. • Acquire knowledge to solve business problems using transportation and assignment. • Assist to mange projects using queing theory. • Help to replace asset using quantitative models.
Corporate Legal Frame Work	• Can able to learn the conditions of partnership act. • Critically evaluate conditions and warranties of sale of goods act. • Aware about rights to information. • Can able to use negotiable instrument in practical life.
	• After conclusion of study the students will be able to: • Define various elements internal as well as external

Business Environment	affecting business environment. • Explain the techniques like SWOT analysis. • Define the terms like inflation, GDP, etc. • Define the consequences with regard to BOP. • Explain the economic trends and effect of Govt. policies as LPG.
Retail Management	• Knowledge about retailing practices followed in India. • Ability to understand behavior of Retail shopper. • Basics of Retail Merchandising and Merchandising Planning Process. • Familiar with Merchandise Procurement and Retail pricing issues
Entrepreneurship Development	• Student will able to understand the basic development of entrepreneurship as a profession. • Student will have a basic knowledge of human resource management for small business. • Student will able to identify and implement systems for collecting and analyzing information to monitor the performance of a new firm • Student will able to understand the differences between an entrepreneurial venture and an ongoing business operation. • Student will able to understand the critical roles of marketing research, competitive analysis, consumer-value proposition, and market-entry strategy in the development of a business plan. • Student will able to describe examples of entrepreneurial business and actual practice, both successful and unsuccessful, and explain the role and significance of entrepreneurship as a career, in the firm, and in society. • Student will able to understand the importance and role of ethical, sustainability, innovation and global issues for strategic decision making.
Advanced Cost Accounting	• After conclusion of study the students will be able to: • Define the various components of total cost of a product i.e. direct & indirect cost and fixed & flexible cost. • Determine various levels of material i.e. reorder level, minimum level, maximum level & EOQ for managing

	- working capital. - Use methods of time-keeping & time-booking and manage idle & overtime. - Define the features of overhead or indirect cost of production and basis of allocation and apportionment. - Use cost-sheet to compute unit cost of product.
Indirect Taxation	- Students will get an understanding on indirect taxation system in India. - Students will get working knowledge on GST - Students will able to compute GST - Students will prepare and submit returns for GST.
Financial Markets	- Students shall understand the mechanism of financial markets - Students shall acquire knowledge on different securities traded in Stock Exchange - The learners shall apply different valuation techniques to determine share prices. - By the end of the course students shall be able to assess the risk and return associated with financial assets. - Students shall be able to frame an optimal mix of debt and equity financing
Computerised Accounting Package –Tally 9	- After successfully qualifying the practical examination, students will be able to work on the software independently. - Students shall possess required skill needed to become a data operator in companies. - Students shall by their own create company, enter voucher entries, etc., in software.

Courses outcome	
Master of Social Work	
courses	**Outcomes**
Introduction to professional social work	• To Demonstrate an initial understanding of core social work values of justice and equality • To Understand the values, knowledge, and skills that distinguishes social work from other professions.
Dynamics of human behaviour	• To analyze a range of factors within and outside individuals which influence mind and behavior • To consider multiple influences in case studies
Case work	• To acquire basic knowledge on casework method • To enhance different skills and techniques in practicing the different process, approaches, and methods of casework in dealing with problems of individuals.
Man and society	• To demonstrate knowledge of core sociological concepts. • To demonstrate knowledge of how to use theory to conceptualize a sociological problem. • To develop the knowledge, skills, and attitudes necessary to be engaged members of the community.
Group work	• To develop interpersonal skills such as speaking and listening as well as team working skills such as leadership, and working with and motivating others. • To develop different skills and techniques in practicing the different process, approaches, and methods of group work in dealing with individuals in groups
Community organisation	• To Identify community organization, management, and policy-planning strategies, as well as empirically supported practices for dealing with contemporary social work and social welfare problems • Demonstrate the ability to utilize selected assessment tools for addressing practice issues (e.g., flow-charts, force field analysis, nominal group technique, task analysis, community profiling, asset mapping, community needs and strengths assessment
Social work research	• To comprehend quantitative and qualitative research and understand scientific and ethical approaches to building knowledge. • To understand the different process and methodology of the scientific social work research.
Observation visit 1	• opportunity to apply theories in practical situations for problem solving with individuals, groups and

