2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students.

The college believes in outcome-based learning rather than input-based learning. Since the college is affiliated with Savitribai Phule Pune University, Pune, the syllabi designed by the university are followed. District level Workshops are organized in the affiliated college by the University for stating the PO, PSO, and CO to teachers. After the approval from university authorities PO, PSO and CO are published on the university website and made available to all stakeholders. A hard copy of the syllabus of each year specifying the programmes and course outcomes is present in respective departments. It is also displayed on the college website so that teachers, students, and other stakeholders can access PO, PSO, and CO from the college website. Further, PO and CO are communicated to students by the faculty members in class. Students are made aware of the correlation between syllabus and PO, PSO, and CO. These outcomes are also communicated to the stakeholders during Parent-Teacher meetings.

DEPARTMENT OF CHEMISTRY

B. Sc. Chemistry

Goals :

The Department has formulated three broad educational goals for the undergraduate degree programs:

Chemistry knowledge: To provide students with the basic foundation in Chemistry and allied subjects, the interplay of theory and experiment, and to motivate scientific enthusiasm and curiosity and the joy of learning.

Problem solving skills: To provide students with the tools needed to analyse problems with the skills required to succeed in graduate school, the chemical industry or professional school.

Employment and technical skills: To provide the students with technical skills necessary for successful careers in chemistry and related or alternative careers for which a chemistry foundation can be very useful. These include to a breadth of experimental techniques using modern instrumentation and communication skills (oral and written).

Programme Outcomes :

Knowledge outcome:

After completing B.Sc. Chemistry Programme students will be able to:

PO1: Transfer and apply the acquired fundamental knowledge of chemistry, including basic concepts and principles of 1) organic chemistry, Inorganic chemistry, Physical and Analytical Chemistry; (2) analytic techniques and experimental methods for chemistry to study different branches of chemistry;

PO2: Demonstrate the ability to explain the importance of the Periodic Table of the Elements and represent key aspects of it and its role in organizing chemical information.

Skills Outcomes

Professional Skills

After completing B.Sc. Physics Programme students will be able to:

PO3: apply and demonstrate knowledge of essential facts, concepts, laws, principles and theories related to chemistry;

PO4: demonstrate the learned laboratory skills, enabling them to perform qualitative and quantitative analysis of given samples and able to make conclusions on it;

PO5: set procedure and synthesize simple compounds of commercial importance;

PO6: engage in oral and written scientific communication, and will prove that they can think critically and work independently.

PO6: Communicate effectively using graphical techniques, reports and presentations within a scientific environment.

PO7: to recognize problems in chemical science and make strategies to solve it

PO8: Respond effectively to unfamiliar problems in scientific contexts

PO9: Plan, execute of design experiment, make documentation of it, interpret data at entry level of chemical industry and report the results;

PO10: Integrate and apply these skills to study different branches of chemistry.

Generic Competencies

PO11: The student will acquire knowledge effectively by self-study and work independently, present information in a clear, concise and logical manner and apply appropriate analytical and approximation methods

PO12: The student will learn professionalism, including the ability to work in groups and in society, and apply basic ethical principles.

Program Specific Outcomes

After completing B. Sc. Chemistry, students will be able to

PSO1: Understand the nature and basic concepts of Physical, Organic and Inorganic chemistry;

PSO2: Analyze Organic and inorganic compounds qualitatively and quantitatively;

PSO3: Understand the applications of physical, organic, inorganic and analytical chemistry in pharmaceutical, agriculture and chemical industries;

PSO4: Able to perform experimental procedures as per laboratory manual in the area of physical, Inorganic and organic chemistry;

PSO5: interpretation and synthesis of chemical information and data obtained from chemical and instrumental analysis.

Course Outcomes :

F.Y.B.Sc. Chemistry

Paper-I, Physical and Inorganic Chemistry

At the end of course student will be able to -

CO1: define the terms related to Surface chemistry, Mole concept, redox reaction, chemical bonding, chemical mathematics, states of matter, thermodynamics and atomic structure.

CO2: explain the laws related to thermodynamics, GMV, redox reaction, mole concept, chemical mathematics and chemical bonding

CO3: Discuss formation of chemical bonds, Properties of gases and liquids such as ideal gas behavior, van der Waal's and Critical constant and regarding P-V-T relations, viscosity, surface tension.

CO4: describe steps involved in hybridization, electrical properties of colloids, Theoretical basis of adsorption and its applications in catalysis, liquid crystals and their application

CO5: classify hybridization, catalysis, graphical representation, chemical bonding, adsorption.

CO6: apply concept of redox reaction to balance the equation by ion electron method & oxidation number method, hybridization concept to predict geometries of molecule, mole concept to find concentrations.

CO7: derive Vander Waal's equation, atomic radius and energy, Schrodinger's equation, classical wave equation, expression for entropy change for n moles of an ideal gas

CO-8: solve numerical problems related to Van der Waal's equation, Critical constant and regarding P-V-T relations. surface tension, entropy, mole concept, integrations, derivations and for plotting various types of graphs.

Paper-II Organic and Inorganic chemistry

By the end of this course students will able to

CO1: describe chemical bonding, structure and reactivity of organic compounds;

CO2: define the terms related to different functional groups of Organic compounds;

CO3: explain the chemical Preparation and reactions of Functional groups;

CO4: explain Stereochemistry of organic compounds;

CO5: interpret R/S Configurations of organic compounds;

CO6: recall the Periodic properties of s and p block elements;

CO7: describe periodic trends in s block elements;

CO8: describe periodic trends in p block elements;

Paper-III, Practical Chemistry

At the end of course student will able **to**

CO1: handle laboratory glassware's, hazardous chemicals safely in laboratory;

CO2: Set up the apparatus properly for the given experiments. Perform all the activities in the laboratory with neatness and cleanness;

CO3: maintain records of quantitative and qualitative analysis;

CO4: acquire laboratory skills for the purpose of collecting, interpreting, analysing, and reporting (in written form) chemical data;

CO5: explain mole concept and its application in the preparation of normal and molar solutions, and use of mole concept in quantitative calculations for inorganic analysis;

CO6: perform quantitative analysis using chemical methods of quantitative analysis;

CO7: illustrate physical chemistry principle with the help of experiments;

CO8: Describe and demonstrate data using graphical representations and communicate the report.

S.Y.B.Sc. Chemistry

CH 211: -Paper-I Physical and Analytical Chemistry

After completion of course student will able to

CO1: define order of reaction, molecularity of reaction, half-life period of reaction, quantum yield, florescence, phosphorescence, photo catalysis,

Nernst distribution law, partition coefficient, qualitative and quantitative analysis, error, accuracy, precision, significant figure, interfering radicals, common ion effect, solubility product;

CO2: explain the terms and facts related to Chemical kinetics, first order and second order chemical reaction, law of photochemistry, theory of extraction, organic and inorganic qualitative analysis;

CO3: recognize order and molecularity of chemical reaction, apply distribution law for extraction process, apply procedure for removal of interfering ions;

CO4: derive rate equation for first and second order chemical reaction, Nernst distribution law, Lambert's Beers Law, efficiency of extraction;

CO5: describe order of chemical reaction, process of extraction, accuracy of analysis, precision in analysis, methods to minimize errors in analysis;

CO6: distinguish between first and second order chemical reaction, accuracy and precision in analysis, photochemical and thermal reactions;

CO7: calculate order of and molecularity of chemical reaction, absolute and relative error in analysis, standard deviation in analysis;

CO8: solve numerical problems related to Physical and analytical chemistry.

CH 221 Paper –I Physical and Analytical chemistry, Sem. –II

After completion of course student will able to

CO1: define Raoult's law, Henry law, Dalton's law, Ideal and non-ideal solutions, critical solution temperature, Azetropic mixtures, Helmoltz and Gibbs free energy.

