# **BOTANY COURSE OUTCOMES**

## CO. 101 F. Y. B. Sc. Sem I - Paper I - Plant Diversity

- Understand the diversity among Algae.
- Know the systematic, morphology and structure, of Algae.
- Understand the life cycle pattern of Algae.
- Understand the useful and harmful activities of Algae.
- Understand the Biodiversity of Fungi
- Know the Economic Importance of Fungi
- Understand the morphological diversity of Bryophytes.
- Understand the economic importance of the Bryophytes.

### CO.102. F. Y. B. Sc. sem-I -Paper II -Form and function-I

- To understand basic units of the organism.
- To know components of the cell and their division.
- To differentiate the organism by its cell structure.
- To understand energy pyramids in detail.
- To know the various types of ecosystem.
- To understand the "Science of Heredity".
- To understand linkage, segregation and mutation of genes.
- To understand phenotypic, genotypic ratios and epistatic, non-epistatic interactions.

## CO. 201. F. Y. B. Sc. Sem- II- Paper-I Plant Diversity-I

- Identify different plant groups using representative life forms.
- Understand similarities & differences among these groups at least at macroscopic level.
- Appreciate their economic importance, ecological & environmental significance.
- Understand Angiosperm plant families and their economic importance
- Understand leaf and inflorescence morphology

#### CO.202 F.Y. B. Sc. Sem II Paper II Form And Function I

- To study simple tissues and complex tissues.
- To study primary structure of dicot and monocot root, stem, leaf.
- To study epidermal tissue system such as types of hair and stomata.
- To study photosynthesis in detail.
- To understand light reaction, photolysis of water and photophosphorylation pathway.
- To know concept of primary and secondary metabolites and difference between primary and secondary metabolites.
- To study the various types of medicinal plants and their uses.

## CO.301. S. Y. B. Sc. Sem- III- Paper-I Plant diversity-II

- Understand Modern Techniques to study of Plant Diversity
- Identify different plant groups using representative life forms.
- Understand the diversity of Brown Algae

- Know the systematic position, range of variation and economic importance of brown algae.
- Know the systematic position and life cycle of Bryophytes
- Have a better understanding of plant morphology terminology.
- Understand Angiosperm plant families and their economic importance
- Understand the nomenclatural problems.

# CO.302 S.Y. B. Sc. Sem III Paper II Form And Function II

- To understand the basic unit of the organism.
- To differentiate the organism by its cell structure.
- To know components of the cell and their division.
- Provide an understanding of the laboratory methods used to identify and analyse.
- To understand cytogenetics alteration and relationship to specific clinical expression.

# CO. 303. S. Y. B. Sc. Sem-III - Paper III -Current Trends in Plant Science

- The study of Economic botany helps to the importance and uses of plant and plant parts. Ethonbotany give a chance to familiarize the traditionally useful medicinal plants.
- To equip the students with skills related to laboratory as well as industries based studies.
- Understand the role plants in human welfare.
- Gain knowledge about various plants of economic use.
- Know importance of plants & plant products.
- Understand the chemical contents of the plant products.
- Know about the utility of plant resources.
- · Forestry provides a focused lense through which to understand, influence and practice sustainable

resource management and utilization, as well as sustainable development.

- Become aware of applications of different plants in various industries.
- To highlight the potential of these studies to become an entrepreneur.

# CO. 401. S. Y. B. Sc. Sem-IV- Paper I - Plant Diversity

- Understand the Biodiversity of Fungi
- Know the Economic Importance of Fungi.
- Know the terminologies in plant pathology.
- Understand the scope and importance of Plant Pathology.
- Know the prevention and control measures of plant diseases and its effect on economy of
- Understand the morphological diversity of Pteridophytes and Gymnosperms.
- Understand the economic importance of the Pteridophytes and Gymnosperms.
- Know the evolution of Pteridophytes and Gymnosperms.
- Know the scope of Paleobotany, types of fossils, its role in global economy and geological time scale.
- Understand the various fossil genera representing different fossil groups.

