



GOVERNMENT COLLEGE MOKERI

POST GRADUATE PROGRAMMES OUTCOMES

1. M. SC MATHEMATICS

PROGRAMME OUTCOMES

Upon completing the M. Sc degree in the field of Mathematics, students have/capable of:

1. A solid understanding of graduate level algebra, analysis and topology.
2. Using their mathematical knowledge to analyze certain problems in day to day life.
3. Identifying unsolved yet relevant problems in a specific field.
4. Undertaking original research on a particular topic.
5. Communicate mathematics accurately and effectively in both written and oral form.
6. Conducting scholarly or professional activities in an ethical manner.

COURSE OUTCOMES

SEMESTER 1

MTH1CO1: ALGEBRA - I

- Learn factor group computation.
- Understand the notion of group action on a set.
- Understand the notion of free groups.
- Understand the concept s rings of polynomials and ideals.
- Learn basic properties of field extensions.

MTH1CO2: LINEARALGEBRA

- Learn basic properties of vector spaces
- Understand the relation between linear Transformations and matrices
- Understand the concept of diagonalizable and triangulable operators and various fundamental results of these operators
- Understand Primary decomposition Theorem.
- Learn basic properties inner product spaces

MTH1CO3: REALANALYSIS-I



- Learn the topology of the real line
- Understand the notions of Continuity, Differentiation and Integration of real functions.
- Learn Uniform convergence of sequence of functions, equicontinuity of family of functions, and Weierstrass theorems.

MTH1CO4: DISCRETE MATHEMATICS

- Understand the fundamentals of Graphs
- Learn the structure of graphs and familiarize the basic concepts used to analyse different problems in different branches in different areas
- Acquire a basic knowledge of formal languages, grammars and automata.
- Learn the equivalence of deterministic and non deterministic finite accepters.
- Learn the concepts of partial order relation and total order relation.
- Acquire knowledge of Boolean algebras and Boolean function and understand how these concepts arise in certain real life problems.

MTH1CO5: NUMBER THEORY

- Be able to effectively express the concepts and results of number theory.
- Learn basic theory of arithmetical functions and Dirichlet multiplication averages of some arithmetical functions.
- Understand distribution of prime numbers and prime number theorem.
- Learn the concept of quadratic residue and Quadratic reciprocity laws.
- Get a basic knowledge in Cryptography

MTHIA01: ABILITY ENHANCEMENT

- Acquires skills for doing research
- Self paced learning

SEMESTER II

MTH2CO6: ALGEBRA-II

- Be able to apply Sylow's theorem effectively in various contexts.
- Learn automorphisms of fields.



- Get a basic knowledge in Galois Theory.
- Learn how to apply Galois Theory in various contexts

MTH 2CO7: REAL ANALYSIS-II

- Learn why and for what the theory of measure was introduced
- Learn the concept of measures and measurable functions
- Learn Lebesgue integration and its various properties
- Learn how to generalize the concept of measure theory.
- Learn that a measure may take negative values

MTH2CO8: TOPOLOGY

- Be proficient in abstract notion of a topological space, where continuous functions are defined in terms of open sets not in the traditional $\varepsilon - \delta$ definition used in analysis.
- Realize Intermediate value theorem is a statement about connectedness, Bolzano-Weierstrass theorem is a theorem about compactness and so on.
- Learn the concept of quotient topology.
- Learn five properties such as T_0 , T_1 , T_2 , T_3 and T_4 of a topological space X which express how rich the open sets are.

MTH 2CO9: ODE AND CALCULUS OF VARIATIONS

- Learn the existence and uniqueness of solutions for a system of first order ODEs.
- Learn many solution techniques such as separation of variables, variation of parameter, power series method, Frobenius method etc.
- Learn method of solving system of first order differential equations.
- Get an idea of how to analyze the behaviour of solutions such as stability, asymptotic stability etc.
- Get a basic knowledge of Calculus of variations

MTH2C10: OPERATIONS RESEARCH

- Learn certain methods and algorithms for solving some particular class of nonlinear programming-convex, quadratic, dynamic and geometric programming problems and realize the limitations in handling non linear programming.
- Learn how to formulate certain games as programming problems, and learn Min-Max Theorem and some techniques for solving rectangular games



MTH2A02: TECHNICAL WRITING WITH LATEX(PCC)

- Able to install and use latex
- Able to use basic syntax, writing equations, Matrix and Tables
- Able to set Page Layout
- Able to use List making environments, Table of contents, Generating new commands
- Able to handle Figures, List of tables, Generating bibliography and index
- Able to create presentation using Beamer
- Able to use Pstricks and Tikz

MTH2A03: PROGRAMMING WITH SCILAB(PCC)

- Able to write programmes using Scilab
- Able to solve problems from Linear algebra, ODE and Numerical Analysis using Scilab
- Able to draw 2D and 3D figures.

SEMESTER III

MTH3C11: MULTIVARIABLE CALCULUS AND GEOMETRY

- Be proficient in differentiation of functions of several variables.
- Understand curves in plane and in space.
- Get a deep knowledge of Curvature, torsion, Serret-Frenet formulae
- Learn Fundamental theorem of curves in plane and space.
- Learn the concept of Surfaces in three dimension, smooth surfaces, surfaces of revolution
- Learn explicitly tangent and normal to the surfaces.
- Get a thorough understanding of oriented surfaces, first and second fundamental forms surfaces, Gaussian curvature and geodesic curvature and so on

MTH3C12: COMPLEX ANALYSIS

- Learn the concept of (complex) differentiation and integration of functions defined on the complex plane and their properties.
- Be thorough in power series representation of analytic functions, different versions of Cauchy's theorem.
- Get an idea of singularities of analytic functions and their classifications.
- Learn different versions of maximum modulus theorem

MTH3C13: FUNCTIONAL ANALYSIS



Learn the concept of normed linear spaces and various properties of operators defined on them

MTH3C14:

PDE AND INTEGRAL EQUATIONS

- Learn a technique to solve first order PDE and analyse the solution to get information about the parameters involved in the model.
- Learn explicit representations of solutions of three important classes of PDE Heat equations Laplace equation and wave equation for initial value problems.
- Get an idea about Integral equations
- Learn the relation between Integral and differential Equations

MTH3E03 :

MEASURE AND INTEGRATION (ELECTIVE)

- Learn how a measure will be helpful to generalize the concept of an integral.
- Learn how smallest sigma algebra containing all open sets be constructed on a topological space which ensures the measurability of all continuous function and how a measure called Borel measure is defined on this sigma algebra which ensures the integrability of a huge class of continuous functions.
- Understand the regularity properties Borel measures.
- Realise a measure may take real values even complex values. Learn to characterize bounded linear functional on L_p

SEMESTER IV

MTH4C15:

ADVANCED FUNCTIONAL ANALYSIS

- Understand the concept of the spectrum of bounded operators and how much it will be helpful in solving certain differential equations.
- Get an idea about different types of convergence of sequences in normed spaces and their relations.
- Understand that there is a nice class of operators called compact linear operators stronger than continuous linear operators on a normed space and understand the behaviour of spectrum of such operators.
- Understand that there is a subjective isometry between a Hilbert space and its dual

MTH4E06:

ALGEBRAIC NUMBER THEORY

1. • Understand that abstract algebra may be used to solve certain problems in Number Theory.



2. • Learn about arithmetic of algebraic number fields.
3. • Understand that the familiar unique factorization property may fail in the case of ring of integers of some quadratic fields while a unique factorization theory holds for ideals of ring of integers of a number field.
4. • Learn finiteness of class numbers.
5. • Understand that the notions of algebraic numbers may be applied to prove Kummer's special case of Fermat's Last Theorem.

**MTH4E07:
ALGEBRAIC TOPOLOGY**

Learn how basic geometric structures may be studied by transforming them into algebraic questions.

- Learn basics of homology theory and apply it to get a generalization of Euler's formula to a general polyhedral.
- Learn to associate various groups namely homology groups of various dimensions and the homotopy group-the fundamental group to every topological space.
- Learn that two objects that can be deformed into one another will have the same homology group.
- Learn Brouwer fixed point theorem and related results.

MTH4E11: GRAPH THEORY

- Learn Different types of connectivity in graphs.
- Learn independent sets and matching.
- Learn graph colouring and related results.

**MTH4E12:
REPRESENTATION THEORY OF FINITE GROUPS**

- Acquire the basics of classical representation theory of finite groups.
- Understand character theory and orthogonal relations.
- Acquire knowledge of the theory of induced characters.

MTH4E13: WAVELET THEORY

- Learn the concept of discrete Fourier Transforms and its basic properties.
- Learn how to construct Wavelets on $\mathbb{Z} \ltimes \mathbb{Z}$ and \mathbb{Z} .
- Learn Wavelets on \mathbb{R} and construction of MRA.