CO2: describe Raoult's law and variation of partial vapour pressure with mole fraction, various types of solutions, pH range of indicator of various indicators;

CO3: explain variation of Helmoltz free energy and Gibbs free energy with their parameter, equilibrium conditions for a chemical reaction, variation of boiling point with vapor pressure, best indicator for various types of titrations, equivalence and end point of titration;

CO4: distinguish between ideal and non-ideal solution, miscible and immiscible liquid pairs, primary and secondary standard solution, equivalent weight and molecular weight;

CO5: draw P-N and T-N diagrams for ideal and non-ideal solutions, titrations curve for various types of titrations;

CO6: judge end point of various types of titrations, choose best indicator of various types of titrations;

CO7: calculate pH at various points of titrations, partial vapour pressure at various compositions of solutions, molecular weight by steam distillation;

CO8: solve numerical problems related to syllabus.

CH 212: Paper-II, Organic and Inorganic Chemistry, Sem.-I

After completion of course student will able to

CO1: define terms related to: optical isomerism, conformations of cyclohexane, elimination reaction, substitution reaction, addition reaction and

rearrangement reaction, metallurgy and corrosion. Write formulas of organic and inorganic compounds. Write elementary reactions in organic and inorganic chemistry related to syllabus;.

CO2: explain the terms and facts related to: optical activity and isomerism, conformations of cyclohexane, corrosion and metallurgy. Will explain process of: metallurgy of Al, Fe, corrosion. Explain how to avoid the corrosion;

CO3: recognize functional groups and their reactions, addition reaction, nucleophilic substitution, elimination reaction. Will wire and explain mechanism of reactions such as SN1, SN2, E1, E2, Markovinkoves, rule, Satzeff's rule;

CO4: apply reaction mechanism to predict the products of reaction in SN1, SN2, E1, E2, rearrangement reaction. Apply rules of absolute configuration and will predict the configuration at chiral C atom;

CO5: determine absolute configuration at chiral C atom, determine suitable process for purification of particular ore, predict the products of specific organic reactions related to syllabus, predict the stability of different conformations of cyclohexane;

CO6: reasoning for appropriate facts related to optical activity, metallurgy, corrosion, reaction mechanism;

CO7: draw diagrams of various metallurgical processes;

CO8: predict products of various chemical reactions.

CH-222: Paper-II, Organic and Inorganic Chemistry, Sem. II

After completion of course student will able to

CO1: define terms: biomolecules, carbohydrates, proteins, glyosidic bond, peptide bond, optical activity, monosaccharides, polysaccharides, oxidation, reduction, oxidizing agent, reducing agent, acid, bases, solvents, Arrhenius, bronsted, Lewis definitions of acids and bases, d block elements, 18-electron rule, homogeneous catalysis, toxicology, etc.;

CO-2: explain the terms and chemical facts related to: carbohydrates, proteins, oxidation and reduction, d-block elements, carbonyl compounds, acids-basses- solvents and toxic metals in environment;

CO-3: recognize functional groups and their reactions, oxidation reaction, reduction reaction. Will wire and explain mechanism of reactions such as Cannizaro's reaction, birch reduction, reduction by NaBH4 / LiAlH4, reduction of carbonyl group, oxidation by KMnO4, K2Cr2O7, hydro-formilation reaction, Wacker's reaction, etc.;

CO-4: apply reaction mechanism and should predict the correct products of reaction in Cannizaro's reaction, Birch reduction, reduction by NaBH4 / LiAlH4, reduction of carbonyl group, oxidation by KMnO4, K2Cr2O7, Hydro-formilation reaction, Wacker's reaction, etc.;

CO-5: evaluate the possibility of correct products in oxidation reduction reaction, homogeneous catalysis, correct trends in periodic properties of d-block elements.

CO-6: reasoning for appropriate facts related to acids-bases-solvents, toxicology of heavy metals, homogeneous catalysis, d-block elements, oxidation and reduction reaction of organic compounds, carbohydrates and proteins;
CO-7: write strategy for the synthesis of required products;
CO-8: solve numerical related organic and inorganic chemistry.

CH-223 Chem. Paper-III, Practical Chemistry

After completion of practical course student should be able to

CO1: verify theoretical principles experimentally
CO2: interpret the experimental data and improve analytical skills
CO3: correlate the theory and experiments and understand their importance and Acquire the simple and complex practical skill
CO4: Separation of organic compound and their identification by chemical methods.
CO5: Write balanced equation for all the reactions, they carry in the laboratory.
CO6: Perform organic synthesis and follow the progress of the reaction by using TLC technique.
CO7: Set up the apparatus properly for the given experiments. Perform all the activities in the laboratory with neatness and cleanness
CO8: Perform the complete qualitative chemical analysis of the given inorganic mixture and find out acidic and basic radicals.

T.Y.B. Sc. Chemistry

CH-331 Physical chemistry, Sem.-I

At the end of course students will able to

CO1: define / recall various terms related to electrolytic conductance, molecular spectroscopy, chemical kinetics and phase diagram.
CO2: write correct equation such as Ohms law, equivalent conductance, molar conductance, rate constant of first, second, third order reactions, Kohlarch law, Debye equation, transport number, molar polarization, force constant, energy of rotational, vibrational excitations, etc.
CO3: derive equations for half-life of third order reaction, rate constant of third order reaction, transport number, dipole moment, molar polarization, reduced mass of diatomic molecule, etc.
CO4: explain / describe various terms in electrolytic conductance, molecular spectroscopy, chemical kinetics and phase diagram. To derive relations between / among various terms / quantities in electrolytic conductance, molecular spectroscopy, chemical kinetics and phase diagram
CO5: differentiate between / among the terms / quantities with suitable example such as molecularity and order of reaction, conductance and resistance, equivalent and molar conductance, rotational and vibrational spectra, etc.
CO6: apply his knowledge to explain / interpret spectra of simple diatomic molecules

CO7: describe facts and observations in electrolytic conductance, molecular spectroscopy, chemical kinetics and phase diagram.
CO8: solve numerical related to electrolytic conductance, molecular spectroscopy, chemical kinetics and phase diagram.

CH-341 Physical chemistry, Sem.-II,

At the end of course students will able to

CO1: define / recall various terms related to electrochemistry, nuclear chemistry and application of radioactivity, crystallography and basics of quantum chemistry.
CO2: write / remember the correct equation such as Nernest equation, representation of cell and cell reactions, Bragg equation, half of radioactive materials, etc.
CO3: derive equations for potentials of various types of cells and electrodes, Bragg equation, half of radioactive materials, kinetics of decay of radioactive materials, particle in 1D box, quantum tunneling, etc.
CO4: explain / describe various terms related to electrochemistry, nuclear chemistry and application of radioactivity, crystallography and basics of quantum chemistry.
CO5: derive relations between / among various terms / quantities related to electrochemistry, nuclear chemistry and application of radioactivity, crystallography and basics of quantum chemistry.
CO6: apply his knowledge to explain experimental observation and should able to correlate theory and particle or observed facts.
CO7: describe facts and observations related to electrochemistry, nuclear chemistry and application of radioactivity, crystallography and basics of quantum chemistry.
CO8: solve numerical in in electrolytic conductance, molecular spectroscopy, chemical kinetics and phase diagram.

