Rayat Shikshan Sanstha's

DADA PATIL MAHAVIDYALAYA, KARJAT

Dist. Ahmednagar 414402.



PROGRAMMES OUTCOMES (POS) PROGRAMME SPECIFIC OUTCOMES (PSOS) COURSE OUTCOMES (COS)

2017-18

PREFACE:

Programme outcomes reflects the skills, knowledge and behaviour that students acquire. Programme specific outcomes are what the students of a specific programme should be able to do at the time of studying in the programme. Course outcomes is the blue-print of unique knowledge and skills expected to be gained from a given course. Programme outcomes and programme specific outcomes are attained through the attainment of course outcomes.

Measurement of attainment of POs, PSOs and COs is done regularly through formative and summative methods. Through class tests understanding ability of the students can be assessed. Group discussions and seminars reflect conceptual understanding of students. Home assignments and classroom assignments builds writing ability among students. Some activities like quiz competition also used to monitor student's progress. Participation of students in National/ International/ State/ Regional level conferences/ Seminars/ Webinars expose themselves to the new horizons of knowledge. Short duration research Projects assigned to UG and PG students of science faculty inculcate research interest among students. Field visits, study tours, surveys, organized by various departments improves curricular enrichment among students. Via Co-curricular activities also behavioural outcome of the students are assessed

Course outcomes (COs) also referred as learning outcomes (LOs) are measurable statements that concretely state what students are expected to learn in a course. The courses assigned to UG and PG classes of Arts faculty are mainly focuses on Student's ability to summarize language acquisition theory and research, evaluate pedagogical materials, build the multidimensional personality and able to correlate languages with social sciences.

The courses assigned to UG and PG classes of Science faculty engage students to understand the role of science in society; and its personal, social and global importance. Students can able to understand environmental concerns and help them change their attitude for more positive, proactive, eco-friendly and sustainable lifestyles. The courses assigned to UG and PG classes of commerce faculty builds the capability of the students to make decisions at personal professional level. The knowledge of different specializations in Accounting, costing, banking and finance with the practical exposure helps the students to stand in any organization. The course outcomes of all the programmes communicated to the students at the beginning of each semester as well as displayed to college website.



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PROGRAMME OUTCOMES (PO)

For every stream, broad expectations listed by the university as well as Institution. The goal of creating an academic program assessment plan is to facilitate continuous program level improvement. A program assessment plan should be developed collaboratively among faculty who teach the program. A program level outcome assessment plan provide faculty with a clear understanding of how their program is assessed. Program outcomes are the focus for program assessment.

> <u>Arts (B.A./M.A)</u>

The programmes under Arts faculty are broadly categorized into Languages and Social Sciences.

- **PO:1-** Specific, measurable statements of what graduating / existing students should know, be able to do, believe or value after completing the program.
- **PO:2-** Depends on the program mission statements.
- **PO:3-** Students summarize Language acquisition theory and research.
- **PO:4-** Students evaluate pedagogical materials.
- **PO:5-** Students build the multidimensional personality and able to correlate Languages with social sciences.
- **PO:6-** Demonstrate proficiency in a range of techniques and media.
- **PO:7-** Communication: Demonstrate familiarity with and ability to analyze both verbally and in writing issues and forms of contemporary art with a clear understanding of historical precedents.
- **PO:8-** Critical Thinking: Demonstrate the ability to articulate an insightful response and analysis of a work of art in order to participate in discussions and studio critiques.

Commerce (B.Com./ M.Com):

- PO 1: After completing three years for Bachelors in Commerce (B.Com) program, students would gain a thorough grounding in the fundamentals of Commerce and Finance.
- **PO** 2: The commerce and finance focused curriculum offers a number of specializations and practical exposures which would equip the student to face the modern-day challenges in commerce and business.
- **PO -3:** The all-inclusive outlook of the course offer a number of value based and job oriented courses ensures that students are trained into up-to-date. In advanced accounting courses beyond the introductory level, affective development will also progress to the valuing and organization levels.

> Science (B.Sc./ M.Sc):

- **PO-1:** Conduct research relevant to a scientific issue, evaluate different sources of information including secondary data, understanding that a source may lack detail or show bias.
- **PO-2:** Appreciate the role of science in society; and its personal, social and global importance; and how society influences scientific research.
- **PO-3:** To understand and analyze the data (qualitatively/quantitatively) to identify patterns and relationships, identify anomalous observations, draw and justify conclusions
- **PO-4:** To recognize questions that are appropriate for scientific investigation, pose testable hypotheses, and evaluate and compare strategies for investigating hypotheses.
- **PO-5:** Students should appreciate the role of science in society; and its personal, social and global importance.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PROGRAMME SPECIFIC OUTCOMES (PSO)

ARTS FACULTY (Languages & Social Sciences):

1) B.A. ENGLISH

- **PSO:1-** Use correct English in oral as well as written form.
- **PSO:2-** Inculcate the human values for one's transformation of behavior.
- **PSO:3-** Interpret the literary works by critical analysis.
- **PSO:4-** Compare literary works of the great writers and philosophers by using their logic and literary competency Nurture themselves in soft skills and develop research aptitude.
- **PSO:5-** Find jobs for their livelihood Be motivated for their further education.