2. MASTER OF COMMERCE (FINANCE)

PROGRAMME OUTCOME:

M.Com is a postgraduate degree, which deals with various advanced areas of Commerce, Accounting, Finance and Economics. The two-year degree course opens career opportunities in the corporate, finance sectors and banking sector. It offers specialization in Accounting, Taxation, Finance, Human resource management etc. This is a four-semester choice-based credit system course and has approval from UGC.

COURSE OUTCOMES:

SEMESTER I

MCM1C01:

BUSINESS ENVIRONMENT AND POLICY

To familiarise students with the concepts of macro- economic in which a Business organization operates.

To give an idea about the policies of the government and assess their impact on business.

MCM1C02

CORPORATE GOVERNANCE AND BUSINESS ETHICS

To familiarise the students with the knowledge of corporate Ethics

To enable the students to understand the emerging trends in good governance practices.

To create corporate financial reports in the global in the global and Indian context.

MCM1C03:

QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS

To acquaint students with important quantitative techniques, which enable sound business decision making

To make students learn the process of applying appropriate quantitative techniques for validating findings and interpreting results.



MCM1C04:
MANAGEMENT THEORY AND ORGANISATIONAL BEHAVIOR

To provide information about Group dynamic and inter group relationships, organizational culture and organizational development

MCM1C05:
ADVANCED MANAGEMENT ACCOUNTING

To enable students to understand and apply tools, techniques, and concepts in managerial decision-making process.
To inculcate analytical skills in interpreting and diagnosing business problems

MCM1A04
NET Coaching
(Ability Enhancement Course)

To generate awareness among students about various competitive examinations
To motivate students to take part in NET examination.

SEMESTER II
MCM2C06: ADVANCED CORPORATE ACCOUNTING

To provide knowledge and skills in the theory and practice of corporate financial accounting.
To provide insight in to some of the important accounting standards of IFRS /Ind AS .
To enable problem solving abilities among students in matters of various corporate situations such as consolidation of group information, corporate restructuring and liquidation

MCM2C07:
ADVANCED STRATEGIC MANAGEMENT

To provide basic knowledge about the concepts, principles, tools and techniques strategic management.
To impart necessary knowledge different aspects related to strategic management

MCM 2C08
STRATEGIC COST ACCOUNTING

To enable the students to know the applications of Cost accounting tools, Techniques and concepts in managerial decision-making process.
To provide students adequate knowledge of cost management and control techniques and to enable them to apply these for managing business



MCM2C09:
INTERNATIONAL BUSINESS

To provide students adequate knowledge of International business environment ,Strategy development in international business, International economic institutions and integrations, functional strategies of international business

MCM2C10:
MANAGEMENT SCIENCE

To familiarize students with concepts of management science and tools supporting decision making
To enable students to apply Management science techniques in appropriate decision situations.

MCM2A04:
Spread Sheet Application
(Professional Competency Course)

To gain an understanding of how managers use spread sheet analysis to formulate and solve business problems and to support managerial decision making.
To become familiar with the processes needed to develop, report and analyse business.

SEMESTER III
MCM3C11
FINANCIAL MANAGEMENT

To acquaint the students with the basic analytical techniques and methods of financial management of business organization.
To provide the students the exposure to certain advanced analytical techniques that are used for taking financial policy decisions.

MCM3C12:
INCOME TAX: LAW, PRACTICE AND TAX PLANNING

To enable students to understand computation of income under various heads, taxable income of various entities, tax planning and procedure of assessment.

MCM3C13:
RESEARCH METHODOLOGY

To acquaint students with process and methodology of research
To enable students to identify research problems, collect and analyse data and present results.



MCM3EF01:
INVESTMENT MANAGEMENT (Elective)

To establish a conceptual framework for the study of security analysis and portfolio management. This course will provide the students the ability to understand and utilize the skill of optimizing returns.

MCM3EF 02:
FINANCIAL MARKETS AND INSTITUTIONS (Elective)

To provide the students a sound information and knowledge of broad framework of financial markets and institutions.

To impart the students an understanding of the inter-linkages and regulatory framework within which the system operates in India

SEMESTER IV
MCM4C14:
FINANCIAL DERIVATIVES AND RISK MANAGEMENT

To make the students efficient in the area of derivatives, by giving them the knowledge of basics in options, futures, swaps etc.

MCM3C15:
INCOME TAX: LAW, PRACTICE AND TAX PLANNING II

To acquaint the students with theoretical and practical knowledge of assessment and tax planning of different assesses.

To familiarize the students with major and latest provisions of the India tax laws and related judicial pronouncements pertaining to various assesses with a view to derive maximum possible tax benefits admissible under the law

MCM4EF03:
INTERNATIONAL FINANCE (Elective)

To understand the concept and significance of international finance
To understand the international financial markets and exchange theories
To get an idea about foreign exchange exposure and risk management

MCM4 EF04
ADVANCED STRATEGIC FINANCIAL MANAGEMENT (Elective)



To build an understanding among students about the concepts, vital tools and techniques used for financial decision making by a business firm.

MCM4PV01

Project Work &

To provide hands own experience in preparation of project

To provide experience in Problem identification , proposal presentation and discussion , Data collection and analysis of data and Report writing

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3. MA ENGLISH LANGUAGE AND LITERATURE

PROGRAMME OUTCOME

The students are expected to develop both an understanding of the cultures represented by the literatures discussed and abilities of critical thinking. The courses on marginalized discourses promote values-based thinking. The Project/Dissertation in the Fourth Semester is expected to be a window to research/project writing for prospective research scholars and professionals. The elective course on Teaching of English is directly career-oriented

COURSE OUTCOMES

Courses

ENG1CO1 British Literature from Chaucer to 18th Century (5 credits)

The students are expected to get a comprehensive view of British Literature from the Fourteenth to the Eighteenth Century. They are also expected to get an outline of British social and cultural history during the period.

ENG1 CO2 British Literature- 19th Century (5 credits)

The students are expected to get an outline of the vast body of British Literature in the Nineteenth Century, looking into trends, movements and influences. They are also expected to get an outline of British social and cultural history during the period, examining how social transition is represented/refracted in literature.

ENG1CO3 History of English Language (5 credits)

The students are expected to get a historical perspective of the English Language in general and to create awareness about the evolution of human language. They are also expected to develop critical thinking on a variety of topics like multiculturalism, power relations in evolution of languages, the dynamics of language change and principles of political



correctness in language policy. Discussions on language variety and the use of English in the New Media are career-focused.

ENG1C04:Indian Literature in English (Credits5)

The students are expected to trace the emergence and evolution of Indian Writing in English from the early colonial phase to the modern phase. They gain an understanding of the various phases of Indian writing in English in the context of the wider postcolonial and transnational scenario, by critically engaging with notions of imitation, assimilation and experimentation. It further explores the cross pollination this cultural and aesthetic engagement entails. A student who has successfully completed the course is expected to be familiar with the evolving trajectory of English writing in India in its multiple manifestations and diversity.

ENG1 A01Writing Skills (4 credits)

Students are expected to hone their writing skills. The focus will be on developing the linguistic, cognitive and logical skills required in writing different types of essays, anecdotes, academic papers and reports.

SECOND SEMESTER

ENG2C05 : Twentieth Century British Literature up to 1940 (5 credits)

The students are expected to familiarize themselves with the major trends, movements and authors in British literature in the first half of the Twentieth Century. The students are expected to undertake an inquiry/ research in the area by brief discussions on comparable texts in European literatures which represent the various phases of Modernism

ENG2C06 – Literary Criticism and Theory – Part 1(Up to New Criticism)(5 credits)

The students are expected to enable themselves to develop a critical acumen rooted in a strong awareness of the historical trajectory of critical thought in western and non-western contexts. Students familiarize themselves with the key texts in Western literary theory. They are also expected to engage themselves with the central aesthetic concepts in Sanskrit critical tradition. The students are expected to read the seminal primary texts from the ancient Greek civilization to new criticism in the beginning of the twentieth century, relating them to the social and historical conditions in which they have been written and practiced and to the contemporary cultural and political contexts in which they are being studied and discussed. They are expected to be able to articulate the prominent features of different texts cogently and to develop a sensitivity to the social implications of different schools of criticism.



ENG2C07 : American Literature (5 credits)

The students are expected to familiarize themselves with the maturing phase of American literature in the early Nineteenth Century to its evolution till the end of the Twentieth century. It focuses on the emergence of a distinct American style and the writing of American ethos in American literature.

ENG2 C08 Postcolonial Writings (Credits: 5)

The students are expected to get an overview of the historical experience of colonization and its impacts on the colonized peoples across the globe, through the medium of literary writings. The students are expected to acquaint themselves with the major theoretical concepts associated with postcolonial studies as manifested through the literary discourse in the works under consideration. It also aims to familiarize students with questions of resistance and representation, the politics language and literary form, and the quests for identity, autonomy and self-determination that mark postcolonial literary expression. It is also envisaged that students will acquire the theoretical formulations, methods and strategies for postcolonial analysis that may contribute to the writing of their Fourth Semester dissertation.