CH-332 Paper –II Inorganic Chemistry Sem-III

At the end of course students will able to

CO1: Define terms related to molecular orbital theory, coordination chemistry
CO2: Explain mononuclear and hetero nuclear molecules, LCAO principle, primary and secondary valancy, bond order and magnetic properties of molecules
CO3: Distinguish between atomic and molecular orbitals, bonding and antibonding molecular orbitals, different theories of coordination chemistry
CO4: Draw MO energy level diagrams for homo and hetero nuclear diatomic molecules, crystal field splitting energy level dig. for octahedral and tetrahedral complexes
CO5: Apply IUPAC nomenclature rules and writ name of coordinate complexes, predict structure of complexes by using hybridization

CO6: Describe valance bond theory and crystal field theory to different type of complexes
CO7: Calculate effective atomic number and crystal field stabilization energy for various complexes
CO8: solve numerical problems related to syllabus

CH-342 Paper –II Inorganic Chemistry Sem-IV

At the end of course students will able to

CO1: define lanthanides, actinides, semiconductors, superconductor, close packed structure, lanthanide contraction, super heavy elements, catalyst, catalysis
CO2: describe lanthanide contraction, types of holes in close pack structure
CO3: distinguish between lanthanides and actinides, homogeneous and heterogeneous catalysis, n-type and p-type semiconductor, nuclear fusion and fission
CO4: explain applications of lanthanides and actinides, superconductivity, acetic acid synthesis, properties of heterogeneous catalyst, separation of lanthanides
CO5: explain n(E), and N(E) curves for semiconductors, band structures for sodium metal, hemoglobin, vit. B12
CO6: predict product of nuclear reactions, geometry of ionic solid from radius ratio effect
CO7: derive names of super heavy elements and symbols form IUPAC rules
CO8: solve numerical problems related to syllabus.

CH -333 Paper III: Organic chemistry Sem. III

By the end of this course students will able to

CO1: define the terms related to Organic Reactions such as Aliphatic Nucleophilic, Aromatic electrophilic and Nucleophilic Substitution Reactions
CO2: list Different factors responsible for reactivity of organic compounds in Addition reactions to Unsaturated compounds
CO3: recall the information about acidity and Basicity
CO4: explain the Elimination reactions
CO5: solve the chemical Reactions for Aliphatic Nucleophilic, Aromatic electrophilic and Nucleophilic Substitution Reaction
CO6: classify the organic reactions like substitution, Addition and elimination Reactions.
CO7: categorize different nucleophiles Electrophiles and Bases.
CO8: judge what type of reagent need for the organic Conversion.

CH-343 Paper III: Organic chemistry Sem. IV

By the end of this course students will able to

CO1: define the terms related to Organic Reactions such as Carbanion, Retrosynthetic analysis Rearrangement Reactions and Spectroscopic methods of structure determination.

CO2: list Different factors responsible for reactivity of organic compounds in Oxidation, Reduction, Rearrangement Reactions
CO3: recall the information about Reactivity stability of carbanion
CO4: explain the Rearrangement reactions
CO5: solve the chemical Reactions for Carbanion Retrosynthetic analysis and rearrangement reactions
CO6: calculation of Wavelengths of Organic compounds.
CO7: identification of different functional groups in organic compounds.
CO8: judge the structure of organic compounds

CH-334 Paper- IV Course- Analytical Chemistry, (Semester -I)

At the end of course students will able to

CO1: remember /write/ explain terms/ recall the terms such as gravimetric analysis, common ion effect, solubility product, formation of complex ion, TGA, DTA DSC, spectrophotometry, terms related to absorption measurement, polarography, FES, AAS.
CO2: explain principles of electro-gravimetric analysis, Thermogravimetric analysis, differential thermal analysis, beers law and lamberts law, Polarography, AAS, FES.
CO3: describe various components used in UV-Visible Spectrophotometry, AAS, FES, Polarography, TGA and DTA
CO4: describe equations or reaction of solubility product, law of mass action, Lambert –Beers Law equation, Ilkvoic equation, equation for no. atoms in excited state, Nernst equation.
CO5: describe Instrumentation of UV-Visible Spectrophotometry, AAS, FES, Polarography, TGA and DTA
CO6: solve numerical problems related to solubility product, common ion effect, Thermal methods of analysis, polarography, spectrophotometry, AAS and FES
CO7: apply Electro-gravimetric analysis for separation of metal ion, TGA, DTA, spectrophotometry, polarography AAS and FES.
CO8: select particular chemical or instrumental method for analysis of sample

CH-344 Analytical Chemistry, (Semester -II)

At the end of course students will able to

CO1: remember /write/ explain terms/ recall the terms such as Distribution coefficient, Distribution ratio, Solvent extraction, chromatography, types of chromatography, Electrophoresis, types of electrophoresis, Nephelometry and Turbidimetry.
CO2: define the terms migration velocity, moving boundary method, zone electrophoresis, disc electrophoresis, Rf value, retention time, supercritical fluid chromatography, normalization, secondary peak, salting out, masking agent, counter-current extraction, synergistic extraction.
CO3: discuss various components used in GC, HPLC, Turbidimetry and Nephelometry.

CO4: derive relationship between distribution coefficient and distribution ratio, equation of turbidance, equation of multiple extraction.
CO5: describe Instrumentation of HPLC, GC, Turbidimetry, Nephelometry, electrophoresis.
CO6: solve numerical problems related to distribution ratio, % extracted, Rf values, no. of plates and theoretical plate, turbidance.
CO7: apply HPLC, paper chromatography, solvent extraction, GC, electrophoresis, Turbidimetry and Nephelometry technique for analysis.
CO8: select particular techniques for separation of sample

CH 335 Paper –V of Industrial Chemistry (Paper-V) Sem III,

By the end of this course student will able to-

CO1: define all the terms related to modern approach to chemical industry, agrochemicals, food and starch.
CO2: list basic chemicals, petrochemicals and eco-friendly fuels, cement and glass industry.
CO3: recall information about basic chemicals used in industry, agrochemicals, fuels and their types, nutritive aspects of food.
CO4: explain processes of manufacture of chemicals related to industry, properties of fuels, nutritive aspects of food and quality of soil.
CO5: calculate/determine calorific values of fuels.
CO6: classify fuels, chemical reactions, plant nutrients, herbicides, pesticides, insecticides and fungicides, glass and cement.
CO7: analyze applications and synthesis of different types of industrial chemicals and agrochemicals
CO8: select which principles are appropriate for industrial set up and to improve the yield of product.

CH 345 Industrial Chemistry (Paper V) Sem. IV,

By the end of this course students will able to

CO1: define the terms related to polymer chemistry, sugar and fermentation industry, soaps, detergents and cosmetics, dyes and paints, pharmaceutical industry, and terms related with pollution prevention and management.
CO2: list types of polymers, soaps, detergents, cosmetics, dyes, paints and pharmaceuticals.
CO3: recall information about soaps, detergents, fermentation process, dyes paints, drugs and pollution.
CO4: explain properties of drugs, polymers, soaps, detergents, dyes, paints and sugars.
CO5: determine quality of manufactured products in sugar and fermentation industry.
CO6: classify commercial polymers, soaps, detergents, cosmetics, dyes, paints, pigments and drugs.
CO7: analyze different types of manufacturing process of sugar industry, fermentation process and pollution prevention and waste management.

CO8: select what types of cosmetic products, drugs are important for human health.

CH 336E Chemistry (Paper-VI) Agriculture Semester: - III

By the end of this course students will able to

CO1: define all the terms related to soil chemistry, quality of irrigation water and plant nutrients.

CO2: list of fertilizers, manures, herbicides, pesticides, insecticides and fungicides.

CO3: recall information about soil, nutrient, quality of water, fertilizers and plant protecting chemicals.

CO4: explain properties of soil, impurities in water, effect of environmental condition on nutrient uptake, roll of fertilizers and effect of different types of plant protecting chemicals.