2) B.A. HINDI

- **PSO:1-** Develop competency in Literary Forms. (Hindi Poetry & Fiction)
- **PSO:2-** Develop Reading, Writing & Communication Skills in Hindi.
- **PSO:3-** Get information about the history of ancient, medieval and modern Hindi Literature.
- **PSO:4-** Learn the literary works on the basis of the foundation laid by the scholars.
- **PSO:5-** Get information about the Literary Theories. Develop Approach of Hindi Linguistics & Grammar.
- **PSO:6-** Get the jobs for their livelihood.
- **PSO:7-** Be motivated for their further education

3) B.A. MARATHI

- **PSO:1-** Develop competency in Literary Forms. (i.e. Marathi poetry, autobiography, novel, short story, drama & performing prose)
- **PSO:2-** Develop Reading, Writing & Communication Skills in Marathi.
- **PSO:3-** Get Information about the history of Saint Literature.
- **PSO:4-** Get Information about Literary Theories.
- **PSO:5-** Get Information about the history of modern Marathi Literature.
- **PSO:6-** Apply the study of Marathi Linguistics & Grammar in their practical life.

PSO:7- Study News Writing for Media. Nurture themselves in soft skills and develop research aptitude.

PSO:8- Be motivated for their further education

4) B.A. HISTORY

- **PSO:1-** Understand the basic themes, concepts, chronology and the Scope of Indian History.
- **PSO:2-** Be Acquaint with the range of issues related Indian History and its distinctive eras.
- **PSO:3-** Understand the history of the countries other than India with comparative approach.
- **PSO:4-** Think and argue historically and critically in writing and discussion.
- **PSO:5-** To study further in the applied field of history as archaeology.

5) B.A. ECONOMICS

- **PSO:1-** Understand basic concepts of economics.
- **PSO:2-** Analyze economic behavior in practice. Understand the economic way of thinking.
- **PSO:3-** Analyze historical and current events from an economic perspective.
- **PSO:4-** Write and discuss economical issues at national levels.
- **PSO:5-** Find alternative approaches to economic problems through the exposure from the coursework in allied fields.
- **PSO:6-** Develop an ability to suggest solutions for various economic problems.
- **PSO:7-** Prepare for the Competitive Examinations as MPSC, UPSC.

6) B.A. GEOGRAPHY

- **PSO:1-** Study the types of land and processes.
- **PSO:2-** Understand the structure, composition of different spheres of the earth and its Atmosphere.
- **PSO:3-** Understand importance of oceans, rivers and water and find the ways of their conservation.
- **PSO:4-** Understand the Function and types of Biogeography.
- **PSO:5-** Understand the science of Remote Sensing Make use of GIS & GPS software

PROGRAMME SPECIFIC OUTCOMES (PSO)

COMMERCE FACULTY:

- PSO 1: Students will be able to demonstrate progressive learning of various tax issues and tax forms related to individuals. Students will be able to demonstrate knowledge in setting up a computerized set of accounting books
- PSO 2: Students will demonstrate progressive affective domain development of values, the role of accounting in society and business.
- **PSO** 3: Students will learn relevant financial accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
- **PSO 4:** Students will learn relevant managerial accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
- PSO 5: Leaners will gain thorough systematic and subject skills within various disciplines of commerce, business, accounting, economics, finance, auditing and marketing.
- **PSO 6:** Learners will be able to recognise features and roles of businessmen, entrepreneur, managers, consultant, which will help learners to possess knowledge and other soft skills and to react aptly when confronted with critical decision making.
- **PSO–7:** Learners will be able to prove proficiency with the ability to engage in competitive exams like CA, CS, ICWA and other courses.
- **PSO** 8: Leaners will acquire the skills like effective communication, decision making, problem solving in day to day business affaire.
- PSO 9: Learners will involve in various co-curricular activities to demonstrate relevancy of foundational and theoretical knowledge of their academic major and to gain practical exposure.
- PSO 10: Learners can also acquire practical skills to work as tax consultant, audit assistant and other financial supporting services.
- **PSO -11:** Learners will be able to do higher education and advance research in the field of commerce and finance.

PROGRAMME SPECIFIC OUTCOMES (PSO)

SCIENCE FACULTY:

B.Sc. BOTANY

- **PSO:1-** Understand the structural organization and variation in chromosomes.
- **PSO:2-** Get self-employment in the fields as: mushroom Cultivation, organic manure preparation, the horticultural plant production, cultivation of crops in poly-house condition, plant tissue, culture laboratories etc.
- **PSO:3-** Understand plant structures in the context of physiological functions of plants.
- **PSO:4-** Understand lipid metabolism in plants.
- **PSO:5-** Understand the morphological and structural organization of Cryptogams and Phanerogams.
- **PSO:6-** Economics Botany and plant utilization in concern with human life.
- **PSO:7-** Diversity of plants
- **PSO:8-** National plant wealth.
- **PSO:9-** Developmental biology of plants. Industrial application of microorganism

B.Sc. CHEMISTRY

- **PSO:1-** Provide a broad foundation in chemistry that stresses scientific reasoning and Analytical problem solving with a molecular perspective.
- **PSO:2-** Achieve the skills required to succeed in graduate school, the chemical industry and professional school.
- **PSO:3-** Get exposures of a breadth of experimental techniques using modern instrumentation.
- **PSO:4-** Understand the importance of the Periodic Table of the Elements, how it came to be, and its role in organizing chemical information.
- **PSO:5-** Understand the interdisciplinary nature of chemistry and to integrate knowledge of mathematics, physics and other disciplines to a wide variety of chemical problems.
- **PSO:6-** Learn the laboratory skills needed to design, safely and interpret chemical research.
- **PSO:7-** Acquire a foundation of chemistry of sufficient breadth and the depth to enable them to understand and critically interpret the primary chemical literature.
- **PSO:8-** Develop the ability to communicate scientific information and research results in written and oral formats. learn professionalism, including the ability to work in teams and apply basic ethical principles.

