# CH. ISHWAR SINGH KANYA MAHAVIDYALAYA DHAND-DADWANA (KAITHAL) HARYANA (Affiliated to Kurukshetra University Kurukshetra)

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# Course Outcomes (COs), Programme Outcomes (POs) & Programme

Specific Outcomes (PSOs) for U.G. & P.G. Programmes.

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# Course Outcomes (COs), Programme Outcomes (POs) as well as

# **Programme Specific Outcomes (PSOs)**

# Atainment of POs & COs are evaluated by the institute.

- > Each POs and its COs are well examined by the course teachers.
- > COs alongwith POs are well communicated to the students by the respective faculty.
- > Soft copy of POs and COs is uploaded on college website.
- ▶ Hard copy is submitted in the library for ready reference.

## **COURSE OUTCOMES**

#### Name of Programme: B.A.(General)

# <u>English</u> Semester - I Paper : En 21 English

- Co 1 : The course provides an opportunity to the students to improve their knowledge in literature and language also.
- Co 2 : A brief analysis of essays included in the textbook would help the students to study different aspects of one's societal life on the whole.
- Co 3 : Knowledge of transcription helps the students to improve their pronunciation with the help of speech sounds and symbols.
- Co 4 : Vocabulary exercises help the students in enriching their vocabulary which in turn help them to improve their comprehension.
- Co 5 : Part of speech form their base of the grammar and help them in learning the language.

#### Semester - II

#### Paper : En 22 English

- Co 1 : In the literary part, short stories are prescribed for the students. These stories help the students to deal with realistic situation of life.
- Co 2 : Characters of the stories become the role model of the students as the stories are taught by corelating with them.
- Co 3 : In Grammatical part, students get the detailed knowledge of sentences, voice, narration and various other topics of grammar. It helps them in the enrichment of writing skills along with good vocabulary.
- Co 4 : Practice of transcription improves their fluency in English.

#### Semester - III

#### Paper : En 23 English

Co 1 : Literature is incomplete without poetry. Poems of the various celebrated poets like Wordworth, Keats, Browning, Gray etc. are taught to the students. They come to

know the literary devices and different poetic forms which help the students to understand the beautiful aspect of literature.

- Co 2 : As the poems included in the text book cover a wide range of forms of expression, the students are able to develop an understanding of nuances of a variety of poetic devices.
- Co 3 : Comprehension questions that followed are designed to help the students develop their linguistic competence.
- Co 4 : The course also helps the students to practice the exact pronunciation of words.
- Co 5 : Knowledge of Non-finite verbs etc. strengthens their written and spoken part.

# Semester - IV

## Paper : En 24 English

Co 1 : Different types of plays cover a wide range of dramatic expressions, and enrich the students' knowledge about various dramatic forms.

Co 2 : Comprehension exercise develop and sharpen the students writing skills and critical thinking skills.

- Co 3 : Vocabulary exercises enhance their composition skills.
- Co 4 : Ample practical exercises are provided in writing E-mails, Dialogues, Resume and book reviews.
- Co 5 : Practice of transcription improves their pronunciation.

# <u>Semester - V</u> <u>Paper : En 25 English</u>

- Co1 :Raja Rao's 'Kanthapura' gives a deep insight how our ancestors fought against Britishers and also we come to know about the socio - economic and political conditions of that time.
- Co 2 : Students get the knowledge of Indian English Literature.

Co 3 : This Novel gives an opportunity to the students to know about the colonial period of India.

Co 4 : Students understand the pre-independence scenario reflecting caste system, social differences, political strategies and also the religious conflicts.

Co 5: It enhances their critical reading and writing skills.

Co 6: Know the origin, development and forms of novel.

Co 7 : It improves their pronunciation and speaking skills with the help of intonation and stress.

## Semester - VI

#### Paper : En 26 English

After reading Shakespeare's play 'The Merchant of Venice' included in the course, the students will be able to:

- Co 1 : Understand the various forms of drama specially Elizabethan drama.
- Co 2 : Get familiar with the writing style of the great dramatist William Shakespeare.
- Co 3 : Know about the social problems, complexity of relations, economic issues, religious conflicts and also about the day-to-day life of the people at that time.
- Co 4 : Enhance their writing and speaking skills.

# बी.ए.हिन्दी (अनिवार्य)

# पाठयक्रम परिणाम (Course Outcomes)-COs

## प्रथम सत्र

- Co1: मध्यकालीन काव्य कुंज के अंतर्गत हिन्दी साहित्य के 'मध्यकालीन कवियों (कबीर, सूरदास, तुलसीदास, मीरांबाई बिहारी, धनानंद रसखान के महान एवं प्रेरणा दायी व्यक्त्वि एवं कृतित्व से उनके द्वारा रचित साहित्य केभाव एवं शिल्पगत सौन्दर्य से, उनके द्वारा प्रतिपादित जीवन मूल्यों से विद्यार्थियों को परिचित करवाना' ।
- Co 2: हिन्दी साहित्य का आदिकाल के अंतर्गत -
  - हिन्दी साहित्य के इतिहास को लिखने की पंरपरा के आरम्भ एवं विकास से परिचित कराते हुए उसकी व्यापकता को दोहराना । 'हिन्दी साहित्य के आरम्भिक काल' 'आदिकाल से नामकरण में विभिन्न विद्वानों द्वारा दिए गए नामों का उल्लेख करते हुए' 'आदिकाल' नाम की सार्थकता से अवगत करवाना । आदिकाल की राजनीतिक, सामाजिक, आर्थिक, धार्मिक, सांस्कृतिक परिस्थितियों से प्रभावित आदिकालीन हिंदी साहित्य से परिचित कराना । आदिकाल की वीर रस से परिपूर्ण 'रासो' काव्य परम्परा के माध्यम से भारतीय राजाओं की शौर्यपूर्ण गाथाओं से, राजनीतिक कौशल से दरबारी कवियों के रासो काव्य के रचनात्मक उद्देय एवं सौष्ठव से परिचित कराना ।
- Co 3 : काव्य शास्त्र पर आधारित विषय के अंतर्गत कल्पना, भाव, विचार और भाषा का ज्ञान प्रदान करना । इस के स्वरूप, अंग एवं भेदों से परिचित कराते हुए काव्य के भाव पक्ष पर प्रकाश डालना । अलंकार, शब्दशत्तियों तथा शब्दगुणों के द्वारा काव्य

के शिला सौन्दर्य का विश्लेषण करते हुए काव्य रचना हेतु विद्यार्थियों को प्ररित करना ।

# द्वितीय सत्र

- Co1: 'ध्रुवस्वामिनी' नाटक के अंतर्गत नाटककार की 'जयशंकर प्रसाद' के व्यक्त्त्वि एवं कृतित्व का विश्लेषणकरते हुए उनकी नाट्यकला पर प्रकाश डालना । ध्रुवस्वामिनी नाटक के कथानाक, पात्र योजना, रंगमंचीयता, अभिनेयता तथा उद्देश्य के आधार पर समीक्षात्मक अध्ययन तथा नाटक के माध्यम से अंतर्द्वंद और उसकी सामाजिक स्थिति के संदर्भ में विद्यार्थियों को परिचित कराना। ध्रुवस्वामिनी के ऐतिहासिक चरित्र के माध्यम से नारी सशक्तिकरण के संदर्भ में समकालीन प्रांसगिकता पर विचार करना। जीवन में आधारित–कर्त्तव्य, न्याय–अन्याय, वीरता कायरता पर चिार करना एवं मान–सम्मान पर चर्चा करते हुए नाटक के उद्देश्य से छात्रों को परिचित कराना ।
- Co 2 : हिन्दी साहित्य का भक्त्काल के अंतर्गत -

हिन्दी साहित्य के स्वर्ण युग 'भक्त्किल' की पूष्ठभूमि की चर्चा करते हुए उसकी सामाजिक, राजनीतिक, आर्थिक, धार्मिक, सांस्कृतिक परिस्थितियों काा विश्लेषण करना। भक्त्किल में रचित संत काव्य, सूफी काव्य, राम काव्य और कृष्ण काव्य की भवगत, विचारगत, भाषागत विशेषताओं से अवगत कराना । मध्यकालीन भारत में रचित भक्ति साहित्य के स्वर्ण युग के रूप में भूमिका एवं महत्ता पर प्रकाश डालना । Co 3 · व्यावहारिक हिंदी के अतंर्गत –

Co 3 : व्यावहारिक हिंदी के अतगत — हिंदी विविध रूपों, विशेषताओं, हिंदी व वर्णमाला, हिंदी वर्तनी की समस्या समाधान, मुहावरे एवं लोकोक्तियों के आधार पर हिंदी भाषा के व्यावहारिक, रूपों, विशेषताओं, हिंदी वर्णमाला, हिंदी वर्तनी की समस्या समाधान, मुहावरे एवं लोक्तियों के आधार पर हिंदी भाषा के व्यावहारिक रूप की जानकारी प्रदान करना ।

# तृतीय सत्र

- 'आधुनिक हिन्दी कविता' पाठ्य पुस्तक में संकलित आधुनिक कवियों का साहित्यिक परिचय देते हुए उन कमवियों की कविताओं की व्याख्या करवाना । उनकी भाव, भाषा, शैली से परिचित करवाते हुए छात्राओं में संवेदनशीलता, समर्पण के भाव जागृत करना ।
- 2. कविताओं के माध्यम से छात्राओं को कवि एवं कविता के महत्व को समझाना ।
- 'हिन्दी साहित्य का इतिहास' के अन्तर्गत रीतिकाल की पृष्ठभूमि, रीतिकालीन काव्य की प्रवृतियॉ, रीति—कालीन साहित्य की उपलब्धियॉ, रीतिकाल के प्रमुख्य कवियों का परिचय देना ।

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- 4. 'प्रयोजन मूलक मूलक हिन्दी' के अन्तर्गत प्रयोजमूलक भाषा का अर्थ, महत्व समझाते हुए कम्प्यूटर, इंटरनेट, ई.मेल, मशीनी अनुवाद, अनुवाद का स्वरूप और महत्व एवं उपयोगिता से अवगत करवाना ।
- वर्तमान समय में जीवन एवं शिक्षा के क्षेत्र में कम्प्यूटर का महत्व एवं इसमें रोजगार की संभावनाओं के विषय में विस्तृत जानकारी देना ।

चतुर्थ सत्र

- Co1: छात्राओं को आधुनिक कहानीकारों, कहानियों, कहानी परम्परा की जानकारी देना। कहानियों का समाज पर प्रभाव व महत्त्व से अवगत करवाना ।
- Co 2: कहानियों को छात्राएं अपने आप से जोड़ते हुए प्रेरणा ले पाएं और उनकी कहानी लेखन रूचि उत्पन्न करना ।
- Co 3: हिंदी साहित्य के आधुनिक काल का स्थान, महत्त्व और पृष्ठभूमि से अवगत करवाना।
- Co 4: आधुनिक गद्य विद्याओं नाटक, कहानी, उपन्यास, निबंध, संस्मरण एवं एकांकी की जानरकारी प्रदान करवाना ।
- Co 5 : छात्राओं को पारिभाषिक शब्दावली के अर्थ, स्वरूप, महत्व, उपयोगिता व सिद्धांतों को समझाना ।

#### पंचम सत्र

- 'समकालीन कालीन हिन्दी कविता' पाठ्य–पुस्तक में संकलित कवियों का साहित्यिक परिचय एवं उनकी कविताओं की व्याख्या करवाते हुए समीक्षात्मक, आलोचनात्मक जानकारी देना ।
- 'हिन्दी साहित्य का इतिहास' के अर्न्तगत आधुनिक काल का परिचय देते हुए भारतेंदु युग से समकालीन हिन्दी कविता तक विस्तृत जानकारी प्रदान करना ।
- छात्राओं को आधुनिक काल के माध्यम से वर्तमान साहित्यिक एवं सामाजिक समस्याओं से अवगत करवाते हुए उनके प्रति सचेत एवं जाागरूक करना ।
- 'प्रयोजन मूलक' हिन्दी के अन्तर्गत प्रयोजनमूलक भाषा के विषय में जानकारी देते हुए पत्र लेखन, संक्षेपण, पल्लवन के नियमों से परिचित करवाना ।

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 विद्यार्थियों में हिन्दी पत्रकारिता का तकनीकी ज्ञान देते हुए इसमें रोजगार की संभावनाओं के विषय में जानकारी प्रदान करना ।

# षष्ठ्म सत्र

- 'नव्यतर गद्य गौरव' पाठ्य पुस्तक में संकलित लेखकों के निबंध, संस्मरण, व्यंग्य, ललित निबंध एवं यात्रा वृतांत के विषय में जानकारी देना । साहित्यकारों के साहित्यिक विशेषताओं से अवगत करवाना ।
- हरियाणवी भाषा का परिचय देते हुए हरियाणवी भाषा के उद्भ्व एवं विकास, उसकी बोलियॉ, सांग परम्परा की विस्तृत चर्चा करते हुए हरियाणवी भाषा के विकास में योगदान की जानकारी प्रदान करना ।
- हरियाणवी भाषा में रचित आधुनिक हिन्दी कविता, उपन्यास, कहानी, नाटक, एकांकी एवं अन्य गद्य विधाओं की विस्तृत जानकारी देना ।
- 4. हरियाणवी भाषा के महत्व को प्रतिपादित करते हुए इसके प्रति रूचि उत्पन्न करना।
- हिन्दी पत्रकारिता के अंतर्गत हिन्दी पत्रकारिता के महत्व, इसके विभिन्न आयाम, सम्पादक के गुण, स्वतंत्र प्रेस के विषय में विस्तृत जानकारी प्रदान करवाना ।
- 6. विद्यार्थियों में हिन्दी पत्रकारिता के व्यावसायिक दृष्ठिकोण से रूचि उत्पन्न करना।

## **B.A.ECONOMICS**

**Course Outcomes (COs)** 

#### Semester - I

## Paper : EC-21 MICRO ECONOMICS I

Micro Economics enables the students to analyse how individual decision-makers both consumers and producers behave in variety of Economic Environment. After studying this paper, students will be able to understand:

- The concept of economics and its role.
- Law of Demand, Elasticity of Demand and their applicability.
- Utility analysis both cordinal & ordinal.

• Theories of cost, Revenue and Break even point.

# Semester - II

# Paper : EC-22 MICRO ECONOMICS II

The course enables the students

- Various market forms such as perfect competition, Monopoly, Monopolistic Competition, oligopoly and determinants of Prices in these markets and how a firm take decisions to maximize its objectives.
- Various factor of production and suitable theories related to them.

#### SEMESTER-III

## Paper (EC 23) MACRO ECONOMICS – 1

• The course enables the students to understand the different concepts of macro's economic variables .

It helps the students to understand the functioning of on economy.

- It provides detailed studies of national income, circular flow of income, classical and keynsian theories.
- It provides detailed studies of consumption and investment functions.

# **SEMESTER- IV**

# PAPER (EC 24) MACRO ECONOMICS -2

- The course enables the students to understand the different concepts of macro economic variables.
- It helps the students to understand the functioning of an economy.
- It provides detailed studies of investment multiplier, acceleration principle, money and their theories.
- It provides detailed studies of trade cycles, investment theories and theories of investment.

#### Semester -V

#### Paper : EC-25 Indian Economy I (Option-I)

Upon the successful completion of this paper the students will be able to acquire a good understanding of:

- What are the basic features of Indian Economy, developed and underdeveloped economy and the nature of capitalist, socialist & mixed economy.
- Major problem of Indian Economy i.e. over population, effects of overpopulation on economic development.
- The problems of Unemployment & poverty will make the students able to deal with issues related with these problems and find out methods to deal with such problems.
- Agriculture sector of India & its contribution to the economy as a whole.
- Study of special Economic Zones also useful to understand the efforts of Govt. to promote Industries.