ENG2 A02 Translation Theory and Practice (Credits: 4)

Students are expected to familiarize themselves with the core of translation theory and some of the current theoretical positions, and at offering training in translation and interpretation of literary and non- literary texts. The students can also obtain a general understanding of the current debates in the discipline.

SEMESTER III

ENG3C09 Twentieth Century British Literature Post 1940(5 Credits)

The students are expected to get a comprehensive picture of British literature written after 1940, besides giving them an outline of the theoretical paradigms that informed them. The learners are expected to find the course a mapping of British culture and society during the period for the learners.

ENG3C10 Literary Criticism and Theory- Part 2 (5 credits)

At the end of the course, the students are expected to read literary and critical texts with judicious appreciation and build up the competence to generate and articulate personal responses to literary and critical texts, as well to explain the premises and assumptions underlying such personal responses.

ENG3E10 Introduction to Media (5 credits)



The learners are expected to gain a comprehensive awareness of the functioning of the print media, the electronic media and the New Media. They are also expected to get a wholesome picture of the relationship of these media with social phenomena and acquire skills for functioning in these media.

ENG 3 E04 – Introduction to Linguistics (Credits: 5)

Apart from the students familiarizing themselves with the key ideas, theories and historical perspectives of Linguistics, students who wish to pursue its applications like translation, language teaching and language therapy are expected to get the necessary theoretical backing for their areas of study.

SEMESTER 4

ENG4C11 English Literature in the 21st Century(4 credits)

The Students are expected to become aware of the multicultural nature of writings in English in the contemporary world and of how English serves as a vehicle for rumination and resistance for writers who come from diverse linguistic communities.

ENG 4 P01 Dissertation/Project (Credits: 4)

The Course is expected to explore the research aptitude of the learners and give them the much needed background information and experience for taking up research programmes or professional assignments

ENG4 E16 DALIT STUDIES (4 Credits)

The students are expected to get a focused perspective on the issues that have engaged Dalit writing and Dalit aesthetics in the country. The course also offers glimpses of the interface between Dalit writing and conventional/mainstream writing in a few major literatures in India.

ENG4E19 Media, Culture and Technology

The learners are expected to acquire an awareness about the paradigms and concepts in media theory and to get a holistic picture of the history of theorization on the media across a century.





GOVERNMENT COLLEGE MOKERI UNDER GRADUATE PROGRAMMES

1. BSc MATHEMATICS

PROGRAMME OUTCOME:

- PO 1 Disciplinary knowledge
- PO 2 Communications skills
- PO 3 Critical thinking
- PO 4 Analytical reasoning
- PO 5 Problem solving
- PO 6 Research-related skills
- PO 7 Information/digital literacy
- PO 8 Self-directed learning
- PO 9 Lifelong learning
- PO 10 Application skills
- PO 11 Experimental skills
- PO 12 Moral and ethical awareness/reasoning

COURSE OUTCOMES :

THEORY

CORE COURSE- I

MTS1 B01 BASIC LOGIC AND NUMBER THEORY



CO1 Prove results involving divisibility, greatest common divisor, least common multiple and a few applications.

CO2 Understand the theory and method of solutions of LDE.

CO3 Solve linear congruent equations.

CO4 Learn three classical theorems viz. Wilson's theorem, Fermat's little theorem and Euler's theorem and a few important consequences.

CORE COURSE- II

Code: MTS2 B02 CALCULUS OF SINGLE VARIABLE-1

CO 1 introduce students to the fundamental ideas of limit, continuity and differentiability and also to some basic theorems of differential calculus.

CO 2 sketching of curves and solving some optimization problems

CO 3 finding out the arc length of a plane curve, volume and surface areas of solids

CORE COURSE – III

CODE: B MTS3 B03 CALCULUS OF SINGLE VARIABLE-2

CO 1 introduction to the idea of improper integrals, their convergence and evaluation.

CO 2 students get the idea of parametrization of curves,

CO 3 Introducing other coordinate systems

CO 4 problems involving geometry of lines, curves, planes and surfaces in space

CO 5 ability to sketch curves in plane and space given in vector valued form.

CORE COURSE-IV

Code: MTS4 B04 LINEAR ALGEBRA

CO 1 Introducing Systems of Linear Equations & Matrices

CO 2 the students learn the fundamentals of linear algebra

CO 3 Understanding Properties of matrices and determinants

CO 4 Knowledge on General Vector Spaces

CO 5 the idea of diagonalization of a matrix

CORE COURSE- V

Code: MTS5 B05 ABSTRACT ALGEBRA

CO 1 understand the abstract notion of a group,

CO 2 learn several examples of groups

CO 3 taught to check whether an algebraic system forms a group or not

CO 4 are introduced to some fundamental results of group theory

CO 4 idea of structural similarity, the notion of cyclic group, permutation group



CORE COURSE- VI

Code: MTS5 B06 BASIC ANALYSIS

CO1 to learn and deduce rigorously many properties of real number system by assuming a few fundamental facts about it as axioms.

CO2 to know about sequences ,their limits, several basic and important theorems involving sequences and their applications .

CO3 to understand some basic topological properties of real number system such as the concept of open and closed sets, their properties, their characterization

CO4 to get a rigorous introduction to algebraic, geometric and topological structures of complex number system, functions of complex variable, their limit and continuity

CORE COURSE- VII

Code: MTS5 B07 NUMERICAL ANALYSIS

CO1 Understand several methods such as bisection method, fixed point iteration method, regula falsi method etc. to find out the approximate numerical solutions of algebraic and transcendental equations with desired accuracy.

CO2 Understand the concept of interpolation and also learn some well known interpolation techniques.

CO3 Understand a few techniques for numerical differentiation and integration and also realize their merits and demerits.

CO4 Find out numerical approximations to solutions of initial value problems and also to understand the efficiency of various methods.

CORE COURSE- VIII

Code: MTS5 B08 LINEAR PROGRAMMING

CO1 solve linear programming problems geometrically

CO2 understand the drawbacks of geometric methods

CO3 solve LP problems more effectively using Simplex algorithm via. the use of condensed tableau of A.W. Tucker

CO4 convert certain related problems, not directly solvable by simplex method, into a form that can be attacked by simplex method.

CO5 understand duality theory, a theory that establishes relationships between linear programming problems of maximization and minimization

CO6 understand game theory

CO7 solve transportation and assignment problems by algorithms that take advantage of the simpler nature of these problems

CORE COURSE – IX

Code: MTS5 B09 INTRODUCTION TO GEOMETRY AND THEORY OF EQUATIONS



CO1 Understand several basic facts about parabola, hyperbola and ellipse (conics) such as their equation in standard form, focal length properties, and reflection properties, their tangents and normal.

CO2 Recognise and classify conics.

CO3 Understand Kleinian view of Euclidean geometry.

CO4 Understand affine transformations, the inherent group structure, the idea of parallel projections and the basic properties of parallel projections.

CO5 Understand the fundamental theorem of affine geometry.

CO6 Learn to solve polynomial equations upto degree four.

CORE COURSE – X

Code: MTS6 B10 REAL ANALYSIS

CO1 State the definition of continuous functions, formulate sequential criteria for continuity and prove or disprove continuity of functions using this criteria.

CO2 Realise the difference between continuity and uniform continuity and equivalence of these ideas for functions on closed and bounded interval.

CO3 Understand the significance of uniform continuity in continuous extension theorem.

CO4 Develop the notion of Riemann integrability of a function using the idea of tagged partitions and calculate the integral value of some simple functions using the definition.

CO5 Understand a few basic and fundamental results of integration theory.

CO6 Formulate Cauchy criteria for integrability and a few applications of it. In particular they learn to use Cauchy criteria in proving the non integrability of certain functions.

CO7 Understand classes of functions that are always integrable

CO8 Understand two forms of fundamental theorem of calculus and their significance in the practical problem of evaluation of an integral.

CO9 Find a justification for ‘change of variable formula’ used in the practical problem of evaluation of an integral.

CO10 Prove convergence and divergence of sequences of functions and series

CO11 Understand the difference between pointwise and uniform convergence of sequences and series of functions

CO12 Answer a few questions related to interchange of limits.

CO13 Learn and find out examples/counter examples to prove or disprove the validity of several mathematical statements that arise naturally in the process/context of learning.

CO14 Understand the notion of improper integrals, their convergence, principal value and evaluation.

CO15 Learn the properties of and relationship among two important improper integrals namely beta and gamma functions that frequently appear in mathematics, statistics, science and engineering.

