#### National Institute of Education's

# Sahakarbhushan S. K. Patil College, Kurundwad.

**NAAC Accreditation: B** 

Tal. Shirol, Dist. Kolhapur Pin - 416 106 ☎(02322) 244244, 243954, (R) 244353

Ref.No.NIOE/SKPC/

Date:

## PROGRAMME OUTCOMES

# 1. Programme Outcomes of English:

- PO1 Students are expected to be able to use English in everyday situations, formal as well as informal.
- PO2 Students are expected to understand and explain text's elements-for example, word choice, imagery, form, and connotations.
- PO3 Students are expected to be able to draw on relevant cultural and historical information to analyse and interpret a literary text.
- PO4 Students are expected to get acquainted with literary traditions including prominent authors, genres, literary movements, and styles.
- PO5 Students are expected to be able to analyze cultural diversity including issues of race, gender, class, sexuality and ethnicity through the study of literary texts.
- PO6 Students are expected to get acquainted with advance skills like marketing, banking and public relations correspondence.

# 2. Program Outcomes of Marathi:

- PO1 Developing the writing, reading and speaking skills.
- PO2 Get acquainted with the social and cultural literature.
- PO3 Get acquainted with the literary types-story, novel, drama, biography, autobiography etc.
- PO4 Developing the vocabulary.
- PO5 Get acquainted with the creative writing.

# 3. Program Outcomes of Hindi:

- PO1 Develop the writing, reading and speaking skills.
- PO2 Get acquainted with literary types: Novel and autobiography.
- PO3 Develop the ability to understand and study the literary works from different approaches.
- PO4 Get acquainted with the prescribed texts.

# 4. Programme Outcomes of Economics.

- PO1 **Critical Thinking Skills:** Students are expected to be able to apply economic analysis to everyday problems in real world situations, to understand current events and evaluate specific policy proposals and to evaluate the role played by assumptions in arguments that reach different conclusions to a specific economic or policy problem.
- PO2 **Quantitative Reasoning Skills:** Students are expected to understand how to use empirical evidence to evaluate the validity of an economic argument, use statistical methodology, interpret statistical results and conduct appropriate statistical analysis of data.
- PO3 **Problem-Solving Skills:** Students are expected to be able to solve problems that have clear solutions and to address problems that do not have clear answers and explain conditions under which these solutions may be correct.
- PO4 **Specialized Knowledge and Application of Skills:** Students are expected to develop critical and quantitative thinking skills specific to business and accounting.
- PO5 **Communication Skills:** Students are expected to be able to communicate effectively in written, oral and graphical form about specific issues and to formulate well-organized written arguments that state assumptions and hypothesis supported by evidence.

## **5. Programme Outcome of Physical Education:**

- PO1 Physical education will develop the whole and every student.
- PO2 The physical educators will serve as role models and demonstrate knowledge of health, physical education and Wellness.
- PO3 The physical education classes will provide a variety of Activities which will motivate the student and increase participation.
- PO4 The physical education programme will allow the student to participate in develop mentally appropriate activities.
- PO5 The physical education programme will develop and reinforce cooperative behaviour. The physical education program will teach the student to establish lifelong fitness goals.

# **6. Programme Outcomes of Political Science:**

Students completing the B.A. degree in Political Science will be able to:

- PO1 Write clearly and with purpose on issue of international and domestic politics and public policy
- PO2 Participate as a civically engaged member of society
- PO3 Analyze political and policy problems and formulate policy options: use electronic and traditional library resources to research key, local, state, national and international policy issues and present results.
- PO4 Demonstrate competency with basic tools, underlying modern social research including competency in statistics and qualitative analysis, demonstrate critical thinking, including the ability to form an

- argument, detect fallacies, and martial evidence, about key issues of public policy: discuss the major theories and concepts of political and its subfields.
- PO5 Deliver thoughtful and well-articulated presentations of research findings.

## 7. Programme Outcomes of History:

- PO1 **Historical and Social Scientific Knowledge:** Identify the key events which express/define change over time in a particular place or region, identify social factors in human change over time describe the influence of political ideologies, economic structures, social organizations, cultural perceptions, and natural environments on historical events discuss the ways in which factors such as race, gender, class, ethnicity, region and religion influence historical narratives and social scientific explanations.
- PO2 **Historical and Social Scientific Thinking:** Explain how people have existed, acted and thought in particular historical periods, explain what influence the past has on the present, interpret the complexity and diversity of situations, events and societies compare eras and regions in order to define enduring issues recognize a range of viewpoints, compare competing narratives and interpretations, analyse cause and effect relationship and multiple causation.
- PO3 **Critical Skills :** Evaluate debates among historians and social scientists, differentiate between facts and interpretations, assess the credibility of different sources of information.
- PO4 **Develop research Skills :** Formulate historical and social science questions, obtain appropriate data from a variety of sources, identify gaps in available records.

# 8. Programme Outcomes of Geography:

#### B.A.I, II, III

- PO1 Be a Good and Knowledge Citizen.
- PO2 Understand the knowledge in the field of geography.
- PO3 Become conscious about the earth, eco system.
- PO4 Get career opportunities.
- PO5 Work for the betterment of Society.

# 9. Programme Outcome of Commerce:

- PO1 **Critical Thinking & Problem Solving :** Students demonstrate the ability to identify a problem and the information needed to develop alternative solutions.
- PO2 **Communication & Presentation Skills :** Students prepare business topics and presentation at the time of seminar. Students effectively utilize data in the written and oral presentation to communicate ideas.

#### PO3 Business Knowledge:

**Accounting:** Students acquire and appropriately use information from financial accounting and cost accounting reports from internal and external business decision.

**Management :** Students will demonstrate skills reflecting appreciation for the roles and importance of people in organization including the roles that the manager plays in various environments of the work place.

**Marketing**: Students conduct consumer segmentation, targeting and positioning to implement marketing mix decision and communicate how these decisions impact the firm.

**Business Regulatory Framework:** Students integrate analysis of legal issues into business decision. Adopting the legal skills which are required to start the business, regulate the business etc.

**International Business:** Students acquire an awareness of global trends and their impact on the business.

PO4 **Ethics & Social Responsibility:** Students identified ethical issues and develop appropriate course of action for well-being of others in society. Students also evaluate the role of social responsibilities in business decision.

## 10. Programme Outcomes of Chemistry:

- PO1 Have firm foundations in the fundamentals and application of current chemical and scientific theories.
- PO2 Are able to design, carry out, record and analyse the results of chemical experiments.
- PO3 Are able to use modern instrumentation and classical techniques, to design experiments, and to properly record the results of their experiments.
- PO4 Are skilled in problems solving, critical thinking and analytical reasoning.
- PO5 Are able to identify and solve chemical problems and explore new areas of research
- PO5 Are able to use modern library searching and retrieval methods to obtain information about a topic, chemical, chemical technique, or an issue relating to chemistry.
- PO6 Knows the proper procedures and regulations for safe handling and use of chemical and can chemical follow the proper procedures and regulations for safe handling when using chemical.
- PO7 Understand the ethical, historic, philosophical, and environmental dimensions of problems and issues facing chemists.
- PO8 Find gainful employment in industry or government, be accepted at graduate or professional schools, or find employment in school systems as instructors or administrators

# 11. Programme Outcomes of Physics:

- PO1 Student are able to study and design the experiments in physics.
- PO2 Skills of reasoning and problem solving developed among the students.