#### Semester -VI

## Paper : EC-26 Indian Economy II (Option-I)

Upon the successful completion of this paper the students will be able to acquire a good understanding of:

- Grasp the Importance of Planning undertaken by the Government of India, have knowledge on the various objectives, failures & achievements as the foundation planning & economic reforms taken by the Government.
- Industrial policy, Industrial Labour, Industrial disputes and social security measures.
- Importance of Foreign Sector, Foreign investment & Foreign institution will make the students able to understand globalization.

## **B.A.Mathematics**

## **COURSE OUTCOMES**

#### **SEMESTER I**

#### PAPER – BM 111 ALGEBRA

CO1 : Students will learn about matrices types, rank of matrix, characteristic equation of matric, using matrices, various types of equations can be solved .

CO2 : Students will learn about unitary and orthogonal matrices, bilinear and quadratic forms.

CO : Students will learn to find of the roots of the quadratic, cubic and biquadratic equations as well as solution of various linear equations, fraction equation etc.

CO : General strategy of equation solving to the problems of optimization, business and logical problems.

# PAPER – CALCULUS (BM- 112) (DIFFENTIAL AND INTEGRALS)

This course will enables the students to :

1. Learning about concept about limits, continuity, derivability and successive diffentiation .

2. It emphasis the study of asymptotes, curvature and curve tracing.

3. Concept of various of such as trigonometry, expotential, inverse, logarithmic, hyperbolic, and their applications.

4. Concept of reduction formula which connects the given integral with another integrals.

# PAPER – BM 113 SOLID GEOMETRY

CO1: Solid geometry is helpful to students to understand the concept of pole of line, director circle of conic, tangent and normal to the conic.

CO2 : Considering various parameters, different geometrical figures and shapes can be traced.

CO3 : Students will learn generating lines, confocal conicoids.

CO4 : It emphasis the study of points, shapes and surface identification.

CO5 : It will be helpful to understand the concept of system of conics.

CO6 : Students will learn reduction of second degree equations.

## **SEMESTER 2**

# PAPER : BM – 121 (NUMBER THEORY AND TRIGNOMETRY)

CO1 : It will be helpful to students to understand the concept of prime numbers, prime number as factors, fundamental theorem of arithmetic.

CO2 : Students will learn congruence's fermat's theorm, wilson's theorm and chineese remainder theorm.

CO3 : Students will study complete residue system, reduced residue system and Euler's function.

CO4 : Number theory plays a vital role to coding and decoding system.

CO5 : Knowledge of trigonometric, exponential and hyperbolic functions is used to find the nth roots of equations.

CO6 : Students will learn summation of trigonometric series.

# SEMESTER 2 PAPER : BM 122 ORDINARY DIFFERENTIAL EQUATION

CO1: Student will learn about the exact differential equation and single solution .

CO2 : Student will learn about orthogonal trajectories, and linear differential equations with constant coefficients, homogenous linear differential equations, equations reducible to homogenous.

CO3 : Student will learn also understand linear differential equations of 2<sup>nd</sup> order, method of variation of parameters, method of undetermined coefficients.

CO4 : Student will learn ordinary simultaneous differential equations.

CO5 : It shows awareness about the classification, formation and solution of various initial and boundary value differential equations.

CO6 : Student will learn to solve homogenous, non-homogenous differential equation which is useful to real world scenario of applied physics, numerical solutions of various problems etc.

## **SEMESTER 2**

## PAPER : (BM – 123) VECTOR CALCULUS

This course will enable the students to

- 1) Learn about vector function and vector fields.
- 2) Concept of ordinary, partial and total derivatives of vector function.
- 3) Learn the concept of gradient, divergence, curl of vector function.
- 4) Green, Gauss, stokes theorem in many branches of mathematics.

## Semester - III

## Paper : BM 231 Advanced Calculus

#### Course Outcomes:- This course will enables the students to

- Co 1 : Concept of learning different indeterminate form of limit, continuity, discontinuity of function at two variables.
- Co 2 : Learning about partial differentiation, differentiability of functions of two variables and Maximum and Minimum of a function of two variables.
- Co 3 : Understanding about behavior of curves in spaces.

#### Paper : BM 232 Partial Differential Equations

- Co 1 : Student will learn about formation of partial differential equations, first order linear and nonlinear partial differential equations.
- Co 2 : Students will be able to know linear partial differential equations of 2nd and higher order.
- Co 3 : Students will also learn about classification and canonical forms of 2nd order linear partial differential equations.
- Co 4 : Students will learn to derive wave, heat equation in one and two dimensional and laplace equation.

#### Paper : BM 233 Statics

- Co 1 : Student will learn Moments and couples.
- Co 2 : Students will understand the concept of composition and resolution of forces.
- Co 3 : Students will understand basic concept of mechanics and equilibrium of rigid body.
- Co 4 : Students will learn about virtual work and forces in three dimensions.
- Co 5 : Students will study wrenches, Null lines and planes.
- Co 6 : Students will analyze equilibrium conditions under the effect of external forces acting on the rigid and to simplify different problems using the basic principles of mechanics.

#### Semester - IV

#### Paper : BM 241 Sequences and Series.

- Co 1 : Student will learn the concepts of sequences, their type i.e. finite, infinite bounded and unbounded sequences etc..
- Co 2 : Students will study neighbourhood, interior points, limit of sequences, limit points, open sets closed sets.
- Co 3 : Students will learn a very useful theorm Bolzano-Weierstrass therom and Haine Borel theorm.
- Co 4 : Students will learn convey out and divergent sequences.
- Co 5 : Students will also learn about the concept of Alternating series.
- Co 6 : Students will study various test: D'alembert's Ratio test, Raabe's test, Logarithmic test, de Margav and Bestroud's test, Cauchy's nth not test, Gauss test, cauchy's integral test etc.
- Co 7 : It will helpful to understand the concept convergence and divergence of infinite products.

## Paper : BM 242 Special Functions and Integral transform.

- Co 1 : Student will learn about power series and bessel's equation.
- Co 2 : Students will come to know about Legendre's and Hermite's equation.
- Co 3 : Students will learn laplace transforms.
- Co 4 : Students will understand about Fourier transforms.

#### Paper :BM 243 Programming in C & Numerical Method

- Co 1 : Concept of learning use of arrays, functions, structures and pointers etc.
- Co 2 : Students learns about practical know-ledge of programming in C to apply it to learn the solution of many problems.
- Co 3 : Concept of solution of algebraic, linear system at equations and transcendental equation by different numerical methods.

## <u>Semester - V</u>

## Paper : BM 351 real Analysis

#### This course will enables the students to

- Co 1 : Learn Riemann Integrable functions, its properties, and applications.
- Co 2 : Recognize bounded, convergent, divergent, Cauchy, monotonic sequences.
- Co 3 : Calculate Limit superior, limit inferior and limit of bounded functions.
- Co 4 : Apply test for convergence and absolute convergence at an infinite series of real number.
- Co 5 : Understand many properties of the real line and learn to define sequence in term of function IR to subset IR.

#### Paper : BM 352 Groups and Rings.

- Co 1 : Student will learn the concept of Groups, subgroups, left and right cosets, Index of a subgroup.
- Co 2 : Students will study Homomorphism Isomorphism, automorphisms and inner automorphisms of a group.
- Co 3 : Students will learn the concept of Rings, sub rings, integral Colman and fields.
- Co 4 : It will be helpful to understand the concepts of prime ideal, principal ideal and Maiximal ideal.
- Co 5 : Students will learn about the concept of Euclidean rings polynomial ring.

#### Paper : BM 353 Numerical Analysis

- Co 1 : Students will learn finite difference operators, Interpolation with equal and unequal intervals.
- Co 2 : Students will come to know about central difference interpolation formulae and probability distributions.
- Co 3 : Students will acquire knowledge about Numerical differentiation and Eigen value problems.
- Co 4 : Students will also understand about numerical integration and numerical solution of ordinary differential equation using initial and boundary conditions.

#### Semester - VI

#### Paper : BM 361 Real and Complex Analysis.

- Co 1 : Students will understand Jacobians Beta, Gamma functions, double and triple Integral.
- Co 2 : Students will learn about Fourier series.
- Co 3 : Students will acquire knowledge about the concept of complex functions, Cauchy-Riemann equations, harmonic function.
- Co 4 : Students will also learn about mobius transformation and critical mapping.

#### Paper : BM 362 Linear Algebra

#### This course will enables the students to

- Co 1 : Concept of vector spaces, subspaces, bases, dimension & their properties.
- Co 2 : Compute eigen value, eigen vectors.
- Co 3 : Learning about inner product spaces and their orthoganlity.
- Co 4 : Importance of adjoint of Linear transformation & its canonical form.

#### Paper : BM 363 Dynamics

- Co 1 : Student will learn very important concepts Newton's law of motion, work, Power and Energy.
- Co 2 : Students will be able to draw free body diagram for a partials or for a rigid body in plane motion.
- Co 3 : Students will learn to analyse the general motion of a rigid body on smooth and rough planes.
- Co 4 : Students will learn Kepler's law of planetary motion and will be able to solve various problems of applied physics and mechanical engineering.
- Co 5 : Students will study Relative velocity and acceleration.
- Co 6 : It will be helpful to understand simple Harmonic Motion and Elastic strings.

# **B.A.(Psychology)**

#### COURSE OUTCOMES(Cos)

# <u>Semester - I</u> Paper : Introduction to Psychology

- Co 1 : Student will learn the nature and objectives of studying Psychology.
- Co 2 : Student will learn the concept of sensation & perception.
- Co 3 : Student will the body changes during emotion.
- Co 4 : Student will get opportunity to understand the concept of personality, Intelligence & Motivation.

# Semester - II Paper: Experimental Psychology

- Co 1 : Student will learn the problems & Methods of Psychologists.
- Co 2 : Student will understand the concept of learning, Memory, Factor leading to forgetting and Memory enhancing Techniques.
- Co 3 : Student will acquire the knowledge of descriptive statistics/elementary Analysis.

# Semester - III Paper : Social Psychology

- Co 1 : Student will learn the learn the subject Matter of Social Psychology.
- Co 2 : They will actuated with the concept of socialization, prejudice, Pro-social behavior.
- Co 3 : Student will learn the causes and prevention of Aggressive behavior and also about leadership.

# Semester - IV Paper : Developmental Psychology

Co 1 : Student will the concept of Human development alongwith the Principles and factors of human development.

- Co 2 : Students will get the knowledge of different developmental stages, their characteristics & hazards of that stages.
- Co 3 : Elementary statistical knowledge of be imported.

## Semester - V Paper : Psychology

- Co 1 : Student will acquire the knowledge of concept normality and abnormality different view points about abnormality.
- Co 2 : Students will study the different Methods of Assessment of abnormal Behaviour.
- Co 3 : Students will learn the symptoms, causes of anxiety based disorder, consequences and Rehabilitation.
- Co 4 : The students will know the concept of substance abuse-causes, Mood disorder & schizophrenia.

# Semester - VI Paper : Applied Psychology

- Co 1 : Student will study the meaning of applied Psychology career in the fields of Psychology.
- Co 2 : Students will learns about the different fields of Applied Psychology i.e. Guidance and Counseling, Health Psychology and forensic Psychology etc. This will help the students to choose optional subject of their interest.
- Co 3 : Students will attain the knowledge of correlation Method of statistics.

# बी.ए.संस्कृत (ऐच्छिक)

# पाठयक्रम परिणाम Course outcomes) COs

# प्रथम सत्र

## Paper: ES 21 Sanskrit Elective

- Co1: कक्षाओं में पशु—पक्षी पात्रों के माध्यम से परस्पर सुहृद कैसे लाभ पहुंचाते हैं । इसका व्यावहारिक ज्ञान प्रदान कराना सामाजिक स्तर पर मिलकर काम करने की भावना से परिचित करवाना ।
- Co 2 : नैतिकता की शिक्षा प्रदान कराना । विपरीत परिस्थितियों में भी मेहनत करते हुए, धैर्य के साथ सफलता प्राप्ति के दिशा–निर्देशों का ज्ञान करवाना ।
- Co 3 : संस्कृत—व्याकरण में शब्द—रूप तथा धातुरूपों के द्वारा छात्राओं का मानसिक विकास करना ।

Co4: संधि ज्ञान के द्वारा, वर्ण–परिचय तथा वर्णों के मेल का ज्ञान करवाना श्लोकों के कण्ठस्थीकरण से छात्राओं में आत्मविश्वास उत्पन्न करना ।

# द्वितीय सत्र

# Paper: ES 22 Sanskrit Elective

- Co1: गीतोपदेश से योगेश्वर श्रीकृष्ण के राजनीति विज्ञान एवं युद्ध—कौशल से छात्राओं को परिचय देना और गीता की सार्वभौमिकता और सार्वकालिकता का अनुभव करवाना ।
- Co 2 : जीवन में नैतिक मूल्यों के महत्व का ज्ञान करवाना और धैर्य तथा उत्साह से जीवन के पथ पर आगे बढ़ने की शिक्षा प्रदान कराना ।
- Co3: शब्दरूप और धातुरूपों की जानकारी देकर छात्राओं का बौद्धिक विकास कराना।
- Co4: छन्द परिचय के ज्ञान से छात्राओं में श्लोकों के छप्दोबद्ध गायन की कुशलीता विकसित कराना । सरल वाक्यों का संस्कृत में अनुवाद द्वारा बौद्धिक क्षमता का विकास कराना ।

# तृतीय सत्र

## Paper: ES 23 Sanskrit Elective

- Col: महाभारत पर आधारित 'प×चरात्र' नाटक के माध्यम से छात्राओं को ऐतिहासिक घटनाओं का ज्ञान करवाना । उस समय की यज्ञ की सकृद्धि एवं गुरू–शिष्य पंरपरा से भी परिचित करवाना ।
- Co 2 : संस्कृत—साहित्य के कवियों के जीवन व रचनाओं से छात्राओं को परिचित करवाना व नाटक में प्रयोग किए जाने वाले पारिभाषिक शब्दों का विस्तृत ज्ञान प्रदान करवाना ।
- Co 3 : समास ज्ञान द्वारा संक्षिप्तीकरण का बोध करवाना तथा प्रत्ययों के ज्ञान द्वारा भाषा की शुद्धता का ज्ञान करवाना ।
- Co4: प्रत्याहार सूत्रों के माध्यम से अच्(स्वर) और हल् (व्यंजन) वर्णों का वैाानिक दृष्टि से बोध करवाना । संस्कृत–पत्र–लेखन द्वारा छात्राओं में लिखने की कुशलता को विकसित कराना ।

# चतुर्थ सत्र

# Paper: ES 24 Sanskrit Elective

- Co1: कविकुलगुरु कालिदास के काव्य–कौशल से परिचित करवाना । रघुकुल के राजा दिलीप के उच्च आदर्शों कार्य निष्ठा, कर्त्तव्यपरायणता तथा गौ–सेवा भाव से परिचित करवाना ।
- Co 2 : कवि की गद्यशैली से अवगत करवाना, कवि को आधुनिक बाणभट्ट कहने के पीछे का भाव बताना । शिवाजी एवं उनके गुप्तचरों की वीरता और राष्ट्रभक्ति भावना एवं समर्पण से अवगत करवाना ।

- Co 3 : वाच्य परिवर्तन और प्रत्ययों के प्रयोग से भाषा की शुद्धता और वैज्ञानिकता का ज्ञान करवाना ।
- Co4: सूत्रों की शैली द्वारा भाषा कौशल को विकसित कराना तथा सूत्रों द्वारा विस्तृत ज्ञान को संक्षिप्त शब्दों के द्वारा बोध कराना । सरल वाक्यों के अनुवाद द्वारा मानसिक क्षमता को विकसित कराना ।