B.Sc. PHYSICS

- **PSO:1-** Demonstrate a rigorous understanding of the core theories & principles of physics, which includes mechanics, electromagnetism, thermodynamics, & quantum mechanics.
- **PSO:2-** Learn the Concepts as Quantum Mechanics, Relativity, introduced at degree level in order to understand nature at atomic levels.
- **PSO:3-** Provide knowledge about material properties and its application for developing technology to ease the problems related to the society.
- **PSO:4-** Understand the set of physical laws, describing the motion of bodies, under the influence of system of forces.
- **PSO:5-** Understand the relationship between particles & atom, as well as their creation & decay.
- **PSO:6-** Relate the structure of atoms & subatomic particles Understand physical properties of molecule the chemical bonds between atom as well as molecular dynamics.
- **PSO:7-** Analyze the applications of mathematics to the problems in physics & develop suitable mathematical method for such application & for formulation of physical theories.
- **PSO:8-** Learn the structure of solid materials & their different physical properties along with metallurgy, cryogenics, electronics, & material science.
- **PSO:9-** Understand the fundamental theory of nature at small scale & levels of atom & sub-atomic particles.

B.Sc. ZOOLOGY

- **PSO:1-** Understand the nature and basic concepts of cell biology Understand the basic concepts of chordates and non-chordates.
- **PSO:2-** Understand the concepts of Sericulture, Apiculture, Fishery & Agricultural pests.
- **PSO:3-** Understand the various Applications of Biotechnology Understand the Lamarkism, Neo-Lamarkism and Darwinism.
- **PSO:4-** Understand the term ELISA technique and DNA finger printing.
- **PSO:5-** Understand the process of evolution.
- **PSO:6-** Understand the scope of Medical Zoology

COURSE OUTCOMES (COs)

COURSE OUTCOMES (CO)

> ARTS FACULTY (Languages & Social Sciences):

MARATHI:

B.A I (Marathi)

- 1. Understanding the interrelation between literature and society.
- 2. Explaining the nature of language and literature.
- 3. Obtaining the skills of literary criticism.
- 4. Imbuing the essay writing skills.
- 5. Illustrating the nature of literary forms like one-act-play, travelogue and short story.

B.A. II (Marathi)

- 1. Introduction of the medieval Marathi language and literature.
- 2. Introduction of the contemporary literary works.
- 3. Acquiring the skill of translation.
- 4. Explanation of the need and significance of editing.

Poetry:

- 1. Acquaintance with oriental poetry.
- 2. Understanding the nature and features of poetry.
- 3. Creating the skill of critical appreciation of a poem.
- 4. Developing the poetic devices and their usages.

B.A.III Linguistics:

- 1. Getting acquainted with modern linguistics.
- 2. Understanding origin, nature and function of language.
- 3. Getting information about phonetics.
- 4. Enhancing the interest in Marathi language.

B.A.III Medieval Marathi Literature:

- 1. Introduction of the historical survey of medieval Marathi literature.
- 2. Introduction of the literary forms in medieval literature.
- 3. Explanation of the trends and structure of medieval Marathi literature.

B.A.III Utility and Creativity of Marathi Language:

- 1. Understanding the formal and informal language.
- 2. Developing various language skills.
- 3. Getting motivation for creative writing.
- 4. Understanding the technique of mass communication.

B.A.III Literary Criticism:

- 1. Introduction to various trends in literary criticism.
- 2. Understanding various trends in rural literature.
- 3. Understanding various trends in Dalit Literature.

ENGLISH:

Course Outcomes (CO's) B.A.I, B.A.II

- 1. Spoken communication and written communication.
- 2. Writing of Resume, letters of application, business letters.
- 3. Writing News-report, Essay, paragraph, review, etc.
- 4. Narration of experience, daily routine.
- 5. Interview Techniques.
- 6. Understanding and interpretation of poem, prose, essay, short stories, etc.

B.A.I, B.A.II & B.A.III (Optional & special English)

- 1. Enjoyment of literature
- 2. Pleasure of literacy forms such as novel, poem, play, and essay.
- 3. Critical understanding of literature.
- 4. Relation between literature and real life.
- 5. Emotional development of human mind.

ECONOMICS:

B.A I Indian Economy

- · Understanding characteristics, features, structural changes in Indian Economy.
- · Comprehension of the nature and impact of New Economic Reforms on the Indian Economy.
- · Knowing the problems of unemployment, poverty, rising economic and social inequality and problems of regional imbalances in India.
- Evaluating the changing role of agriculture, industrial and service sector and foreign sector in Indian Economy.
- Measuring the problems and prospects of cottage and small scale industries, and industrial sicknesses.
- · Measuring the growth, volume, composition and direction of India's foreign trade and capital inflow since 1991.