# 12. Programme outcomes of Botany:

After completion of programme,

- PO1 students are able to Identification, classification of the plants
- PO2 students have opportunity to work Plant tissue culture companies
- PO3 Student are able for Nursery management
- PO4 able to apply the knowledge for plant breeding programme
- PO5 find the opportunity genetic engineering by applying the knowledge acquired during the completion of programme
- PO7 Have knowledge of exploration of fossil fuels
- PO8 Able to identify the medicinal plants
- PO9 Chemical aspects of plant life processes and chemical products of plants.
- PO10 Agronomy for crop and soil science

## 13. Programme outcomes of Mathematics:

- PO1 Acquire knowledge with facts and figures related to various subjects in basic sciences such as Physics, Chemistry, Mathematics, Microbiology etc.
- PO2 Understand the basic concepts, fundamental principles, and scientific theories related to various scientific phenomena and their relevance in day-to-day life.
- PO3 Acquire skills in handling scientific instruments, planning and performing laboratory experiments nothing down the observation and drawing logical inferences from them.
- PO4 Analyze the given scientific data critically and systematically and drawing objective conclusions.
- PO5 Realize the knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can greatly and effectively influence & inspire in evolving new scientific theories and inventions.
- PO6 Imbibe ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.

## PROGRAMME SPECIFIC OUTCOME

## 1. Program Specific Outcomes of English:

- PSO1 Get familiar with modern English idiom
- PSO2 Learn English to be used in everyday situations, formal as well as informal
- PSO3 Enrich the vocabulary and get acquainted with different registers of English
- PSO4 Get acquainted with the effective and creative writing skills
- PSO5 Understand the advance skills of personality development
- PSO6 Make the students to use effective communicative skills
- PSO7 Understand the advanced skills like marketing, banking, public relations correspondence
- PSO8 Understand the major tenors in literature
- PSO9 Make the students to get acquainted with literary competence
- PSO10 Improve students critical faculty, sharpen their perception and observation on the phenomenon of literature
- PSO11 Know the basic concepts in linguistic and difference between semantics and pragmatics
- PSO12 Understand how to study comparatively two different languages

# 2. Program Specific Outcomes of Marathi:

- PSO1 Develop the writing, reading and speaking skills.
- PSO2 Get acquainted with the modern linguistics
- PSO3 Get motivated to write creative and applied Marathi.

# 3. Program Specific Outcomes of Hindi:

- PSO1 Develop the writing, reading and speaking skills.
- PSO2 Develop the ability to appreciate the literary works.
- PSO3 Get acquainted with the reference material to study Hindi Language

# **4. Specific Program Outcome of Economics:**

- PSO1 Understand the structure and decision-making authority of the Reserve Bank and the Indian Treasury, respectively.
- PSO2 Understand the factors determining gross domestic product, employment, the general level of prices, and interest rates.
- PSO3 Measure living standards, inflation, and unemployment for use as economic indicators.

- PSO4 Analyze the determinants of the relative strengths of fiscal and monetary policy for affecting gross domestic product.
- PSO5 Learn the determinants of long-term economic growth, including the role of saving and investment on the rate of growth.
- PSO6 Understand the role of international trade in affecting living standards.
- PSO7 Analyze the factors that determine currency exchange rates and the impact of changes in exchange rates on exports and imports.
- PSO8 Learn to access national and international macroeconomic data.
- PSO9 Learn how to access and interpret forecasts using macroeconomic data.
- PSO10 Understand various possible criteria for judging the success of economic systems.
- PSO11 Understand the relationships among the concepts of "market failure," "government failure," property rights, transaction costs, and culture.
- PSO12 Understand how monetary and fiscal policy affects the financial system.
- PSO13 Critically assess the current motivations for and the efficacy of government interventions in the economy.
- PSO14 Effectively communicate the essence of taxation theory, including tax incidence, tax efficiency, and tax equity.
- PSO15 Apply knowledge of the seminal literature in the areas of public goods, externalities, public choice, and taxation.
- PSO16 Critically analyze alternative taxation schemes.
- PSO17 Measure living standards, inflation, and unemployment for use as economic indicators
- PSO18 Analyze the determinants of the relative strengths of fiscal and monetary policy for affecting gross domestic product.
- PSO19 Learn the determinants of long-term economic growth, including the role of saving and investment on the rate of growth.
- PSO20 Understand the term structure of interest rates.
- PSO21 Understand the likely path of interest rates in the aftermath of a change in monetary policy
- PSO22 Understand the impact of inflation on interest rates.
- PSO23 Understand various concepts of yield or rate of return.

# 5. Program Specific Outcomes of Geography:

- PSO1 Understand the basic concepts in geomorphology.
- PSO2 Get the knowledge of earth's interior, endogenetic and exogenetic forces, their effects.
- PSO3 Understand the concept of continental drift.
- PSO4 Learn the types of humidity of precipitaton

## 6. Specific Program Outcomes of Physical Education:

- PSO1 To make the student aware of the true meaning and modem concept/trend of physical education and Sports
- PSO2 To help the student familiarize with the scope of physical education and sports
- PSO3 Student will be able to understand Physical fitness, concept of Balance Diet, and Bad Habits with Special reference to Physical Fitesses Alcohol and Tobacco
- PSO4 To understand Kinds of body Posture, Characteristics of good body posture And Physical Differences between two sexes with reference to Physical performance-strength, speed, endurance, agility, flexibility etc.
- PSO5 To understand Physical Education Periods Advent of Aryans 2000 B.C. (Early Period), Epic Age 1500 B.C. to 500 B.C. and Buddhist Period in Ancient India.
- PSO6 Student will be able to understand Development of Physical Education in India
- PS07 Student will be able to understand Development of Physical Education in Maharashtra
- PSO8 To understand the History of Ancient Olympic Games and History of Modem Olympic Games
- PSO9 To know the History of Asian Games
- PSO10 To understand the University various competitions of Inter-collegiate Sports of Shivaji University, Inter-Zonal Sports of Shivaji University, Inter-University Sports and All India Inter-University Sports
- PSO11 Student will be able to understand different Institutions for training in Physical Education in India of NSNIS. LNIPE (Deemed University), Sports Authority of India with Inceptions and Functions
- PSO12To understand what type of award get in India such like National Level Sports Award and Maharashtra State Level Sports Award
- PSO13 Student will be able to understand different Playground Facilities and its Standards, Preparation and Maintenance of Playgrounds
- PSO14 Student will be able to understand different Equipments of Sports: Care and Maintenance and Policies of purchases of Sports Equipments
- PSO15 To get knowledge of Factors of Personal Health: Physical, Mental, and Social Factors influencing on Health: Heredity, environment, Habits. Exercise
- PSO16To make the student aware of the Health of the Community, of Health problems in family, Community, School and Colleges and Role of Government in community health
- PSO17 To enable the student to understand Different Health Programmes. Importance of exercises in health and fitness and Drugs, Alcohol and Tobacco-Adverse effect on sports performance
- PSO18 To understand about World Health Organization (WHO) and World Health Organization in India
- PSO19 To get knowledge about Dietetics and Hygiene of Food sources and their effect: Natural food, impure food, processed food, Stimulants and Athlete Diet Need arid importance