# पंचम सत्र

## Paper: ES 25 Sanskrit Elective

- Col: 'अभिज्ञानशाकुन्तलम्' नाटक के माध्यम से कवि की नाटयशैली और रचनात्मकता तथा कल्पनाशीलता से परिचित करवाना । महाभारत पर आधारित कथानक में कल्भ्पना के पुट का अनुभव कराना तथा नाटक के परिवर्तित अंशों का भी परिचय देना ।
- Co2: कवि की जीवन-शैली, रचनाओं व समय से छात्राओं को परिचित करवाना ।
- Co 3 : वैदिक साहित्य के माध्यम से वैदिक और भारतीय पुरातन संस्कृति से अवगत करवाना ।
- Co4: शब्दालंकारों और अर्थालंकारों के द्वारा भाषा के शाब्दिक एवं भाव सौंदर्य से छात्राओं को परिचित करवाना । भाषा की शुद्धता को बोध करवाना ।

#### षष्ठम सत्र

# Paper: ES 26 Sanskrit Elective

- Col: नाटक के माध्यम से कवित की नाट्यशैली और रचनात्मकता से परिचित करवाना ।
- Co 2 : कवि की रचनाओं में प्रदर्शित राष्ट्रीय—प्रेम भावना, प्राकृतिक—सौंदर्य, जीवन—दृष्टि और प्रकृति के मानवीयकरण का ज्ञान देना ।
- Co 3 : संस्कृत—साहित्य के लौकिक साहित्य द्वारा सामाजिक, राजनीतिक और व्यावहारिक ज्ञान तथा अन्य पहलुओं से परिचित करवाना । उस समय के कवियों की जीवन—शैली एवं संघर्षपूर्ण सय से भी परिचित करवाना ।
- Co4: स्त्रीप्रत्ययों के द्वारा पुल्लिंग शब्दों को स्त्रीलिंग में प्रयोग करने की कुशलता विकसित करना तथा समाज में प्रयुक्त किए जाने वाले पुल्लिंग शब्दों के आधार पर स्त्रीलिंग शब्दों में प्रत्ययों की जानकारी रखना । निबंध लेखन के द्वारा क्षमता को विकसित करना ।

## B.A. Music(I)

Courseout comes (COS) Semester-I MT 21 Music Instrumental

- Co1: पाठ्यक्रम में दिए गए रागों के भारपाल एवं स्वरूपकी ऐतिहासिक जानकारी छात्राओं को देना ताकि वे रागों का अभ्यास भावपूर्ण ढंग से कर सकें ।
- Co 2 : सुप्रसिद्ध सितार वाद्यों की जीवनशैली तथा उसके सागेतिक योगदान की पूर्ण जानकारी विद्यार्थियों को देना ताकि विद्यार्थी अलग–अलग घरानेदार वादन शैली की विशेषता को ग्रहण करें ।
- Co 3 : विद्यार्थियों को वैदिक काल से 12वीं शताब्दी के संगीत की ऐतिहासिक जानकारी प्रदान करना ताकि वे इसके महत्व को समझ सकें ।
- Co4: सितार की बनावट व उसमें बजाने के बारे में छात्राओं को जानकारी देना ताकि वे प्रमाल के सुरमय आन्नद ले सकें ।
- Co 5 : छात्राओं को लोक संगीत व शास्त्रीय संगीत के अन्नत समबन्ध को पूर्णतय समझाना जिसमें शास्त्रीय संगीत के दुराह प्रसार में विशेष महत्व है ।

#### Semester-II

## MT 22 Music Instrumental

- Co1: विद्यार्थियों के पाठ्यक्रम में दिए गये रागों के स्वर पर`लगने वाले स्वर को इत्यादि के विषय में जानकारी प्रदान करना ताकि वे रागों का अभ्यास कर सकें ।
- Co 2 : छात्राओं को सूत, धसोट, जमजमा, नायक–नायकी,वादी–संवादी विवादी की परिभाषाएं समझाना ।
- Co 3 : छात्राओं को सितार वादकों के गुण–दोषों के बारे में बताना ताकि वे एक अच्छे सितार वादक–वादिका बनने का प्रयास कर सकें ।
- Co4: विद्यार्थियों को वाद्यों की बनावट, आकार व उनकी वादन शैली के बारे में विस्तृत जानकारी देना ताकि वे अपने वाद्यों की ध्वन्तामक गुणात्मकता को समझ सकें ।
- Co 5 : जनसंपर्क आदि माध्यमों का भारतीय शास्त्रीय संगीत की उन्नति में क्या भूमिका है, इसकी पूर्ण जानकारी छात्राओं को देना ताकि विद्यार्थीगण इन माध्यमों का प्रयोग अपने वादन स्वरीय बनाने में कर सकें ।

# Semester-III

# MT 23 Music Instrumental

- Co1: छात्राओं को स्वरलिपि का महत्व बताते हुए वाद्य पर बजाना सिखानाताकि वे सुरों को सुनकर समझ सकें ।
- Co 2 : छात्राओं को तालों की संरचना व लयबद्धता के विषय में बेखूबी समझना ताकि विद्यार्थियों का वादन बाल पक्ष को दृष्टि से परिपक हो सकें ।
- Co 3 : छात्राओं को सितार वादन की विभिन्न शैलियों के बारे में विस्तृत जानकारी देना क्योंकि शैलियों के आधार पर ही विद्यार्थी सितार वादन की तकनीकियों को अपनाएंगे ।

- Co4: स्वयंभूनाद (स्वयं से उत्पन्न नाद) के बारे में छात्राओं को बेखूबी समझना ताकि रागों में छात्रागण स्वयंभूनाद का अनुभव कर सकें ।
- Co 5 : विद्यार्थियों को परमेल–राग, अल्ताफ बहुत्व मसीतखानी गत, रजाखानी गत,ग्राम आदि संगीतात्मक विषयों के बारे में समझाना ताकि वे संगीत के शास्त्र–पक्ष से अवगत हो सकें ।

## Semester-IV

# MT 24 Music Instrumental

- Co1: पाठयक्रम में वर्णित राघव के स्वरूप व (लगने वाले स्वर इत्यादि) के विषय में जानकारी देना ताकि वे रागों का समुचित ढंग से अभ्यास कर सकें ।
- Co2: स्वरलिपि का महत्व बताते हुए राग शुद्ध, कल्याण, ख्माज केदार का विस्तुत परिचय बताना ताकि वे रागों के शास्त्रपक्ष को समझ सकें एवं रगानुसार अपने वादन का अभ्यास करें ।
- Co 3 : छात्राओं को तालों की संरचना व लयबद्धता के विषय में पूर्ण रूप से जानकारी प्रदान करना क्योंकि संगीत—गायन वाद्यन के ताल अभिन्न अंग हैं ।
- Co4: ख्याति प्रास कलाकारों की जीवनशैली व संगीतिक योगदान की जानकारी छात्राओं को देना ताकि वे उनकी साधना के लय से प्रभावित हो सकें ।
- Co 5 : छात्राओं ने सरोद, तबला, वायलिन आदि वाद्यों की बनावट एवं वादन शैली की विस्तृत जानकारी प्रदान करना ताकि वे वाद्यों की धन्यात्मक गुणात्मकता को समझ सकें तथा अपने वादन को प्रभावशाली बना सकें ।

## Semester-V

# MT 25 Music Instrumental

- Co1: पाठ्यक्रम में दिए गए रागों के ऐतिहासिक एवं शास्त्रीय परिचय की जानकारी छात्राओं को देना ताकि वे रागों के समुचित स्वरूप को समझ सकें ।
- Co 2 : स्वरलिपि का महत्व बताते हुए सितार वाद्यों पर रागों को बजाना ताकि वे स्वरों को सुनकर समझ सकें ।
- Co 3 : छात्राओं को तालों की संरचना व लयबद्धता के विषय में पूर्ण रूप से जानकारी देना ताकि संगीत में ताल लयबद्धता की गायन वाद्यन की पूर्णता है ।
- Co4: विद्यार्थियों ने स्वर लिपि पद्धति के उद्धव एवं विकास के बारे में विस्तार से समझाना ताकि वे अपने अभ्यास में उसका लाभ उठा सकें ।
- Co 5 : भारतीय वाद्यवृंद की उत्पत्ति एवं विकास के बारे में विद्यार्थियों को भली—भांति समझाना ताकि विद्यार्थीगण विभिन्न भारतीय वाद्यों का वाद्यन कर सकें ।

## Semester-VI

# MT 26 Music Instrumental

Co1: पाठ्यक्रम में वर्णित रागों के परिचय व ऐतिहासिक स्वरूप की विस्तृत जानकारी छात्राओं को देना ताकि वे रागों का अभ्यास भाषानुसार कर सकें ।

- Co 2 : सुप्रसिद्ध सितार वादकों की जीवनशैली व विभिन्न स्वरों पर आयोजित लयक्रमों में वादन की विशिष्ठताओं के विषय में बताना ताकि वे अपने सितार वादन के अभ्यास को आगे बढ़ा सकें ।
- Co 3 : छात्राओं को को तारों की संरचना व लयबद्धता के विषय में बखूबी यथोचित जानकारी देना क्योंकि राग वादन में ताल लयबद्धता अनिवार्य अंग के रूप में प्रस्तुत होती है ।
- Co4: शास्त्रीय संगीत व इलैक्ट्रॉनिक मीडिया के विषयमें छात्राओं को पूर्णरूप जानकारी देना ताकि वे वर्तमान समय में इसके महत्व को समझ सकें एवं अपने गायन–वादन में इसका लाभ उठा सकें ।
- Co 5 : विद्यार्थियों को 17वीं शताब्दी से 19वीं शताब्दी के दौरान भातीय शास्त्रीय संगीत के विकास की जानकारी देना ताकि वे संगीत की ऐतिहासिक महत्व को समझ सकें, अपने शास्त्र पद्वा को समृद्ध बना सकें ।

#### **B.A. Political Science**

#### Course Outcomes (COs) Semester- I Paper: PS 21 (I) Indian Constitution

CO1: Students are introduced to the Indian Constitution with a focus on the role of the constituent assembly and examine the essence of Preamble.

CO2: Students examine the Fundamental Rights and Duties of Indian citizens with a study of the significance and status of Directive Principles.

CO3: Students cam critically analyze the important institution of the Indian Union: the Executive: President, Prime Minister, Council of Minister, Governor, Chief Minister, the legislature: Rajya Sabha, Lok Sabha, Speaker, Committee System, State Legislature and also the working of Gram Panchayat, Gram Sabha and duties of the Sarpanch has the executive knowledge about the need and mechanisms of the constitutional amendments.

CO4: Students will get to know that judiciary is an important pillar of our successful democracy. The content will make students aware of the judiciary levels—Supreme Court and the High Courts: composition and functions-- Judicial Activism.

## Semester- II Paper: PS 22(I) Indian Politics (Option i)

CO1: Indian being a federal state with unitary features, students will learn about Centre State

relations. Principles of healthy federation and also sharing of powers and revenue between Centre and States.

CO2: Evaluating the Electoral Process in India with focus on the Election Commission Composition, Functions and roles.

CO3: Critically evaluating the Indian Party System, its development and looking at the ideology of dominant National Parties.

CO4: Evaluating the role of various forces on Indian Politics, religion, language, Caste, Tribe and regionalism.

# Semester- III Paper: PS 23(ii) Indian Political Thinkers (Option ii)

CO1: Tracing the evaluation of Indian Political Thinkers life history and economic view from ancient India to modern India.

CO2: Analysing the nationalist thinkers of Raja Ram Mohan Roy and Swami Vivekananda.

CO3: Assessing the nationalist Thinker to Lala Lajpat Rai and Bal Gangadhar Tilak.

CO4: Tilak was Father of Indian unrest.

# Semester- IV Paper: PS 24(II) Indian Political Thinkers (option ii)

CO1: Discussing the nationalism of Bhagat Singh, MahatmaGandhi social changes due to working of democracy.

CO2:Discussing the moment against caste and British rule, Liberal democracy which develops society and equal right to take part.

# Semester- V Paper: PS 25(I) Comparative Politics (option i)

CO1: Need and significance of politics for modern state and comparison of different political systems in the world.

CO2: Knowledge about various approaches of comparative politics and relevance in changing political setup and political equations.

CO3: Knowledge about basis of Constitutionalism and different types of Constitution and problems in constitutionalism.

CO4: Inter-linkage and interdependence of pillars of democracy- Executive, Legislative and Judiciary.

# Semester- VI

# Paper: PS 26(I) Comparative constitutions of UK and USA (option i)

CO1: Fundamental and significance of constitutions of the UK and USA in the Indian context and also the socio-economic basis in democracies.

CO2: Making a comparative analysis of the following constitutions of UK and USA legislature Executive and Judiciary.

CO3: The constitution of UK and USA role in keeping democracy transparent and also the role of the pressure groups and political parties.

CO4: The electoral process in UK and USA and its transparency, people attitude towards franchising and consciousness towards politics, the quality and levels of bureaucracy in UK and USA.

# **B.A History**

## **Course Outcomes(Cos)**

# Semester -1 Paper: HR21(1) Ancient History( Option 1)

Co1: Students would have gained Knowledge about meaning concept, concept and area of history.

Co2: Students will gain knowledge about pre-historic age and concept of Neolithic.

Co3: Students will Acquire knowledge about Vedic civilization and political, social and religious conditions during the Vedic age.

Co4: Students would have gained knowledge about Mauryan Empire administration.

Co5: Students are enabled to understand the maps of important sites of Harappan civilization,

extent of Asoka's Empire and pillars edicts. Ports and Urban centres in ancient India.

Semester-II Paper HR 22(1) History of India(option 1) Co1: Students will have an idea about the main dynasties of India as Pushyabuti and Cholas, rashtrakut and tripartient struggle.

Co2: Students will gain knowledge of invasions of Mahmud Ghaznavi and Muhammad Ghori.

Co3: Students will have an idea about society, culture and literature( 600 and 1206 AD). Co4: Students would have gained knowledge about downfall of Delhi sultanate.

Co5: Students are enabled to understand the map of Harsha's Empire, Vijayanagar Empire and urban centres of Delhi sultanate.

# Semester -III

# Paper: HR23(1) political History of India (1526-1857AD)(option 1)

Co1: Students will gain knowledge about establishment of the Mughal Empire.

Co2: Students would have gained knowledge about administration of Sher Shah Suri.

Co3: Students will be given knowledge of Mughal society, economy and liberal religious policy.

Co4: Students would have gained sufficient knowledge about religious policy of Akbar. 3

Co5: Students will have the knowledge about establishment of English East India company and rivalry between the French and the British in India.

Co6: Students will understand the maps of political condition of India in 1526 and Mughal Empire at the death of Akbar 1605.

# Semester V Paper: HR24(ii) Indian National movement (option ii)

Co1: Students will have the knowledge about origin and growth of national consciousness.

Co2: Students will have the knowledge about ideology, programmes and politics of Moderates and extremists.

Co3: Students will have the knowledge emergences of Mahatma Gandhi, non cooperation moment, civil disobedience and Quit Indian movement, failure and impact of these moment.

Co4: Students will student will get knowledge through the maps about place of impact session of Indian National Congress, area and centres of quit India movement.

# Semester -V Paper: HR25(ii) Rise of modern world (option ii)

Co1: Students gain knowledge about federalism system in Europe and transition from feudalism to capitalism.