B.A-II Banks and Financial Institutions

- · Understanding the meaning, function and role of commercial banking.
- · Comprehending the procedure of an account opening, operating and closing.
- · Knowing the structure, function and role of RBI in economic development.
- · Judging the progress of financial inclusion.
- Evaluating the importance, characteristics and components of the financial Market.
- · Understanding the role and types of development banks and Non banking financial termediaries.
- · Realizing the banking reforms and Basel norms-I and II.

· Identifying recent trends in Indian Banking such as E- Banking, MICR Clearing, ATMs, Credit cards and Debit Cards, Travelers Cheques, Gift Cheques, Demat Account.

B.A.-II Macro Economics

- · Identifying the basic concepts and theories of Macro economics.
- · Awareness about changing macro economics policies and theories.
- Understanding various concepts such as; GDP, GNP NNP, Personal Income, Disposable Income, Per Capita Income, and National Income.
- · Identifying the factors determining gross domestic product, employment, the general level of prices, and interest rates.
- · Realizing the law of markets, consumption function and investment function.
- · Judging the role of fiscal policy and monetary policy in a Developing economy.
- Knowing features, phases and theories of trade cycles.
- Evaluating types, merits and demerits of taxes.
- · Comprehending the role of public finance in developing economy.

B.A.-III Micro Economics

- · Knowing the decision making of consumer.
- · Identifying the nature of revenue and cost of production.
- · Comprehending the demand function and production function.
- · Realizing various production theories.
- · Clarifying the meaning of Marginal, average, total revenue, and Marginal, average and total cost and its implication.
- Awareness of different markets structure.
- · Understanding pricing in different markets.
- Judging the factor pricing.

B.A.-III Research Methodology

- · Understanding the basic framework of research process.
- · Defining various research designs and techniques.
- Identifying various sources of information for literature review and data collection.
- · Discussing the ethical dimensions of conducting applied research.
- · Appreciating the components of scholarly writing and evaluate its quality.
- Knowing various aspects of Research in Economics.
- Understanding various data analysis techniques (Mean, Mode, Median, Range, Standard Deviation, Karl person coefficient of correlation).

· Ability to interpretation of data and report writing.

B.A.-III History of Economic Thoughts

- · Acquaintance with the economic thoughts of Classical, Nationalist and Socialist Thinkers.
- · Judging the development of economic thoughts.
- · Realizing the economic concepts and theories of Neo-classicals and Indian thinkers.
- Evaluating the development of Indian economic thoughts.

B.A-III Economics of Development

- · Understanding the concept and aspects of economic Development.
- · Knowing the theories of economic growth & Development.
- · Measuring the concept and issues of economic planning.
- · Discussing the need, types and necessary conditions of economic planning.

B.A.-III International Economics

- Elaborating the importance of the study of International Economics.
- Finding similarities and dissimilarities in inter-regional and international trade.
- · Knowing the changes in the import-export policies of India.
- Evaluating various types of exchange rates and its merits and demerits.
- · Discussing the types and effects of tariffs and quotas.
- Judging the function, merits and demerits of Foreign Capital, and International Corporation (IMF, IBRD, WTO and SAARC).

GEOGRAPHY:

Physical Geography

- 1. Understand the effect of rotation of revolution the Earth
- 2. Know the internal structure of the earth know the importance of longitudes & latitudes International Date line and Standard time
- 3. Understand interior structure of the earth
- 4. Understand Theory regarding of Origin of Continents and oceans
- 5. Study the formation of Rocks Understand the work of internal and external forces and their associated landforms.
- 6. Understand the importance of Atmosphere
- 7. Understand the composition of atmosphere
- 8. Know Measurement of Atmospheric Pressure and formation of Pressure Belts
- 9. Understand the types of winds

Human Geography

- 1. Understand the relationship of man and environment
- 2. Studies of races of man kinds.
- 3. Understand the modes of life of aximo, pigmy, gonad ,Bhil And nagas.
- 4. Importance of Right to Information Acts.

Geography of Maharashtra

- 1. Understand the Geographical Personality of Maharashtra
- 2. Study the Major river in Maharashtra
- 3. Understand the Geographical Personality of Maharashtra
- 4. Study of major crops of Maharashtra.
- 5. Acquire knowledge of forests in Maharashtra.

Remote Sensing & GIS

- 1. Understand the History of Remote Sensing
- 2. Know Arial Photographs and Satellite Imageries
- 3. Acquire Knowledge about Indian Remote sensing.
- 4. Investigate components and function of GIS
- 5. Study GIS Data models.
- 6. Introduce GPS and Its Functions.
- 7. Make use GIS & GPS software.

Population Geography

- 1.Understand the history of population
- 2. Understand the types of data
- 3. Study of distribution and density of population.
- 4. Get knowledge of population theories.
- 5. Investigate Current Issues and Problems in India

COURSE OUTCOMES (CO)

COMMERCE:

English for Business Communication

- 1. Spoken communication and written communication.
- 2. Writing of Resume, letters of application, business letters.
- 3. Writing News-report, Essay, paragraph,, Review, etc.
- 4. Narration of experience, daily routine.
- 5. Interview Techniques.
- 6. Understanding and interpretation of poem, prose, essay, short stories, etc.