CO5: determine quality of irrigation water in terms of ppm meq/lit, epm, TSS, SAR, ESP and RSC.

CO6: classify soils, quality of water, plant nutrients, herbicides, pesticides, insecticides and fungicides

CO7: analyze different types of impurities present in irrigation and drinking water.

CO8: select appropriate fertilizer which would be more suitable for cultivation of different verities of crop with improve yield.

CH 346E Dairy Chemistry (Paper-VI) Semester: - IV

By the end of this course, the student will able to

CO1: define market milks, special milks, milk protein, carbohydrates, vitamins, died milk, butter, cheese, enzymes and adulterants in milk.

CO2: list out market milks, special milks, milk constituents, nutrients in milk, preservatives and adulterants in milk, milk products and dried milk products.

CO3: discuss about common dairy products, market milks, special milks, milk protein, carbohydrates and vitamins, adulterants in milk, cream, butter, cheese and dried milk.

CO4: explain properties of market milks, common dairy products, special milks, milk protein, carbohydrates and vitamins, cream, butter, cheese and dried milk products.

CO5: classify nutrient in milk, major milk constituents, common dairy processes, preservatives and adulterants in milk, milk products and dried milk powders, common dairy processes.

CO6: classify nutrients in milk, major milk constituents, common dairy processes, chemical composition of milk, milk proteins, special milks, pasteurization of milk process, preservatives and adulterants in milk and dried milk powders.

CO7: analyze different types of adulterations in milk, milk products and dried milk powders.

CO8: choose good quality milk and allied milk products available in the market, which would be suitable for human consumption.

CH-347 Practical Paper-I, Physical Chemistry Practical

CO1: Maintaining records of chemical and instrumental analysis.
CO2: Laboratory skills for the purpose of collecting, interpreting, analysing, practical data.
CO3: Laboratory skills for the purpose handling different analytical instruments.
CO4: Interpretation of results of experiment and their correlation with theory.
CO5: Study of reaction kinetics practically.
CO6: Study of conduct metric, potentiometric, colorimeter and pH metric principles.
CO7: Application of conduct metric, potentiometric, colorimetric and pH metric measurement in quantitative analysis.
CO8: Viscosity measurement and its application.
CO9: Refractometric measurement and its application.

CH-348 Practical Paper-II, Inorganic Chemistry Practical

CO1: Maintaining records of quantitative and qualitative analysis.
CO2: Laboratory skills for the purpose of collecting, interpreting, analysing, and reporting (in written form) chemical data.
CO3: Laboratory skills for the purpose handling different equipment's and analytical instruments.
CO4: Identify methods and instruments that can be used qualitative and quantitative analysis.
CO5: Mole concept and its application in the preparation of normal and molar solutions, and use of mole concept in quantitative calculations for inorganic analysis.
CO6: Choice of proper quantitative methods for analysis of samples containing inorganic substances.
CO7: Synthesis and purify coordination compounds.
CO8: Statistical treatment to quantitative data
CO9: Quantitative analysis using instrumental methods of quantitative analysis.

CH-349 Practical Paper-III, Organic Chemistry Practical

CO1: Maintaining records of quantitative and qualitative analysis.
CO2: Laboratory skills for the purpose handling different equipment's and analytical instruments.
CO3: Study of organic reactions their applications.
CO4: Separation of mixture of organic compound and their identification by chemical methods.
CO5: Perform organic synthesis and follow the progress of the reaction by using TLC technique.

CO6: Write balanced equation for all the reaction performed in laboratory and write it mechanism.
CO7: Choice of proper quantitative methods for analysis of samples containing organic substances.
CO8: Synthesis and purify organic compounds.
CO9: understanding of reaction mechanism involved.
CO10: physical constant determination.

Department of Commerce & Management

Programme Outcomes(PO), Programme Specific Outcomes(PSO),Course Outcomes(CO)

B.COM.

PROGRAMME OUTCOMES:

PO-1: This program could provide Industries, Banking Sectors, Insurance Companies, Financing.

PO-2 : After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.

PO-3: Capability of the students to make decisions at personal professional level will increase after completion of this course.

PO-4: Students can independently start up their own Business.

PO-5: Students can get thorough knowledge of finance and commerce.

PO-6: The knowledge of different specializations in Accounting, costing, banking and finance with the practical exposure helps the students to stand in organization.

PROGRAMME SPECIFIC OUTCOMES (PSO):

PSO 1 : The students can get the knowledge, skills and attitudes during the end of the B.com degree course.

PSO 2 : By goodness of the preparation they can turn into a Manager, Accountant ,Management Accountant, cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Professor, Stock Agents, Government employments and so on

PSO 3 : Students will prove themselves in different professional exams like C.A. , C S, CMA, MPSC, UPSC. As well as other coerces

PSO 4 : The students will acquire the knowledge, skill in different areas of communication, decision making, innovations and problem solving in day to day business activities

PSO 5 : Students will gain thorough systematic and subject skills within various disciplines of finance, auditing and taxation, accounting, management, communication, computer.

PSO 6 : Students can also get the practical skills to work as accountant, audit assistant, tax

consultant, and computer operator. As well as other financial supporting services.

PSO 7 : Students will learn relevant Advanced accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.

PSO 8 : Students will be able to do their higher education and can make research in the field of finance and commerce.

Department of Commerce & Management

? COURSE OUTCOMES (CO):

F.Y.B.COM

SEMESTER – I

FINANCIAL ACCOUNTING- I

CO 1. To impart knowledge of basic accounting concepts

C O 2. To create awareness about application of these concepts in business world

C O 3. To impart skills regarding Computerised Accounting

C O 4. To impart knowledge regarding finalization of accounts of various establishments.

BUSINESS MATHEMATICS & STATISTICS- I

C O 1. To introduce the basic concepts in Finance and Business Mathematics and Statistics

C O 2. To familiar the students with applications of Statistics and Mathematics in Business

C O 3. To acquaint students with some basic concepts in Statistics.

C O 4. To learn some elementary statistical methods for analysis of data.

C O 5. The main outcome of this course is that the students are able to analyze the data by using some elementary statistical methods

MARKETING MANAGEMENT- I

CO 1. To create awareness and impart knowledge about the basics of Marketing Management which is the basic foundation of Marketing subject.

CO 2. To orient the students in Marketing Strategy and Consumer Behaviour.

CO 3. To help students understand how to craft Marketing Plan which help the organisation outline their marketing goals and objectives.

CO 4. To enable students to apply this knowledge in practicality by enhancing their skills in the field of Marketing.

ORGANIZATIONAL SKILLS DEVELOPMENT- I

C O 1. To introduce the students to the emerging changes in the modern office environment

C O 2. To develop the conceptual , analytical , technical and managerial skills of students efficient office organization and records management

C O 3. To develop the organizational skills of students

C O 4. To develop Technical skills among the students for designing and developing effective means to manage records , consistency and efficiency of work flow in the administrative section of an organsation

C O 5. To develop employability skills among the students

BUSINESS ENVIRONMENT & ENTREPRENEURSHIP – I

CO 1. To understand the concept of Business Environment and its aspects

CO 2. To make students aware about the Business Environment issues and problems of Growth

CO 3. To examine personality competencies most common to majority of successful entrepreneurs and to show how these competencies can be developed or acquired

CO 4. To understand the difference between Entrepreneurial and non-Entrepreneurial behavior

CO 5. To provide knowledge of the significance of Entrepreneurship in economy

CO 6. To familiarize the students with the contribution of selected institutes working to promote Entrepreneurship

CO 7. To generate entrepreneurial inspiration through the study of successful Entrepreneurs

SEMESTER- II

FINANCIAL ACCOUNTING- II

CO 1. To impart knowledge of various software used in accounting

CO 2. To impart knowledge about final accounts of charitable trusts CO 3. To impart knowledge about valuation of intangible assets CO 4. To impart knowledge about accounting for leases

BUSINESS MATHEMATICS AND STATISTICS – II

CO 1. To introduce the basic concepts in Finance and Business Mathematics and Statistics

CO 2. To familiar the students with applications of Statistics and Mathematics in Business

CO 3. To acquaint students with some basic concepts in Statistics.