Co2: Students will have idea about the knowledge of technical revolutionaries as industrial, scientific, glorious and agriculture revolution.

Co3: Students will gain knowledge about economics changing from the Mediterranean to Athletic region.

Co4: Students will be enabled to understand maps of major place connected with industrial revolutions and capitalist power of Europe.

# Semester. VI Paper: HR23(ii) Modern Europe(option ii)

Co1: Students will get knowledge about causes, events and impact of French revolutions on France and Europe.

Co2: Students know about rise of Napoleon Bonaparte and his continental system.

Co3: Students will get knowledge about unification of Italy and Germany.

Co4: Students know about causes and impact of the first world war.

Co5: Students understand the maps of on the eve of French revolution, world war 1 and world war 2.

# **B.A** (HOME SCIENCE)

# Course outcome Semester 1 Paper HS21 Family Resource Management

- Co1 Knowledge regarding job opportunities in the field of home science.
- Co2 learn the principles of art.
- Co3 Understanding the concept of home science in the interior decoration.
- Co4 Manage various resources of family in productive way.
- Co5 Work simplification techniques to conserve energy.

## Semester 2

## Paper HS 22 Health and Hygiene

Co1 Students learn the concept of health and hygiene.

Co2 Students understands the impurities of water and their purification techniques.

Co3 Knowledge of first aid techniques.

Co4 learn about type mode spread and channels of infection.

Co5 Knowledge about disinfection.

#### semester 3

#### Paper HS 23 Physiology

Co1 Students learn about structure of animal cell.

Co2 Deep knowledge about human skeleton system.

Co3 Know about organs and functioning of digestive system.

Co4 Learn about functions and working of circulatory system.

Co5 Understand the knowledge about excretory system.

#### Semester 4

## Paper HS 24 Clothing and Textile

Co1 Students know about history of traditional textile of india.

Co2 Understand the classification of fibre.

Co3 Gain the knowledge about manufacture and properties of different fires.

Co4 Students learn about the meaning, objectives, types of bleaches.

Co5 They learn about basic weaves.

## Semester 5

## Paper HS 25 Food and Nutrition

Co1 Students learn about food and its functions.

Co2 Students have depth knowledge about food sources, daily allowances, deficiencies and excess intake of different vitamins and minerals.

Co 3 Students learn about role of water and dietary fibres.

Co 4 They learn the principles of meal planning during life cycles.

Co 5 Students learn about complete concept of food preservation.

#### Semester 6

#### Paper HS 26 Human Development

Co1 Understand the concept of child psychology.

Co2 Learn about the subject matter of learning, intelligence and personality development.

Co3 Know about the definition, features and importance of play.

Co4 Learn about the stages of development.

Co5 Know about the signs and chicompforte of pregnancy and also about the case of expectant.

Co 6 Understanding the case of newborn baby and feeding and weaning concept in relation.

Co7 Learn different common ailments of childhood, skin infection and convulsions.

# **B.A MUSIC VOCAL**

#### **Course Outcome**

**B**.A 1

Paper-1

Students learn to differentiate sounds, tonal quality and different pitches. They would learn the correlation of music with science and physics. relationship of folk and classical music is important as it tunes down the complexities of modern instrumentation and takes it back to basics. it gives the students an ability to focus on just hoping his/her skills on just a couple instruments.

## Paper-2

Writing notations of singing compositions and talas. learning of basic ragas and talas. Music vocal learners will be getting advantages of learning Hindustani classical music to know about gayakon ke gun-dosh.

Practical singing perfectly all the musical notes in different pitches. basic knowledge of all the ragas and talas mentioned in the syllabus. Knowledge of the different classical and semi classical forms of music.

# B.A. 2 Paper-1

Knowledge of the different notation system of indian and western notation system. Insights of northern and southern musical forms and styles. dhrupad, dhamar, khyal and thumri gayan

shaillies singing involves single-minded devotion and lifelong commitment. Students will learn to sing ragas and gayan.

#### Paper- 2

Writing notations of singing compositions and talas. learning of ragas and talas mentioned in the syllabus. classification and knowledge of musical instruments. practical singing perfectly all the musical notes in different pitches. basic knowledge of all the ragas and talas mentioned in the syllabus. knowledge of the different classical and semi classical forms of music. tuning the instruments and to develop the skills of accompaniment.

#### **B.A.3**

#### Paper-1

Students could get the knowledge of musical history of india from ancient period to the modern era.they get to know the origin of gharanas and the reasons behind the evolution of different gharanas in indian classical music. When students learn a new raga, they notate a few basic melodic phrases, patterns and simple compositions in that raga so that they can recall them later.

## Paper- 2

Proficiency in writing notations of compositions and talas. learning of Ragas and Talas mentioned in the syllabus. Practical proficiency in singing ragas and talas mentioned in the syllabus. Knowledge of the different classical and semi classical forms of music. Tuning the instruments and to develop the skills of accompaniment.

#### **B.A.** Computer Awareness

#### **Course Outcomes (COs)**

Paper: level I Computer Awareness

CO1: Learners would have an understanding of windows operating system, control panel, desktop, applications, files and folders in computer.

CO2: Course would be able to use word processor, create and edit document, formatting, advance features of MS word, charts etc.

CO3: Knowledge of Spread sheet, creating, Editing and formatting spread sheet, and formula and functions, and creating charts in MS excel.

CO4: Learners would be able to use Power Point Presentation, creating, manipulating and enhancing slides, animations, and inserting different sound effects.

CO5: After completing the course, Students will be able to create emails, send and view emails and send an attachment. Students will also understand the concept of internet, search engine and web browser.

## **B.A. Environment Studies**

#### **Course Outcomes (COs)**

Paper: Environment Studies

CO1: This Course offered at UG level compulsory for all streams aim to shape the mind of students sensitive towards environment & their surroundings.

CO2: Students learn how environment studies is a multi-disciplinary in nature & how it is connected to other branches of humanities, commence & science.

CO3: Students gain knowledge different natural resources, renewable & non-renewable resources, their utilization & deletion, ecosystems & their interaction with each other.

CO4: Familiarity arises among students for biodiversity of flora and fauna and its conservation.

CO5: Major Social Issues as pollution, global warming, green-house effect, water conservation draws the attention of students.

CO6: Some other issues such population explosion Human Rights, AIDS, Drugs are also there to increase awareness among students.

CO4: Familiarity arises among students for biodiversity of flora and fauna and its conservation.

CO5: Major Social Issues as pollution, global warming, green-house effect, water conservation draws the attention of students.

CO6: Some other issues such population explosion Human Rights, AIDS, Drugs are also there to increase awareness among students.

#### Programme Outcomes (POs) for B.A.

After completing the graduation in the faculty of Arts the students have:

PO1: Acquired the knowledge with facts and figures concerned with the subjects such as History, Political Science, Economics, Home Science, Psychology, Mathematics and Languages etc.

PO2: Understood the basic concepts, fundamental principles and various theories in the abovementioned subjects.

PO3: Gained analytical ability by studying Mathematics, Economics and Psychology.

PO4: Realized the importance of literature in terms of aesthetics, mental, moral and intellectual development of an individual by studying Hindi, English, Sanskrit and Punjabi languages.

PO5: Gained ability to perform as soloists, ensemble members and chamber musicians at appropriate levels after graduating in Music (Vocal) and Music instrumental.

PO6: Maintained a health enhancing level of fitness throughout the programme as well as to be able to collect and analyze personal fitness data after studying the subject Physical Education.

PO7: Learnt family relations, community living, art, food, nutrition, clothing, textiles and home management by studying practical subjects Home Science.

#### Programme Specific Outcomes (PSOs) for B.A.

After completing the graduation in the faculty of Arts the students have:

PSO1: Appreciated that social issues are no longer permanent and largely depend on political and social changes.

PSO2: Become eligible for competitive exams for higher studies and job in private and public sector after graduation in Arts.

PSO3: Emerged as a multifaceted personality who is self-dependent; earning her own bread and butter and also creating opportunities to do so.

PSO4: Convinced herself that the study of literature and Social sciences are not only helpful to evolve better individual and better society but also helpful to make the life of an individual happier and more meaningful.

PSO5: Become efficient to contribute in the society by providing their skills and awareness of psychotherapy and home-making after studying practical i.e. Home Science and Psychology.

PSO6: Helped to demonstrate the understanding and use of public performance as a means for engaging communities, creating cultural awareness and providing ethical leadership.

PSO7: Written articles, novels, stories to spread the messages of equality, nationality, social harmony and other human values.

PSO8: Developed various communication skills such as reading, listening, speaking etc. which will be helpful in expressing ideas and views clearly and effectively.

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# **COURSE OUTCOMES**

#### NAME OF PROGRAMME: B.COM (GENERAL)

#### Semester- Ist

#### PAPER (BC-101) FINANCIAL ACCOUNTING-1

Co 1: It helps the students to understand accounting terminology, nature and functions of accounting.

- Co 2: Students get acquainted with accounting concepts and standards.
- Co 3: The course will help the students to understand rectification of errors and final accounts.
- Co 4 : The course help the students to understand accounting of Non Trading organization..

## PAPER (BC-102) MICRO ECONOMICS

Co 1: The course enables the students to understand the different concepts of micro economics variables.

- Co 2 : It helps the students to understand the functioning of an economy.
- Co 3: It provides detailed studies of Theories of Demand, Elasticity of Demand and utility theories.
- Col 4 : It provides detailed studies of production function, Theories of cost and price determination in different markets.

#### PAPER (BC-103) Principles of Business Management.

Co 1: The course help the students to understand functions and principles of business management.

Co 2 : Students will learn various types of managerial skills like communication, motivation and leadership.

#### PAPER (BC-104) Computer Application In Business

Co1: Student understand, identify and analyses computer hardware, software and network components.

- Co2: Student understand the concepts of Basic of computer.
- Co3: Student get familiar with memory and CPU organization.
- Co4: Student get familiar with different types of operating system.
- Co5: Student's practical knowledge is enhanced by working on various function of Microsoft word and Excel.

## PAPER (BC-105) BUSINESS MATHEMATICS

- Co 1: Students will understand the concept of Logarithm and anti-logarithm.
- Co 2: Students will learn the concept of series solving of arithmetic progression and geometric progression will help students in competitive exams.
- Co 3: Students will understand the concept of differentiation that will be usable in cost optimization related problems of demand and supply.
- Co 4: Students will learn about matrices and determinants.
- Co 5 : Students will learn to solve the system of linear equations by different methods that are usable in simple business problems.
- Co 6 : Students will learn to compute simple and compound interest using different formula and investigate bank facilities.
- Co 7: Students will understand the concept of annuity which is useful in EMI Calculation finance management etc

## PAPER (BC-106) Business Communication

- Co 1 : Course provides knowledge about different types of communication verbal, non verbal, formal and informal.
- Co 2 : Course cover knowledge about interviewing skills, resume writing skills, writing business letter and memorandum.
- Co 3: It help the students to understand modern concept of communication.
- Co 4 : Course enable the students to make effective presentation by using verbal as well as non verbal aspect of communication.

#### Semester- II

#### Paper: BC 201 Financial Accounting –II

CO1: It enables the students to gain further knowledge about hire purchase system and instalment payment system.

CO2: The course will enable students to acquire practical knowledge about branch accounts, foreign branches, dependent and independent branches.

CO3: To make the students aware about partnership and dissolution of partnership including Garner Vs Murray rule.

CO4: Students will be able to understand the treatment of goodwill and joint life policy on admission and death/retirement of partner.

#### PAPER (BC-202) MACRO ECONOMICS

Co 1 : The course enables the students to understand the different concepts of macro economics variables.

Co 2 : It helps the students to understand the functioning of an economy.

Co 3: It provides detailed studies of National Income, classical and Keynesian theories of Income and Employment.

Col 4 : It provides detailed studies of consumption and Investment functions with their theories.

#### PAPER (BC-203) Fundamentals of Marketing

- Co 1: It help the students to understand concept of advertisement and other promotional tools.
- Co 2 : To enable the students to understand product designing, packaging and pricing.
- Co 3: To make aware the students how a product passes from one stage to another.
- Co 4 : To enable the students to know about effect of consumer behaviour on marketing.

## PAPER (BC-204) E-COMMERCE

- Co1: It helps the students to learn the basics of networking and it is useful for the students in long time.
- Co2: Students are able to use various online source for research.
- Co3: Ability to understand the IT (information Technology) and their application.
- Co4: Students come to know about EDI and its components on EDI.
- Co5: Importance of to search a specific information using a Search Engine.

## PAPER (BC-205) BUSINESS MATHEMATICS

Co 1 : Students will learn the concept of permutation and combination that are used in event management.

Co 2: Students will learn the concept of binomial theorem.

- Co 3: Use of graphical representation of equations and inequations is helpful in optimization of business problems, diet problems, transportation problems, cost related problems etc.
- Co 4 : Students will learn about data, classification and tabulation of data.
- Co 5 : Students will also learn about Diagrammatic Representation for better understanding and data interpretation.

#### PAPER (BC-206) Business Environment of Haryana

- Co 1 : The course enables the students to understand the economy of Haryana.
- Co 2 : It provides detailed studies of Nature of Haryana Economy, credit system and various financial Institutions.
- Co 3: It provides detailed studies of study of Haryana Budget.
- Col 4 : It helps the students to understand the overall functioning of Haryana Economy.

#### Semester-III

#### Paper: BC 301 Corporate Accounting-I

CO1: Through this course students will be able to understand the concept of issues of shares & debentures.

CO2: Students will get understanding regarding redemption of shares & debentures.

CO3: Students will get an exposure to the company final accounts.

CO4: After successful completion, students will get to know about amalgamation & its types. CO5: Students will get to know how to deal with complex issues of Amalgamation & reconstruction.

## PAPER (BC-302) BUSINESS STATISTICS-I

Co 1 : The course enable the students to understand the research field through different statistics methods.

- Co 2 : It provides detailed studies of statistics, collection of data, central tendencies like Mean, Median, Mode, H.M. & G.M.
- Co 3: It provides detailed studies of Measure of Dispersion and Index numbers.
- Col 4 : It provides detailed studies of Time series.

## Paper: BC 303 Business Law-I

CO1: To Provide basic knowledge of the provisions of the Contract act 1872.

CO2: The students become aware with practical aspects of discharge of the contract and its remedies.

CO3: To impart knowledge about concept of consumer protection act 1986 and its different consumer's redressal forums.

CO4: To give knowledge about sales of goods act 1930, concept of unpaid seller, suits against buyer and seller etc.

#### Paper: BC 304 Company Law-I

CO1: The students will be able to know about company and its various types.

CO2: They become aware about the salient features of company act 2013 and its various amendments.

CO3: Students will get the knowledge of promotion and incorporation of company and various legal documents required for its incorporation.

CO4: They will come to know how prospectus is formed and how it can be scanned.

CO5: They become aware about shares, debentures and stock and how shares can be converted into stocks.

CO6: This course also enables students about the memorandum and article of association and its various components.

## PAPER (BC-305) INDIAN FINANCIAL SYSTEM (IFS)

- Co 1 : The course enables the students to understand financial system of Indian economy.
- Co 2: It improves the financial literacy among the students.
- Co 3: It provides detailed studies of Money Market, Capital Market, Regulatory Banks and their functions.
- Col 4 : It provides detailed studies of commercial Banks, Payment Banks, E-Banking and development Banks of India.

## Paper: BC 306(opt i) Rural Marketing

CO1: It would provide knowledge to students regarding marketing strategies and rural pricing

policies.

CO2: It would give information about the difference between urban market and rural market

easily.

CO3: Rural marketing would help the students to know about the consumer's behaviour.

CO4: Help the students in understanding the rural marketing environment and rural

marketing mix.