- PSO20 To understand about Balance Diet and Malnutrition
- PSO21 To make the student aware of Underweight and Obesity
- PSO22 To enable the student to understand the modern concept of Rhythm and Recreation
- PSO23 To acquaint the student regarding the brief Introduction of Anatomy, Physiology and Physiology of exercises
- PSO24 To understand Yoga and Physical Health
- PSO25 To understand Relationship of Yoga and Mental Health, Emotional Health
- PSO26 To understand Effect of yogic exercises and Yoga on Various system of the Human Body
- PSO27 To understand Benefits of Yoga in Modern life
- PSO28 To get knowledge about Yoga and Sports Contribution of yogic practices for the development of Sports performances
- PSO29 Student gets knowledge about All Athletics events, Knowledge of Rules & Regulations, how to mark running track, track and field athletics technical officials, Fundamental skills Technique & Modem Style
- PSO30 To get knowledge about Indian Game: Kabaddi and Kho kho
- PSO31 To get knowledge about Various Game: Volley ball, Hand Ball, Basket Ball, Table Tennis, Foot Ball, Badminton, Wrestling, Weight Lifting, Fencing, Judo, Gymnastics and Cricket
- PSO32 To get knowledge about First Aid Meaning, Objectives, Important rules, Material in the First Aid Box and identify Fracture Types, Signs and Symptoms, Bleeding Types, Signs and Symptoms Use of Sling and Splint, Artificial Respiration Meaning and Method of Artificial respiration, Bandage, Meaning, Types, Way of applying sling, simple dressing

## 7. Programme Specific Outcomes of History:

- PSO1 Acquire an understanding of the historical framework for the development of Indian Civilization and Understand background of our Nation.
- PSO2 Pursue a more in depth study in aspects of Ancient, Medieval, Modern and of Contemporary History.
- PSO3 Understand the present existing social, political, religious, economic conditions of the Indian people.
- PSO4 Develop practical skills helpful in the study and understanding of historical events.

## 8. Programme Specific Outcomes of Political Science:

- PSO1 Learn organization of government machinery and representation.
- PSO2 Get effectiveness in translating the government philosophy programme.
- PSO3 Deal with the concepts and dimensions of international politics.

- PSO4 Understand the constitutional and legal provision of America.
- PSO5 Understand continuity and change within the western political traditions.

## 9. Programme Specific Outcomes of Commerce:

- PSO1 Understand practical and theoretical aspect of accounting, auditing, costing and taxation.
- PSO2 Understand costing methods and techniques
- PSO3 Understand overall management of business unit.
- PSO4 Understand theoretical and practical aspects of banking sector.

## 10. Programme Specific Outcomes of Chemistry:

#### **PSO1 Professional skills:**

Acquiring skills to utilize the knowledge of chemistry in innovative, dynamic and challenging environment for design and development of new products

#### **PSO2** Professional skills:

Attainment of ability to acquire skills required to help chemical industry through the practical knowledge

## **PSO3** Practical implementation and testing skills:

Attainment of ability to acquire skills required to help chemical industry. These may be imbibed through topics like analytical techniques', 'instrumentation' required in chemical and allied industry.

## **PSO4** Successful career and entrepreneurship:

Transformation of the students into skilled person through which their carrier will be successful and they will be successful entrepreneur.

#### **Mechanism of Communication:**

#### **Credits**

#### B.A. and B.Com.

4 Theory period of 48 minutes per week over a semester.

#### **B.Sc Part 1**

- 5 Theory period for 2 papers of 48 minutes per week over a semester.
- 1 Practical period per week over a semester.

#### B. Sc. Part II

- 3 Theory period of 48 minutes per week over a semester.
- 2 Practical period per week over a semester.

## B. Sc. Part III

- 4 Theory period of 48 minutes per week over a semester.
- 4 Practical period per week over a semester.

# 11. Programme Specific Outcomes of Mathematics:

- PSO1 Develop knowledge, skills and attitudes necessary to pursue studies in Mathematics.
- PSO2 Use of Linear equations for solving any differential equations.
- PSO3 Develop critical appreciation of use of ICT in Mathematics
- PSO4 Recognize that Mathematics Primates the world around us
- PSO5 Appreciate the usefulness, power and beauty of Mathematics

## **COURSE OUTCOMES**

## 1. Course Outcomes of English:

#### **Understanding Drama:**

- CO1 Understand the form of drama with its origin, definitions and development of drama as a form of literature.
- CO2 Get acquainted with the worldwide drama, particularly Indian, English and American.
- CO3 Understand the various trends in drama.
- CO4 Understand the various themes dealt in the dramas of different periods, particularly in prescribed dramas.
- CO5 Understand how to analyze given text.
- CO6 Improve their critical faculty, sharpen their perception and observation on the phenomena of literature.

## **Understanding poetry:**

- CO1 Understand the form of poetry with its origin, definitions and developments of poetry as a form of literature.
- CO2 Get acquainted with the poetical creation from the different periods worldwide.
- CO3 Understand the various trends in poetry.
- CO4 Understand the various themes dealt in the poetry of different periods.
- CO5 Understand how to analyse given text.
- CO6 Improve their critical faculty, sharpen their perception and observation on the phenomena of literature.

#### **Understanding Novel:**

- CO1 Understand the form of novel with its origin, definitions and development of novel as a form of literature.
- CO2 Get acquainted with the worldwide novel, particularly Indian and English.
- CO3 Understand the various trends in novel.
- CO4 Understand the various themes dealt in the novels of different periods.
- CO5 Understand how to analyse given text.
- CO6 Understand their faculty, sharpen their perception and observation on the phenomena of literature.

## The Structure And Function Of Modern English:

- CO1 Understand the concepts of Phonology.
- CO2 Get acquainted with the terms, morphemes, allomorphs and morphology.
- CO3 Understand the open class and closed class words.
- CO4 Understand the phrase as a unit of language.
- CO5 Understand the clause elements and structure of complex sentence.
- CO6 Understand the different types of cohesive devices.
- CO7 Get acquainted with different types of discourse and different domains of discourse.

#### **Literary Criticism and Appreciation:**

- CO1 Understand the nature and functions of the literature.
- CO2 Understand the nature and functions of the criticism.
- CO3 Understand the different approaches to study the literary works.
- CO4 Understand the use of the Biographical and Psychological approach.
- CO5 Understand the different figures of speech.
- CO6 Understand the different trends in criticism.
- CO7 Understand how to analyze a literary work.

#### **Introduction To English Literature : The short Story and The Novel (B.A. I Optional English)**

- CO1 Understand the short story as a minor form of literature.
- CO2 Understand the novel as a major form of literature.
- CO3 Get familiar with the prescribed short stories and novels.
- CO4 Develop the literary competence among the students.

#### Modern English Literature : Poems, Drammas and Essays. (B.A I Optional English)

- CO1 Understand the Poem as a form of literature.
- CO2 Understand the Drama as a major form of literature.
- CO3 Understand the Essay as form of literature.
- CO4 Get familiar with the prescribed Poems, drama and essays.
- CO5 Develop the literary competence among the students.