# CO.402-S.Y.B.Sc.sem-IV-paper-II-Form and function-II

- To study the normal secondary growth in dicotyledonous stem and root.
- To understand the mechanical tissue system in detail.
- To study the types of vascular bundles.
- To understand the process of respiration and their pathways.

- To study the process of photorespiration and photoperiodism in detail.
- To study biogeochemical cycles includes carbon, Nitrogen and water in detail.
- Study of ecological factors, soil as edaphic factor and their types.
- To study the community ecology in detail.

# CO. 403. S. Y. B. Sc. Sem- IV- Paper-III Current Trends in Plant Sciences-I

- Understand the types and locations of gardens
- Know the national parks and botanical gardens
- Understand the plant tissue culture techniques
- Understand the gene cloning and vector used for gene cloning
- Know the chi square test and coefficient of correlations
- Understand the bioinformatics, BLAST and bioinformatics programme in India

# CO. 501. T. Y. B. Sc. Sem-V- Paper I - Plant Diversity

- Over view of the microbial world, its structure and function.
- Familiar with the tools and techniques used in Microbiology.
- Familiarize the learner with the applied aspects of microbiology.
- Understand the concept, principle and types of sterilization methods.
- Developing interest in plant diversity.
- Developing skill of identification of Algae, Fungi.
- To study in depth about algae and fungi.
- Know the terminologies in plant pathology
- Understand the scope and importance of Plant Pathology
- Know the control measures of plant diseases.
- Studying basic knowledge of pathogens, diseases and their control.

# CO. 502. T. Y. B. Sc. Sem- V- Paper-II Plant Diversity -IV

- Understand the fossil genera of plants
- Have a better understanding of plant morphology terminology
- Understand Angiosperm plant families & respective genera using proposed classification systems & standard floras & use identification keys
- Understand key methods and principles of angiosperm classification
- Understand anomalous secondary growths of stem and roots of plants
- To study of pollen morphology, analysis and viability

# CO.503-T.Y.B.Sc.sem-V-Paper-III-Form and function-II

- To study the structure and functions of cell organalles in detail.
- To understand the giant chromosome and their types.
- To understand the concept of genetic code and process of transcription and translation in eukaryotes.
- To study the water relations in plants and solute transport.
- To study the translocation of solutes and their models in detail.
- To study the process of bioremediation and phytoremediation in detail.
- To understand the plant sucession and their poly and monoclimax theories.
- To study the micropropogation techniques and plant cell suspension culture for the production of secondary metabolites.
- To study the techniques of protoplast fusion and somatic hybridization.

# CO.504. T. Y. B. Sc Sem V Paper IV Current Trends In Plant sciences I

- To explain basic concept about ethnobotany.
- To express the historical development of ethnobotany.
- To explain the construction of c DNA and genomic library.
- To understand the step involved in recombinant DNA technology.
- Introduce the basic concept of qualitative analysis of a given sample.
- Discuss the terms, principle, instrumentation operation of spectroscopic techniques.
- To study medicinal plant and their uses.

# CO. 601. T. Y. B. Sc. Sem-VI - Paper I -Plant Diversity

- Interpret the performance characteristics and life cycles of various lower plants.
- Developing skill of identification of Bryophytes, pteridophytes and Gymnosperms.
- Diversity in vascular plant.
- Characters of vascular plants and classification of plants.
- External & internal characters of plants.
- Aware the students to understand the evolution and its importance.