## Semester- IV

## Paper: BC 401 Corporate Accounting-II

Co1: Give Knowledge about preparation of Valuation of Shares and Goodwill.

Co2: Understand accounting requirement of banking and insurance companies.

Co3:Give Knowledge about Liquidation and consolidation of companies

## PAPER (BC-402) BUSINESS STATISTICS-II

Co 1 : The course enables the students to understand the research field through different statistics methods.

Co 2 : It provide detailed studies of correlation and Regression.

Co 3: It provides detailed studies of Probabilities Addition theorem, Multiplication theorem, conditional Probabilities and Baye's theorem.

Col 4 : It provides detailed studies of Binomial distribution Poisson distribution and Normal distribution.

## PAPER (BC-403) Business Law-II

Co 1: To impart knowledge about provisions of Negotiable Instruments Act 1881.

- Co 2: To understand the basic concept of information technology act 2000.
- Co 3: Knowledge of procedure of filling RTI form under Right to Information Act 2005.
- Co 4 : It help the students in understanding basic concepts of Limited Liability Partnership Act 2008.

## Paper: BC 404 Company Law-II

CO1: The course enables students to understand the procedure of transfer and transmission of shares and debentures.

CO2: Students become also aware about the electronic sales and purchase of securities i.e. depository system and its working.

CO3: Students will get the knowledge of legal position, qualification, appointment, removal, powers and duties of directors.

CO4: They become able to know the Reconstruction and Amalgamation Procedure of companies.

CO5: This course also become aware the students about the winding up, its modes and consequences of winding up.

CO6: Including all above points students also become aware about the statutory, annual general and extra ordinary general meeting that are required in companies and quorum.

## Paper: BC 405 Computerized Accounting System

CO1: It enables the students about installation of Tally, Tally vault password and splitting company data.

CO2: The students will get to know about practical aspects of computerized accounting.

CO3: To enable the students in preparation of financial statements and reports by various voucher entries.

CO4: It enables the students to maintain payroll and computerized tax liability calculations.

CO5: It makes students ready with required skills for employability in the job market.

### Paper: BC 406(opt i) Advertising

Co 1 : The Students will be able to learn role of advertising as a promotional tool.

Co 2: Students will be able to develop creative advertisements.

Co 3: To know about role of advertising agency in current business world.

Co 4 : Students will be able to understand role of various advertising media.

## Semester –V

### Paper: BC 501 Cost Accounting

CO 1: To understand the basic concepts and processes used to determine costs .

CO 2: To be able to interpret cost accounting statements.

CO3:To be able to analyse and evaluate information for cost ascertainment, planning, control and decision making.

CO 4: To understand the different methods of costing such as Process, contract, job, unit and operating costing.

Co5: To identify the variance between actual and standard so they can be removed on time.

## Paper: BC 502 Financial Management

CO 1: The students will be able to know Basic Financial Management concept

CO 2: To give an understanding of the overall role and importance of finance function.

CO 3: Students will be able to analyze the complexities associated with management of cost of funds in the capital structure.

CO 4: Students will be able to understand the concept of Investment, financing and dividend policy decisions.

## Paper: BC 503 Goods and Services Tax

 $\overline{CO}$  1: To understand the concept of the earlier indirect tax system and present indirect tax system and difference between two.

CO 2: To understand the importance of indirect taxes (GST) in the Indian and Global economy and its contribution to the economic development.

CO 3: The students will be able to learn the procedure for registration, payment and refund of GST.

CO 4: To understand the difference between regular scheme and composition scheme in GST.

CO 5: To understand the implications of GST on the taxable capacity of consumers, dealers and of the society at large and its changes.

CO 6: To understand the appeals, offences and penalties with respect to GST.

## Paper: BC 504 Income Tax I

CO 1: Students will be able to define the basic concept of income tax and determine the residential status for tax implication.

CO 2: To make student understand the computation of total income under five heads of income.

CO 3: It enables the students to know about the income which does not become part of total income.

CO 4: Students will learn the provision of clubbing and aggregation of income.

## Paper: BC 505 Auditing

CO1: Understand the processes of financial audit.

CO2: Comprehend the importance of internal check, vouching, verification and valuation.

Co3: Understand the provisions of companies Act regarding Audit.

Co4: Understand the special points to be considered at the time of audit of statutory corporations, local bodies banking and insurance companies.

## Paper: BC 506 Opt (2) Indian Economy

## After studying this paper students will be able to understand:

CO1: What are the basic features of Indian Economy and its Potential of Natural Resources.

CO2: Role of Industry & various policy Decisions to induced Industrial revolution in India.

CO3: Understand Agriculture as the foundation of Economic growth and development, analyse the progress & changing nature of agriculture sector and its contributions to Economy as a whole.

CO4: Grasp the importance of planning undertaken by the government of India, have knowledge on the various objectives, failure& achievement as the foundation planning & economic reforms taken by the government.

CO5: Importance of foreign sector & contribution of import export in Indian economy.

CO6: Problem of Poverty and unemployment will make the students able to deal with issues related with these problems and find out methods to deal with such problems.

## Semester-VI

## Paper: BC 601 Management Accounting

CO1: This course will make the students to understand management accounting for decision making purpose.

CO2: This will teach how reporting is done at all three levels of management.

CO3: This will provide knowledge about the ways of formulation of budgets.

CO4: This enables to understand the concept of break-even-point and its use to increase the profitability of business.

CO5: This enables the students to calculate the various ratios and discuss the significance of various ratios.

Co6: This enables the students how to prepare fund flow and cash flow statements.

## Paper: BC 602 Fundamentals of Insurance

CO 1: Students will get better understanding of insurance practices.

CO 2: Students would be able to know about the different types of insurance policies and their distinct features.

CO 3: To know about the different types of accidental insurance policies, motor vehicle insurance policies and their distinct features and similarities.

CO 4: To give knowledge about the present organizational structures of a general insurance companies and their subsidiaries and private companies.

CO 5: To provide information about the principles for getting a general insurance policy in terms of insurable interest, indemnity, subrogation & utmost good faith.

## Paper: BC 603 Human Resource Management

Co1: Evolution, concepts, objects and function of HRM.

- Co2: Human resource planning, recruitment and selection.
- Co3: Performance Appraisal and Potentail Appraisal.
- Co4: Concepts, Causes and prevention of industrial disputes.
- Co5: Leadership style, qualities of an effective leader.

### Paper: BC 604 Income Tax-II

CO1: Students will be able to know about the deduction u/s 80C to 80U for planning of tax in legal manner.

CO2: It enables the students to compute and assess the total income of individual, HUF and firm.

CO3: Students will develop an understanding of various amendments made from time to time in Income Tax.

CO4: Students will get the knowledge about various ITR forms and how to file it.

CO5: Understand the power of Taxation authorities and assessment types.

## Paper : BC 605 Business Environment

Co1: At the End of the course students will be able to understand the importance & components of business environment.

Co2: Students are made aware about Public, private & Joint sectors in India with examples.

Co3: Students come to know about the economic system.

Co4: Learn about monetary & fiscal policy.

Co5: Students are made aware about economic planning achievements & Failures in India.

Co6: Students come to know about globalization of Indian business, MNC in India, Competition Act, Foreign Exchange Management Act (FEMA) & Foreign Exchange market . all these will be helpful to a business successfully.

## Paper: BC 606 (Opt. I) Retail Management

CO1: To explain the design, implementation and assessment of retailing strategies based on consumer need and market changes.

CO2: They can understand the impact of retailing on the economy.

CO3: They can describe what is retailing and role played by the retailers in society.

CO4: Learners get basic understanding of the retail management and FDI.

CO5: They can evaluate current retailing trends based on consumer, legal and competitive environments.

## **PROGRAMME OUTCOMES (POs) for B.Com (General)**

PO1: After completing Graduation, students can get through skills regarding various aspects like Marketing, Finance, communication, selling, tax and other administrative works.

PO2: By Studying three years course students will be able to understand the value and importance of Critical thinking, training evaluating and problem-solving approach in various disciplines.

PO3: Developing an attitude for working efficiently and effectively in a business environment.

PO4: By Studying three years course students will be able to understand the value and importance of Critical thinking, training evaluating and problem-solving approach in various disciplines.

## **PROGRAMME SPECIFIC OUTCOME (PSOs) for B. Com (General)**

PSO1: This program inculcates among the students the sense of discipline, confidence, and communication skills required in the changed global scenario.

PSO2: It gives students theoretical and application-based knowledge in the banking and financial sector and analytical skills to work with various financial tools, such as regulatory agencies and global markets.

PSO3: Students can get the practical skill to work as an accountant, audit assistant, tax consultant, and computer operator.

PSO4: - Enables learners to prove themselves in different Professional examinations like CA, CS, CAT, GRE, CMA, MPSC, UPSC etc.

.PSO5: Commerce graduates may become expert marketing professional for insurance,

PSO6: This program will create awareness among students for their rights and duties by understanding and studying various acts and laws.

## COURSE OUTCOME Name of Programme: B.Sc.(Non-Medical) Physics

### Semester-1

### Paper: PH 101 Classical mechanics and theory of relativity

Co1: This course helps students understand the basic and fundamental concept of classical mechanics learn about the law of conservation of energy,linear momentum and angular momentum and apply them to solve problem.

Co2: This course helps student to understand the basic of potential and fields, central force ,newton's laws and get knowledge about forces which help them in their daily life. the parameters like velocity and acceleration give knowledge about how vehicle move.

Co3: This course helps student to understand the rolling concept and concept of inertia which helps them in their daily life with the concept of langragian and hamiltonian formulation which helps them to solve problem related to physical systems.

Co4: This course help students to understand the fundamental ideas of special theory of relativity such as length contraction ,time relation and mass energy equivalence. it helps them to get the knowledge of coriolis forces , michaelson- morley experiment.

### Paper:PH102 Electricity magnetism and electromagnetic theory

Co1: Students learn about a wonderful mathematical dell operator on scalar and vector physical quantities to develop the quantities as mentioned in course objectives and also would be able to build up logical and analytical skill to work on new complex physical world by applying the same del operator the physical quantities of their own choice.

Co2: Would be able to get the knowledge of guass divergence theorem and stocks law, students have gain knowledge about electrostatics law governing the charge distribution ,it helps students to have the knowledge related to theories of magnetism and hysteries loop.

Co3: Would be able to visualize the invisible world of accelerated charged particle in the form of electromagnetic field or electromagnetic wave which is very important to students have gain the idea of pointing vector and pointing theorem.

Co4: Study in depth about bound charges and boundary conditions .this course helps students to have deep understanding about transient current response of cr, lc, lr and lcr circuits which is essential in designing as well as understanding the working of electronics circuits.

### Semester 2

## Paper:PH201 Properties of matter and kinetic theory of gases

Co1: This course help students to understand the fundamental concepts related to hooke's law and electric properties of matter that have many application in daily life.

Co2: Students gets proper understanding of bending of beam, cantilever as well as concept of twisting couple could open up industrial doors to the student.

Co3: This course help students to get the idea of moment of inertia and help them to calculate moment of inertia for various physical system like solid sphere, cylinder, students would be able to calculate the acceleration of a body rolling down on an inclined plane.

Co4: The concept of energy distribution specific heat and maxwell distribution of speed have interesting statistical and experimental verification. it helps student to closely realize the practical part of curriculum.

## Paper :PH202 semiconductor devices

Co1: This course helps the student to understand about energy band in solid, semiconductor zener diode ,pn junction diode and their characteristics and to get the knowledge of photodiode, solar cell full wave and half wave rectifier.

Co2: Would be able to understand the semiconductor elements in controlling the applied voltage source of voltage and current and how these elements have brought up a change after the discovery of transistor as a semiconductor device. it help student to understand how transistor can be used as a switch.

Co3: Students would be able to understand about dc load line ,transistor as an amplifier, it helps student to observe the effect of positive feedback in generating the oscillation without any input and effect of negative feedback in generating the amplification of input signal as the law of physics is explicitly a consequence of law of nature.

Co4: This course helps the student to understand the principle and working of CRO.

## Subject- Physics practical.

Co1: The experiments of this course are formed so as to understand comprehensively the meaning of minute observation and measurement these experiments are first lesson to learn that how understand the role of measurement in physical world.

Co2: All the experiments are based on the theory course of the student in the same year therefore these laboratory experiments are important part of curriculum and help in improving the knowledge of the student.

Co3: Experiments based on moment of inertia provides a technical hand to the students and open a pathway to the industrial world to related machinery and vehicle.

Co4: Experiments based on current and electricity learner code relate the many practical concept solenoid magnetism, frequency of ac main.

Co5: Experiments related to industrial world like photodiode, pn junction diode, zener diode etc helps students in their practical life.

Co6: Experiments related to measurement of acceleration due to gravity and elastic constant would putup a clear picture of universal constant to the mind of students, therefore besides increasing the conceptual qualities these experiment world further rise the imagination power of students.

## Semester 3

## Paper: PH301 computer programming and thermodynamics

Co1: This course will help to understand the concept of heat and its conversion from one form toa nother, thermodynamics can be used in our daily life ,laws of thermodynamics are used in refrigerator ,air conditioners, heat pump one of the important field of thermodynamic ,heat transfer which relates to transfer of heat between two media.

Co2: The students are able to understand the law of thermodynamics shows energy behaviour, for example how and why heat which is form of energy transfer between different objects.

Co3: The concept of Maxwell relations allow us to relate changes in one set of thermodynamics variable to other variables.

Co4: The students get the information about programming which is important to create software and applications that helps computer and mobile used in daily life due to all these reasons it's really important to learn how to use programming language in our daily life,

programming is important to collect ,manage, calculate and analyse processing of data and information accurately.

## Paper: PH 302 wave and optics-1

Co1: The students are able to understand and correlate various optical phenomena related to light and practical problems applications in day to day life.

Co2: The concept of analytical treatment of Fourier analysis would stabilized bridge that link mathematical equation with their physical aspects and company ,hence you recognisation and conceptual clarify.

Co3 :This course will help to understand the concept of a different dimension of laws of reflection, refraction and other equation based on them is shown in matrix method. These methods result in simplification/alternate of complicated and lengthy equations .

Co 4: The students will come to know about wave nature of light is described by interference of light and it answers many observations in our daily life. for example, coloration in the soap bubble, fringe patterns observed somewhere and laser phenomena based on coherence of light. thus, students are able to observe and analyse various naturally occurring phenomena. **Semester- iv** 

## Paper: PH 401 statistical mechanics

Co 1: This course helps the students to understand the methods of statistical mechanics used to develop its statistics for bose-einstein, fermi-dirac and photon gases.

Co 2: The students are able to understand the concept of microstates and macro states and how the particles are distributed in the system in different states.

Co 3: The students get the information about the macroscopic and microscopic description of temperature, entropy and free energy and their descriptions in terms of probabilities.

Co 4: The concept of canonical and micro canonical ensemble. This is very useful in our daily life.

## Paper: Ph 402 subject- wave and optics ii

Co 1: This course helps the students to understand the description of wave nature of light by interference of light answers many observations in our daily life. for example, coloration in the soap bubble, fringe pattern observed somewhere and laser phenomena based on coherence of light.

Co 2: The students are able to observe and analyse various naturally occurring phenomena.

Co 3: The concept of polarization would comprehensively describe the difference between longitudinal and transverse waves. along with it, students can learn the practical aspect to distinguish between polarized and unpolarised light.

Co 4: The students are able to understand and correlate various optical phenomena related to light with practical problem/ application in day to day life. for e.g. the distinction between various type of light and different set of Polari meters.