#### **Indian English Literature (B.A II Optional English )**

- CO1 Get familiar with the Indian English Literature.
- CO2 Understand the different trends in Indian Literature.
- CO3 Get familiar with the prescribed literary works of Indian English literature.
- CO4 Develop the literary appreciation and competence among the students.

#### 2. Course Outcomes of Marathi:

#### **Ancient Marathi Prose and Information of Story Collections:**

- CO1 Get acquainted with the Bakhar Literature.
- CO2 Get acquainted with the social realism from stories.
- CO3 Get acquainted with the characters in literary works.
- CO4 Understand the language skills.

## **Ancient Marathi Poetry and Information of Poetry Collections:**

- CO1 Get acquainted with the saint literature from ancient literature.
- CO2 Get acquainted with the saint Janabai's abhangs.
- CO3 Understand the poetry from social and cultural approaches.

#### **Poetics:**

- CO1 Get acquainted with the ancient poetics.
- CO2 Get acquainted with the characteristics of poetry.
- CO3 Get acquainted with the nature of literature.
- CO4 Get acquainted with the poetic devices.

#### **Linguistics and Marathi Language:**

- CO1 Get acquainted with modern linguistics.
- CO2 Get acquainted with relationship between linguistics and Marathi language.
- CO3 Get acquainted with the consonants and vowels in Marathi.
- CO4 Develop the interest in the study of Marathi language.

#### **History of Marathi Literature:**

CO1 Get acquainted with the traditions and history of Marathi literature.

- CO2 Get acquainted with the literary types in the medieval period.
- CO3 Get acquainted with the cultural background of literature in the medieval period.

## **Creativity and Application of Marathi language:**

- CO1 Get acquainted with the formal and informal use of language.
- CO2 Develop the language skills.
- CO3 Develop the writing, reading and speaking skills.
- CO4 Get motivated to write creative and applied Marathi.

#### **Study of Literary Trends : (Rural Literature, Dalit Literature)**

- CO1 Get acquainted with the literary trends in Marathi literature.
- CO2 Get acquainted with the nature, characteristics and development of Rural Marathi literature.
- CO3 Get acquainted with the nature, characteristics and development of Dalit Marathi literature.
- CO4 Get acquainted with the prescribed texts.

## 3. Course Outcomes of Hindi:

## Sahityashastra (Literature)

- CO1 Develop the ability to appreciate the literary works.
- CO2 Get acquainted with the characteristics of the poetry.
- CO3 Get acquainted with the criticism of the literary works.

#### **History of Hindi Literature:**

- CO1 Get acquainted with the history of Hindi Literature.
- CO2 Get acquainted with the trends of Hindi Literature.
- CO3 Get acquainted with the types of literature.

#### **Applied Hindi:**

- CO1 Get acquainted with the applied hindi.
- CO2 Get acquainted with the formal vocabulary of hindi.
- CO3 Get acquainted with the reference material to study Hindi Language.

## **Linguistics and Hindi Language:**

- CO1 Get acquainted with the nature and characteristics of language.
- CO2 Get acquainted with the nature of linguistics.
- CO3 Get acquainted with the origin and development of Hindi language.

## Novel: (Ana Is Desh by Krushna Agnihotri)

- CO1 Get acquainted with the prescribed text.
- CO2 Get acquainted with the development of the novel.
- CO3 Get acquainted with the nature and characteristics of novel.

## Autobiography: ('Dohra Abhishap' by Krushna Agnihotri)

- CO1 To get acquaint with the work of Kausalya Baisantri.
- CO2 To get acquaint with the autobiography 'Dohra Abhishap'.
- CO3 To get acquaint with the hardships faced by Dalit womens.

#### 4. Course Outcomes of Economics:

#### **Indian Economy**

Upon Successful completion of the course a student will be able to:

- CO1 Understand type of Indian Economy.
- CO2 Understand the basic factor of Indian Economy.
- CO3 Understand the Indian Economical problem.
- CO4 Understand the Indian Fiscal Policy.
- CO5 Understand the Indian Monetary policy.

#### **Macro Economics**

Upon Successful completion of the course a student will be able to:

- CO1 Understand why household Business, government and global behaviour determine the aggregate demand for goods and services.
- CO2 Understand why the behaviour of business and the rest of the world determine the aggregate supply of goods and services.
- CO3 Understand how aggregate demand and aggregate supply interact to drive a free market economy.
- CO4 Understand the implications of interference in a market economy, including government policy.

- CO5 Understand the basic of national income accounting.
- CO6 Understand the causes and consequences of business cycles.
- CO7 Understand the roles of fiscal and monetary policy in fighting recessions and inflation.
- CO8 Understand factors that contribute to and detract form long-term economic growth.

#### **Micro Economics**

- Upon Successful completion of the course a student will be able to:
- CO1 Understand how households (demand) and business (supply) interact in various market structures to determine price and quantity of a good produced.
- CO2 Understand the links between household behaviour and the economic models of demand.
- CO3 Represent demand, in graphical form, including the downward slope of the demand curve and what shifts the demand curve.
- CO4 Understand the links between production costs and the economic models of supply.
- CO5 Represent supply, in graphical form, including the upward slope of the supply curve and what shifts the supply curve.
- CO6 Understand the efficiency and equity implications of market interference, including government policy.
- CO7 Understand how different degrees of competition in a market effect pricing and output.
- CO8 Apply economics reasoning to individual and firm behaviour.
- CO9 Understand the meaning of marginal revenue and marginal cost and their relevance for firm profitability.
- CO10 Understand the major characteristics of different market structures and the implications for the behaviour of the firm.
- CO11 Make decisions, using marginal analysis and opportunity costs.
- CO12 Use supply and demand to determine changes in market equilibrium (price and output), change in welfare, and analyse the impact of government policies.
- CO13 Understand the relationship between marginal utility and price in equilibrium.
- CO14 Explain why firms exist.
- CO15 Develop cost functions from production functions.
- CO16 Be able to determine the profit maximizing price and output for a firm operating in competitive environment.
- CO17 Determine profit maximizing price and output for monopoly firm.
- CO18 Evaluate various policies for regulating monopolies.
- CO19 Be able to determine profit maximizing price and output for a firm in a quasi-competitive market (oligopoly or monopolistic competition)

- CO20 Develop and evaluate the impact of government regulations.
- CO21 Explain relationship between wages and productivity and apply the model to real-world business.
- CO22 Be able to apply the concepts of supply and demand to markets with external costs and benefits (understand market failure, implications for regulation, optimal pollution level.)
- CO23 Understand the nature and consequences of general equilibrium (pare to optimality)

#### **Research Methodology of Economics**

Upon successful completion of the course a student will be able to:

- CO1 Define and operationalize a variable.
- CO2 Understand the relationship between concept and variable.
- CO3 Understand the difference between causation and correlation
- CO4 Understand the difference between a population and sample.
- CO4 Understand the difference between random assignment and random sampling.
- CO6 Understand validity and sampling concerns in research design.
- CO7 Distinguish between primary and secondary data and understand the advantages and disadvantages of each.
- CO8 Understand the alternative level of measurement available for data collection and select the appropriate level.
- CO9 Prepare data for analysis.
- CO10 Know how to report research results.
- CO11 Critically evaluate research proposed or performed by others.
- CO12 Define an economic problem.
- CO13 Review some relevant literature related to the problem.
- CO14 Use economic data and analysis to describe or explain the problem.
- CO15 Present a conclusion or resolution.