# CO. 602. T. Y. B. Sc. Sem- VI- Paper-II Plant Diversity -IV

- To study of Major Botanic gardens of India
- Know the regional circles of botanical survey of India
- Understand Angiosperm plant families & respective genera using proposed classification systems & standard floras & use identification keys.
- Understand Hutchinson's classification
- Understand embryology and development of embryo in plants
- Study anatomical peculiarities of different groups by using live specimens and micro
- Understand biostatistics, regression and ANOVA

# C0.603-T.Y.B.Sc.sem-VI-Paper-III-Form and function-III

- To study the structure and of biomolecules includes carbohydrate, lipid and protein in
- To understand the structure of enzymes, their nomenclature and types in detail.
- To study the Nitrogen metabolism includes nitrogen cycle, root nodule formation, and nitrogenase activity.
- Physiological effects and applications of auxin, gibberellins, cytokinins and abscissic acid.
- To study the genetic mapping in eukaryotes, genetic linkage, three point crosses and their problems.
- To study the gene mutations, types of mutations in detail.
- To understand the metabolic disorders caused by genetic mutations.
- To study the organization of biological data and databases, BLAST.
- To study the protein structure analysis, multiple sequence analysis and phylogenetic

# CO.604.T. Y. B. Sc Sem VI Paper IV Current Trends In Plant sciences II

- To understand the step involved in recombinant DNA technology.
- To study various techniques of DNA sequencing.
- To study DNA barcoding and its basic features.

• To study various phytogeographical regions of India with respect to definition, diversity of flora found in various forest types of India.

- To study evolution of biodiversity.
- To study methods of extraction of essential and fatty oils.
- To study drying oil semidrying oil non-drying oil.
- To study storage and preservation techniques of fruits and vegetable.

# CO. H501. T. Y. B. Sc. Sem- V- Applied component of Horticulture-I

- Introduction to Horticulture and understand various branches of Horticulture
- Understand apiculture and sericulture
- Know the horticultural institutes of India and government schemes
- Understand artificial plant propagation practices
- To know the vegetative plant propagation practices
- Know the seed propagation and methods.
- Understand tissue culture in relation to horticulture
- To study the importance of Manures, Fertilizers, biofertilizers and their various types.
- To study the various types of diseases and their control measures.
- To study the common pests on horticultural crops.
- To study the friends of farmers such as earthworm, snakes and predaceous fungi.

# CO. H602. T. Y.B. Sc. Sem-VI- Paper II - Horticulture and Gardening

- Horticulture focuses on fruit, vegetables, flowers, and landscape plants.
- Understand the role plants in human welfare.
- Gain knowledge about various plants of economic use.
- Know importance of plants & plant products.
- Understand the chemical contents of the plant products.
- To be challenged intellectually, to work in a job they love, and to make a difference in the quality of life for countless others.
- To study of commercial production of propagation includes tubers of potato, vegetables-Tomato and their post harvest management.
- To study the post harvest management in fruits includes Mango, Grapes and coconut.
- To understand the propagation techniques in spices or condiments.
- To study the medicinal and aromatic plants and their uses.

# Program Outcomes B. A.

- 1. The students acquire knowledge in the field of social sciences, literature and humanities which make them sensitive and sensible enough.
- 2. The B.A. graduates will be acquainted with the social, economic, historical, geographical, political, ideological and philosophical tradition and thinking.
- 3. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate program of their choice.
- 4. The B. A. program enables the students to acquire the knowledge with human values framing the base to deal with various problems in life with courage and humanity.
- 5. The students will be ignited enough to think and act over for the solution of various issues prevailed in the human life to make this world better than ever.
- 6. Program provides the base to be the responsible citizen.
- 7. A graduate student in arts/social sciences/humanities shall be confident to speak, write, read, listen and understand the English language and one or more Indian languages.
- 8. Program Develops clear, rational and progressive thinking. Participating in decision-making concerning the society and upholding national development, integrity, unity and fraternity