CO 4. To learn some elementary statistical methods for analysis of data.

CO 5. The main outcome of this course is that the students are able to analyze the data by using some elementary statistical methods

MARKETING MANAGEMENT –II

CO 1. To create awareness and impart knowledge about the basics of Marketing Management which is the basic foundation of Marketing subject.

CO 2. To orient the students in recent trends in marketing management.

CO 3. To understand the concept of Green Marketing.

CO 4. To enable students to apply this knowledge in practical by enhancing their skills in the field of Marketing.

ORGANIZATIONAL SKILL DEVELOPMENT- II

CO 1. To imbibe among the students the qualities of a good manager and develop the necessary skill sets

CO 2. To develop the technical skills of the students to keep up with the technological advancements and digitalization

CO 3. To develop the communication skills of students and introducing them to the latest tools in communication CO 4. To develop writing, presentation,interpersonal skills of the students for effective formal corporate reporting.

CO 5. To educate the students on the recent trends in communication technology and tools of office automation

Business Environment & Entrepreneurship – I

CO 1. Understanding of various aspects business environment useful for would be entrepreneurs

CO 2. Understanding of various aspects of pollution and its ill effects

CO 3. Understanding of Problems and their causes and remedies

CO 4. Understanding the concept of entrepreneur, competencies of a successful entrepreneur

Compulsory English

CO 1 • Introduce students with good pieces of prose and poetry so that they realize the beauty and communicative power of English .

CO 2 • Expose students to native cultural experiences and situations so that they understand the importance and utility of English language.

CO 3 • Develop overall linguistic competence and communicative skills among the students.

CO 4 • Develop oral and written communicative skills among the students.

Business Economics (Micro)

CO 1 • Expose students of Commerce to basic micro economic concepts and inculcate an analytical approach to the subject matter.

CO 2 • Stimulate students 'interest by showing the relevance and use of various economic theories.

CO 3 • Apply economic reasoning to problems of business.

Additional Marathi

CO 1 • Introduce commerce students to conduct business transactions in Marathi.

CO 2 • Clarify the role of Marathi as a medium of trade and commerce.

CO 3 • Develop ability to use mass media and communication to learn and teach Marathi.

CO 4 • Develop ability to write for media.

CO 5 • To sensitize students to the importance of Marathi in official, administrative and academic spheres.

S.Y.B.COM

SEMESTER -III

BUSINESS COMMUNICATION-I

CO 1. To understand the concept, process and importance of communication.

CO 2. To acquire and develop good communication skills requisite for business correspondence.

CO 3. To develop awareness regarding new trends in business communication.

CO 4. To provide knowledge of various media of communication.

CO 5. To develop business communication skills through the application and exercises.

CORPORATE ACCOUNTING -I

CO 1. To acquaint the student with knowledge about various Concepts , Objectives and applicability of some important accounting standards associated with to corporate accounting.

CO 2. To develop understanding among the students on the difference between commencement

and incorporation of a company and the accounting treatment for transactions during the two phases.

CO 3. To update the students with knowledge for preparation of final accounts of a company as per Schedule III of the Companies Act 2013

CO 4. To empower to students with skills to interpret the financial statements in simple and summarized manner for effective decision making process.

CO 5. To acquaint the student with knowledge about various Concepts, Objectives and applicability of some important accounting standards associated with to corporate accounting.

CO 6. To develop understanding among the students on the difference between commencement and incorporation of a company and the accounting treatment for transactions during the two phases.

CO 7. To update the students with knowledge for preparation of final accounts of a company as per Schedule III of the Companies Act 2013

CO 8. To empower to students with skills to interpret the financial statements in simple and summarized manner for effective decision making process.

BUSINESS MANAGEMENT-I

CO 1. To provide basic knowledge and understanding about various concepts of Business Management.

CO 2. To help the students to develop cognizance of the importance of management principles.

CO 3. To provide an understanding about various functions of management.

CO 4. To provide them tools and techniques to be used in the performance of the managerial job.

ELEMENTS OF COMPANY LAW -I

CO 1. To develop general awareness of Elements of Company Law among the students.

CO 2. To understand the Companies Act 2013 and its provisions.

CO 3. To have a comprehensive understanding about the existing law on formation of new company in India.

CO 4. To create awareness among the students about legal environment relating to the company law.

CO 5. To acquaint the students on e-commerce, E governance and e-filling mechanism relating to Companies.

CO 6. To enhance capacity of learners to seek the career opportunity in corporate sector.

COST AND WORKS ACCOUNTING –I

CO 1. To remember and understand basic concept of cost accounting. Development of an overall

outlook of Cost Accounting

CO 2.To understand the concept of cost, costing and cost accounting.

CO 3. To trace the cost to cost centres and cost units.

CO 4. To identify role of cost accountant in an organisation

CO 5. To Understand different elements of cost

CO 6.To understand the purchase procedure and its documentation

BUSINESS COMMUNICATION-II

CO 1.To understand the concept, process and importance of communication.

CO 2.. To acquire and develop good communication skills requisite for business correspondence.

CO 3.. To develop awareness regarding new trends in business communication.

CO 4. To provide knowledge of various media of communication.

CO 5. To develop business communication skills through the application and exercises.

CORPORATE ACCOUNTING-II

CO 1. To acquaint the student with knowledge of corporate

policies of investment for expansion and growth through purchase of stake in or absorption of smaller units.

CO 2. To develop the knowledge among the student about consolidation of financial statement with the process of holding.

CO 3. To update the students with knowledge of the process of liquidation of a company

CO 4. To introduce the students with the recent trends in the field of accountancy

BUSINESS MANAGEMENT-II

CO 1.Students will get an idea about the basic motivational tools used in the field of management.

CO 2.Students will get an idea about how leadership influences organizational success.

CO 3.To understand the significance of coordination and control in modern business management.

CO 4.Students will come across various emerging trends in management.

ELEMENTS OF COMPANY LAW-II

CO 1. To develop general awareness among the students about management of company

CO 2. To have a comprehensive understanding about Key managerial Personnel of company and their

role in Company administration.

CO 3. To acquaint the students about E Governance and E Filling under the Companies Act, 2013.

CO 4. To equip the students about the various meetings of Companies and their importance.

COST & WORKS ACCOUNTING-II

CO 1. To know the documents that are used in stores and how to calculate the issuing price of material.

CO 2. To provide knowledge to students on classification and codification.

CO 3. To equip students with knowledge regarding the ascertainment of labour cost.

CO 4. To understand the concept of payroll.

CO 5. To know the concepts of labour turnover and merit rating.

CO 6. To understand recent trends in cost accounting.

Business Economics (Macro)

CO 1 • Familiarize the students the basic concept of Macro Economics and application.

CO 2 • Study the behaviour of the economy as a whole.

CO 3 • Study the relationship among broad aggregates.

CO 4 • Apply economic reasoning to problems of the economy.

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SEMESTER – V

BUSINESS REGULATORY FRAMEWORK (MERCANTILE LAW)- I

CO 1. To acquaint students with the basic concepts, terms & provisions of Mercantile and Business Laws.

CO 2. To develop the awareness among the students regarding these laws affecting business, trade and commerce.