Business Economics

- 1. Understanding the link between business economics and business decision.
- 2. Realizing the importance of demand forecasting and method of demand forecasting.
- 3. Justifying the demand function and production function.
- 4. Evaluating various production theories.
- 5. Clarifying the meaning of Marginal, average, total revenue, and Marginal, average and total cost and its implication.
- 6. Understanding different markets structure in marketing system

Financial Accounting

- 1 Understanding the concepts of financial Accounting
- 2 Exposure to nature and advantages of Accounting, Accounting concepts and conventions.
- 3. Introduction to Accounting standards in India
- 4. Obtaining the knowledge of computerized Accounting.
- 5. Getting knowledge about accounting procedure of partnership firm, accounts of professionals, single entry system, branch accounts and consignment accounts.

Principles of Business Management

- 1. Supporting to Achieve Group Goals.
- 2. Knowledge about motivating employees by providing financial and nonfinancial incentives.
- 3. Evaluating the economic growth and development of an organization.
- 4. Understanding the relation between individuals, groups, departments and between levels of management.
- 5. Comprehending the human resource productivity.

Principle of Marketing

1. Enhancing the skill of marketing among students.

- 2. Providing different techniques of marketing for increase of sales.
- 3. Creating the sense how to behave in the market while buying or selling ofproduct.
- 4. Understanding how to undertake crucial task such as competition analysis, production etc.
- 5. Providing information about buying pattern and different attitudes of consumers.

Marathi

- 1. Illustrating the nature of short story.
- 2. Explaining the nature of characterization, literate and philosophical writings.
- 3. Illustrating one-act-play, travelogue and autobiography as the forms of literature.
- 4. Illustrating the general skills and usages of Marathi in day-to-day life.

Insurance

- 1. Knowledge about importance of life insurance in own/family life & General Insurance in Trade & commerce.
- 2. Knowledge about business procedure of different Insurance Companies
- 3. Creating ability to handle critical situation and security about different perils (like fire, theft) and getting procedure of compensation.

Course Outcomes of B. Com.II

English for Business Communication

- 1. Spoken communication and written communication.
- 2. Writing of Resume, letters of application, business letters .
- 3. Writing News-report, Essay, paragraph,, Review, etc.
- 4. Narration of experience, daily routine.
- 5. Interview Techniques.

Corporate Accounting

- 1. Exposure to the issue of shares and debentures of the company
- 2. Attainment of knowledge about accounting procedure of company final account.
- 3. Understanding the accounting procedure amalgamation and absorption of company
- 4. Ability to get the knowledge about valuation of shares.
- 5. Understanding the accounts procedure of liquidation of Ltd. company.

Business Economics

- 1. Understanding the basic concepts and theories of Macro economics.
- 2. Awareness about changing macro economics policies and theories.
- 3. Justifying various concepts such as; GDP, GNP NNP, Personal Income, Disposable Income, Per Capita Income, and National Income.
- 4. Explanation of the factors determining gross domestic product, employment, the general level of prices, and interest rates.
- 5. Acquaintance with law of markets, consumption function and investment function.
- 6. Understanding monetary policy of Central Banks and its implications.

Money and Financial System

- 1. Understanding the nature, functions and issues related to money, banking and non banking financial intermediaries and financial system.
- 2. Knowing about changing role of banking and financial intermediaries in the process of growth & development.
- 3. Realization of the term structure, role and functions of RBI, NBFIs, Development Banks, Commercial Banks, Money Market, Capital Market and Forex Market.
- 4. Getting knowledge about changing paradigms in Indian Banking (EBanking, Mobile Banking Tele Banking, Core Banking Retail Banking ATM, Credit Card and Debit card, Kisan card).

Fundamentals of Entrepreneurship

- 1. Motivating to acquire the skill to be an Entrepreneur
- 2. Creating Entrepreneurial skill among the students.
- 3. Creating awareness among students about self employment/ own business.
- 4. Providing various innovative business ideas to the society.
- 5. Developing a skill of stability in the business at critical situation.

Business statistics

- 1. Making familiar with statistical tools which are relatively used in business.
- 2. Imparting the ability to collect present, analyze and interpret data.
- 3. Ability to predict trend values by using list square methods in regression.

B. Com. III

Modern Management Practices

- 1. Knowing about the growing size and complexity of business.
- 2. Getting known with good working environment and conditions.
- 3. Explanation about how to reduce wastage and increase efficiency.
- 4. Importance of research and development.
- 5. Knowledge about cut throat competition in the market.
- 6. Acquaintance with the modern management practices being used by the corporate world.

Business Regularity Framework

- 1. introduction to Business Law as well as other Laws.
- 2. Achieving the knowledge of Law.
- 3. Knowing the rights and liability of every citizen regarding society.
- 4. Awareness of legal liability.
- 5. Welfare of society
- 6. Creating legal awareness among the students.
- 7. Acquainting with the latest laws, governing business and commercial transactions.

Business Environment

- 1. Understanding business environment at national and international level.
- 2. Knowledge about agricultural development, industrial development and service sector development in India.
- 3. Discussing the problems of Indian economy.
- 4. Measuring implementation and impact of Liberalization, Privatization and Globalization on Indian Economy.
- 5. Justifying performance, role, function, merits and demerits of Foreign Capital, Multinational corporations and International Corporation (IMF, IBRD, WTO and SAARC).