#### **PROGRAMME OUTCOMES: BACHELOR OF SCIENCE (B.SC)**

- **Explaining the basic scientific principles and methods:** Inculcating scientific thinking and awareness among the student, Ability to handle the unexpected situation by critically analyzing the problem.
- **Intellectual skills able to:** Think logically and organize tasks into a structured form. Assimilate knowledge and ideas based on wide reading and through the internet. Transfer of appropriate knowledge and methods from one topic to another within the subject. Understand the evolving state of knowledge in a rapidly developing field. Construct and test hypothesis. Plan, conduct and write a report on an independent term project.
- **Practical skills:** Students learn to carry out practical work, in the field and in the laboratory, with minimal risk. They gain introductory experience and gain greater proficiency in a selection of them depending on their choice of optional modules.
- **Transferable skills:** Use of IT (word-processing, use of internet, statistical packages and databases). Communication of scientific ideas in writing and orally. Ability to work as part of a team. Ability to use library resources. Time management. Career planning.
- **Scientific Knowledge:** Apply the knowledge of basic science, life sciences and fundamental process to study and analyze subject.
- **Problem analysis**: Identify and formulate the research literature, and analyze non reported plants with substantiated conclusions using first principles and methods.
- **Design/development of solutions**: Design solutions for health problems, disorders and disease of human beings.
- **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and development of the information to provide valid conclusions.
- **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern instruments and equipments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological activities of plants with an understanding of the application and limitations.
- **The Botanist and society**: Apply reasoning informed by the contextual knowledge to assess plant diversity, its importance for society, health, safety, legal and

environmental issues and the consequent responsibilities relevant to the biodiversity conservation practice.

- **Environment and sustainability**: Understand the impact of the plant diversity in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **Ethics**: Apply ethical principles and commit to environmental ethics and responsibilities and norms of the biodiversity conservation.
- **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **Communication**: Communicate effectively on complex science activities with the science community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

#### **Program Outcome**

#### **BACHELOR OF COMMERCE (B.COM)**

Students who have taken admission to this program of B.Com are expected to concentrate upon the following outcomes.

- 1. Commercial sense.
- 2. Budgeting policy.
- 3. Entrepreneurial skill.
- 4. Develop managerial skills.
- 5. Human Resources Management.
- 6. Develop Numerical ability.
- 7. To inculcate knowledge of accountancy.
- 8. Well versed with business regulatory framework.

#### **Program Specific Outcomes**

#### ACCOUNTANCY

1. Understanding basic concepts of accountancy, principles of accountancy and accounting standards to maintain accounts of trading & non-trading organizations.

2. Getting acquainted with the procedure of preparation of income statements, retained earnings, balance sheet and statement of working capital which are required for external users and more useful to managers for managerial decision making.

3. Inculcating different skills for analysis and interpretation of financial data to understand financial health of an organization and ensure that resources are being used to achieve the organizations objectives.

4. Developing knowledge about cost ascertainment and fixation of selling price and cost control.

5. Getting working knowledge of generally accepted auditing procedure, techniques and skills.

# **Course Outcomes**

# F Y.B.Com.

### Accountancy and Financial Management P. I & II

1. Understanding the concepts of financial Accounting.

2. Exposure to nature and advantages of Accounting, Accounting concepts and conventions, Accounting Standards.

3. Preparation of Final Accounts of Manufacturing concern and departments.

4. Accounting for hire purchase.

5. Getting knowledge about accounting procedure of single entry system, branch accounts and consignment accounts.

6. Accounting for fire insurance claim.

### Business Development P.I & II

- 1. Getting knowledge of business & objectives of business.
- 2. Creating knowledge about business environment.
- 3. Getting knowledge of project planning.
- 4. Getting acquitted with entrepreneurship.
- 5. Developing knowledge about concept of services.
- 6. Developing knowledge about retailing.
- 7. Getting knowledge of recent trends in service sector.
- 8. Creating knowledge about E-Commerce.

#### S. Y.B.Com.

## Accountancy and Financial Management P. III & IV

1.Understanding basic concepts of partnership final accounts based on adjustment of admission or retirement /death of partner.

2. Getting acquainted with the procedure of piecemeal distribution of cash on liquidation of partnership firm.

- 3. Understanding the accounting procedure of amalgamation.
- 4. Getting acquainted with company accounts.
- 5. Developing knowledge about redemption of preference share.
- 6. Developing knowledge about redemption of debentures.
- 7. Obtaining the knowledge of various provisions about profit prior to incorporation.