CORE COURSE –XI

Code: MTS6 B11 COMPLEX ANALYSIS



- CO1 to understand the difference between differentiability and analyticity of a complex function and construct examples.
- CO2 to understand necessary and sufficient condition for checking analyticity.
- CO3 to know of harmonic functions and their connection with analytic functions
- CO4 to know a few elementary analytic functions of complex analysis and their properties.
- CO5 to understand definition of complex integral, its properties and evaluation.
- CO6 to know a few fundamental results on contour integration theory such as Cauchy's theorem, Cauchy-Goursat theorem and their applications.
- CO7 to understand and apply Cauchy's integral formula and a few consequences of it such as Liouville's theorem, Morera's theorem and so forth in various situations.
- CO8 to see the application of Cauchy's integral formula in the derivation of power series expansion of an analytic function.
- CO9 to know a more general type of series expansion analogous to power series expansion viz. Laurent's series expansion for functions having singularity.
- CO10 to understand how Laurent's series expansion lead to the concept of residue, which in turn provide another fruitful way to evaluate complex integrals and, in some cases, even real integrals.
- CO11 to see another application of residue theory in locating the region of zeros of an analytic function.

CORE COURSE –XII

Code:MTS6 B12 CALCULUS OF MULTI VARIABLES6 B12 CALCULUS OF MULTI VARIABLE

- CO1 Understand several contexts of appearance of multivariable functions and their representation using graph and contour diagrams.
- CO2 Formulate and work on the idea of limit and continuity for functions of several variables.
- CO3 Understand the notion of partial derivative, their computation and interpretation.
- CO4 Understand chain rule for calculating partial derivatives.
- CO5 Get the idea of directional derivative, its evaluation, interpretation, and relationship with partial derivatives.
- CO6 Understand the concept of gradient, a few of its properties, application and interpretation.
- CO7 Understand the use of partial derivatives in getting information of tangent plane and normal line.
- CO8 Calculate the maximum and minimum values of a multivariable function using second derivative test and Lagrange multiplier method.
- CO9 Find a few real life applications of Lagrange multiplier method in optimization problems.
- CO10 Extend the notion of integral of a function of single variable to integral of functions of two and three variables.
- CO11 Address the practical problem of evaluation of double and triple integral using Fubini's theorem and change of variable formula.
- CO12 Realise the advantage of choosing other coordinate systems such as polar, spherical,



cylindrical etc. in the evaluation of double and triple integrals .

CO13 See a few applications of double and triple integral in the problem of finding out surface area ,mass of lamina, volume, centre of mass and so on.

CO14 Understand the notion of a vector field, the idea of curl and divergence of a vector field, their evaluation and interpretation.

CO15 Understand the idea of line integral and surface integral and their evaluations.

CO16 Learn three major results viz. Green's theorem, Gauss's theorem and Stokes' theorem of multivariable calculus and their use in several areas and directions.

CORE COURSE –XIII

Code: MTS6 B13 DIFFERENTIAL EQUATIONS

CO1 Students could identify a number of areas where the modelling process results in a differential equation.

CO2 They will learn what an ODE is, what it means by its solution, how to classify DEs, what it means by an IVP and so on.

CO3 They will learn to solve DEs that are in linear, separable and in exact forms and also to analyse the solution.

CO4 They will realise the basic differences between linear and non linear DEs and also basic results that guarantees a solution in each case.

CO5 They will learn a method to approximate the solution successively of a first order IVP.

CO6 They will become familiar with the theory and method of solving a second order linear homogeneous and nonhomogeneous equation with constant coefficients.

CO7 They will learn to find out a series solution for homogeneous equations with variable coefficients near ordinary points.

CO8 Students acquire the knowledge of solving a differential equation using Laplace method which is especially suitable to deal with problems arising in engineering field.

CO9 Students learn the technique of solving partial differential equations using the method of separation of variables

CODE:MTS6 B14 (E01) GRAPH THEORY

CO 1 Knowledge on basic definitions of graph

CO 2 Matrix representation

CO 3 Knowledge of spanning trees

CO 4 Euler and Hamilton graphs

OPEN COURSE

OPEN COURSE- I (Theory)

CODE: MTS5 D03 LINEAR MATHEMATICAL MODELS

CO 1 Knowledge of Linear Functions LINEAR MATHEMATICAL MODELS

CO 2 Properties of matrices and determinants



CO 3 Linear Programming: The Graphical Method
Linear Programming: The Simplex Method

COMPLEMENTARY COURSE

Theory Course- I

Code: MTS1 C01:MATHEMATICS1

CO 1 Introducing derivative, Limits and Linear Approximation and Tangent Lines

CO 2 Understanding derivatives as rate of change

CO 3 Applications of derivatives and graphing

CO 4 Integration and its application

Theory Course- II

Code: MTS2 C02:MATHEMATICS-2

CO 1 Introducing polar coordinates

CO 2 Graphing in polar coordinates

CO 3 Limits of sequences and series

CO 4 Introduction to vector spaces

CO 5 Properties of determinant and matrices

CO 6 Diagonalization

Theory Course- III

Cos Course Outcome Statements

CO1 Understand several contexts of appearance of multivariable functions and their representation using graph and contour diagrams.

CO2 Formulate and work on the idea of limit and continuity for functions of several variables.

CO3 Understand the notion of partial derivative, their computation and interpretation.

CO4 Understand chain rule for calculating partial derivatives.

CO5 Get the idea of directional derivative, its evaluation, interpretation, and relationship with partial derivatives.

CO6 Understand the concept of gradient, a few of its properties, application and interpretation.

CO7 Understand the use of partial derivatives in getting information of tangent plane and normal line.

CO8 Calculate the maximum and minimum values of a multivariable function using second derivative test and Lagrange multiplier method.

CO9 Find a few real life applications of Lagrange multiplier method in optimization problems.

CO10 Extend the notion of integral of a function of single variable to integral of functions of two and three variables.

CO11 Address the practical problem of evaluation of double and triple integral using Fubini's theorem and change of variable formula.

CO12 Realise the advantage of choosing other coordinate systems such as polar, spherical,



cylindrical etc. in the evaluation of double and triple integrals .

CO13 See a few applications of double and triple integral in the problem of finding out surface area ,mass of lamina, volume, centre of mass and so on.

CO14 Understand the notion of a vector field, the idea of curl and divergence of a vector field, their evaluation and interpretation.

CO15 Understand the idea of line integral and surface integral and their evaluations.

CO16 Learn three major results viz. Green's theorem, Gauss's theorem and Stokes' theorem of multivariable calculus and their use in several areas and directions.

CO 17 Understand complex functions, its continuity differentiability with the use of Cauchy-Riemann equations

CO 18 Evaluate complex integrals using Cauchy's integral theorem and Cauchy's integral formula, understand the series expansion of analytic function

Theory Course- IV

Code: MTS4 C04:MATHEMATICS4

CO1 Students could identify a number of areas where the modelling process results in a differential equation.

CO2 They will learn what an ODE is, what it means by its solution, how to classify DEs, what it means by an IVP and so on.

CO3 They will learn to solve DEs that are in linear, separable and in exact forms and also to analyse the solution.

CO4 They will realise the basic differences between linear and non linear DEs and also basic results that guarantee a solution in each case.

CO5 They will learn a method to approximate the solution successively of a first order IVP.

CO6 They will become familiar with the theory and method of solving a second order linear homogeneous and nonhomogeneous equation with constant coefficients.

CO7 They will learn to find out a series solution for homogeneous equations with variable coefficients near ordinary points.

CO8 Students acquire the knowledge of solving a differential equation using Laplace method which is especially suitable to deal with problems arising in engineering field.

CO9 Students learn the technique of solving partial differential equations using the method of separation of variables

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2. B.Sc. CHEMISTRY

PROGRAMME OUTCOMES:

PSO1 To understand basic facts and concepts in chemistry

PSO2 To apply the principles of chemistry

PSO3 To appreciate the achievements in chemistry and to know the role of chemistry in nature and in society

PSO4 To familiarize with the emerging areas of chemistry and their applications in various spheres of chemical sciences and to apprise the students of its relevance in future studies

PSO5 To develop skills in the proper handling of instruments and chemicals

PSO6 To familiarize with the different processes used in industries and their applications

PSO7 To develop an eco-friendly attitude by creating a sense of environmental awareness

PSO8 To be conversant with the applications of chemistry in day-to-day life

COURSE OUTCOMES:



CORE COURSE- I

Course Code: CHE1B01 Theoretical and Inorganic Chemistry- I

- CO1 To apply the methods of a research project
- CO2 To understand the principles behind volumetry
- CO3 To analyse the characteristics of different elements
- CO4 To distinguish between different acid base concepts
- CO5 To analyse the stability of different nuclei

CORE COURSE- II

Course Code: CHE2B02 Theoretical and Inorganic Chemistry- II

- CO1 To understand the importance and the impact of quantum revolution in Science
- CO2 To understand and apply the concept that the wave functions of hydrogen atom are nothing but atomic orbitals
- CO3 To understand that chemical bonding is the mixing of wave functions of the two combining atoms
- CO4 To understand the concept of hybridization as linear combination of orbitals of the same atom
- CO5 To inculcate an atomic/molecular level philosophy in the mind

CORE COURSE – III

Course Code: CHE3B03 PHYSICAL CHEMISTRY - I

- CO1 To understand the properties of gaseous state and how it links to thermodynamic systems
- CO2 To understand the concepts of thermodynamics and it's relation to statistical thermodynamics
- CO3 To apply symmetry operations to categorize different molecules

CORE COURSE-IV

Course Code: CHE4B04 ORGANIC CHEMISTRY– I

- CO1 To apply the concept of stereochemistry to different compounds.
- CO2 To understand the basic concepts of reaction mechanism
- CO3 To analyse the mechanism of a chemical reaction
- CO4 To analyse the stability of different aromatic systems.