Co-operative Development

- 1. Understanding the principles of co-operation and co-operative movement in India.
- 2. Knowing the structure, types, functions, problems and remedies agricultural and Non-agricultural Credit Co-operative institutions.
- 3. Getting known with Co-operative credit movement in post- independence period.
- 4. Evaluating the impact of Globalization on co-operative Movement.
- 5. Getting basic knowledge of co-operative society and its administration.
- 6. Justifying the role of state and central government in development of cooperative sector.
- 7. Understanding New Economic Policy since 1991 and Co-operative Movement.

Advanced Accountancy

- 1. Knowledge about various provision of Banking Regulation Act for maintenance of Bank final accounts.
- 2. Knowledge about the accounting procedure of Hire purchase system of sales.
- 3. Calculation of fire insurance claim under loss of stock policy and loss of profit policy
- 4. Knowledge about the Firm Accounting procedure.
- 5. Obtaining the knowledge about analysis and interpretation of financial statements.
- 6. Understanding the procedure of calculation of working capital requirement and preparation of funds flow statement.
- 7. Exposure to cost accounting and management accounting.

Advanced Accounting

- 1. Knowledge about auditing principles and techniques of auditing.
- 2. Getting knowledge of vouching of cash and credit transactions.
- 3. Knowing the appointment procedure of Auditor.
- 4. Acquiring the skills of Audit program of co-operative societies and banks.
- 5. Knowledge about writing of audit reports.

Advanced Accounting (Income Tax)

- 1 Understanding basic concepts in Indian Tax Act.
- 2 Obtaining the knowledge about tax free incomes.
- 3 Acquiring the knowledge about general deductions from income.

- 4 Exposure to income tax planning
- 5 Knowing the procedure of calculation of income tax
- 6 Understanding the procedure of e-filling of return and e-payment of tax.
- 7 Getting known with application of principles and provisions of direct tax laws in computation of taxable income under various heads of income.

Cost Accounting

- 1. Creating logical thinking power.
- 2. Creating ability to take decision at different level of production activity like make or buy, project launching etc.
- 3. Developing knowledge among students about cost ascertainment and fixation of selling price and cost control.
- 4. Knowledge about presentation of cost accounting information for the purpose of decision making.
- 5. Determination of profitable or unprofitable activity in business by using different cost accounting tools.

Cost Accounting

- 1. Developing knowledge about preparation of tenders, quotations, etc.
- 2. Helping in determining the product total cost and fixation of selling price.
- 3. Creating skills about handling of various financial records, documentation, collection and classification of different costs.
- 4. Enhancing the knowledge of business project analysis and cost planning and procedure.
- 5. Getting known with how to publish information about production to management, consumer, Government, Employee at different levels for decision making purpose.

Advanced Banking B.Com-III Advance Banking

- 1. Introducing banking law and practice in relation to the banking system in India.
- 2. Developing the capability of students for knowing banking system, regulatory framework, banker-customer relationship and banking services.
- 3. Understanding the legal aspects of banking transactions and its implications as banker and customer.
- 4. Knowing the banking services and remittances.
- 5. Understanding electronic banking and IT in banks.
- 6. Knowing types of negotiable instruments.
- 7. Getting acquainted with banks and financial institutions.
- 8. Developing the capability of students for knowing bank nationalization, financial and business performance of banks, central banking and financial markets (Money Market, Capital Market, Spot and Derivative Market).
- 9. Explanation of regulatory and promotional role of central banking, and its role in economic development.

Industrial Management

- 1. Understanding about work for maximum outputs.
- 2. Knowing about mobilization of best talents.
- 3. Motivation of employees
- 4. Improving standard of living.
- 5. Ample job opportunity.
- 6. Establishing sound industrial relations.
- 7. Achievement of goals.
- 8. Creating relationship between owners and workers.
- 9. Management provides innovation.

Industrial Management

- 1. Active cooperation of human being.
- 2. Industrial management aims of achieving Predetermine objectives.
- 3. It helps coordination and establishes team spirit
- 4. Basic of management and multidisciplinary teams.

COURSE OUTCOMES (CO)

> SCIENCE:

ENVIRONMENTAL STUDIES: (S.Y.B.Sc & S.Y.B.A)

- 1. Understanding environmental concerns by the students at the undergraduate level.
- 2. Understanding the relationship of man with the environment and help them change his attitude for more positive, proactive, eco-friendly and sustainable lifestyles.
- 3. Getting information about climate change, Global warming, Acid rain, Green house effect, Ozone, layer depletion.
- 4. Cultivating attitudes to safeguard the environment built particularly with field experience.
- 5. Realization of the impact of human actions on the immediate environment and the linkage with the larger issues.
- 6. Getting information about Environment Protection Acts.

CHEMISTRY:

Physical chemistry

- 1 Developing problem solving skills.
- 2 Developing scientific knowledge.
- 3 Developing working knowledge of instrument.

Inorganic Chemistry

- 1. Developing ability to apply the knowledge on contents of principles of chemistry.
- 2. Developing the power of appreciation, the achievement in chemistry and role in nature and society.

Organic Chemistry:

- 1 Developing spectral knowledge.
- 2 Developing proper aptitude towards the subject.
- 3. Creating scientific approach towards various chemical reactions.

Analytical Chemistry

- 1. Exposure to different processers used in Industries and their applications.
- 2. Developing ability to acquire the knowledge of terms, facts, concepts, Processors, technique and principles of subject.