## **History of Economic Thought**

Upon successful completion of the course a student will be able to:

- CO1 Understand the evolution of modern economic theories.
- CO2 Understand the sources of controversies in modern economics.
- CO3 Understand classical and modern version of Marxism.
- CO4 Understand the nature of an economic system; varieties of economic system.
- CO5 Appreciate well-developed economic theories and distinguish them from inconsistent ones.

## **Economic Development**

- Upon successful completion of the course a student will be able to:
- CO1 Understand the causes of underdevelopment in the Third World.
- CO2 Understand the role of agriculture, industry, and trade in the development process of the less developed countries.
- CO3 Understand the extent to which economic theories may be helpful in the design of development policies in the less developed countries.

#### **International Economics**

Upon successful completion of the course a student will be able to:

- CO1 Understand the various reasons why countries engage in international trade, including the direction and volume of trade between nations.
- CO2 Use models of trade to demonstrate the gains from exchange as well as the effects on income distribution within countries due to trade with foreign nations.
- CO3 Understand how international factor mobility affects an economy.
- CO4 Analayze current issues and policies using the concepts of international trade theory.
- CO5 Understand the role international institutions play in affecting trade flows across the world.
- CO6 Understand the accounting methods and concepts used by countries to keep track of international transactions.
- CO7 Understand the role of exchange rates and how they are determined in the short-run and long-run.
- CO8 Analyze how various policies, both domestic and foreign, may affect exchange rates and economic welfare.
- CO9 Understand the functioning of various exchange rate regimes, (such as gold standards and floating exchange rate mechanisms.
- CO10 Understand the role played by various international institutions with regards to exchange rate values and the flow on international assets.

## 5. Course Outcomes of Physical Education:

#### **Introduction of Physical Education and Sports**

- CO1 To make the student aware of the true meaning and definition of Physical Education and Sports.
- CO2 To acquaint the student regarding the aim and objective of physical education.
- CO3 To enable the student to understand the modern concept/ trend of physical education.
- CO4 To help the student to familiarize with the scope of physical education.
- CO5 To analyse the nature of physical education as to whether it is an art or a science.

CO6 Student will be able to understand physical fitness, concept of Balance Diet. And Bad Habits with special reference to Physical Fitness Alcohol and Tobacco.

#### **History of Physical Education.**

- CO1 To understand Physical Education Periods Advent of Aryans 2000 B.C. (Early period), Epic Age 1500 B.C. to 500 B.C. and Buddhist period in Ancient India with reference to the following activities: Archery, wrestling, Stick fighting, Yogic exercises.
- CO2 Student will be able to understand Development of Physical Education in India: Mongal period, British Period, Post-Independence Period.
- CO3 Student will be able to understand Development of Physical Education in Maharashtra: Maratha Period: 1600 A.D. onwards, British Period: 1800 A.D. onwards, period of Nationals: 1920 onwards, modern period: 1937 onwards.
- CO4 To understand the History of Ancient Olympic Games and Legendary origin, Significance of the games, rules of the games and eligibility, conduct of events, awards decline of ancient Olympic.
- CO5 To know the History of Modern Olympic Games and Revival of the Olympic Games, Controlling body, rule of eligibility for competition, organization and conduct of the games, venues, event, opening ceremony, awards, closing of ceremony, Olympic flag, Olympic torch.
- CO6 To know the History of Asian Games and controlling body, rule of eligibility for competition, organization and conduct of the games, venues, events, etc.

#### Organization and Administration in Physical Education and Sports

- CO1 To understand Organization and Administration in Physical Education and Sports, Meaning, Definitions, Concepts and its need in Physical Education and Sports, Principles of Organization and Administration in Physical Education and Sports.
- CO2 To understand Organization, various competitions of Inter-collegiate Sports of Shivaji University, Inter-Zonal Sports of Shivaji University, Inter-university Sports and All India Inter-University Sports With special reference to organize body, Finance and various Committees and their functions.
- CO3 Student will be able to understand Different Institutions for training in Physical Education Level, Bharatratna Award, Arjun Awards, Dronacharya Awards, Rajiv Gandhi Khel Ratna Awards with eligibility and nature.
- CO4 To understand the what type of award get in India such like National Level Awards Bharatratna Award, Arjun Awards, Dronacharya Awards, Rajiv Gandhi Khelratna Awards with eligibility and nature.

#### **Health Education**

CO1 To get a knowledge of Health Education of Meaning, definitions of Health Education and Nature and scope of Health Education.

- CO2 To get Knowledge of Personal Health, Factors of Personal Health: Physical, Mental, and Social Factors influence on Health: Heredity, environment, Habits Exercise.
- CO3 To get Knowledge of Social Health Problems and futurity of social Health, Role of Government in social Health and Communicable disease Causes and Prevention (Malaria, Dengu, Chikan Gunia, SawinFlue.) and HIV/AIDS causes, symptoms and prevention.
- CO4 To make the student aware of the Health of the Community, Health problems in family, Community, School and colleges and Role of Government in community health.
- CO5 To enable the student to understand Different Health Programmes: Importance of exercise in Health and fitness and Drugs, Alcohol and Tobacco-Advance effect on sports performance.
- CO6 To understand about World Health Organization (WHO) its Aims and Objectives, program and projects and World Health Organization in India.

## **Dietetics and Hygiene**

- CO1 To get knowledge about Dietetics and Hygiene of Food sources and their effect: Natural food, impure food, processed food, Stimulants and Athlete Diet Need arid importance.
- CO2 Student knowledge about Diet components: Carbohydrates, proteins, Fats, vitamins, Mineral Fibers and water with need and importance.
- CO3 To understand Balance Diet, Malnutrition Meaning, Definition and sources.
- CO4 To make the student aware of Underweight: causes sign and symptoms. and Obesity: causes, types, Signs and Symptoms.

#### **Recreation In Physical Education**

- CO1 To enable the student to understand the modern concept of Rhythm: Meaning, concept, definitions and Need and Importance of Rhythmic exercise, Classification Rhythmic exercise Traditional and Modern.
- CO2 To enable the student to understand the modern concept of Recreation: Meaning, Concept, Definition and Need and Importance of Recreation.
- CO3 To enable the student to understand the modern concept/ trend of recreation: Haiking, Treaking, Trips/picnic, Sports Camps and Competitions.
- CO4 To understand about Recreational Scheduling programmers provides for primary and secondary Schools, Colleges, universities & Industrial Workers.
- CO5 To get Knowledge of Recreational Games and Facilities and Importance of recreational Game, Recreational Facilities in Sports.

#### **Anatomy and Physiology**

CO1 To acquaint the student regarding the brief Introduction Anatomy, Physiology and Physiology of exercise Meaning, definition and Importance.