CORE COURSE- VI

Course Code: CHE5B06 INORGANIC CHEMISTRY – III

- CO1 To understand the principles behind qualitative and quantitative Analysis
- CO2 To understand basic processes of metallurgy and to analyse the merits of different alloys.
- CO3 To understand the applications of different inorganic polymers
- CO4 To analyse different polluting agents.



CO5 To apply the principles of solid waste management

CORE COURSE- VII

Course Code: CHE5B07 ORGANIC CHEMISTRY – II

CO1 To understand the difference between alcohols and phenols.

CO2 To understand the importance of ethers and epoxides.

CO3 To apply organometallic compounds in the preparation of different functional groups.

CO4 To apply different reagents for the inter conversion of aldehydes, carboxylic acids and acid derivatives

CO5 To apply active methylene compounds in organic preparations.

CORE COURSE- VIII

Course Code: CHE5B08 PHYSICAL CHEMISTRY – II

CO1 To apply the concept of kinetics, catalysis and photochemistry to various chemical and physical processes.

CO2 To characterise different molecules using spectral methods.

CO3 To understand various phase transitions and its applications.

CORE COURSE- IX

Course Code: CHE6B09 INORGANIC CHEMISTRY – IV

CO1 To understand the principles behind different instrumental methods

CO2 To distinguish between lanthanides and actinides

CO3 To appreciate the importance of CFT

CO4 To understand the importance of metals in living systems

CO5 To distinguish geometries of coordination compounds

CORE COURSE – X

Course Code: CHE6B10 ORGANIC CHEMISTRY – III

CO1 To elucidate the structure of simple organic compounds using spectral techniques.

CO2 To understand the basic structure and tests for carbohydrates.

CO3 To understand the basic components and importance of DNA.

CO4 To understand the basic structure and applications of alkaloids and terpenes.

CO5 To distinguish different pericyclic reactions

CORE COURSE – XI

Course Code: CHE6B11 PHYSICAL CHEMISTRY – III

CO1 To understand the basic concepts of electrochemistry.

CO2 To understand the importance of colligative properties.



CO3 To relate the properties of materials/solids to the geometrical properties and chemical compositions

CORE COURSE –XII

Course Code: CHE6B12 Advanced and Applied Chemistry

CO1 To understand the importance of nanomaterials.

CO2 To appreciate the importance of green approach in chemistry.

CO3 To understand the uses and importance of computational calculations in molecular design.

CO4 To understand the role of chemistry in human happiness index and life expectancy

CHEMISTRY ELECTIVE CORE COURSE- III (Theory)

Course Code: CHE6B13(E3) MEDICINAL AND ENVIRONMENTAL CHEMISTRY

CO1 To understand the importance of drugs in human health.

CO2 To understand the facts about common diseases and treatment.

CO3 To identify the presence of toxic substances in atmosphere.

CO4 To identify the presence of toxic substances in atmosphere.

PRACTICAL

PRACTICAL – I

Course Code: CHE6B14(P) PHYSICAL CHEMISTRY PRACTICAL

CO1 To enable the students to develop analytical skills in determining the physical properties (physical constants).

CO2 To develop skill in setting up an experimental method to determine the physical properties.

CO3 To understand the principles of Refractometry, Potentiometry and Conductometry.

PRACTICAL – II

Course Code: CHE6B15(P) ORGANIC CHEMISTRY PRACTICAL

CO1 To enable the students to develop analytical skills in organic qualitative analysis.

CO2 To develop talent in organic preparations to ensure maximum yield

CO3 To apply the concept of melting or boiling points to check the purity of compounds.

CO4 To analyse and characterise simple organic functional groups.

CO5 To analyse individual amino acids from a mixture using chromatography.

PRACTICAL – III

Course Code: CHE6B16(P) INORGANIC CHEMISTRY PRACTICAL-II

CO1 To enable the students to develop analytical skills in inorganic quantitative analysis

CO2 To understand the principles behind gravimetry and to apply it in quantitative analysis.

CO3 To understand the principles behind colorimetry and to apply it in quantitative analysis



PRACTICAL – IV

Course Code: CHE6B17(P) INORGANIC CHEMISTRY PRACTICAL-III

CO1 To enable the students to develop skills in inorganic quantitative analysis.

CO2 To understand the principles behind inorganic mixture analysis and to apply it in quantitative analysis.

CO3 To analyse systematically mixtures containing two cations and two anions.

PROJECT

Course Code: CHE6B18(Pr) PROJECT WORK

CO1 To understand the scientific methods of research project.

CO2 To apply the scientific method in life situations.

CO3 To analyse scientific problems systematically

OPEN COURSE

OPEN COURSE- I (Theory)

Course Code: CHE5D01 ENVIRONMENTAL CHEMISTRY

CO1 Recall the technical/scientific terms involved in pollution.

CO2 Understand the causes and effects of air pollution.

CO3 Understand the sources, types and effects of water pollution.

CO4 Describe water quality parameters.

CO5 Know soil, noise, thermal and radioactive pollutions and their effects.

CO6 Study various pollution control measures

CO7 Understand the basics of green chemistry.

COMPLEMENTARY COURSE

Theory Course- I

Course Code: CHE1C01- GENERAL CHEMISTRY

CO1 To understand and to apply the theories of quantitative and qualitative analysis.

CO2 To understand the theories of chemical bonding.

CO3 To appreciate the uses of radioactive isotopes.

CO4 To understand the importance of metals in biological systems.

Theory Course- II

Course Code: CHE2C02 - PHYSICAL CHEMISTRY

CO1 To understand the importance of free energy in defining spontaneity.

CO2 To realise the theories of different states of matter and their implication



CO3 To understand the basic principles of electrochemistry.

Theory Course- III

Course Code: CHE3C03 - ORGANIC CHEMISTRY

CO1 To understand the basic concepts involved in reaction intermediates.

CO2 To realise the importance of optical activity and chirality.

CO3 To appreciate the importance of functional groups and aromatic stability

CO4 To understand the basic structure and importance of carbohydrates, nucleic acids, alkaloids and terpenes

Theory Course- IV

Course Code: CHE4C04 - PHYSICAL AND APPLIED CHEMISTRY

CO1 To understand the basic concepts behind colloidal state and nanochemistry.

CO2 To understand the importance of green chemistry and pollution prevention.

CO3 To appreciate the importance of different separation methods and spectral techniques.

CO4 To understand the extent of chemistry in daily life.

PRACTICAL

Course Code: CHE4C05(P) CHEMISTRY PRACTICAL

CO1 To understand the basic concepts of inter group separation.

CO2 To enable the students to develop analytical and preparation skills.

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3. BACHELOR IN BUSINESS ADMINISTRATION

PROGRAMME OUTCOME:

The curriculum of BBA programme is designed to inculcate managerial, administrative and entrepreneurial competencies demanded by today's challenging business scenario.

COURSE OUTCOME:

BBAIB01 Management Theory and Practices



Understand the process of business management and its functions.
Familiarize students with current management practices.
Understand the importance of ethics in business.

BBA2B02 Financial Accounting

Equip the students with the skill of preparing financial statements for various types of organisations.
Understand financial reporting standards and corporate accounting methods.

BBA2B03 Marketing Management

Enable students for acquiring basic knowledge about concepts, principles, tools and techniques of marketing.
Understand the latest trends in marketing.
Enable the students to choose a career in the field of marketing.

BBA3B04 Corporate Accounting

Help the students to acquire conceptual knowledge of the fundamentals of the corporate accounting.
Understand the techniques of preparing the financial statements.

BBA3B05 Financial Management

Familiarize the students with the concepts, tools and practices of financial management.
Learn about the decisions and processes of financial management in a business firm.

BBA4B06 Cost and Management Accounting

Familiarize the students with various elements and concepts of cost
Create cost consciousness among the students.

BBA5B07 Human Resources Management

Familiarize the students with the different aspects of managing human resources in an organisation.
Equip students with the basic knowledge and skills required for the acquisition, development and retention of human resources.

BBA5B08 Business Research Methods

Enable students for acquiring knowledge in business research methods.



Develop basic skills to conduct survey researches and case studies.