PHYSICS:

B.Sc. I Paper I Physics

By the end of this Course students should be able to know about:

- 1. Different types of motions in nature
- 2. Difference between translational motion and rotational motion
- 3. Various elastic constants and property of Elasticity.
- 4. Surface tension and its applications.

B.Sc. I Paper II Physics

By the end of this Course students should be able to know about:

- 1. Oscillations and waves and their properties.
- 2. Use of waves in general life.
- 3. Optics and properties of light.
- 4. What are the optical instruments and their developments.

B.Sc. I Paper III Physics

By the end of this Course students should be able to know about:

- 1. General information of various types of gases and theories related to it.
- 2. How gas can be liquefied? What are the conditions for liquefactions of gases?
- 3. Thermal properties of gases and various laws related in thermodynamics.
- 4. Transport phenomena in gases.

B.Sc. I Paper IV Physics

By the end of this Course students should be able to know about:

- 1. What is the origin of magnetic property of material?
- 2. Dielectric phenomenon and difference between polar and non polarmmolecules.
- 3. Theory of semiconductor. Various devices like diode, triode, LED, photo diode and their applications.
- 4. The amplification of input signals and designing of amplifier.

B.Sc. II Paper V Physics

By the end of this Course students should be able to know about:

- 1. Vectors and scalar and mathematical applications.
- 2. Processional motion and properties of the body.
- 3. Elasticity of flat spiral spring.
- 4. Viscosity of liquids and mathematical theory related with it.
- 5. Sound and property of sound and their uses.

B.Sc. II Paper VI Physics

By the end of this Course students should be able to know about:

- 1. Use of Cathode ray oscilloscope and functions of its parts.
- 2. Amplifier and feedback requirements in amplifier circuits.
- 3. Effects of positive and negative feedbacks.
- 4. Operational amplifier and their designing.
- 5. Circuit and properties of UJT and FETs.

B.Sc. II Paper VII Physics

By the end of this Course students should be able to know about:

- 1. Lenses and various cardinal points .
- 2. Formation of Images by Newton's formula.
- 3. Properties of light like interference, diffraction and polarization with theory and experiments.
- 4. Properties of optical fiber and use in telephone communication.
- 5. LASERS and applications in various fields.

B.Sc. II Paper VIII Physics

By the end of this Course students should be able to know about:

- 1. Theory of relativity and its consequence.
- 2. Wave particle duality and development of new theory.
- 3. Development of vector atom model and its superiority on various other models.
- 4. Nuclear energy resources and their importance in modern life.
- 5. X-rays and their applications.

BOTANY:

B.Sc –I Paper I Diversity in non-vascular plants. B.Sc –

II Paper VAlgae, Fungi, Bryophytes and Industrial application.

- 1 Developing interest in plant diversity.
- 2 Developing skill of identification of Algae, Fungi and Bryophytes.
- 3 Creating interest in biological industry.

B.Sc –I Paper No. II- Plant Biochemistry, physiology and Ecology.

B.Sc -II Paper No .IV-Plant physiology, Ecology and Horticulture.

- 1. Acquiring basic knowledge about biochemical, physiological mechanism in plants.
- 2. Imparting knowledge of Horticulture.

B.Sc -I Paper III -Diversity in vascular plants. B.Sc -II Paper IV -

Pteridophytes, Gymnosperms, Angiosperms and Anatomy.

The student can understand the knowledge about

- 1. Diversity in vascular plant.
- 2. Characters of vascular plants and classification of plants.
- 3. External & internal characters of plants.

B.Sc –I Paper IV- Cytology, Genetics and utilization of plants.

B.Sc -II PaperVIII- Cytogenetic and utilization of plants.

Students should be able to know

- 1. Structure of cell.
- 2. Types of organisms and characteristics.
- 3. History, distribution, structure and functions of different cell organelles,
- 4. Transmission of character
- 5. Mendelism.
- 6. Resource of plants to fulfill the basic needs.

ZOOLOGY:

Animal Diversity- Paper I & II

- 1. Understanding the arrangement of organism or groups of organism in distinct categories in accordance with particular & well established plan.
- 2. Explanation of unity in diversity of organism.
- 3. Studying specific & scientific names to organism.
- 4. Collecting information about useful and harmful animals, helps in understanding the nature of habitant.

CELL BIOLOGY AND GENETICS.

- 1. Understanding the structure and function of cell & cell organelles, to study animal tissue to improve knowledge about genetic information, it study how organism evolve from a single cell division, get knowledge about unicellular & multi-cellular organisms
- 2. Understanding normal function of cell, organ or tissue.
- 3. Study of structure function, molecular organization, growth, reproduction and genetics of cell.

Ecology, Ethology, Evolution And Applied Zoology

- 1. Improving environmental component such as biotic and biotic factors.
- 2. Study of how each organism interlock with one another.
- 3. Perceiving prey predator relationship, study interrelationship of different organisms, to know about distribution of organism with reference to the geographical conditions, to improve knowledge related to undesirable change in physical, chemical or biological characteristics.
- 4. Study of tropic level of food chain.
- 5. Understanding evolutionary history of certain animals, study their sericulture which is one of the longest agro industries & silk is used in the manufacture of woven materials.

