

Dnyaneshwar Gramonnati Mandal's
**Hon. Balasaheb Jadhav Arts, Commerce And Science College, Ale
Tal- Junnar, Dist- Pune – 412 411**
Course Outcomes, Programme Outcomes at UG/PG Level

1. Faculty of Arts

1. Department of Marathi

F.Y.B.A. Marathi (1024)

General Paper-1 (G1)

Sahityik Marathi/ Vyavaharik ani Upyojit Marathi

1. Introduce students to Marathi literature, language and culture.
2. Create interest in Marathi literature.
3. Develop the literary taste of students.
4. Cultivate ability to appreciate literature.
5. Connect literature to real life experience.
6. Understand various branches and movements of Marathi literature.
7. Develop linguistic skills to meet the requirements in the age of globalization.
8. Importance of language in personality developments.

S.Y.B.A. Marathi

Marathi General Paper-2 (G2) -Sahityik Marathi/Vhyahvarik and Upyojit Marathi

1. Introduce standard writing practices.
2. Develop the skill of translation.
3. Understand aspects of Biography and Autobiography.
4. Develop ability to appreciate and evaluate selected Biographies and Autobiographies in modern Marathi literature.

Marathi Special Paper-1 (S1) Marathi -

Sahityatil Vividh Sahityaprakar (Types in Marathi Literature)

1. Provide basic knowledge of Marathi literature.
2. Introduce literary classics of different historical periods.

3. Create and cultivate taste in Marathi literature.
4. Create perspectives to analyze, evaluate and appreciate literary texts.
5. Develop ability for in-depth study of literature.

Marathi Special Paper-2 (S2)

Arvachin Marathi Wangmayacha Abhayas (Ancient Marathi Literature)

1. Study of the history of Marathi literature.
2. Clarify the concept of literary history.
3. Introduce the nature, source and types of Marathi literature from 1818 to 1960.
4. Introduce the major Marathi writers and their works from 1818 to 1960.

TYBA Marathi

Marathi General Paper-3 (G3)

Modern Marathi Literature and Functional Marathi)

1. Introduce various movements in Modern Marathi literature.
2. Generate interest in modern Marathi literature among students.
3. Provide close understanding of selected literary texts.
4. Introduce students to media.
5. Develop skill in preparing materials for media including Newspaper, Radio and TV.

Marathi Special Paper-3 (S3)

Sahityavichar (Literary Criticism)

1. Explain the nature and function of literature.
2. Explain the nature of the process of literary creation and the concept of literary genus.
3. Analyze the process of literary appreciation.
4. Provide knowledge of some fundamental concepts in literary appreciation.

Marathi Special Paper-4 (S4)

1. Understand the original development of Marathi language in the light of linguistic theories.
2. Understand the evolution of Marathi language.
3. Study the basic features of Marathi language.
4. Introduce students to historical and descriptive linguistics.

Programme Outcomes at UG level

B.A. Marathi

1. Students have learned to analyze literature on their own.
2. The different forms of literature have been understood by the students.
3. Students have understood the importance of orthography.
4. Students have understood the importance of regional literature.
5. Students have acquired the knowledge of language and literature.
6. This programme has enhanced and enriched the competence of the students.
7. Students have improved their communicative competence

2. Department of English

F.Y.B.A. English

Compulsory English

1. Students have learned the different communicative skills, and have developed their capacity to communicate in English, both in written and spoken modes.
2. They have developed linguistic and pragmatic competence for self-learning.
3. Students have learned to understand various types of texts on their own.
4. This course has helped the students to comprehend the different forms of literature.
5. Students have practised basic grammar of English.

General Paper-1(Optional English)

1. The students have been exposed to the basic concepts of literature and language.
2. This programme has helped the students to understand the literary merit, beauty and creative use of language.
3. This programme has helped the students to know the basic units of language.
4. This programme has helped the students to understand language and literature.
5. This programme has developed integrated view about language and literature among the students

S. Y. B. A.

Compulsory English

1. Students have started learning at their own level.
2. They have enjoyed the beauty of literature.

3. They have started reading short stories.
4. They have begun to think about universal values and compared them to Indian Society.
5. Their language and communication skills have been improved.

General Paper-2 Study of English Language and Literature

1. The students of this course have understood the basics of short story, as one of the literary forms.
2. They have understood the different types of stories and their basic elements.
3. This course has supported them to understand the literary merit, beauty and creative use of language.
4. The students have been introduced with some advanced units of language and its technical aspects.
4. This course has given the students an insight to differentiate study and understand literature and language.
5. This course has proved to be the perfect combination of language and literature.
6. It has given comprehensive vision to the students to look at language and literature from different perspectives.

Special Paper-I Appreciating Drama

1. Students have become familiar with basic terms of Drama and learned its application.
2. Students have studied the few masterpieces of English Drama.
3. They have studied masterpieces in the Indian Context.
4. They have developed their skills for appreciating and analyzing Drama at their own level.
5. They have enjoyed the aesthetic beauty of Drama and began to evaluate.