## Subject- Physics practical

Co 1: The students come to know how to make use of handling of the optical instruments such as bi-prism arrangement, telescope and microscope would provide learner an expertise in the field of measurements.

Co 2: The concept of the experiments of the optics division would assist students to recognize and verify the various laws related to the light and optical event which is just a part of their imagination till now.

Co 3: In addition to realize the fundamental concepts of theory, the laboratory experiments could make available learner a potential candidate to be absorbed in the industrial world.

Co 4: The course of computer programming would help the students to get familiar with software skills. It not only develops a skill in the students but also open up another way to the students after completing their graduation course.

### Semester- v

## Paper: PH 501 quantum and laser physics

Co 1: After studying this course the students shall be able to understand origin of quantum physics, the behaviour of radiation and matter at atomic and subatomic levels.

Co 2: This course helps students to study applications of Schrodinger wave equation.

Co 3: Main features and basic principles of laser will be studied by students. Students will be familiarized with einstein's quantum theory of emission and absorption of radiation.

Co 4: Shall enable them to study some specific laser systems and the applications.

## Paper: PH 502 Nuclear Physics

Co 1: The objective of this course is to study various properties of nucleus, its structure and nuclear mass spectrograph.

Co 2: Students will learn alpha- disintegration, alpha- drag neutrino hypothesis, beta-drag, energetic of gamma ray and different phenomenon related to radiations interaction with matter.

Co 3: They would be able to study nuclear accelerators understand nuclear reactions, q value and general aspects of nuclear fission fusion reactors.

## Semester- vi

## Paper: PH 601 solid state and nano physics

Co 1: This course helps students to get familiar with an extended knowledge of principles and techniques of solid-state physics.

Co 2: Students learn to determine the mechanical structure of materials and how this conduct electricity, how they interact with light.

Co 3: It will enable them in understanding the process of determining the structures by x-ray diffraction method.

Co 4: Graduates have a wide variety of opportunities after learning this discipline such as career in applied research and education along with the opportunities in aerospace, engineering industries and importance of nano-technology and its applications.

## Paper: PH 602 atomic and molecular spectroscopy

Co 1: Students are able to analyse alkali atoms and their spectrums.

Co 2: After studying this course student could understand the raman effect which further helps in analysing rotational and translational energies.

Co 3: The analysis of electric and magnetic fields effect on alkali atoms can also be done by students.

## Subject- Physics Practical

Co 1: The experiment such as transistor amplifier, oscillator would help students get a hold of practical aspects of these electronic devices.

Co 2: In addition, computer programming develops software skills of students helping them to pursue a career in computer world.

Co 3: Students learn to handle the sophisticated optical instruments used to determine its wavelength and resolving power.

Co 4: Along with the knowledge of theoretical concepts, students get knowledge about application of such concepts in real life and build a career out of it.

## BSc (Non Medical) Chemistry

### Semester-1

## Paper: CH 101 Inorganic Chemistry

Inorganic chemistry deals with synthesis and behaviour of inorganic and organic metallic compounds. from this course students will have

Co 1: Understanding about structure of atom and particles constituting it.

Co 2: Understanding about periodic table and placement of element according to their unique properties.

Co 3: To understand concept of bonding ,various theories of bonding, structure and geometry of different compounds.

Co 4: To develop a concept of ionic bonding in compounds, their properties and structure. **Paper :CH 102 Physical Chemistry** 

Physical chemistry deals with study of concepts of energy thermodynamics, equilibrium. upon successful completion of this course students will be able to

Co 1: Understand different state of matter and interactions existing between their particulates. Co 2 : Understand effect of temperature, pressure and volume among states of matter.

co 3: understanding of various physical properties of liquid such as viscosity, surface tension

vapour pressure and their practical applications.

Co 4: To inculcate the numerical ability.

## Paper Ch 103 Organic Chemistry

organic chemistry is the scientific study of structure, reactions of organic compounds. By the end of this course, students will:

Co 1: Understand different kinds of bonds existing in organic compounds

Co 2: Naming of compounds to IUPAC nomenclature

Co 3: Recognize and and draw constitutional isomers, stereoisomers enantiomers, diasteromers, racemic mixture and meso compounds.

Co 4: To understand concept of reactant, reagents and different type of reaction.

### Semester- II

### Paper: Ch 104 Inorganic Chemistry

This course will benefit the student in the following ways:

Co 1 : To understand the concept of hydrogen bonding, vanderwaal's metallic bond and semiconductor.

Co 2:To clear why noble gases are low chemical reactivity, their late discovery.

Co 3 : To understand about concept of diagonal relationship, anamolus behavior of elements.

Co 4 : To study physical and chemical trends of s block and p block element.

## Paper : Ch 105 Physical Chemistry

Co 1: Understand that every reaction has a unique time of occurrence due to the involvement of different chemical species , concept about half life.

Co 2: Enhance their numerical ability of solving numerical.

Co 3: Concept of electrochemistry, conductance, resistance.

Co 4: Correlate factor of acidity, basicity with pH,pKa, buffer solution buffer action.

### **Paper : Ch 106 Organic Chemistry**

Following outcomes are expected from this course :

Co 1: Student will be able to differentiate between the aromatic, anti-aromatic and non aromatic compounds.

Co 2: To understand basic difference between alkyl and aryl compounds.

Co 3 : To clear concept about various reactions of alkenes and alkynes.

Co 4 : To understand about reactivity, structure and hybridization of alkenes, alkynes.

### Paper : CH 107 Practical

Upon successful completion of this course student will be able to :

Co 1: Able to design ,carry out, record and analyze the results of chemical experiments.

Co 2:Will be able to titrate different mixtures.

Co 3: Understand concept of normality molarity molality and have to make solution of different concentration.

Co 4: Acquire habit of working safely with the chemicals and handling of equipments.

Co 4:Design experiments on parameter of viscosity, surface tension ,specific refractivity.

## Semester-III

### Paper: CH 201 Inorganic Chemistry theory

Co 1: Students will have the ability to demonstrate knowledge and understanding of essential facts concepts and principles of inorganic chemistry.

Co 2: Students will be able to relate the basic difference amongst transition metals. metal complexes cover a wide applicability in quantification of analysis and metal extraction.

Co 3: Students will be able to know about spectral property of different inorganic compound based on their electronic properties.

Co 4: Students will come to know about the urge of development of coordination chemistry and its integration with the d-block element.

Co 5: Basic nature of solvent and how different solvent show different reactions is all that students will understand.

### Paper: CH 202 Physical Chemistry theory

Co 1:Students will understand the concept of entropy and how the whole universe is related to it and how it effects other properties.

Co 2: Students will learn about the relationship between basic concept of thermodynamics and everyday world. they will also learn how the stability of whole universe is affected with different laws of thermodynamics.

Co3: Students will get the knowledge about basic difference between path and state functions.

Co4 :Students will be able to know the importance of equilibria and how various types equilibrium are different by various external parameters.

Co 5 : Students will learn how to calculate the thermal efficiency of heat energy and half problems are solved which are based on laws of thermodynamics

Co6: Students will determine nernst distribution law and they can relate it to various factor causing it's deviation.

## Paper : CH 203 Organic Chemistry theory

Co 1: Students will inculcate the knowledge about alcohols and phenols and about their activity.

Co 2 :Students will understand about the epoxides and their importance in industrial chemistry.

Co 3 : Students will get a throw knowledge about the basic concept of UV spectroscopy and have it can be used in organic chemistry for the identification of type of electronic transitions, reason for the colour of compounds their stability.they will also come to know about the calculation of lambda maximum by woodward fieser rules.

Co 4:Student will learn the importance and application of UV spectroscopy in structural determination of organic compound

Co 5: Students will come to know about the carboxylic acid their properties

Semester -iv

### Paper : Ch 204 Inorganic Chemistry Theory

Co 1: Students will be able to know about the chemical and physical properties of f-blocks elements including lanthanide and actinides specifically reasoning for anomalous electronic configuration.

Co2: Students will be able to differentiate between acidic and basic radicals and how they can be further useful in research as well as day to day life.

Co :3 Enables to individuate qualitative analysis from quantative analysis

Co 4: Students will understand about different theories of precipitation and how they are unique from each other.

## Paper: CH205 Physical Chemistry theory

Co 1: Students will inculcate knowledge about the advance domain of thermodynamics.

Co 2: Students will understand second law of thermodynamics and its reaction with entropy.

Co 3: Students will learn how to apply third law in calculating entropy for various phases of matter and pure crystalline solid.

Co 4: Students will conceptualize the concept of work function, gibb's energy and their significance for criteria of spontaneous reactions.

Co 5: Students will acquire knowledge about electro chemistry, various electrodes and their reactions, cell emf and its applications in solubility product and potentiometric titrations

## Paper: CH 206 Organic Chemistry Theory

Co 1: Enables to understand the concept of ir spectroscopy and its applications in everyday life.

Co 2: Enables to familiarize with the amines, their preparation, reactions and comparison between primary, secondary and tertiary amines basicity.

Co 3: Students will be able to know about diazonium salt and their applications.

Co 4: Students will inculcate the understanding of aldehydes and ketones, their reactions comparison and mechanisms of some name reactions and nucleophilic addition reactions.

### Paper: CH 207 Practical

Co 1: Experimentation enhances the skills of managing resources, time and team work. students will be able to function as a member of an interdisciplinary problem-solving team.

Co 2: Students will get skilled to perform gravimetric analysis efficiently.

Co 3: Students will be able to figure out different organic compounds.

Co 4: students will be able to detect different functional groups, extra elements in the organic compound.

Co 5: Enables to handle the apparatus used in calorimetric experiments and perform them accurately. Co 6: Students will be able to perform some inorganic preparation.

Co 7: Enables to verify beer's law through colorimetry.

Co 8: Students will be able to conceptualize distribution law experimentally.

### Semester V

## Paper: CH 301 Inorganic Chemistry Theory

Co 1: Students will come to know about the limitations of valence bond theory and they will be able to have an idea about crystal field theory .

Co 2: Students will understand CFT for both tetrahedral and octahedral complexes.

Co 3: Enables to have detailed knowledge about the magnetic and electronic properties of transition metal complexes.

Co 4: Students will be able to understand the concept of stability in metal complexes governed by kinetic and thermodynamic parameter.

### Paper: CH 302 Physical Chemistry Theory

Co 1: Students will understand the concept of quantum mechanics and limitations of classical mechanics.

Co 2: Students will acquire knowledge about operators in quantum mechanics. they will also learn postulate, wave functions, expectation values and probabilities for different system.

Co 3: Students will gain knowledge about spectral information.

Co 4: enables to understand molecular spectroscopy, description of vibrational, rotational and raman spectra thoroughly and their role in research.

Co 5: enables to conceptualize molecular structure, physical properties, dipole moment and various types of magnetism.

### Paper: CH 303 Organic Chemistry Theory

Co 1: Students will inculcate the knowledge of principle of nmr spectroscopy, detailed description and applications of nmr spectroscopy in determining the structure of organic compounds.

Co 2: Students will be able to classify different carbohydrates based on their structure and positional composition.

Co 3: Students will acquire knowledge about the nature of metal carbon bond present in organic compounds.

Co 4: Enables them to learn about the organo metallic reagents like organolithium, organozinc and organomagnesium reagents and their applications.

### Semester – VI

## Paper: CH 304 Inorganic Chemistry Theory

Co 1: Students will be able to differentiate between acids and bases on the basis of different concepts.

Co 2: Students will be able to cater their theoretical knowledge of acid-base into practical world.

Co 3: Students will have an insight idea of organo metallic reagents in inorganic chemistry and their applications.

Co 4: Students will be able to know about the bioinorganic chemistry. they will learn about the roles of different metal ions in various physiological and biological processes.

Co 5: Students will acquire knowledge about the compounds of silicon and phosphorus and their applications especially in greases.

Co 6: Students will come to know about silicones and phosphazenes.

## Paper: CH 305 Physical Chemistry Theory

CO 1: Students will have a detailed idea of statistical mechanics and their applications.

Co 2: Students will have thorough knowledge about the different types of solutions, dilute and concentrated. they will also learn about the colligative properties and their relation to different solutions.

Co 3: Students will capable of understanding phases and how phase equilibria of two components are related.

Co 4: Enables to conceptualize photochemistry, its laws and to analyze the impact of photochemistry in sustainable development to help society.

## Paper: CH 306 Organic Chemistry Theory

Co 1: Students will acquire knowledge about the organic synthesis via enolates.

Co 2: Students will be introduced about heterocyclic compounds in organic chemistry.

Co 3: Students will come to know about the change of properties of organic compounds by introducing heteroatom amongst cyclic hydrocarbons.

Co 4: Students will be taught about proteins amino acids and peptides.

Co 5: Students will be able to differentiate between primary, secondary, tertiary structure of proteins. Co 6:Students will get to know about the applications of heterocyclic compounds.

Co 7: students will inculcate knowledge about the industrially important inorganic polymers and their applications in everyday life.

### Paper: CH 307 Practical

Co 1: Students will have a vast idea of different types of salts and the factors on which they are categorized into different groups.

Co 2: Students will be able to categorize and maintain a detailed record differentiating different radicals on basis of different factors.

Co 3: Students will learn about the different organic synthesis.

Co 4: Students will acquire comparative knowledge of different types of chromatography.

Co 5: Students will be able to determine rf values and learn about the separation from rf values.

Co 6: Students will be skilled to perform conductometry experiments.

Co 7: Students will experience to handle pH meter and potentiometer through various experiments.

## **B.Sc.**Mathematics

## COURSE OUTCOMES SEMESTER I PAPER – BM 111 ALGEBRA

CO1 : Students will learn about matrices types, rank of matrix, characteristic equation of matric, using matrices, various types of equations can be solved .

CO2 : Students will learn about unitary and orthogonal matrices, bilinear and quadratic forms.

CO : Students will learn to find of the roots of the quadratic, cubic and biquadratic equations as well as solution of various linear equations, fraction equation etc.

CO : General strategy of equation solving to the problems of optimization, business and logical problems.

## PAPER – CALCULUS (BM- 112) (DIFFENTIAL AND INTEGRALS)

This course will enables the students to :

1. Learning about concept about limits, continuity, derivability and successive diffentiation .

2. It emphasis the study of asymptotes, curvature and curve tracing.

3. Concept of various of such as trigonometry, expotential, inverse, logarithmic, hyperbolic, and their applications.

4. Concept of reduction formula which connects the given integral with another integrals.

## PAPER – BM 113 SOLID GEOMETRY

CO1: Solid geometry is helpful to students to understand the concept of pole of line, director circle of conic, tangent and normal to the conic.

CO2 : Considering various parameters, different geometrical figures and shapes can be traced.

CO3 : Students will learn generating lines, confocal conicoids.

CO4 : It emphasis the study of points, shapes and surface identification.

CO5 : It will be helpful to understand the concept of system of conics.

CO6 : Students will learn reduction of second degree equations.

#### **SEMESTER 2**

### PAPER : BM – 121 (NUMBER THEORY AND TRIGNOMETRY)

CO1 : It will be helpful to students to understand the concept of prime numbers, prime number as factors, fundamental theorem of arithmetic.

CO2 : Students will learn congruence's fermat's theorm, wilson's theorm and chineese remainder theorm.

CO3 : Students will study complete residue system, reduced residue system and Euler's function.

CO4 : Number theory plays a vital role to coding and decoding system.

CO5 : Knowledge of trigonometric, exponential and hyperbolic functions is used to find the nth roots of equations.

CO6 : Students will learn summation of trigonometric series.

## SEMESTER 2 PAPER : BM 122 ORDINARY DIFFERENTIAL EQUATION

CO1: Student will learn about the exact differential equation and single solution .