Genetics, Molecular Biology And Biological Chemistry

- 1. Study of chemistry within living organisms.
- 2. Perceiving the chemical components & chemical structure in organisms.
- 3. Study how body functioning with the help of chemical molecules & elements.

Histology & Physiology

1. Improving proper knowledge about histology of animal tissue, organ, understanding physiology of animals including external features & internal features used in pathology lab for detecting malfunction which leads to disorders, physiology useful for study of normal function of body plan for their molecular level.

COMPUTER SCIENCE:

Introduction to Computer & Modern Operating Environments (B. Sc I):

- 1. Understanding the fundamental hardware and software components that make up a computer.
- 2. Understanding the difference between an operating system and application program, and what each is used for in a computer.
- 3. Performing common basic functions like editing, formatting, printing, scanning etc using tools.
- 4. Ability to sort data, manipulate data using formulas and functions and add and modify charts in a worksheet.

Introduction to Programming in C (B. Sc I)::

- 1. Ability to develop applications.
- 2. Creation algorithms and flowcharts to solve simple programming problems.
- 3. Understanding to design, implement, test, debug a program that uses calculations, loops, array, function, pointers, structure etc.
- 4. Memory management using C.

Introduction of Database and HTML (B. Sc I)::

- 1. Knowledge of Database concepts, data model, Relational Algebra.
- 2. Knowledge of basic SQL queries.
- 3. Knowledge of Internet Basics.
- 4. Understanding methods and tools to design, implement, test web pages and develop Web Application.

Fundamental of Software Engineering (B. Sc II):

- 1. Understanding how to work as an individual and as part of a multidisciplinary team to develop and deliver quality software.
- 2. Demonstrating an understanding of and apply current theories, models, and techniques that provide a basis for the software lifecycle.
- 3. Understanding methods and tools to design, implement, test, document, and maintain a software system.
- 4. Communicating effectively and professionally both in writing and by means of presentations to both specialist and a general audience.

Object Oriented Programming Using C++ (B. Sc II):

- 1. Using the characteristics of an object-oriented programming language in a program.
- 2. Using the basic object-oriented design principles in computer problem solving.
- 3. Programming with advanced features of the C++ programming language.
- 4. Using C++ classes for code reuse.

Relational Database Management System (B. Sc II):

- 1. Understanding the purpose and differences between Database models.
- 2. Knowing the design and implement relational database.
- 3. Designing and implementing SQL queries for both data manipulation and data definition tasks.
- 4. Knowing about protecting data from physical harm and unauthorized access with user access privileges.
- 5. Designing and executing programs using PL/SQL.
- 6. Getting known of new software application i.e. MYSQL for designing database.

Computer Network (B. Sc III):

- 1. Understanding the concepts, vocabulary and techniques currently used in the area of computer networks.
- 2. Getting known with wireless networking concepts.
- 3. Understanding classification of network, transmission impairments, Data transmission methods etc.
- 4. Understanding installation of Windows Server 2008 and managing active directory.

Visual programming using C# (B. Sc III):

- 1. Design, document, code and test C# console and GUI applications
- 2. Building and using classes, events, methods, properties.
- 3. Design and implement Web Applications using ASP.NET.
- 4. Understand and use of different validation controls.
- 5. ADO.NET database application.

Linux Operating System (B. Sc III):

- 1. Understanding the Linux Architecture, use of basic command and to explain administrator privileges, super user basic command to add, modify and delete users and to understand basics of File systems.
- 2. Understanding the Directory commands, File related commands and changing file permission and directory permission. To understand VI editor basics. Pattern searching and search and replace commands.
- 3. Understanding shell basics, connecting commands and Basics and Extended regular expressions, the grep and egrep and shell programming.
- 4. Understanding shell programming, logical Operators, File Links and to understand process creation and decision making looped control structures.

SHORT TERM COURSE OUTCOMES (CO)

1. Communication Skills in English

- ➤ Enhanced communication skills among the students.
 - > Developed the interpersonal skills among the students
 - > Students got confidence for better communication
 - > Increased their linguistic competence in effective use of communication skills in English

2. Journalism & Mass Communication

- ➤ Understood the importance of language in personality development.
- ➤ Understood the language skill and applied it.
- Applied the skills of journalism and writing by obtain it.
- ➤ Understood the social commitment of newspaper.
- ➤ Understood the nature of works of printing & electric sources.
- Familiarized about journalism.
- ➤ Took the information of newspaper, magazines, evening newspaper & media in the field of journalism.
- > Took the information of life of the people, public institution work, Low, Sociology, Linguistics and history for the personality development.
- ➤ Introduced the modern technology of media to the students.

3. Vermicomposting Technology

- > Students will get the employment.
- > They can generate employments.
- > They will also turn towards organic farming.
- > They can start short or large scale vermicompost plants.

4.B.VOC (Bachelor of Vocation) -medicinal Plants Grower

- ➤ Identified the plants and their importance as medicines.
- > Conserved the plants.
- > Developed the nursery.
- > Produced medicinal plants, their parts and products & also marketed them.

5.Printed Circuit Board & Its Application

- > Students are able to analyze the fabrication process of printed circuit boards.
- Perform the chemical & Mechanical process by different kind of masks.
- > Students are able to define how to operate the hardware.
- > Student are able to design different kind of PCB' from electrical Circuit diagram.