- CO2 To get knowledge of Circulatory System: Blood-Its constituents and functions, Heart Its Structure and function and Blood pressure, Pulse, Blood groups, Oxygen debt.
- CO3 To get knowledge of Digestive System: Organ of digestive system- Mouth, teeth, salivary glands, pharynx, oesphages, stomach, small and large intestine, pancreas, liver, structure and function –in brief and Excretory System: Kidney and skin it's Structure and function.
- CO4 To get knowledge of Nervous System: Structure of brain and spinal cord, Reflex action.
- CO5 To get knowledge of cell and its parts.
- CO6 To get knowledge of Skeletal System: Structure and classification, Names of bones of the body and Functions of Skeletal system.
- CO7 To get knowledge of Muscular System: Structure, classification of muscular system, Name various muscles of the body and Effect of exercise on Muscular system.
- CO8 To get knowledge of Respiratory System: The nose, pharynx, larynx, trachea, bronchioles, lungs structure and functions and knows as about Vital capacity, Second wind And Effect of exercise on respiratory system.

#### Yoga

- CO1 To make the student aware of the true Aim, Objections and Scope of Yoga in Human life.
- CO2 To understand Yoga and Physical Health: Promotives, Preventive and Curative aspects Of Physical Health tackled through Yogic practices.
- CO3 To understand Relationship of Yoga and Mental Health: Nature of problems in mental health, Promotive, Preventive and Curative aspects of mental health through Yogic practices.
- CO4 To understand Relationship of Yoga with Emotional Health.
- CO5 To understand Effect of yogic exercise and Yoga on Vaious system of the Human Body.
- CO6 To get knowledge about Astang Yoga of patanjali Asana, Pranayam, pratyahar, Dharana, Dhyan, Samadhi
- CO7 To understand Benefits of Yoga in Modern life
- CO8 To get knowledge about Yoga and Sports: Psychophysical basis of promoting sports career, Contribution of Yogic practices for the development of Sports performances.

#### **Physical Education and Sports Practical**

- CO1 Student gets knowledge about, All Athletics events, knowledge of Rules & Regulations, how to mark running track, track and field athletics technical officials, Fundamental skills, Technique & Modern Style.
- CO2 To get knowledge about Indian Game: Kabaddi and Kho Kho it's knowledge of rules & regulations, ground measurement, Ground Marketing, technical officials, Fundamental skills Technique and performance

- CO3 To get knowledge about Ball Game: Volley ball, Hand Ball, Basket Ball, Table Tennis Foot Ball and Cricket its Knowledge, Rules & regulations, ground Measurement, Ground Marketing, technical officials, Fundamental skills Technique and performance.
- CO4 To get knowledge about Badminton knowledge of Rules & regulations, Ground measurement, Ground Marketing, Technical officials, fundamental skills, Technique and performance
- CO5 To get knowledge about Wrestling and Weight Lifting, its different Styles, Modern Technique and Perfomance, Rules & regulations, equipements.
- CO6 To get Knowledge about Fencing and Judo its Knowledge of Rules & regulations, technical officials, Fundamental skills, Techique and Perfomace.
- CO7 To get Knowledge about Gymnastics, Front Role, Back Role, Cartwheel, Dive and Role, Hand Stand and its Knowledge of Rules & Regulations, technical officials, Fundamental skills, Technique and performance.
- CO8 To get Knowledge about Suryanamaskar, Pranayam: Anulomvilom, Bhastrika, shitkari, shitalli and Yogasans: Padman, padhastan, veersan, Shawasan, Shabhasan, Navkasan, Tadasan, Suptavajrasan, Matsyasana, AkarnaDhanurasana, Ardhamachhindrasana, Buddha Padmasana and its performance.
- CO9 To get Knowledge about First Aid: Meaning, Objects, Important rules, Material in the First Aid Box and indentify Fracture-types, Signs and Symptoms, Bleeding-types, Signs and Symptoms-use of sing and Splint, Artificial Respiration- Meaning and Method of Artificial respiration, Bandage, Meaning, Types, Way of applying sling, simple dressing.

# **6. Course Outcomes of Geography:**

## Physical Geography of India

- CO1 Understanding physical setup of the country
- CO2 Student will be able to understand climate of India

#### **Economics Geography**

- CO1 Be able to understand basic concept in economic Geography
- CO2 Get acquainted with the relationship of human activities and resources
- CO3 Understand the economic situation of global level and apply this knowledge of local level
- CO4 Get acquainted with knowledge of regional resources.

## **Economic Geography of India**

- CO1 Be able to understand economic set up the country
- CO2 Learn about various agriculture products of India
- CO3 Learn about transportation facilities of India. e.g. Roadways, waterways and Airwalys.

#### **Urban Geography**

- CO1 Learn the basic concepts in urban geography
- CO2 Understand the various types of urban settlements and impact of site and situation on settlemetns,

#### **Political Geography**

- CO1 Understand how and why states are organized into regional grouping both formally and informally.
- CO2 Learn the relation between government and its people.
- CO3 Understand the influence of political power on geography space.

#### Map work and Map Reading

- CO1 Learn the importance of map making and map reading
- CO2 Understand the concept of scale and map projections.
- CO3 Learn the analysis of land forms.

#### Advanced Techniques and Field work.

- CO1 Be able to understand the importance of field work and advanced techniques in Geography
- CO2 Learn the use of computer analysis in geographical data.

## 7. Course Outcomes of Political Science:

#### B.A.I

- CO1 Understand the key concept of Political Science, state; democracy, nation.
- CO2 Understand Indian Constitution.
- CO3 Learn the Philosophy of Indian Constitution

#### **B.A.II**

- CO1 Understand basic concept of Political Science and state theory.
- CO2 Acquaint with ancient Indian Political Thoughts.
- CO3 Understand of to theories of origin state.
- CO4 Get the knowledge local self -Government.
- CO5 Understand political, social movement in Maharashtra.
- CO6 Explain political, classical, traditional thoughts Maharashtra.

#### **B.A.III**

CO1 Understand modern political concepts, unitary and federal form Government System

- CO2 Understand public, personal, financial administration.
- CO3 Understand the main theories of International Politics
- CO4 Understand the constitution of America, China and Sweden.
- CO5 Understand the western classical tradition from Plato to Montesquieu

## 8. Course Outcomes of History:

#### B.A. I

- CO1 Understand the history of the Rise of Maratha Power.
- CO2 Acquaint the students with the sacrifices made by Maratha leaders and people for the sake of freedom and sovereignty of the region.

#### B.A. II

- CO1 Understand the beginnings and growth of nationalist consciousness in Maharashtra.
- CO2 Explain the contribution of Maharashtra to the national movement
- CO3 Understand the structural changes initiated by colonial rule in Indian economy.
- CO4 Understand the events which lead to the growth of nationalism in India.