### Financial Accounting and Auditing P. V & VI Management Accounting

1. Creating knowledge about vertical arrangement of income statement and balance sheet.

2. Developing knowledge about preparation of common size statement, comparative statement and trend analysis.

3. Developing knowledge about computing ratios.

- 4. Developing knowledge about estimation of working capital requirement.
- 5. Developing knowledge about project evaluation techiques.

#### Auditing

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. Getting knowledge of verification of cash and credit transactions.
- 5. Knowledge about writing of audit reports.

#### Principles of Management and Finance P.III & IV

1. Getting acquitted with management, evolution of management thoughts and modern management approach.

- 2. Getting knowledge of planning & decision making.
- 3. Creating knowledge about organising.
- 4. Developing knowledge about directing and controlling.
- 5. Developing knowledge about production & inventory management.
- 6. Getting knowledge of quality management.
- 7. Creating knowledge about Indian financial system.
- 8. Creating knowledge about recent trends in finance.

#### Business Law P.I & II

- 1. Introduction to business law as well as other laws.
- 2. Achieving the knowledge of Indian contract.
- 3. Knowing the information the sale of good act, 1932.
- 4. Awareness of legal liability of the negotiable instrument.
- 5. Developing the knowledge about company act.
- 6. Creating legal awareness among the students about partnership act.

- 7. Acquainting with the Consumer Protection act and competition act.
- 8. Understanding the intellectual property right.

## T. Y.B.Com. Financial Accounting and Auditing P. VII & IX Financial Accounting

- 1. Creating knowledge about 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 for amalgamation and absorption of company
- 4. Ability to get the knowledge about valuation of shares.
- 5. Understanding the accounting procedure of liquidation of Ltd. company.
- 6. Understanding the transactions of foreign currency.

## Financial Accounting and Auditing P. VIII & X Cost Accounting

1. Creating knowledge about accounting for material, labour and overheads.

2. Developing knowledge about preparation of cost sheets, tenders, quotations, etc. and reconciliation of cost accounts with financial accounts.

3. Developing knowledge about preparation of cost control accounts.

4. Developing knowledge about procedure for accounting for contract accounts and process accounts.

5. Developing knowledge about accounting for marginal and standard costing.

#### Marketing & Human Resource Management P.V & VI

- 1. Developing knowledge about marketing and marketing research
- 2. Getting knowledge of marketing mix
- 3. Creating knowledge about marketing ethics
- 4. Getting acquitted with key marketing dimension
- 5. Creating knowledge about introduction to human resource management
- 6. Developing knowledge about human recourse development
- 7. Getting acquitted with human relations
- 8. Developing knowledge about current issue in human resource management

#### Export Marketing P.I & II

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

#### Labour Welfare & Practice P.I & II

- 1. Understanding constitutional provisions regarding labour.
- 2. Awareness of labour legislations pertaining to Industrial Relations.
- 3. Providing information about traditional concept of labour welfare in the industry
- 4. Understand the labour policy aspects in the country

5. Understand the conditions of labour and their welfare and social security needs in the country.

- 6. Developing the knowledge about labour markets and its characteristics.
- 7. Achieving legal provisions regarding regional Industrial Relations.
- 8. To study legal provisions of working conditions and social security.

9. Conversant with the legal aspects of how to deal with social security measures as well as working conditions of factories.

#### **Program Outcomes**

#### Master of Commerce (M. Com.)

1. Enrich knowledge with new ideas and techniques essential for business and management.

2. Acquire mastery over specific skills in business.

3. Acquire capability to acquire and handle any position in business.

4. Develop analytical interpretative and presentation skill regarding research in commerce and management.

5. Acquaintance with recent trends in commerce and management.

#### **Program Specific Outcomes**

#### Accountancy

1. To apply qualitative skills to analyse and solve business problems.

2. To carry out in depth study of accounting transactions of profit and non-profit making organizations.

3. To develop ability to analyse financial data for managerial decisions

4. To inculcate knowledge of auditing principles & techniques.

5.To inculcate Knowledge about Cost Accounting Procedure and technique.