	communities
	• To familiarize with different settings and agencies of social work
Concurrent field visit 2	• To appreciate the role of social work profession empowering individuals, groups and communities and in facilitating social change, To provide opportunities to accept challenges and respond to them To understand the nature of social work practice in different specializations ensuring human rights and social justice.
Social welfare administration	• To understand the different functions and programmes of different social welfare agencies • To enhance different practical skills and techniques in carrying out specific programme of social welfare agencies
Summer placement	• To develop an understanding of the agency's organizational structure and relevant factors which impact the provision of service to clients. • To develop the ability to work collaboratively with other professionals and the community at large in their role as a professional social worker.
Health and hygiene	• To familiarize on balance diet and communicable diseases • To enhance knowledge on different practical techniques and strategies in application of health and hygiene care
Mental health	• Respond empathically to mental illness and psychological distress in all medical and broader settings. • Knowledge regarding different mental illness and its treatment • Demonstrate an understanding of mental health legislation and organizational policies and guidelines relevant to mental health practice.
Medical social work	• Facilitating adaptive coping patterns and adjustment to chronic illness or Helping people facing illness, trauma-related crises, or disability • to understand and manage the psychosocial impact on their lives and on significant relationships and to make decisions and plan for the future. Inability and assisting with reintegration or adaptation to new environments.
Labour welfare	• To demonstrate the Acts and Regulations regarding the labour welfare schemes.

	• To identify the need of labour welfare with the changed context of economic reform, such as globalization, privatization and liberalization.
Labour legislation 1	• Students will know the development and the judicial setup of Labour Laws. • Students will learn the laws relating to Industrial Relations, Social Security and Working conditions and also learn the enquiry procedural and industrial discipline.
Human resource management	• Demonstrate a basic understanding of different tools used in forecasting and planning human resource needs recruitment, selection, and retention plans and processes. • Contribute to the development, implementation, and evaluation of employee recruitment, selection, and retention plans and processes.
Concurrent field visit 3	• To appreciate the role of social work profession empowering individuals, groups and communities and in facilitating social change, To provide opportunities to accept challenges and respond to them To understand the nature of social work practice in different specializations ensuring human rights and social justice.
Study tour	• to expose to a wide range of government and nongovernment organizations in different parts of the country • Enables to acquire information about new strategies and trends practiced in various organizations in relation to different issues. • information about employment opportunities and conditions in various places
Psychiatric social work	• To understand the therapeutic intervention in psychiatric illness and counselling • To demonstrate skills and intervention techniques for psycho social treatment and rehabilitation of patients
Hospital administration	• To evaluate the culturally diverse healthcare environment. • To Analyze the inter professional relationships within a healthcare setting.
Counseling	• Realize the significance of counselling • Assess the skills and qualities of a good counsellor • Differentiate between guidance and counselling • Identify and appreciate the various roles of a counsellor • Realize the importance of ethics in the counselling

	profession
Industrial relations	• Be aware of the present state of Industrial relations in India. • Be acquainted with the concepts, principles and issues connected with trade unions, • collective bargaining, workers participation, grievance redress, and employee discipline
Labour legislations2	• Students will know the development and the judicial setup of Labour Laws. • Students will learn the laws relating to Industrial Relations, Social Security and Working conditions and also learn the enquiry procedural and industrial discipline.
Organizational behaviour	• to identify the processes used in developing communication and resolving conflicts • to identify the various leadership styles and the role of leaders in a decision making process.
Fieldwork 4	• To appreciate the role of social work profession empowering individuals, groups and communities and in facilitating social change, To provide opportunities to accept challenges and respond to them To understand the nature of social work practice in different specializations ensuring human rights and social justice.
Research Project	• Identify and demonstrate appropriate research methodologies and know when to use them. • To conduct in-depth study on any social problems, and areas of specialization.
Block placement	• Equipping the students with relevant and conceptualized professional skills and guiding them towards a bright future. • provide an appropriate, positive working environment which is conducive to learning and provides opportunities for identifying good practice;