BBA5B09 Operations Management

Familiarize the students with the concepts, tools and practices of operations.

Understand the different concepts of operation Management.

Acquire the knowledge to make plans at the operational level of an industry.

BBA5B10 Income Tax

Enable students for acquiring basic knowledge in Income tax.

Equip students with application of principles and provisions of Income Tax Act.

Enable students to compute different heads of income as well as total income and tax liability.

BBA5B11 Financial Market and Institutions

Provide basic knowledge about the structure, organisation and working of financial system in

Understand different aspects and components of financial Institutions and financial markets.

Enable the students to take rational decisions on financial market and institutions.

BBA5B12 Organisational Behaviour

Enable the students to know the organizational basis for behaviour.

Familiarize students with current management practices.

BBA6B13 Management Science

Familiarize students with the concepts of management science and tools supporting decision making.

Enable students to apply management science techniques in appropriate decision situation.

BBA6B14 Project Management

Enable the students to acquire basic knowledge of different facets of Project management.

Understand the different concepts of managing a project.

Analyse the viability of a project.

BBA6B15 Financial Services

To understand the various financial services and investment opportunities available in the country.

Enable students to aware of various financial services available in Indian financial system.

BBA6B16 Investment Management



Familiarize the students with the word of investments.
Understand theoretical framework for the analysis and valuation of investments.

BBA6B17(PR)

Project Work

Enable students for acquiring practical knowledge in research.

COMPLIMENTARY COURSE

BBA1C01 Managerial Economics

Understand micro and macro concepts relevant for business decisions.
Understand the application of economics principles in business management.

BBA3C02 Business Regulations

Familiarize the students with certain statutes concerning and affecting business organisations in their operations

BBA3C03 Human Resources Management

Familiarize the students with the different aspects of managing human resources in an organisation.
Equip students with the basic knowledge and skills required for the acquisition, development and retention of human resources.

BBA4C03 Corporate Regulations

Understand the process of formation of the joint stock companies
Familiarize the students with the laws governing the corporate entities.
Understand the importance of corporate governance in the management of organisations.

BBA4C04 Quantitative Techniques For Business

Familiarize the students with the use of quantitative techniques in managerial decision making.
Understand application of QT in business.

COMMON COURSE COURSE

BBA3A11 Basic Numerical Methods



Enable the students to acquire knowledge of numerical equations, matrices progressions, financial mathematics and descriptive statistics

To understand numerical equations, matrix, progression, financial mathematics, descriptive statistics and their applications.

BBA3A12 Professional Business Skills

Enable the students to update and expand basic Informatics skills.

Equip the students to effectively utilize the digital knowledge resources for their study

BBA4A13 Entrepreneurship Development

Familiarize the students with the concept of entrepreneurship.

Enable the students to identify and develop the entrepreneurial talents.

Helps to generate innovative business ideas in the emerging industrial scenario.

BBA4A14 Banking and Insurance

Enable the students to acquire knowledge about basics of Banking and Insurance.

Familiarize the students with the modern trends in banking and insurance

OPEN COURSE (For students from other Departments)

BBA5D02 E- COMMERCE business management.

Gain a practical orientation to database development and maintenance.

Understand the practice of Ecommerce, e-payment and also the security issues.

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4. BA HISTORY

PROGRAMME OUTCOME:

The syllabus reconstituted here primarily aims at introducing the fundamental s of historical knowledge in a wider range so as to equip the students with better understanding of society and Historical processes. It also aims at exposing the spirit of research, analysis, criticism, innovation and invention among the students.



COURSE OUTCOME:

HIS1B01: TRENDS IN HISTORIOGRAPHY

The emphasis will be on the major trends in the area of Historical Writing and Thought.

HIS2B02: TRENDS IN INDIAN HISTORIOGRAPHY

It will also provide a basic understanding regarding the major trends in the arena of Historical Writing and Thought in India

HIS3B03: WORLD HISTORY-1

World history reveals that people are to look at other civilizations in comparative context and to look at one's own society and civilization in the context of other societies and civilizations.

HIS3B04: INDIAN HISTORY-1

The main objective of this syllabus is to provide a broad historic outline about the process of socio-political formations in the northandsouthIndiaupto1300CE.

HIS4B05: WORLD HISTORY-2

The course is prepared to create knowledge on medieval world through which students could able to understand different state systems, its socio-cultural contributions and its impact on later society.

HIS4B06: INDIAN HISTORY-2

It Familiarizes the students with process of state formation; economic pattern of medieval India along with the social and cultural developments of the period.

HIS5B07: WORLD HISTORY-3

It is expected to make them aware of how the people all over the world led various movements for the attainment of democratic rights.

HIS5B08: INDIAN HISTORY-3

It would instruct the dimensions of the economic impact of colonialism

HIS5B09: KERALA HISTORY-1



Understanding of the source materials including archaeological, epigraphical, Numismatic, literary and archival.

HIS5B10: METHODOLOGY OF THE WRITING OF HISTORY

It enables the student to develop a thesis/argument, evaluate its historical probability, and place that argument in a historiographical context.

HIS6B11: INDIAN HISTORY-4

Realize the social and economic issues of contemporary India and engage in the socially useful productive works.

HIS6B12: KERALA HISTORY-2

Identify the real nature of the colonial intervention in Kerala

HIS6B13: GENDER STUDIES

Explain the conventional social norms about male-female dichotomy and device policies and strategies to foster gender equality and gender justice

HIS6B14: INDIAN HERITAGE AND PLURALITY OF CULTURES

Realize the diverse nature of Indian culture.

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5.BA FUNCTIONAL ENGLISH

COURSE OUTCOMES:

FEN1B01 Communication Skills in English



CO1: Learners improve their ability to express themselves in English in formal and informal situations.

CO2: They identify the linguistic and pragmatic variations in English in relation to context and speakers.

CO3 : They attain an advanced level of mastery in all the macro skills of English.

FEN2B02 Advanced English Grammar

CO1: Learners get exposed to advanced level of grammatical patterns and usages in English.

CO2: They improve their skills to speak and write English accurately.

CO3: They enhance their skills to analyse the internal patterns and functions of language in different contexts.

FEN3B03 Language and Technology

CO1: Learners get skills in using the internet as a potential tool for language learning.

CO2: Learners acquire skills to use smartphones for better communicative mastery in English.

CO3: They realize the paradigm shifts taking place in instructional practices.

FEN3B04 Applied Phonetics

CO1: The students get to handle the target language effectively in an internationally acceptable manner.

CO2: They develop skills to understand different accents and language variations.

FEN4B05 Fundamentals of Linguistics

CO1: The learners understand the relationship between linguistics and related disciplines.

CO2 They will be able to use linguistics as a tool in understanding and processing written or spoken text.

CO3: They realize the complexities underlying the structure and function of human languages

CO4: They acquire better communication and analytical abilities in English.

FEN4B06 Business English

CO1: Students get a comprehensive idea about business correspondence.

CO2: They develop ability to prepare business letters, business reports, technical proposal etc.

CO3: They develop their employability skills.

FEN5B07 Translation Studies

CO1: The students will have an overall view of basic theories of translation.



CO2: They will have acquired the skill in translating various kinds of texts.

FEN5B08 Print Media

CO1: Students get knowledge of the history of the media

CO2 :They acquire functional knowledge of the fundamentals of media writing.

CO3: They developing the skill by practice, of writing editorials, features, reviews and the like.

FEN5B09 Theatre for Communication

CO1: The student will be familiar with theories related to drama and theatre , both eastern and western from Bharata and Aristotle to modern theatre

CO2: They will be able to understand and analyse plays in relation to history, culture and theory

CO3: They will be empowered in conceptualizing and implementing theatrical projects.

FEN5B10 Contemporary Literary Theory

CO1: The student will be equipped with theoretical perspectives

CO2 :They will be familiar with the significance of theory and have acquired the ability to pursue research

FEN6B11 English Language Teaching

CO1: To be able to teach basic English language components in an effective way.

CO2: To understand and achieve the rudimentary skills for being a successful English teacher.

CO3: To realize the roles of a teacher/learner in making the process of teaching interactive and outcome- based.

CO4: To acquire better presentation and communication abilities in English.

FEN6B12 Electronic Media

CO1: The students will be familiar with them with the fundamentals of electronic media.

CO2: They will get the knowledge of the fundamentals of writing for the electronic media.

FEN6B13 Creative Writing

CO1: Students learn how to identify and appreciate various writing styles.

CO2: They develop abilities to critically reflect on other's writings from different angles.

CO3: They acquire skills to prune their writing skills and analytical skills.

FEN6B14 Film Studies

CO1: Students develop skills to appreciate film as an art form and its aesthetics.



CO2: They get an understanding of visual aesthetics, forms and technological innovation.

CO3: They develop skills to connect films with history, politics, technology, psychology and performance.

ELECTIVE

FEN6B15 Elective 1 – Language for Advertising : Theory and Practice

CO1: Identify the role of advertising within the Marketing Communication Mix.