ADVANCED ACCOUNTING-I

CO 1.To impart the knowledge of various accounting concepts

CO 2.To instill the knowledge about accounting procedures, methods and techniques.

CO 3.To acquaint them with practical approach to accounts writing by using software package.

AUDITING & TAXATION- I

CO 1. To acquaint themselves about the concept and principles of Auditing, Audit process, Assurance Standards, Tax Audit, and Audit of computerized Systems.

CO 2. To get knowledge about preparation of Audit report.

CO 3. To understand the basic concepts and to acquire knowledge about Computation of Income,

Submission of Income Tax Return, Advance Tax, and Tax deducted at Source, Tax Collection Authorities under the Income Tax Act, 1961.

COST AND WORKS ACCOUNTING SPECIAL PAPER II

CO1. To provide knowledge about the various methods of costing

CO2. To understand the applications of different methods of costing in manufacturing and

service industries.

CO3. To enable students to prepare cost statements under different types of manufacturing industries and Service Industries

CO4. To build the applicability of cost accounting standards in the method of costing.

COST AND WORKS ACCOUNTING SPECIAL PAPER III

CO 1.To prepare learners to understand the basic techniques in Cost Accounting

CO 2. To understand the learner, application of Cost Accounting techniques in cost control and decision making.

CO 3. To enable the learners to prepare various types of Budgets.

CO 4. To learn the basic concept of Uniform Costing and Inter-firm comparison

CO 5. To enhance the knowledge of students about MIS and Supply Chain Management

BUSINESS REGULATORY FRAMEWORK -II

Co 1. To Develop General Awareness Of Business Law Among The Students.

Co 2. To Understand the Various Statutes Containing Regulatory Mechanism Of Business And Its Relevant Provisions Including Different Types Of Partnerships.

Co 3. To Have a Understanding about the Landmark Cases/Decisions Having Impact on Business Laws

Co 4. To Create Awareness Among The Students About Legal Environment Relating To The Business Activities And New Ways Dispute Resolutions Provided Under Arbitration Act.

Co 5. To Acquaint The Students On Relevant Developments In Business Laws To Keep Them Updated.

Co 6. To Enhance Capacity Of Learners To Seek The Career Opportunity In Corporate Sector And As A Business Person.

ADVANCED ACCOUNTING – II

CO 1. To acquaint the student with knowledge about the legal provisions regarding preparation and presentation of final accounts of Co-operative Societies.

CO 2. To empower to students about the branch accounting in simple.

CO 3. To make aware the students about the conceptual aspects of various recent trends in the field of accounting especially forensic accounting, accounting of CSR activities, accounting of derivative contracts and Artificial Intelligence in Accounting.

CO 4. To understand the procedure and methods of analysis of financial statements.

AUDITING & TAXATION - II

CO 1. To understand the basic concepts of Income Tax Act, 1961 and create awareness of direct taxation among the students.

CO 2. To understand the income tax rules and regulations and its provisions.

CO 3. To have a comprehensive knowledge of calculation various types of income.

CO 4. To know the recent changes made by the finance bill (Act) every year and its impact on taxation of person.

CO 5. To acquaint the students on Income tax department portal (ITD), e-filing and e-services mechanism relating to Assessee.

COST AND WORKS ACCOUNTING. SPECIAL PAPER II

CO 1. To provide knowledge about the various methods of costing.

CO 2. To understand the applications of different methods of costing in manufacturing and service industries.

CO 3. To enable students to prepare cost statements under different types of manufacturing industries and Service Industries

CO 4. To build the applicability of cost accounting standards in the method of costing

COST AND WORKS ACCOUNTING SPECIAL PAPER III

Techniques of Cost Accounting and Cost Audit

CO 1. To impart knowledge about Standard Costing and Variance Analysis

CO 2. To learn about pricing policy and its implementation.

CO 3. To know the related Cost Accounting Standards and Cost Management practices in specific sectors

CO 4. To provide a conceptual understanding of procedures and Provisions of Cost Audit.

Department: Political Science

Program Outcomes (PO):

 PO1: Basic knowledge: apply and analyze the knowledge of social sciences.

 PO2: Problem Analysis: Identify, understand terms and particular concepts. Identify, formulate and analyze complex ideas in the social sciences.

 PO3: Understand, identify and analyzed the knowledge such as, code of conduct of society, manners, cultural issues, political issues, economical, historical and geographical etc.

 PO4: Critical Thinking: Identify the assumptions, checking out the degree to which assumptions are accurate and valid looking out the correct perspectives.

 PO5: Effective communication: Apply the basic knowledge to listen, speak, read and write clearly to understand English knowledge.

 PO6: Modern tool usage: To understand and analyzed the knowledge of ICT in communications.

 PO7: Ethics and values: Apply the ethical principles and understand the responsibilities of the societies.

 PO8: Communications: To communicate effectively in the society such as being able to comprehend and write effective reports and design documents for making effective presentation and exchange clear information.

Program specific outcomes (PSO) Political Science

A degree in Political Science provides with the wide range of transferrable skills which is important

 PSO1: Understand the basic principles of politics .

 PSO2: Awareness of their rights .

 PSO3: Understand the code of conduct political issues.

 PSO4: Understand the new trends and study of political science such as LPG, Good Governess and political parties etc.

Course Outcomes

1.B. A.- Political Science General-1

Course Name - Indian Government & Politics

A) Objectives:

1. To Student understand the philosophy if Indian Constitution

2. To Student identify the causes, impacts of British Colonial Rule

3. To understand the various Government of Indian Acts

4. To appreciate the various phases of Indian National Movement

B) Outcomes:

1. Student understood the philosophy if Indian Constitution

2. Student identified the causes, impacts of British Colonial Rule

3. Understood the various Govt. of Indian Acts

4. Students appreciated the various phases of Indian National Movement

B.A.-III Political Ideology G-II

A. Objectives:

1. To understand the concept of Political Ideology

2.To understand the general framework for the interpretation of the ideology

3. To understandthe different aspects of several contemporary ideology

B. Outcome –

1. Understood the concept of Political Ideology

2. Understood the general framework for the interpretation of the ideology

3. Understood the different aspects of several contemporary ideology

B A II Western Political Thought S-I

B) Objectives:

6. To Student will demonstrate of knowledge key thinkers & concept

7. To Students will compare thinkers on similar concept

8. To Students use various concepts to analyze new situation

B) Outcomes:

1. Student will demonstrated of knowledge key thinkers & concept

2. Students will compared thinkers on similar concept

3. Students used various concepts to analyze new situation

B. A. Political Journalism S-II

C) Objectives:

1. To understand the intellectual foundation of Political Sociology

2. To understand the political culture

3. To understand the process & agencies of socialization

D) Outcomes:

1. Understood the intellectual foundation of Political Sociology

2. Understood the political culture

3. Understood the process & agencies of socialization

B.A.-III Local Self Government of Maharashtra G-III A.

Objectives:

1. To understand the evolution, scope & significance of local self Govt. of Maharashtra

2. To understand the 73rd& 74th amendments of Indian Constitution

3.To understand the various structure & functions of Local Self Government

Outcome:

1. Understood the evolution, scope & significance of local self Govt. of Maharashtra

2. Understood the 73rd& 74th amendments of Indian Constitution

3. Understood the various structure & functions of Local Self Government

B.A.-III Public Administration S-III

A. Objectives:

1. To understand the scope & significance of public administration

2. To introduce new approaches of public administration

3. To students will be able to analyze, think critically, solve problems & make decision

B. Outcome:

1. Understood the scope & significance of public administration

2. learned new approaches of public administration

3. students should be able to analyze, think critically, solve problems & make decision

B.A.-III International Relations S-IV

A. Objectives :

1. To understand the evolution, scope & significance of International Politics

2.To criticized the various ideologies which lead to destruction of world

3. To identify various issues & challenges toward International Politics

4. To understand the International Political Economy

B. Outcome :

1. Understood the evolution, scope & significance of International Politics

2. Criticized the various ideologies which lead to destruction of world

3. Identified various issues & challenges toward International Politics

4. Understood the International Political Economy

Department of Economics

PO PSO & CO:

Programme Outcomes of BA (PO):

 Basic knowledge: apply and analyze the knowledge of languages and social sciences.