CO2 : Student will learn about orthogonal trajectories, and linear differential equations with constant coefficients, homogenous linear differential equations, equations reducible to homogenous.

CO3 : Student will learn also understand linear differential equations of 2<sup>nd</sup> order, method of variation of parameters, method of undetermined coefficients.

CO4 : Student will learn ordinary simultaneous differential equations.

CO5 : It shows awareness about the classification, formation and solution of various initial and boundary value differential equations.

CO6 : Student will learn to solve homogenous, non-homogenous differential equation which is useful to real world scenario of applied physics, numerical solutions of various problems etc.

#### **SEMESTER 2**

#### PAPER : (BM – 123) VECTOR CALCULUS

This course will enable the students to

- 1) Learn about vector function and vector fields.
- 2) Concept of ordinary, partial and total derivatives of vector function.
- 3) Learn the concept of gradient, divergence, curl of vector function.

4) Green, Gauss, stokes theorem in many branches of mathematics.

## <u>Semester - III</u> <u>Paper : BM 231 Advanced Calculus</u>

## Course Outcomes:- This course will enables the students to

- Co 1 : Concept of learning different indeterminate form of limit, continuity, discontinuity of function at two variables.
- Co 2 : Learning about partial differentiation, differentiability of functions of two variables and Maximum and Minimum of a function of two variables.
- Co 3 : Understanding about behavior of curves in spaces.

## Paper : BM 232 Partial Differential Equations

- Co 1 : Student will learn about formation of partial differential equations, first order linear and nonlinear partial differential equations.
- Co 2 : Students will be able to know linear partial differential equations of 2nd and higher order.
- Co 3 : Students will also learn about classification and canonical forms of 2nd order linear partial differential equations.
- Co 4 : Students will learn to derive wave, heat equation in one and two dimensional and laplace equation.

## Paper : BM 233 Statics

- Co 1 : Student will learn Moments and couples.
- Co 2 : Students will understand the concept of composition and resolution of forces.
- Co 3 : Students will understand basic concept of mechanics and equilibrium of rigid body.
- Co 4 : Students will learn about virtual work and forces in three dimensions.
- Co 5 : Students will study wrenches, Null lines and planes.
- Co 6 : Students will analyze equilibrium conditions under the effect of external forces acting on the rigid and to simplify different problems using the basic principles of mechanics.

## Semester - IV

### Paper : BM 241 Sequences and Series.

- Co 1 : Student will learn the concepts of sequences, their type i.e. finite, infinite bounded and unbounded sequences etc..
- Co 2 : Students will study neighbourhood, interior points, limit of sequences, limit points, open sets closed sets.
- Co 3 : Students will learn a very useful theorm Bolzano-Weierstrass therom and Haine Borel theorm.
- Co 4 : Students will learn convey out and divergent sequences.
- Co 5 : Students will also learn about the concept of Alternating series.
- Co 6 : Students will study various test: D'alembert's Ratio test, Raabe's test, Logarithmic test, de Margav and Bestroud's test, Cauchy's nth not test, Gauss test, cauchy's integral test etc.
- Co 7 : It will helpful to understand the concept convergence and divergence of infinite products.

#### Paper : BM 242 Special Functions and Integral transform.

- Co 1 : Student will learn about power series and bessel's equation.
- Co 2 : Students will come to know about Legendre's and Hermite's equation.
- Co 3 : Students will learn laplace transforms.
- Co 4 : Students will understand about Fourier transforms.

## Paper :BM 243 Programming in C & Numerical Method

- Co 1 : Concept of learning use of arrays, functions, structures and pointers etc.
- Co 2 : Students learns about practical know-ledge of programming in C to apply it to learn the solution of many problems.
- Co 3 : Concept of solution of algebraic, linear system at equations and transcendental equation by different numerical methods.

### Semester - V

#### Paper : BM 351 real Analysis

#### This course will enables the students to

- Co 1 : Learn Riemann Integrable functions, its properties, and applications.
- Co 2 : Recognize bounded, convergent, divergent, Cauchy, monotonic sequences.
- Co 3 : Calculate Limit superior, limit inferior and limit of bounded functions.
- Co 4 : Apply test for convergence and absolute convergence at an infinite series of real number.
- Co 5 : Understand many properties of the real line and learn to define sequence in term of function IR to subset IR.

#### Paper : BM 352 Groups and Rings.

- Co 1 : Student will learn the concept of Groups, subgroups, left and right cosets, Index of a subgroup.
- Co 2 : Students will study Homomorphism Isomorphism, automorphisms and inner automorphisms of a group.
- Co 3 : Students will learn the concept of Rings, sub rings, integral domain and fields.
- Co 4 : It will be helpful to understand the concepts of prime ideal, principal ideal and Maximal ideal.
- Co 5 : Students will learn about the concept of Euclidean rings polynomial ring.

#### Paper : BM 353 Numerical Analysis

- Co 1 : Students will learn finite difference operators, Interpolation with equal and unequal intervals.
- Co 2 : Students will come to know about central difference interpolation formulae and probability distributions.
- Co 3 : Students will acquire knowledge about Numerical differentiation and Eigen value problems.

Co 4 : Students will also understand about numerical integration and numerical solution of ordinary differential equation using initial and boundary conditions.

## Semester - VI

## Paper : BM 361 Real and Complex Analysis.

- Co 1 : Students will understand Jacobians Beta, Gamma functions, double and triple Integral.
- Co 2: Students will learn about Fourier series.
- Co 3 : Students will acquire knowledge about the concept of complex functions, Cauchy-Riemann equations, harmonic function.
- Co 4 : Students will also learn about mobius transformation and critical mapping.

### Paper : BM 362 Linear Algebra

### This course will enables the students to

- Co 1 : Concept of vector spaces, subspaces, bases, dimension & their properties.
- Co 2 : Compute eigen value, eigen vectors.
- Co 3 : Learning about inner product spaces and their orthoganlity.
- Co 4 : Importance of adjoint of Linear transformation & its canonical form.

## Paper : BM 363 Dynamics

- Co 1 : Student will learn very important concepts Newton's law of motion, work, Power and Energy.
- Co 2 : Students will be able to draw free body diagram for a partials or for a rigid body in plane motion.
- Co 3 : Students will learn to analyse the general motion of a rigid body on smooth and rough planes.
- Co 4 : Students will learn Kepler's law of planetary motion and will be able to solve various problems of applied physics and mechanical engineering.
- Co 5 : Students will study Relative velocity and acceleration.

Co 6 : It will be helpful to understand simple Harmonic Motion and Elastic strings.

## **B.Sc. (Non-Medical) English**

## Semester: I

## Paper: ENG 101

A book title as 'Chronicles of Time' An Anthology of poems is prescribed for the students of semester I of B.Sc. 1st science stream. The course outcomes are as follows:

CO 1: The aim of the course to give the knowledge of the chronicles poets of the time to the students.

CO 2: Simple presentation of the poems step by step discussion and use of examples will help students in mastering the subject.

CO 3: The course focuses on helping the students to develop skills in all the four dimensions of communication namely, listening, speaking, reading and writing.

CO 4: The course will enable the students to use the grammatical structures, translation from Hindi to English accurately and paragraph writing.

CO 5: The course provides an opportunity to the students to improve their grammatical mistake through grammar, 'common errors'.

## Semester- II

## Paper: ENG 201

A book titles as 'Ideas Aglow' is prescribed for the students of semester II of science stream. The course outcomes of this course are as follows:

CO 1: The aim of the course to give the knowledge of the different writers to the students.

CO 2: Students will understand the views of different writers as mentioned in the prescribed book.

CO 3: The course will enable the students for the practical use of language through grammatical structure, translation from English to Hindi.

CO 4: Precise writing will increase the analysing skill of the students.

CO 5: The course aim at imparting the communication and writing skills that are needed in their academic and professional pursuits through letter writing.

## **B.Sc. (Non-Medical) Sanskrit Elective**

# तृतीय सत्र

## Paper: SA 23

Co1: संस्कृत चयनिका के द्वारा, साहित्य, दर्शन संबंधी ज्ञान प्रदान करना ।

- Co 2 : संस्कृत चयनिका में दी गई भिन्न–भिन्न कथाओं के माध्यम से सामाजिक, राजनैतिक तथा व्यवहारिक ज्ञान प्रदान करना ।
- Co3: संस्कृत व्याकरण से भाषा का वक्य प्रयोग के लिए शब्द और क्रिया का ज्ञान प्रदान करना ।
- Co4: संधि के द्वारा वर्णों का योग करना सिखाना ।

# चतुर्थ सत्र

# Paper: SA 24

- Co1: संस्कृत चयनिका के द्वारा, साहित्य, दर्शन संबंधी ज्ञान प्रदान करना ।
- Co 2 : संस्कृत चयनिका में दी गई भिन्न–भिन्न कथाओं के माध्यम से सामाजिक, राजनैतिक तथा व्यवहारिक ज्ञान प्रदान करना ।

Co3: संस्कृत व्याकरण से भाषा का वक्यप्रयोग के लिए शब्द और क्रिया का ज्ञान प्रदान करना ।

Co4: संधि के द्वारा वर्णों का योग करना सिखाना ।

## B.Sc. (Non-Medical) Computer Awareness Course Outcomes (COs)

### Semester-II Paper:

### CAT 22 Computer Awareness(level I)

CO1: This course will give an understanding of windows operating system, control panel, desktop, applications, files and folders in computer.

CO2: This would be able to use word processor, create and edit document, formatting, advance features of MS word, charts etc.

CO3: This would be able to use spread sheet, creating, editing and formatting spread sheet, and formula and functions, and creating charts in MS excel. 109

CO4: This would be able to use power point presentation, creating, manipulating and enhancing slides, animations, and inserting different sound effects.

CO5: At the end of this course, Students will be able to create emails, send and view emails, and send an attachment. Students will also understand the concept of internet, search engine and web browser. B.Sc. (Non-Medical) Environment Studies Course Outcomes (COs) Paper: EVS(Q) Environment Studies

## Semester-II

CO1: Course offered at UG level compulsory for all streams aim to shape the mind of students sensitive towards environment & their surroundings.

CO2: Students learn how environment studies is a multi-disciplinary in nature & how it is connected to other branches of humanities, commence & science.

CO3: Students gain knowledge different natural resources, renewable & non-renewable resources, their utilization & deletion, ecosystems & their interaction with each other.

CO4: Familiarity arises among students for biodiversity of flora and fauna and its conservation.

CO5: Major social issues as pollution, global warming, green-house effect, water conservation draws the attention of students.

CO6: Some other issues such population explosion Human rights, AIDS, drugs are also there to increase awareness among students.

## Program outcomes for B.Sc (Non Medical)

PSO1: By studying science subjects, you get to know the reasons for the things happening around you. As we come to know that why do we keep the fridge at home against the wall. If the fridge was so hot from outside, how would things get so cold from inside.

PSO2: After taking a science subject, your reasoning power also increases to a great extent, you are always curious to do something new, to know about it.

PSO3: The concepts of science are so difficult that you become so sharp minded while reading them that your thinking power also increases.

PSO4: If you study from non-medical, then you can go ahead and study in IIT too, I don't think there is any need to tell us about IIT, IIT is the world's largest educational institute. And later you can also be a symbol of pride for your country.

PSO5: After taking science, you can become an engineer, professor, broadcaster, media incharge, medical lab technician. You can become a researcher, you can become CEO of any company by doing MBA. You can become IAS, IPS and IFS.

### Program Specific Outcome (PSOs) for B.Sc. (Non-Medical)

PSO1: Students acquire knowledge about fundamental theories of chemical and scientific phenomena and their application in everyday life.

PSO2: Students get hands on training of scientific experiments which enables them to record, analyse and measure the results with accuracy.

PSO3: Program also opens the path for master's degree in chemistry/ physics/ mathematics/ computer science or even in other fields also such as management, pharma industry, humanities, defence, public and banking sector.

PSO4: Present subject area of science will increase the capability of students in exploring interdisciplinary scientific research area.

PSO5: Basic knowledge of mathematics and practical application of computer programming in FORTRAN and other scientific languages is gained so as to solve scientific problems.

#### **COURSE OUTCOMES**

#### Name of Programme- M.A. (English)

#### Semester- I

#### Paper: MENG 101 Literature in English:1550-1660 (Part- I)

Course Description: The paper envisages to acquaint the students with the literacy historical movement i.e. Renaissance, Jacobean, Puritanism, Rise and fall of drama and development of English Literature during the period.

CO1: The students will come to know about the major literary figures/movements of the abovementioned period.

CO2: They will also learn how the literature of the period paved the way for upcoming writers.

CO3: The students will also learn about the different genres of literatures such as tragedy, comedy, romantic-comedy, melodrama, problematic drama and poetic forms will also be familiarized with.

#### Paper: MENG 102 Literature in English: 1660-1798 (Part- I)

CO1: The writers included in the semester are William Congreve, R. B. Sheridan, John Dryden and Alexander Pope.

CO2: The prescribed books written by above writers are 'The way to the world', 'The school for Scandal Absalom and Achitophel' and 'The Rape of the Lock'.

CO3: By reading these books students get the idea of Restoration age. They come to know about the living standard of aristocratic of the age.

#### Paper: MENG 103 Literature in English: 1798-1914 (Part- I)

CO1: This paper represents the Victorian age. Students learn about the romantic Poet William Wordsworth's Philosophy and his love for nature.

CO2: John Keat's poems fill the students with the spirit of imagination in life

CO3: By regarding George Eliot's 'The mill on the floss' and Charles Dickens' 'oliver Twist', students learn that Literature is the reflection of life.

#### Paper: MENG 104 Literature in English: 1914-2000 (Part- I)

CO1: Students will able to understand the Era of literature in English.

CO2: In this paper they understand the circumstances of pre and post war i.e. in post modernism Literature (1914-2000).

O3: Students come to know the writings of writer's like- T. S. Eliot, Philip Larkin, E. M. Forster and Lucky Iim Etc.

CO4: It gives a better understanding of the world which is not experienced by the students.

CO5: Beyond the simple entertainment of a good story in Literature, students gain compassion for a wide range of people across cultures ad time periods.

#### Paper: MENG 105(I) Study of a Genre Fiction (Part-I) (Option- i)

CO1: The fifth paper in M.A. English Previous has three options: (1) Poetry (2) Drama (3) Fiction. Students opted fiction.

CO2: In fiction there are stories which inspires the students how to deal with the difficult situations in life.

CO3: Virginia Woolf's 'To the Lighthouse' gives the idea of fixed direction. E.M. Forster's 'Aspects of the Novel' suggest the students about the different parts of the novel such as Rhythm, Flat and Round Characters etc.

CO4: Students get the knowledge of Literacy devices of the English Language.

CO5: In the second semester Jane Austen and James Joyce are the important writers in the prescribed syllabus. By reading the books of these writers' students are able to know about different aspects of life and literature.

#### Semester- II Paper: MENG 201 Literature in English: 1550-1660 (Part II)

Course Description- The paper envisages to acquaint the students with the literacy historical movement i.e. Renaissance, Jacobean, Puritanism, Rise and fall of drama.

CO1: In this course students will come to know about the major literacy figures i.e. John Milton, Shakespeare etc.

CO2: They will also learn the major movements of the period.

CO3: They will also learn how the classical Literature paved the way the upcoming writers.

CO4: Students will also learn about the different genres of Literature such as tragedy, comedy, melodrama, Moral plays etc.

#### Paper: MENG 202 Literature in English: 1660-17

CO1: In the second semester the prescribed writers are Robinson Crusoe, Joseph Andrew, Josep Addison and Richard Steele and Samuel Johnson.

CO 2: Students compare the manners of the age with the manners of Indian culture. They conclude that one should adopt fait means not foul means to be successful in life.