CO2: Analyse advertisements in terms of creativity and execution.

CO3: Create advertising objectives and put together a plan to meet these objectives

CO4: Examine marketing data, using appropriate techniques, and use the information to establish and solve marketing communication problems.

COMPLEMENTARY COURSES

FEN1(2)CO1 Literatures in English:From Chaucer to the Present

CO1: The student will become familiar with the various movements and ages in English literature.

CO2 : The student will be acquainted with great classics in English of literature.

CO3: They will be enlightened by the experience of reading great works of literature and delving into the literary genius of the age.

FEN4(3)CO1 Literatures in English:American & Post Colonial

CO1: The student will become familiar with the various movements and ages in English literature.

CO2: The student will be acquainted with great classics in English of literature.

CO3: They will be enlightened by the experience of reading great works of literature and delving into the literary genius of the age.

FEN1(2)CO2 Cultural Studies: Perspectives in Culture

CO1: To discover the contours of Cultural Studies as a field of inquiry, situating their learning within explorations of the disciplinary and historical context of the field.

CO2: to use interdisciplinary critical perspectives to examine the diverse and sometimes contested meanings of cultural objects and processes, establishing a basic knowledge of the theoretical paradigms of Cultural Studies.

CO3: to connect cultural knowledge to everyday life and practices, gaining a preliminary understanding of the relationship of methodology (paradigms for study) to inquiry in Cultural Studies.

FEN4(3)CO2 Cultural Studies:Cultural Spaces



CO1: To discover the contours of Cultural Studies as a field of inquiry, situating their learning within explorations of the disciplinary and historical context of the field.

CO2: to use interdisciplinary critical perspectives to examine the diverse and sometimes contested meanings of cultural objects and processes, establishing a basic knowledge of the theoretical paradigms of Cultural Studies.

CO3: To connect cultural knowledge to everyday life and practices, gaining a preliminary understanding of the relationship of methodology (paradigms for study) to inquiry in Cultural Studies.

OPEN COURSES

FEN5DO1 English for Competitive Examinations

CO1: The learners get a good idea of how to prepare for competitive exams.

CO2: They improve their competence and confidence level in English for competitive exams.

COMMON COURSES

ENG1A01 Litmosphere: The World Of Literature

CO1: Develop the qualities necessary to become good, kind and responsible human being

CO2: Attain confidence to ask questions

CO3: Apply logical and analytical skills in various situations

CO4: Understand and apply problem solving skills

CO5: Assimilate new perspectives on life

CO6: Enhance the ability to express themselves through writing

ENG1A02 Functional Grammar and Communication In English

CO1: Demonstrate the ability to use the syntactic structures within English texts.

CO2: Distinguish logical and analytical skills in the use of language for communication.

CO3: Develop writing skills in various professional and career related situations

CO4: Formulate the basic skills in spoken communication in formal contexts

ENG2A03 Readings from the Fringes

CO1: Discuss and contemplate on the areas of gender inequality, marginalization, disability studies, racism and casteism.

CO2: Develop sensitivity towards environmental concerns and feel responsible towards protecting nature.

CO3: Understand the everyday realities of the marginalized sections of the society and negate the stereotypes surrounding them and accept them as allies.



CO4: To develop scientific temper and scientific thinking

ENG2A04 Readings on Kerala

CO1: Develop critical understanding of literature of Kerala

CO2: Interrelate the cultural and historical tradition of the society and the development of literary sensibility

CO3: Identify the diversity of literary endeavours and the cultural representations

CO4: Identify and apply the insights and values in everyday life as a Keralite

CO5: Critically analyse and interpret the present cultural production

ENG3 A05 Readings on Indian Literatures

CO1: Students learn to appreciate the multiple genres of Indian writings cutting across different sections of Indian Society

CO2: Students can understand how social issues are represented in Indian literature

CO3: Students will gain the knowledge of 'Indianness' through the works of Indian writers from different parts of India.

CO4: Students will understand the pluralistic aspects of Indian culture and identity

ENG4 A06 Songs and Stories of Our World

CO1: Gain familiarity with a variety of classical and marginal literatures.

CO2: Acquire knowledge of literatures from around the world and from different eras.

CO3 : Have an awareness of the ways in which different cultures perceive the world around them and how they capture these experiences in literature.

CO4 : Develop empathy and understanding on the face of diverse peoples and their experiences.

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PROGRAMME OUTCOMES:

The learners are expected to demonstrate the following:

- Critically evaluate and apply the theories and techniques of economics.
- Demonstrate subject-specific ‘thinking’ skills that are readily transferable to problem solving and decision making in a wider context.
- Enhance their lifelong learning, employing a range of practical and professional skills.
- Find, evaluate, synthesize and use information from a variety of sources
- Articulate an awareness of the social and community contexts within their disciplinary field

COURSE OUTCOMES:

Microeconomics – I

ECO1 B01

CO 1 Students explain what economics is and explain why the subject is important

CO 2 Students explain how economists use economic models Explaining

CO 3 Students understand the scarcity and choice in the economy and the basic problems of an economy.

CO 4 Students explain and illustrate market equilibrium and disequilibrium. Explaining &

CO 5 Students analyse how consumers maximize the total utility within a given income using the utility maximizing rule.

CO 6 Students describe how consumer’s utility changes when income or price change.

CO 7 Students define the term production and explain what a production function is; define and differentiate between marginal, average and total product; compute and graph marginal, average and total product.

CO 8 Students define and differentiate between different cost concepts and interpret the relation between long run and short run costs.

Macroeconomics I

ECO2 B02

CO 1 Students appreciate the context in which Macroeconomics emerged as a separate discipline.

CO 2 Students understand the concepts regarding macroeconomic model building.

CO 3 Students understand and evaluate different concepts and measurements of national income

CO 4 Students explain how output and employment are determined in classical and Keynesian systems of economics.

CO 5 Students explain and analyse why actual output will fall short of the productive capacity of the economy.

CO 6 Students evaluate fiscal policies of Governments at different situations.

CO 7 Students understand and generalize the concept of money and money supply in the economy and evaluate monetary policy of different Governments.



Mathematical Methods for Economics-1,EDMSB03

Students understand and demonstrate sound quantitative skills to collect analyse and interpret empirical data related to socio-economic issues.

Students understand the skill in statistical and mathematical techniques that are required for a meaningful study of applied economics and for carrying out empirical analysis.

Students generalize skill in quantitative analysis and apply it to study the concepts in most branches of economics

Students solve and analyse the data to solve economic issues

Microeconomics II, ECO3804

Students understand the difference between the firm and industry, explain and illustrate Demand curve, Average Revenue curve and Marginal Revenue curve of a perfectly competitive firm.

Students understand and determine the break-even and shutdown points of production for a perfectly competitive firm; understand why perfectly competitive markets are efficient.

Students define and analyse the characteristics of monopoly and explain the sources of barriers to entry.

Students explain why a monopoly is inefficient using deadweight loss; differentiate between a single price monopolist and a price discriminating monopolist.

Students define the characteristics of a monopolistically competitive industry and explain the difference between short run and long run equilibrium in a monopolistically competitive industry.

Students define characteristics of oligopolies and explain why collusion can occur in oligopolistic industries.

Students explain pricing and employment of factor inputs and define demand for and supply of factor inputs.

Core5:

Mathematical Methods for Economics-II, EDM4805

Students understand the skill in the calculation of mathematical techniques that are required for a meaningful study of applied economics and other branches.

Students understand and demonstrate sound quantitative skills to collect analyse and interpret empirical data related to socio-economic issues.

Students understand and apply the concepts Derivatives and Marginal Concepts

Core6:

Macroeconomics-II, ECO4B06



Students understand and derive IS-LM curves and use the framework to explain the working of an economy

Students explain the way fiscal and monetary policy works and apply the concept of IS-LM framework.

Students explain the concept and measurement of inflation and unemployment.

Students explain the trade-off between inflation and unemployment as predicted by the Phillips curve and its collapse after the stagflation of 1970s.

Students analyse different phases of trade cycle, and demonstrate various trade cycle theories

Students understand and analyse the reasons for economic recessions and suggest the appropriate instruments of monetary and fiscal policy.

Students measure the inflation in the economy and apply the concepts like WPI-CPI-PPI-GDP deflator.

Core7:

Fiscal Economics, ECOS807

Students define and differentiate public finance and private finance and to generalize the Students understand and explain the public expenditure and the effects and importance of public expenditure in India

Students understand the cost-benefit analysis and apply its principle in the day to day economic life.

Students understand various concepts of tax, explain the tax and nontax revenue and compare and contrast the direct tax and indirect tax and its benefits.

Students understand and develop the skill to calculate personal, corporate income tax and other taxes

Students explain the types of public debt and analyse how debt is repaid.