 Problem Analysis: Identify, study of literature, understand terms and particular concepts. Identify, formulate and analyze complex ideas in the social sciences.

 Critical Thinking: Identify the assumptions, checking out the degree to which assumptions are accurate and valid looking out the correct perspectives.

 Effective communication: Apply the basic knowledge to listen, speak, read and write clearly to understand English knowledge.

 Modern tool usage: To understand and analyzed the knowledge of ICT in communications.

 Ethics and values: Apply the ethical principles and understand the responsibilities of the societies.

 Communications: To communicate effectively in the society such as being able to comprehend and write effective reports and design documents for making effective presentation and exchange clear information.

Programme Specific Outcomes (PSO): Economics

The principal aims of objectives of the BA Economics programme are:

 To provide students a well-founded education in Economics;

 To provide structured curricula which support the academic development of Students.

 To provide and adapt curricula that prepare our graduates for employment and further study as economists;

 To provide the students with the opportunity to pursue courses that emphasize quantitative and theoretical aspects of Economics;

 To provide students with the opportunity to focus on applied and policy issues in Economics;

 To provide programmers that allow the students to choose from a wide range of economic specialization;

 To provide a well-resourced learning environment for Economics.

BA Course wised Outcome (CO): Economics

FYBA

Course Name - Indian Economic Envoriment

1) The emphasis of this paper is on understanding economic concepts with the help of Indian economy.

2) In this paper a student will be initiated into various economies‟ problems, which are related to current issues.

3) This course develop practical skill and to the different skill and abilities of students.

4) Students are doing practical work in different modules on regional economic aspects and they understand the Indian economic problems.

SYBA

Course Name - Modern Banking (G2)

1) This course awareness among the students of Modern Banking System and banking constitutes important components towards understanding of economics.

2) Clear understanding of the operations of banking their interaction with the rest of the economy is essential to realize how monetary forces operate through a multitude of channels-market, non-market, institutions and among others factors.

Course Name - Micro Economics (S1)

1) In this Paper, student is expected to understand the behavior of an economic agent, namely, a consumer, a producer, a factor owner and the price fluctuation in a market.

2) The course incorporated in this Paper deal with the nature and scope of economics, the theory of consumer behavior, analysis of production function and equilibrium of a producer, the price formation in different markets structures and the equilibrium of a firm and industry.

3) The principles of factor pricing and commodity pricing as also the problems of investment and welfare economics have been included.

Course Name - Macro Economics (S2)

1) On account of the growing influence and involvement of the State in economic fields, macroeconomics has become a major area of economic analysis in terms of theoretical, empirical as well as policy-making issues.

2) It deals with the functioning of the economy as a whole, the objective of the course is to familiarize the students the basic concept of Macro Economics

and application

3) It deals with the functioning of the economy as a whole, including how the

economy‟s total output of goods and services and employment of resources is

determined and what causes these totals to fluctuate.

TYBA

Course Name Planning &Development (G3)

1) The Study of Economic Development has gained importance because of stained interest of the developing countries in uplifting their economic conditions by restructuring their economics to acquire greater diversity, efficiency and equity in Consonance with their priorities.

2) For this and other reasons, there have been many approaches to economic development.

3) In recent times, besides hard core economic prescriptions to development, concern hitherto relegated to background, like education, health, sanitation and infrastructural development, have found place of pride in explaining the preference of various problems in developing countries.

Course Name - International Economics (S3)

1) This course provides the students a thorough understanding and deep knowledge about the basic principles that tend to govern the free flow of trade in goods and services at the global level.

2) The contents of the Paper spread over various modules, lay stress both on theory and applied nature of the subject that have registered rapid changes during the last decade. Besides this, the contents prepare the students to know the impact of free trade and tariffs on the different sectors of the economy as well as at the macro level.

3) The students would also be well trained about the rationale of recent changes in the export import policies of India.

4) This paper has become relatively more relevant from the policy point of view under the present waves of globalization and liberalization both in the North and in the South.

Course Name - Public Finance (S4)

1) The main objective of this paper is to train the students to use the techniques of statistical analysis, which are commonly applied to understand and analyze economic problems.

2) The emphasis of this paper is on understanding economic concepts with the help of statistical methods.

2) Hence in this paper a student will be initiated into various economic concepts, which are amenable to statistical tools.

3) The paper also deals with simple tools and techniques, which will help a student in data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

Department : Marathi

Learning Outcomes

Program Outcomes (PO):

 PO1: Basic knowledge: apply and analyze the knowledge of languages and social sciences.

 PO2: Problem Analysis: Identify, study of literature, understand terms and particular concepts. Identify, formulate and analyze complex ideas in the social sciences.

 PO3: Understand, identify and analyzed the knowledge such as, code of conduct of society, manners, cultural issues, political issues, economical, historical and geographical etc.

 PO4: Critical Thinking: Identify the assumptions, checking out the degree to which assumptions are accurate and valid looking out the correct perspectives.

 PO5: Effective communication: Apply the basic knowledge to listen, speak, read and write clearly to understand Marathi knowledge.

 PO6: Modern tool usage: To understand and analyzed the knowledge of ICT in communications.

 PO7: Ethics and values: Apply the ethical principles and understand the responsibilities of the societies.

 PO8: Communications: To communicate effectively in the society such as being able to comprehend and write effective reports and design documents for making effective presentation and exchange clear information.

 PO9: Develop Competency : Develop Competency in Literary Forms. (i.e. Marathi Poetry, Novel, Autobiography, Short Story, Drama & Performing Prose)

Program specific outcomes (PSO) Marathi

A degree in Marathi provides with the wide range of transferrable skills which is important

 PSO1: Ability for clear expression for both oral and written.

 PSO2: Attend the potential knowledge of Marathi language, their trends and terms.

 PSO3: Understand the code of conduct cultural issues.

 PSO4: Understand the era trends and study of literature such as Indian literature

(Gramin, Dalit, strivadi folk-literature etc.)

 PSO5 : Get Information about the history of Modern Marathi Literature.

 PSO6 : study News Writing for Media.

BA Programme

Course Outcomes (CO) : Marathi:

Class - FYBA

Course Name मराठी साहित्य: कथा आणि एकांकिका किंवा व्यवहारिक व उपयोजित मराठी

Objectives :

१. मराठी साहित्यासंबंधी रुची निर्माण करणे.

२. विद्यार्थ्यांच्या वाङ्मयीन अभिरुचीचा विकास करणे

३. कथा आणि एकांकिका साहित्य प्रकार समजून घेणे.

४. भाषिक व लेखन कौशल्य विकसित करणे.

५. मराठीचा कार्यालयीन / व्यवसायिक कामकाजात वापर, गरज व स्वरूप

विशेषांची माहिती करून देणे.

Outcome :

१. मराठी साहित्यासंबंधी रुची निर्माण झाली.

२. भाषिक क्षमता विकसित झाली.

३. भाषिक व लेखन कौशल्य विकस झाला.

FYBCOM

Course Name भाषा, साहित्य आणि कौशल्यविकास (G1)

Objectives :

१. मराठी साहित्यासंबंधी रुची निर्माण करणे.