## **Course Outcomes**

#### M.Com – Sem. I Strategic Management

- 1. To understand the role and basic concepts of Strategy, Strategic Intent, Strategic flexibility and learning organization
- To comprehend the Strategic options at Corporate Level, Business Level and Functional Level
- 3. To comprehend the strategy implementation process
- To develop the knowledge about Corporate Restructuring Strategies, Strategic Alliance, Public Private participation, Information technology strategies.
- 5. Understanding emerging strategic trends.

#### **Cost and Management Accounting**

- 1. To inculcate knowledge of Process Costing
- 2. To inculcate knowledge Cost Allocation and Activity Based Costing Systems
- 3. To inculcate knowledge of Responsibility Accounting
- 4. To carry out in depth study of Strategic Cost Management

#### **Business Ethics and Corporate Social Responsibility**

- 1. To Understand knowledge of Concept, Characteristics, Importance and Need for business.
- 2. To inculcate knowledge Indian Ethical Practices and Corporate Governance.
- 3. To inculcate knowledge of Corporate Social Responsibility.
- 4. To understand Areas of CSR and CSR Policy.

#### M.Com - Sem. II

#### **Research Methodology for Business**

1. To enhance the abilities of learners to undertake research in business & social sciences.

2. To understand, develop and apply the fundamental skills in formulating research problems

3. Understanding and developing the most appropriate methodology for their research

4. To understand Knowledge about Research Reporting and Modern Practices in Research

#### **Corporate Finance**

1. To enhance the abilities of learners to develop the objectives of Financial Management.

2. To enable the learners to understand, develop and apply the techniques of investment in the financial decision making in the business corporates.

3. To enhance the abilities of learners to analyse the financial statements.

#### **E-Commerce**

1. To understand knowledge about Electronic Commerce – Evolution and Models.

2. To understand concept World Wide Web and E-enterprise.

- 3. Understanding E-marketing and Electronic Payment System.
- 4. To understand Legal and Regulatory Environment and Security issues of E-commerce.

# M.com .Sem. III

## **Advanced Financial Accounting**

- 1. To develop knowledge of Foreign Currency Conversion.
- 2. To understand the Statutory Requirements for final Accounts Banking Companies.
- **3.** To understand the Statutory Requirements for final Accounts of Insurance Companies final Accounts.
- **4.** To understand the Statutory Requirements for final Accounts of Co-operative Societies.

# **Advanced Cost Accounting**

- 1. To inculcate knowledge of Process Costing.
- 2. To develop the knowledge of Cost Allocation and Activity Based Costing Systems.
- 3. To understand Responsibility Accounting
- 4. To understand the Strategic Cost Management

# **Financial Services**

- 1. To develop the knowledge of Financial Services and Merchant Banking.
- 2. To understand concept Venture Capital and Securitization.
- 3. To understand Hire Purchase Finance and Housing Finance
- 4. To understand Stock Broking and Depository Services.

# Sem. IV

# **Corporate Financial Accounting**

- 1. To develop knowledge of Corporate Financial Reporting.
- **2.** To understand the International Financial Reporting Standards and Indian Accounting Standard.
- 3. To understand the Valuation of Business for Amalgamation & Merger.
- 4. To develop the knowledge of Consolidated Financial Statement.

#### **Financial Management**

- **1.** To develop knowledge of types of Financing.
- 2. To understand investment decisions of capital Budgeting.
- 3. To understand Management of Working Capital.
- 4. To develop the knowledge of Financial Planning.
- 5. To understand Financial Policy and Corporate Strategy.

## **Personal Financial Planning**

- 1. Understanding Personal Finance.
- 2. To understand the concept of Risk Analysis & Insurance Planning
- 3. To develop the knowledge about Retirement Planning & Employees Benefits.
- 4. Understand Personal Investment Planning.