#### **B.A.III**

- CO1 Understand the transition of humans in India from Hunters to Farmers.
- CO2 Describe the different types of historical sources available for writing the history of medieval India
- CO3 Explain the causes and consequences of the Reformation
- CO4 Describe the political conditions of the Marathas up to the year
- CO5 Understand the definition and scope of the subject of History

#### 9. Course Outcome of Commerce:

After successful completion of the course a students will be able to:

#### **Business & Industrial Management:-**

- CO1 To familiarize the students with the basic concept and principles of management
- CO2 To make students familiar with the modern management being used by the corporate world
- CO3 To provide basic knowledge of 4P's, Marketing, Retailing and tools and techniques of marketing
- CO4 |To makes students familiar with the subject of industrial management and the importance of industrial management

#### **Advanced Accounting & Cost Accounting:-**

CO1 To impart basic accounting knowledge as applicable to business

- CO2 To develop awareness of students and train them in corporate accounting in the practical aspects and computerized accounting
- CO3 To expose students to advanced accounting issues and practice, to gain working knowledge of auditing procedure, techniques and skills
- CO4 To gain the understanding of cost accounting, concepts and techniques

## Fundamentals of Entrepreneurship:-

- CO1 To acquaint students with the concepts of the rural and women entrepreneurship
- CO2 To impart conceptual knowledge of project management
- CO3 To encourage the students through successful stories entrepreneurs

#### B.Com I

- CO1 Learn the concepts of micro economics dealing with consumer behaviour.
- CO2 Understand the supply side of the market through production and cost behavior of firm.
- CO3 Know the procedure of conversion of Partnership firm in to limited company.
- CO4 Learn basic management concepts, principles and practices.
- CO5 Get the basic knowledge of principles and practice of insurance and life insurance
- CO6 Learn the concepts, principles, tools and marketing.
- CO7 Learn communication skills with specific focus, business correspondence and telephonic communication.
- CO8 Learn basic mathematics & develop the skills which are required for professional exams.

#### **B.Com II**

- CO1 Learn the meaning and types of Companies, Companies Act 2013.
- CO2 Get theoretical knowledge of Entrepreneurship, qualities and skills
- CO3 Learn functions of money and measurement of money supply.
- CO4 Explain the scope of statistics in business, perform classification and tabulation, and represent the data by means of diagrams and graphs.
- CO5 Learn the macro variables and components of macro economics
- CO6 Understand changing value of money and its impacts on economy.
- CO7 Develop communication skills in English, both oral and written
- CO8 Develop awareness amongst the students about environment protection.

#### **B.Com III**

- CO1 Familiar with the modern management practices being used by the corporate world
- CO2 Understand various Laws and Acts which have impact on business and industry.

- CO3 Understand the basic concepts of Business Environment.
- CO4 Understand meaning, principles of Co-operation
- CO5 Practice the preparation of financial statements of banks
- CO6 Gain working knowledge of generally accepted auditing procedure, techniques & Skills.
- CO7 Understand element of cost and cost sheets.
- CO8 Understand the basic concepts of income tax and basis of charge.
- CO9 Understand the importance and applicability of industry management
- CO10 Understand banking law and practice in relation to the banking system in India.

## 10. Course Outcomes of Chemistry:-

#### **Physical Chemistry**

At the end of course, the students

- CO1 will be familiar to nature of matter and light
- CO2 will know the basics of photochemistry and spectroscopy
- CO3 will have the basic knowledge of solutions, ideal and non-ideal solutions.
- CO4 Will be familiar with fluorescence and photorescece.
- CO5 Will know the E.M.F series and types of electrode.
- CO6 Will have the knowledge of reversible and irreversible cell
- CO7 Will be familiar with different thermodynamic parameters
- CO8 will be familiar to phase rule and phase diagram
- CO9 Will have the knowledge of thermodynamics
- CO10 will have the basic knowledge of solid state and laws of crystallography
- CO11 Will know the methods used to measure and detect nuclear radiations
- CO12 Will know the opposing, side and consecutive reaction
- CO13 Will be familiar with adsorption and mechanism of adsorption

#### **Inorganic Chemistry**

At the end of the course, the students

- CO1 Will be familiar to hard and soft acids and bases
- CO2 Will know the basics of Molecular orbital theory
- CO3 Will be familiar with Geometrical and Optical isomerism in inorganic complexes
- CO4 Will be familiar with Metals, Semiconductors and superconductors

COS	Will know basic and different types of inorganic polymer
CO6	Will be familiar with applications of superconductor
CO7	Will be familiar with different organometallic compounds
CO8	Will be familiar to different inorganic reaction mechanism
CO9	Will have the knowledge of thermodynamics of metal complexes
CO10	Will have the basic knowledge of nuclear chemistry
CO11	Will know about manufacture of iron and steel in industry
CO12	Will have knowledge about bio-inorganic chemistry
CO13	Will be familiar with transuranic elements
Organic Chemistry	
At the end of the course, the students	
CO1	Will be familiar with the nature of electromagnetic radiation
CO2	Will know the basics of ultra violet and mass spectroscopy

# CO2 Will know the basics of ultra violet and mass spectroscopy CO3 Will have the knowledge to calculate the max values for dienes and enone system CO4 Will be familiar with principles of Infrared spectroscopy CO5 Will know different frequency of various functional groups CO6 Will know the basics of Nuclear magnetic resonance spectroscopy CO7 Will able to find out the structure of unknown compound from given data CO8 Will be familiar to different organic reaction mechanism

CO10 Will have the basic knowledge of addition reaction
CO11 Will know about synthesis of natural products
CO12 Will have knowledge action of drug

CO13 Will be familiar with synthesis and uses of some drugs

Will have the knowledge about different organic reagents

## **Industrial Chemistry**

CO9

At the end of the course, the students

CO1 will be familiar with the different industrial process

CO2 Will know the basics corrosion and passivity

CO3 Will have the knowledge of manufacturing process of different chemicals widely used in chemical industries

CO4 Will be familiar with different factors causing corrosion
CO5 Will know different methods used for protection of metal from corrosion
CO6 Will know the manufacturing of Sugar in industry
CO7 Will have the knowledge of soup and detergents cleansing action
CO8 Will familiar with Nanomaterials and its characterization techniques

## **Analytical Chemistry**

At the end of the course, the students

- CO1 will be familiar with the basics of titrimetric analysis
- CO2 Will have the knowledge of different potentiometric titration
- CO3 Will the basics of colorimetry and spectrophotometry
- CO4 Will be familiar with applications of flame photometry
- CO5 Will know different methods used for protection of metal from corrosion
- CO6 Will know the basic of chromatography
- CO7 Will have the knowledge of instruments used for chemical analysis
- CO8 will familiar with basics of different analysis techniques

## **Laboratory Practical**

After the successful completion of course, the student will able to:

- CO1 Apply practical knowledge to industrial application and for developing methods
- CO2 Know the kinetics of various reaction
- CO3 Use the Conductometer for different titrations
- CO4 Handle the Refractometer, Colorimeter and pll meter and use these instruments for different analytical applications
- CO5 Know the application of gravimetric estimation
- CO6 Know the preparation of different coordination compounds
- CO7 Able to carry out analysis of different commercial samples like talcum powder, milk etc.
- CO8 Carry out the Organic qualitative analysis (binary mixture)
- CO9 To separate solid-solid, solid-liquid and liquid-liquid mixture by chemical method
- CO10 Estimate the amount of analyte by chemical method
- CO11 Prepare different Organic compound
- CO12 Identify the protocol for purity analysis

#### **Organic Chemistry**

At the end of the course, the students

- CO1 will have knowledge about conformational isomer
- CO2 Will know the mechanism of different name reaction
- CO3 Will have the knowledge to calculate the max values for dienes and enone system
- CO4 Will be familiar with reaction of different heterocyclic compounds
- CO5 Will know importance of green chemistry