२. विविध क्षेत्रातील कर्तृत्ववान व्यक्तींच्या कार्याची व विचारांची ओळख करून देणे.

३. भाषिक क्षमता विकसित करणे.

४. भाषिक व लेखन कौशल्य विकसित करणे.

५. मराठीचा कार्यालयीन / व्यवसायिक कामकाजात वापर, गरज व स्वरूप विशेषांची माहिती करून देणे.

Outcome :

१. मराठी साहित्यासंबंधी रुची निर्माण झाली.

२. भाषिक क्षमता विकसित झाली.

३. भाषिक व लेखन कौशल्य विकस झाला.

४. विद्यार्थ्यांच्या वाङ्मयीन अभिरुचीचा विकास झाला.

Class - SYBA

Course Name - आधुनिक मराठी साहित्य आणि उपयोजित मराठी

Objectives :

१. चरित्र-आत्मचरित्र या साहित्य प्रकारांच्या तात्विक घटकांचे ज्ञान करून देणे.

२ भाषिक कौशल्याची क्षमता विकसित करणे.

३. कार्यालयीन भाषा व्यवहारातील लेखन कौशल्याची ओळख करून देणे.

४. आधुनिक मराठी साहित्यातील निवडक चरित्र-आत्मचरित्र यांचे आकलन व आस्वाद क्षमता विकसित करणे.

५. पारिभाषिक संज्ञाची ओळख करून देणे.

Outcome :

१. चरित्र-आत्मचरित्र या साहित्य प्रकारांच्या तात्विक घटकांचे ज्ञान झाले.

२. आधुनिक मराठी साहित्यातील निवडक चरित्र-आत्मचरित्र यांचे आकलन व आस्वाद क्षमता विकसित करण्यात आली.

३. पारिभाषिक संज्ञाची ओळख करून दिली.

Course Name - आधुनिक मराठी साहित्य आणि उपयोजित मराठी (G-1)

Objectives:

१. चरित्र-आत्मचरित्र या साहित्य प्रकारांच्या तात्विक घटकांचे ज्ञान करून देणे.

२. भाषिक कौशल्याची क्षमता विकसित करणे.

३. कार्यालयीन भाषा व्यवहारातील लेखन कौशल्याची ओळख करून देणे.

४. आधुनिक मराठी साहित्यातील निवडक चरित्र-आत्मचरित्र यांचे आकलन व आस्वाद क्षमता विकसित करणे.

५. पारिभाषिक संज्ञाची ओळख करून देणे.

Outcome

१. चरित्र-आत्मचरित्र या साहित्य प्रकारांच्या तात्विक घटकांचे ज्ञान झाले.

२. आधुनिक मराठी साहित्यातील निवडक चरित्र-आत्मचरित्र यांचे आकलन व आस्वाद क्षमता विकसित करण्यात आली.

Course Name -मराठी साहित्यतील विविध साहित्य प्रकार (S1)

Objectives:

१. मराठी साहित्यप्रकारांच्या तात्त्विक घटकांचे ज्ञान देणे.

२. साहित्य विषयक अभिरुची निर्माण करणे.

३. साहित्याचे आकलन व मूल्यमापन करण्याची दृष्टी निर्माण करणे.

४. मराठीतील अभिजात साहित्यक्तीचा संस्कार घडवणे.

५. साहित्याचा सक्ष्म पातळीवर अभ्यास करण्याची क्षमता विकसित करणे.

Outcome :

१. मराठी साहित्यप्रकारांच्या तात्त्विक घटकांचे ज्ञान झाले.

२. साहित्याचे आकलन व मूल्यमापन करण्याची दृष्टी निर्माण करण्यात आली.

3. साहित्याचा सूक्ष्म पातळीवर अभ्यास करण्याची क्षमता विकसित झाली.

Course Name- साहित्यविचार (S-2)

Objectives:

१. साहित्याचे स्वरूप व प्रयोजने समजावून देणे.

२. साहित्य निर्मितीची प्रक्रिया ज्ञात करून देणे.

३. साहित्याची आस्वाद आणि अभिरुची प्रक्रिया समजावन देणे.

४. साहित्य आणि समाज यातील परस्पर संबंध समजावून देणे.

५. साहित्यप्रकारची संकल्पना आणि वाङ्मयीन मूल्ये समजावून देणे.

Outcome :

१. साहित्याचे स्वरूप व निर्मितीची प्रयोजने समजली.

२. साहित्याचा आस्वाद आणि अभिरुची प्रक्रिया विकसित झाली.

३. साहित्य आणि समाज यातील परस्पर संबंध समजला.

T.Y.B.A.

Objectives:

Course Name- मध्ययुगीन मराठी वाङ्मयाचा इतिहास (प्रारंभ -१६००) (S-3)

१. मराठी साहित्य परंपरेचे स्थूल ज्ञान करून देणे.

२. विशिष्ट कालखंडाच्या साहित्यामागील प्रेरणा ज्ञात करून देणे.

३. विशिष्ट कालखंडाच्या साहित्यामागील प्रवृत्ती ज्ञात करून देणे.

४. साहित्यप्रकारांच्या विकसनशील परंपरेचे स्थूल ज्ञान करून देणे.

५. साहित्याच्या पार्श्वभूमी संबंधी आकलन करून देणे.

Outcome :

१. मराठी साहित्य परंपरेचे स्थूल ज्ञान प्राप्त झाले.

२. विशिष्ट कालखंडाच्या साहित्यामागील प्रेरणा आणि प्रवृत्ती ज्ञात झाल्या.

३. साहित्याची पार्श्वभूमी आकलन झाली.

Course Name -आधुनिक मराठी साहित्य आणि उपयोजित मराठी (G-3)

Objectives :

१. आधुनिक मराठी साहित्यातील विविध वाङ्मयप्रकारांचा परिचय वाढवणे.

२. भाषिक कौशल्याची व संपर्क माध्यमे यांचा परस्पर संबंध समजावून

करण्याचे कौशल्य प्राप्त झाले.

३. भाषेचे यथोचित आकलन व वापर करण्याची क्षमता विकसित करणे. ४. मराठीचा कार्यालयीन कामकाजात होणारा वापर, गरज ज्ञात करून देणे. ५. विद्यार्थ्यांची वाचन व लेखन क्षमता विकसित करून त्यांच्या मध्ये साहित्य परीक्षणाची आवड निर्माण करणे.

Outcome :

१. आधुनिक मराठी साहित्यातील विविध वाङ्मयप्रकारांचा परिचय झाला.

२. भाषिक कौशल्ये विकसित झाली आणि संपर्क माध्यमे यांचा वापर

३. भाषेचे यथोचित आकलन व वापर करण्याची क्षमता विकसित झाली.

Course Name -भाषाविज्ञान (S4)

Objectives :

१. भाषाकुलाची संकल्पना व उत्पत्तीचा अभ्यास करणे.

२. मराठी भाषेचा उत्पत्ती काळ आणि स्थितीगती जाणून घेणे.

३. भाषा म्हणून मराठीच्या वाटचालीचा आढवा घेणे.

४. स्वनिम संकल्पना आणि रुपिम व्यवस्था समजावून देणे.

५. वाक्यविन्यास व अर्थविन्यास या वैज्ञानिक संकल्पनांचा सूक्ष्म परिचय करून देणे.

Outcome :

१. भाषाकुलाची संकल्पना व उत्पत्तीचा अभ्यास झाला.

२. मराठी भाषेचा उत्पत्ती काळ आणि स्थितीगती याविषयीचे ज्ञान प्राप्त झाले.

३. भाषा म्हणून मराठीच्या वाटचालीचा आढवा समजला.

४. स्वनिम संकल्पना आणि रुपिम व्यवस्था समजली.