Students describe government budget and budgeting and understand the different aspects of federal finance and local finance

Students understand the federal finance, function of finance commissions and analyse Centre State financial relations

Core8:

Indian Economic Development, ECO5B08

Students explain the growth and structural changes happened in Indian economy from British period to till date.

Students understand the background and programmes under new economic policy.

Students Understand the place of Agriculture, Industry and services sector in India's economy.



Students describe the causes and magnitude of poverty and unemployment in India.

Students analyse various economic issues happening around us.

Students understand and evaluate numerical information relating to various aspects of Indian economy and India's economic policies.

Students refer books related to Indian economy, collect clippings and articles from newspapers and magazines and also follow economic

Core9:

Economic theory and data, EDM5B09

Students understand the basic sources of economic data, the structure, the scale of measurement, data reporting and data pulling/extracting exercises, data cleaning exercises, data treatment exercises etc.

Students use and apply data in solving problems related to economic issues

Core10:

Basic Econometrics, EDM5B10

Students define econometrics and understand the basic econometric techniques and their applications.

Students analyse empirical work in economics and use actual economic data to test economic theories.

Students understand and analyse statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models etc

Students with foundation in econometric analysis, develop skills required for empirical research in economics

Students analyze and solve simple Linear Regression Model and theories related to it

Students analyze two variable regression models and multiple regression models and apply these theories for the empirical analysis of data available to them

Students analyse and solve Econometric Problems like Multicollinearity and Heteroskedasticity

Students develop an attitude for conducting empirical works in economics and they appreciate the econometric works.



Conducting research

Core11:

Applied Econometrics,EDM6B11

Students define econometrics and understand the basic econometric techniques and their applications

Students analyse empirical work in economics and develop regression models to solve economic problems empirically

Core12:

International Economics,ECO6B12

Students identify the basic difference between inter-regional and international trade and understand how international trade has helped countries to acquire goods at cheaper cost, and explain it through the various international trade theories...

Students evaluate how international trade promotes economic development.

Students compare and contrast different trade theories.

Students understand the ways in which free trade and restrictive trade policies could be practiced

Students identify the issues and prospects of current international trade order with respect to India and its major trade partners

Students understand the functioning of foreign exchange markets in the world

Students relate different exchange rate systems with the current systems of foreign exchange determination across the globe

Students calculate the Balance of payments (BOPs) of nations and analyse different instruments to clear BOP disequilibrium

Core13:

Applied Financial Economics,EDM6B13

Students understand the basic concepts in financial economics and their role of finance in the operation of an economy.

Students understand and analyse different investment theories and the structure of interest rate in the formulation of a project.



Students understand the fundamentals of valuation of bonds and securities.

Students understand risk and return and analyse various types of risks. They evaluate the measurement of risk and return of an asset, measurement of risk and return of a portfolio.

Students analyse cost of capital and capital asset pricing model

Students explain derivatives and differentiate different derivatives like forward, future, options and swaps

Students analyse the derivative market and evaluate different derivatives for investment.

Students watch the conditions of financial markets and analyse its impact in the economy

Core14:

Economics of Growth and Development, ECO6B14

Students understand the theoretical framework for growth and development discourses under different schools of economic thoughts and develop better insights and knowledge on issues and challenges on economic development.

Students analyze the factors affecting the long-run economic growth, both from a positive and negative sense.

Students understand various theories of growth and development and analyze the problems of the developing world.

Students differentiate growth and development and measure growth and development by using different techniques like HDI, HPI etc.

Students develop attitudes towards the problems of underdevelopment and evaluate different policies and theories to overcome the issues of

Students analyse and evaluate Neoclassical growth models.

Students identify the problems of poverty and inequality and analyse the measures and

Students internalize the concept of Sustainable development, identify

Core15:

Project, ECO6 B15

Students understand the importance of research methodology and its basic tools for understanding the social reality



Students understand different types of research and familiarize the student with the quantitative and qualitative strategies of research in social science.

Students understand the importance of literature review in the projects and review various journals and research papers for their projects.

Students analyse various research design and methods

Students understand the methods of collecting data and analyse hypothesis.

Students report projects in a systematic way.

After completing this course the students prepare projects and work with a research problem..

Conducting research

Elective1:

Research Methodology, EDM6B16

Students understand the importance of research methodology and its basic tools for understanding the social reality

Students understand different types of research and familiarize the student with the quantitative and qualitative strategies of research in social science.

Students understand the importance of literature review in the projects and review various journals and research papers for their projects.

Students analyse various research design and methods

Students understand the methods of collecting data and analyse hypothesis.

Students report projects in a systematic way.

After completing this course the students prepare projects and work with a research problem.

Conducting research

Elective2:

Behavioral Economics, ECO6B17

At the end of this course the students are expected to have the following course outcome.

Students understand the economic decision making process and role of psychology

Evaluate the importance of psychology in behavioural economics

Understand the role of choice in theoretical formulations

Critically discuss the behavioural concepts in real situations and game theory

Elective3:



Urban economics

Students understand the fundamental terminologies of urban economics

Students identify the problems associated with urbanisation

Understand the theories and analytical tools in urban economics

Evaluate the policy initiatives developed in urban India

Open Courses:

Open1:

Economics in everyday life, ECO5D01

Noneconomic students understand the basic concepts in economics and recognize the importance of economic science in their everyday life.

Students understand and explain basic concepts from micro and macroeconomics

Students develop interest to understand the working of an economy.

Students understand and evaluate the working of a budgetary system in an economy

Open2:

Indian financial system, ECO5D02

At the end of this course the students are expected to have the following course outcome.

Noneconomic students understand the conceptual framework of Indian financial institutions and markets and their operations.

Students understand the components of financial system and explain how these elements are associated with everyday life

Students develop interest to understand more about Indian financial system and markets

Students explain and evaluate the role of RBI in controlling financial system

Students develop interest toward the financial market operations

Open3:

Basic econometrics, EDM5D03

Students define econometrics and understand the basic econometric techniques and their applications.



Students analyse empirical work in economics and use actual economic data to test economic theories.

Students understand and analyse statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models etc

Open Courses:

Complementary 1:

Introductory Economics I, ECO1(2)C01

At the end of this course the students are expected to have the following course outcome.

Students explain what Economics is and explain why it is important

Explain how economists use economic models.

Understand the scarcity and choice in the economy and the basic problems of an economy.

Explain and illustrate the basics of market demand and supply and the concept of market equilibrium and disequilibrium.

Students illustrate the concepts of elasticity of demand and cost functions.

Define the term production and explain what a production function is;

define and differentiate between marginal, average and total product; compute and graph marginal, average and total product and explain marginal productivity theory.

Students distinguish various concepts of national income and estimate the national income of a country.

Define and differentiate the basic premises of classical and Keynesian economics.

Complementary 2:

Introductory Economics II, ECO4(3)C01

Students define the concept of money and explain different

concepts and theories of money. Students understand the basic elements of public finance and explain the theory of maximum social advantage

Students understand the principle of federal finance and explain the role of the finance commission.

Students explain and illustrate the basics of international trade and analyse various concepts associated with trade.



Students understand the basic characteristics of the Indian economy and analyse various economic issues of the Indian economy.

Students define NITI Aayog and understand the functions of it.

Complementary 3:

Banking-I, ECO1(2)C03

Students define the bank, classify different banks and analyse the various roles of banks in the economy.

Students understand the various structures of banks and illustrate balance sheet and managements of funds.

Students explain various negotiable instruments and classify them on the basis of characteristics.

Students understand and explain the innovations in the banking sector and apply the knowledge in their day to day banking practices.

Complementary 4:

Banking 11, ECO4(3)C03

Students understand rural banking in India and analyse the three tier structure of banks in the country.

Students understand and analyse various banking sector reforms in the country.

Students explain the role and function of RBI and classify different monetary policy instruments.

Students understand and explain the role of development banks in India and classify development banks

Complementary 5:

Mathematical Tools For Economics-I, ECO1(2)C04

Students understand the language of mathematical economics and internalize how the whole body of economics has been influenced by mathematical science.

Students understand mathematical models and generalize various functions in economics

Students solve problems from set theory and apply it in economic problems.

Students apply the graph theories to illustrate and solve economic problems.



Students solve the equilibrium of different market structures by using mathematical techniques.

Students solve the problems related to matrices and determinants and apply them in economic problems.

Develop attitude to opt courses in economics in the institutes of high repute

Students undertake minor research projects to apply the tools they assimilated.

Complementary 6:

Mathematical Tools For economics-II, ECO1(3)C04

Students understand the language of mathematical economics and internalise how the whole body of economics has been influenced by mathematical science.

Students understand mathematical models and generalize various functions in economics

Students solve problems from set theory and apply it in economic problems.

Students apply the graph theories to illustrate and solve economic problems.

Students solve the equilibrium of different market structures by using mathematical techniques.

Students solve the problems related to matrices and determinants and apply them in economic problems.

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Abhinav