CO 3: By reading the above Writer's books, students get the knowledge about Realism and Symbolism in Literature.

#### Paper: MENG 203 Literature in English: 1798-1914 (Part II)

CO1: In the second semester the poems of Robert Browning fill the students with optimistic attitude. Thomas Hardy, Bernard Shaw and Gustav Flaubert are the important Writers prescribed in the syllabus.

CO2: The novel of the above writers is very useful in life and Literature.

CO3: This paper represents the Victorian Age.

#### Paper: MENG 204 Literature in English: 1914-2000 (Part II)

CO1: This course gives a better understanding of writers in the era of 1914-2000. CO2: R. K.

Narayan's 'The Guide' is most interesting novel about Indian culture village.

CO3: The poetry of Nissin Ezekiel presents an Indian aspect to the students.

CO4: Indianness, Patriotism is presented in very colloquial language.

CO5: By 'Death of a Salesman', 'The Outsider' compassionate story, they can understand post modernism Literature. Paper:

#### MENG 205 Study of a Genre Fiction (Part II) (Option-i)

CO1: In fiction there are stories. So, students inspired and dials with life situations.

CO2: Students know the difference between Rhythm and Character etc.

CO3: Fames Joyce and Jane Austen are writers who play great role in fiction.

CO4: By reading the books in this paper, students can understand psychological and different concept of life.

#### Semester- III Paper:

MENG 301 Critical Theory (Part- I)

CO1: Students are able to develop the skills of criticism, means to judge someone by his qualities as well as weakness.

CO 2: Engage students activate high order thinking skill such as logical reasoning, evolution.

CO3: This paper develops the student's ability to express an opinion, arguments and sum up the ideas.

CO4: Students are able to understand the rules to criticism of poetry, prose and other forms of Literature.

CO5: Students enjoyed a lot to the theory of Rosa And Bhava in 'Natyashastra' through actions and gestures.

#### Paper: MENG 302 American Literature (Part- I)

Course Description: A survey of American Literature from period of exploration and settlement to the present. Students will study works of prose, poetry, drama and fiction in relation to their historical and culture contexts.

CO1: Critical Thinking- This course develops critical thinking, creative thinking, innovation, inquiry and analysis, evaluation and syntheses of information.

CO2: Communication-To include the effective development, interpretation and expression of ideas through written and visual communication.

CO3: Social Responsibility: This course develops intercultural competence, knowledge of Civic responsibility, and the ability to engage effectively in regional, national and global communities. CO4: Personal Responsibility- This course develops the ability to connect choices, actions, and consequences to ethical decision-making.

#### Paper: MENG 303 Indian Writing in English (Part-I)

Course Description: This course introduces nineteenth century Reform Movements in India, The Indian National Movement; Rise of the Indian Novel; Caste- Class; The new Indian Woman. It also offers the details study of the themes and techniques of the Indian Novel in English. CO1: Social, Political and Culture issues- It makes the students aware, political and critical issues reflected in Indian Writing in English.

CO2: It also aware the students about Indian social reformation, Freedom struggle, women education and empowerment in nineteenth century.

CO3: Language- Students would appreciate the artistic and innovative use of language employed by the writers to instill the values and develop human concern in students through exposure to literary texts.

#### Paper: MENG 304(II) Colonial & Post Colonial Literature (Part- I) (Option ii)

CO1: The Syllabus prescribed for this paper is colonial and Post Colonial studies.

CO2: In the third Semester the Topic describes The Empire writes Back by B.Ashcraft and culture and Imperials by Edward said.

CO3: Students learn about the Theory and Practice in Post colonial Lecterature by G.Griffiths and H.Tiffin.

Co 4: In this paper students will find out Rudyard kepling's Kim and Karambhumi by Premchand.

MENG 305(I) Literature and Gender (Part- I) (Option i)

CO1: This paper shows the contributions of women writers in English Literature.

CO2: In the previous era female writers had not the right to write in Literature but a few female writers raised the voice of Protest and began to write.

CO3: The prescribed book for this paper gives the idea that women are equal to men.

#### Semester- IV

#### Paper: XVI Critical Theory (Part- II)

CO1: In this paper students are able to study the essay of Virginia, Woolf, T.S. Eliot and I. A. Richards.

CO2: Wordsworth's 'Preface to Lyrical Ballad' is an introduction to the study of Lyrical Ballad.

CO3: Arnold's 'Essay in criticism' presents the critical views about study of poetry, John, Keats.

CO4: Saussure 'Object of study', Showalter 'Feminist criticism in Wilderness'. These essays built a new aspect in students about Literature.

CO5: Better understanding of Literature and critical aspect gives compassion to the student.

### Paper: XVII American Literature (Part- II)

Course Description: A survey of American Literature from the period of exploration and settlement of the present. Students will study works of prose, poetry, drama and fiction in relation to the historical and cultural contexts.

CO1: This course develops critical thinking and creative thinking among the students.

CO2: This course develops the understanding of American Literature among the students.

CO3: This course develops the ability to connect choices, actions and consequences to ethical making. CO4: This course develops intercultural competence, knowledge of civic responsibility and the ability to engage effectively in regional, national and global communities.

**Paper: XVIII Indian Writing in English (Part- II)** Course Description: This course introduces the Indian National Movement, Rise of the Indian novel and novelist, Caste-class and The New Indian Woman. It also offers the detail study of the themes and techniques of the Indian novel in English. CO1: It makes the students aware of social, political and culture issues reflected in Indian writing in English.

CO2: Through this course students also aware about Indian Social reformation, freedom struggle, women education and empowerment in nineteenth century.

CO3: Students would appreciate the artistic and innovative use of language use by the writers.

CO4: This course also teaches students the feelings of Indian woman and Indian tradition through Jayanta Mahapatra and Kamala poetry.

### Paper: XIX(II) Conolial & Post colonial studies.

CO1: The syllabus prescribed for this paper is colonial and post colonial studies.

CO2: Students learn about Doris lessing's The grass is sisniging and Salman Rshdier Midnight's children.

CO3: Students get the knowledge about alber Chinua Achebe's Things fall Aprt.

CO4: Students read the Great Indian Novel by Shashi Tharoor.

Paper: XX(I) Literature and Gender (Part- II) (Option i)

CO1: Feminism is the main concept and topic in the paper.

CO2: Female writers raised the voice of women on behalf of women all over the world.

CO3: Students are able to understand the position of women in all over world in past or present.

CO4: So, reading of this paper and understanding of concept make students aware.

#### Programme Outcomes (POs) for M.A. (English)

PO1: The students acquire knowledge in the field of Literature and Language.

PO2: The students are able to know the tendencies and traditions of different ages of English Literature.

PO3: The M.A. Programme enhances the confidence of the students through carefully chosen the option prescribes in the syllabus.

PO4: The M.A. Programme enables the students the students to acquire the knowledge with human values.

PO5: The students prepare themselves according to the bold characters given in the novels and plays.

PO6: The students are given exposure to think of the solutions of various issues in life.

PO7: The M.A. Programme empowers the students to appear for various competitive examinations.

PO8: The M.A. Programme enhances the knowledge of the students about history of English Literature.

#### Programme Specific Outcomes (PSOs) for M.A. (English)

PSO1: The postgraduates will be acquainted with the philosophical and Psychological thinking. PSO2: The programme will enable the students to think and act over for the solution of various problems prevailed in the human life.

PSO3: The programme will impart the practical knowledge of Literature and languages.

PSO4: The programme will empower the students to acquire in-depth knowledge of effective presentation.

PSO5: The students will understand the concept of literary terms applied to the novels.

PSO6: The students will understand the rhythmic and tonic concepts of Poems.

PSO7: The programme will prepare the students to avail opportunities available in the literary field and also in the co-corporate field.

PSO8: English is an international language. So, its importance can be felt in every field of education and technical field.

# COURSE OUTCOME

## Name of Programme: M.COM

## Semester 1

# Paper Mc 101 organisational behaviour

CO1 To understand human behaviour perception in the organisation

CO2 Basic understanding of psychological attributes like personality wise behaviour of the clients

CO3 Understanding of behavioural manifestation also helps students to understand the transaction.

# Paper :MC 102 Business environment

Co1: Student will be able to understand the business environment and its components

co2:Students will be able to apply the techniques available for scanning monitoring

CO3: Students will be able to ANALYSE the economic policies related with industrial development

Co4: Students will be able to demonstrate the knowledge of the trade practices provision of the competition act RTI and consumer protection act

# Paper MC 103 MANAGERIAL ECONOMICS

CO 1 Develop awareness about legal documents of company and its formation procedure

CO2 Students are able with the knowledge about economic

CO3This helps students to understand price and output determination

CO4 This course also helps them in various trade cycles in economy

## Paper MC 104 COMPANY LAW

CO1 Students will be able to describe the basic rules and concepts of company law such as limited liability of company directors

CO2 Develop awareness about legal documents of the company and procedures

CO3 To make students about the procedures of merger winding up of company

Co4 Develop an awareness of the socio legal and economic dimensions of company law

# MC 105 Accounting For Managerial Decision

CO1 This course provide knowledge about the role of management and how the responsibilities are ascertained.

CO2 This teaches how reporting is done at various levels of management

CO3 This course teaches the way of formatting different types if budget and their uses.

CO4 This course will teach the students about the method of finding out variance between actual and standard so that they can remove with in time

# MC 106 MARKETING MANAGEMENT

CO1 The students will know the concept, scope and importance of marketing

CO2 The course will help in understanding the marketing mix and marketing environment.

CO3 To make aware the students about different types of consumer behaviour

C04 It helps in acquiring the knowledge about different promotion programme

# **SEMESTER 2**

# MC 201 HUMAN RESOURCE MANAGEMENT

CO1 Students will get knowledge regarding various aspects of human resources

CO2 Through this course students will gain insight regarding various system of human resources

CO3 With the help of this course students will get to know about various components of HRM .

CO4 After completion students can apply their acquired knowledge role playing in assignment

# MC 202 INTERNATIONAL BUSINESS ENVIRONMENT

CO1 Students will be able explain how different environment factors encountered international market place.

CO2 Apply that trade theories foreign exchange theories .

CO3 Students will learn about various international financial institution and their work

CO4 It develop an understanding about foreign exchange determination

## MC 203 STRATEGIC MARKETING

CO 1 This course will enable the student to understand about strategic marketing

CO2 Students will able explain to understand competitive analysis .

CO3 Students will able explain the marketing and strategic concept

CO4 It enhance the further knowledge of student about marketing strategy implication .

# MC 204 FINANCIAL MANAGEMENT AND POLICY

CO1 This course teach to manage the finance to teach the way of calculate the financial need.

CO2 Student understands the techniques of financial planning and forecasting

CO3 It provides knowledge about capital budgeting decisions

CO4 It teaches the methods to calculate the cost of capital and working capitals

## MC 205 CORPORATE ACCOUNTING

CO1 Understand the concept of amalgamation and reconstruction

CO2 .To develop knowledge of holding company accounts

CO3 The students to prepare the financial statement of a company

Co4 To understand the difficult issues related to issue and redemption of shares

# MC 206 BUSINESS STATISTICS

CO1 It will help to interpret statistical tools to analysis various aspects of business units .

CO2 It through this course students will understand the concept of correlation and regression of two or more variance

CO3 Students will get knowledge about how to use statistical of daily business problems like index numbers and time series .

CO4 It will help in understanding the concept of probability theoretical and practical.

# MC 301 COMPUTER APPLICATIONS IN BUSINESS

CO1 Students understand the concept of computer application in daily life

CO2 Students come to know how to use computer for their day to day life and business purpose.

CO3 Students learn to prepare how to use MS WORD, EXCEL, ACCESS AND POWERPOINT.

CO4 Student can enhance their ability to understand and utilise computer apps for make their life easy

# MC 303 ADVANCED FINANCIAL MANAGEMENT

CO1 Students will come to know about dividend decisions and models .

CO2 Students enables about capital structures concept and meaning

CO3 Capital restructure ,need and broad areas of corporate restructuring ,objectives.

CO4 They will be able to understand the merger and takeover of company policies.

# MC 304 FINANCIAL INSTITUTION AND MARKETS

CO 1 Students come across the meaning and concept clarity of financial system and markets.

CO2 They have deep knowledge about money market and capital market

CO3 They will understand about merchant banking and how to use it

CO4 Student understand about mutual funds scheme

# MC 309 ADVERTISEMENT MANAGEMENT

CO1 Students will understand about advertisement management

Co2 Student comes to knows about copy development and testing

CO3 They learn about media planning and media scheduling

CO4 Students will be come insights of organisation and control of advertising effects

# MC 314 ENTREPRENEURIAL DEVELOPMENT

CO1 Students will comes to know about how to entrepreneurial activities as their profession

CO2 They will be able to understand entrepreneurship development programme

CO3 They know how to overcome stress

CO4 Students will understand how to prepare personal protection equipment for safety at work

# MC 316 HUMAN RESOURCE DEVELOPMENT

CO1 They will be able to understand the concept of human resource development

CO2 Students have clear insights about knowledge management

CO3 Students learns about employee socialization and orientation

CO4 Organisation health and environment have a deep insights about business

# **SEMESTER 4**

# MC 401 IT AND E COMMERCE

CO1 Students will be able to understand the concept of IT and how to use it for business purpose

CO2 They have clear comparison insights about e commerce e auction RTGS ATM etc

CO3 Hey know how use online marketing and web based advertising

CO4 Cloud computing and how to use ERP system in a business

# MC 402 CORPORATE TAX AND MANAGEMENT

CO1 Students know about the tax planning and assessment

CO2 They will be able to calculate the total income and tax finding on themselves

CO3Students have clear insights about tax slabs and how to implement them accordingly

CO4 They have knowledge about special Tax provision like special tax zone ,economic zone backward areas

# MC 403 PROJECT PLANNING AND CONTROL

CO1 They have knowledge about hoe to identify investment opportunities

CO2 They can do market and demand analysis like production technology, product mix

CO3 Students have do financial analysis like cost of capital ,financial projection etc

CO4 They can do performance appraisal and evaluation of project problem of time and cost overrun

# MC 408 SALES MANAGEMENT

CO1 Students knows the concept of sales management and objectives functions

CO2 They have to know how to use sales planning and for -casting for their own

CO3 They can make territory and quota management ,need procedures

CO4 They can easily prepare control process analysis of sales

## MC 409 SERVICE MARKETING

CO1 Students have clarity regarding service and its related concepts

CO2 They will know how to improve service quality and its benefit for the business

CO3 Students can do service development programmes at different levels

CO4 They have clear insights how to prepare price schedule for services and how to manage customers.

## MC415 INTERNATIONAL HUMAN RESOURCE MANAGEMENT

CO1 Students have clear knowledge about nature meaning and trends

CO2 They can do comparative management like legal ethical cultural

CO3 Management styles and practices in JAPAN ,CHINA,KOREA,EUROPE

CO4 They have knowledge how to do motivation and perception of customer.

## PROGRAMME OUTCOME (PO) FOR M.COM

- PO1 To acquaint the students with conventional as well as contemporary areas in commerce
- PO2 To enable the student well versed in national as well as international trends
- PO3 To provide in depth understanding of all core areas
- PO4 To provide the student for conducting business accounting and auditing practices
- PO5 To course a number of specialization and practical exposures global le

## SPECIFIC PROGRAMME OUTCOMES (PSO) FOR M.COM

After the completion of the M.com course ,a Student is asked

- PSO1 For pursuing research in chosen areas
- PSO2 For teaching in schools and colleges
- PSO3 For working as data analyst
- PSO4 To work as investment consultant
- PSO5 To work as marketing manager, sales manager.