#### **Analytical Chemistry**

At the end of the course, the students

- CO1 will have knowledge about basic concepts in analytical chemistry
- CO2 Will know the mechanism of gravimetric analysis
- CO3 Will have the knowledge of different fertilizers and its analysis
- CO4 Will be familiar with different conduct metric titrations
- CO5 Will know basics of inorganic qualitative analysis

#### **Physical Chemistry**

At the end of the course, the students

- CO1 Will have knowledge about basic concept in electrochemistry
- CO2 Will know about the thermodynamics third law
- CO3 Will have the knowledge of third order reaction
- CO4 Will be familiar with different physical properties of liquid

#### **Inorganic Chemistry**

At the end of the course, the student

- CO1 will have knowledge about different properties of transition elements.
- CO2 Will know about the basics of coordination chemistry
- CO3 Will have the knowledge of crystal field theory
- CO4 Will be familiar with chelate and complex formation
- CO5 Will have knowledge about different catalytic reaction

## **Laboratory Practical**

After the successful completion of course, the student will able to:

- CO1 Apply practical knowledge to industrial application and for developing methods
- CO2 Know the kinetics of various reaction
- CO3 Use the Conductometer for different titrations
- CO5 Handle the Refract meter, Conductometer & viscometer & use these instruments for different analytical applications
- CO6 Know the application of gravimetric estimation
- CO7 Know the preparation of different coordination compounds
- CO8 Able to carry out analysis of drug like vitamin c
- CO9 Carry out the Organic qualitative analysis
- CO10 Prepare different Organic compound
- CO11 Identify the protocol for purity analysis
- CO12 Learning to work in group and intimate standard procedure for practical work

## 11. Course outcomes of Physics:

## **Mechanics and Properties of Matter**

CO1 Students understand properties of matter and gain basic knowledge about mechanics.

#### **Oscillations Waves and Optics**

CO1 Properties and nature of light cleared. Students made familiar to knowledge of optical instruments.

#### KT of gases Heat and Thermodynamics

CO1 Students are exposed to knowledge of different thermodynamic parameters.

#### **Electricity, Magnetism and Basic Electronics.**

- CO1 Students will have knowledge of laws of electricity and magnetism.
- CO2 Will study basic electronic circuits with the applications.

#### **Practical Annual**

At the end of course students can

CO1 Easily handle instruments like spectrometer.

- CO2 Will know use of instruments in day to day life.
- CO3 Can study optical experiments easily.

#### **General Physics Sound and Acoustics**

CO1 Student know almost all properties of matter. Exposed to ultrasonics and building acoustics.

## **Electronics and Computer Programing**

- CO1 Students able to write computer programmes.
- CO2 Will design simple electronic circuits.

#### **Optics and LASERS**

CO1 Students gain theoretical knowledge about defects in optical instruments and how to reduce it.

## **Relativity and Modern Physics**

- CO1 Able to know how speed of object affects its property.
- CO2 All laws of mechanics in light of relativity are studied.

#### **Practical: Annual**

At the end of course students are able

- CO1 To develop skills of handling the different instruments
- CO2 Build and test basic electronic circuits
- CO3 To apply practical knowledge to business purpose.

#### **Mathematical and Statistical Physics**

- CO1 Study related to co-ordinate system done by students
- CO2 Students are able to study the basic concepts of radiation and its experimental study
- CO3 Basic concepts of Statistical physics and quantum physics studied by students so that they can solve problems in related topics.

#### **Quantum Mechanics**

CO1 Basic concepts of Matter Waves are made clear

CO2 Nature of matter particle with respect to Energy and Momentum understood by students

#### **Classical Mechanics**

- CO1 Various techniques of Calculus, variation and their applications made clear
- CO2 Concepts regarding different forces understood by students

#### **Atomic Physic: Astronomy and Astrophysics**

- CO1 Students get knowledge of origin of entire Universe.
- CO2 Space Research attitude developed among the students

#### **Nuclear and Particle Physics**

- CO1 The students will familiar with different techniques used in study of atomic particles
- CO2 The students will have basic knowledge about Nuclear Physics

#### **Energy Studies and Material Science**

- CO1 Student will understand importance of current issues regarding environment
- CO2 Provide knowledge about non-conventional energy sources and their importance
- CO3 Students will introduced to nanotechnology.

#### **Electrodynamics and electromagnetic:**

- CO1 Students will able to solve the problems in theoretical physics related to magnetic fields...
- CO2 Students will able to study behaviour of fundamental matter particles in detail.

#### **Solid State Physics and Solid State Devices**

- CO1 Students made familiar with recent trends in research in advanced Materials
- CO2 Students introduced to different solid state electronic devices

#### **Practical: Annual**

After successful completion of practical work, Students will able to.

- CO1 Motivate society towards innovations in physical sciences
- CO2 Apply practical knowledge for industrial application
- CO3 Explain importance of nonconventional energy sources and their use

# 12. Course Outcomes of Botony:

- CO1 To understand and apply the basic principles and rules of Botanical nomenclature
- CO2 Be familiar with methods of systematic, both traditional and modern knowledge
- CO3 Recognize representatives of local flora
- CO4 An introduction to plant cell, plant anatomy, plant physiology
- CO5 To study the life cycles and characteristics of the plants
- CO6 Use in construction of phylogenies and evolutionary relationships
- CO7 Agricultural and economically use of plants
- CO8 Will have the knowledge of plant molecular biology, plant pathology
- CO9 Will be familiar with basics of plant pathology
- CO10 Understand the basics of plant biotechnology
- CO11 Will have the basic knowledge of paleobotany
- CO12 Familiar with basics of floriculture, Sericulture, Ethnobotany
- CO13 Students are able to identify and classify the different plants

## 13. Course Outcomes of Mathematics:

- CO1 Students will be able to explain the core ideas and the techniques of mathematics at the college level.
- CO2 Students will be able to apply rigorous, analytic, highly numerate approach to analyze, execute tasks and solve problems in daily life and at work.
- CO3 Students will be able to recognize the power of abstraction and generalization, and to carry out investigative mathematical work with independent judgment.
- CO4 Students will be able to setup mathematical models of real world problems and obtain solutions in structured and analytical approaches with independent judgment.
- CO5 Students will be able to carry out objective analysis and prediction of quantitative information with independent judgment.
- CO6 Students will be able to demonstrate a systematic knowledge of learning processes and a professional attitude in classroom teaching of mathematics and IT.
- CO7 Students will be able to communicate effectively about mathematics to both lay and expert audiences utilizing appropriate information and communication technology.
- CO8 Students will be able to work independently, and to collaborate effectively in team work and team building.

- CO9 Students will be able to conduct self-evaluation, and continuously enrich themselves through lifelong learning.
- CO10 Students will be able to communicate to lay audiences and arouse their interest in the beauty and precision of mathematical arguments and science.
- CO11 Students will be able to recognize the importance of compliance with the ethics of science and being a responsible citizen towards their community and a sustainable environment.

Criterion - II Convener

**Teaching Learning and Evaluation** 

I/C Principal
I/C PRINCIPAL
Sahakanbhushushushk Pati
College, Kurundwad