Special English Paper-2 Appreciating Poetry

1. This paper has helped the students to know what poetry is.
2. The different terms have been prescribed for the students to let them know the difference between the terms, forms and poetic devices which are used to define poetry.
3. The different figures of speech have made the students aware about the figurative language and its usages.
4. This course has proved to be very useful for the students to understand the literary genre and poetry.

T. Y. B. A.

Compulsory English

1. This paper has helped the students to know language and literature as this paper is the perfect combination of literature and language.
2. The different forms of literature such as poetry, essay etc., have been prescribed for the students to let them know the difference between them.
3. Students have undergone cultural differences and experiences through literature.
4. The students have learned communicative strategies and soft skills.
5. The students have understood various tips for effective communication and presentation.
6. This course has been proved to be extremely useful for the students.

English Special Paper III Appreciating Novel

1. This paper has helped the students to know the basics of novel as a literary form.
2. The students have studied different elements of novel: Theme, Characters, Plot, Structure Narrative Techniques, Point of view, Conflict, Setting and atmosphere, Dialogue etc.
3. They also have studied different types of novels: epistolary, picaresque, bildungsroman, historical, regional, Psychological, satire, realistic, experimental novel, science fiction.
4. Students have studied different terms related to fiction. It has increased their knowledge about novel.
5. Students have studied three different novels of world famous novelists. It has helped the students to understand novels by taking into consideration different factors which help the novelist to become famous.

General Paper-3 Advanced Study of English Language and literature

1. Students have become familiar with Indian English Poetry.
2. They have understood the culture, diversity, ethos and feminist approach of the poet.
3. They have learned the creative use of language in poetry.
4. They have studied various figures of speech and applied them to poems.
5. Students have learned the advance areas of language studies.
6. They have developed their English language through literature.
7. Students have developed the integrated view about the language and literature.

Special Paper IV Introduction to Literary Criticism

1. Students have understood the basic concepts of the Criticism
2. They have learned principles, function and nature of Criticism.
3. Students have learned critical appreciation.
4. They have studied various literary terms.
5. Students have become familiar with various movements and isms.
6. They have started understanding literary terms to the literature.

F.Y.B.Com.

Compulsory English Course

1. Students have learned prose and poetry.
2. This course has helped the students to realize the beauty and communicative power of English
3. Students have learned the importance and utility of English language
4. Students have developed overall linguistic competence and communicative skills.
5. Students have developed oral and written communicative skills.
6. Students have learned the use of vocabulary.

S.Y. B. Sc. Comp-Sci. Technical English

1. Students have learned the different communicative skills, and have developed their capacity to communicate in English, both in written and spoken modes.
2. They have developed linguistic and pragmatic competence for self-learning.
3. Students have learned to understand various types of texts on their own.
4. This course has held the students to comprehend the different forms of literature.
5. Students have practiced basic grammar of English.
6. The students have learned communicative strategies and soft skills.
7. The students have understood various tips for effective communication and presentation.
8. This course has been proved to be extremely useful for the students.

Programme Outcomes of UG

B.A. English at Compulsory, General and Special Level

1. Students have developed linguistic and pragmatic competence for self- learning.
2. Students have understood the literary merit, beauty and creative use of language.
3. This programme has proved to be the perfect combination of language, literature and criticism.
4. Students have understood different figures of speech and importance of figurative language.
5. Students have understood different types of poetry, novels and plays.
6. This programme has helped the students to understand the importance of criticism, literature and communication in our day-to-day life.

B.Com English at Compulsory Level

1. Students have learned the different communicative skills, and have developed their capacity to communicate in English, both in written and spoken modes.
2. They have developed linguistic and literary competence for self-learning.
3. Students have learned to understand various types of texts on their own.
4. This course has held the students to comprehend variety of culture.
5. Students have got some lifelike experiences related to the world of business.

B. Sc (Comp-Sci) English at Compulsory Level

1. Students have understood the literary merit, beauty and creative use of language.
2. This programme has proved to be the perfect combination of language and literature.
3. Students have understood different concepts in grammar.
4. Students have understood variety of life experiences and life values.

3 Department Of Geography

F. Y.B.A.

Geography General Paper-1 Elements of Geomorphology (G – 110)

1. After studying this curriculum, students have learnt basic concepts in Geomorphology.
2. This curriculum has proved helpful for students to understand the latest concepts in Geomorphology.

3. Students have learned about the utility and application of Geomorphology in different regions and environment.
4. Students have understood the geological structure.
5. Students have understood structural effects of folding and faulting of the earth's surface.

S.Y.B.A.

Geography General Paper-2 Geography of Disaster Management (Gg -210)

1. This paper has helped the students to learn the concept of Disaster and its relation with Geography.
2. The Students have learned the utility and application of hazards in different areas and its management.
3. This course has helped the students to know about disaster management.
4. Students have learned to face natural calamities.
5. Students have understood the causes and consequences of disaster manage

General Geography Paper-3 Human Geography (Gg – 310)

1. The students have learned the nature of man and his abilities and capabilities in environment.
2. They have come to know about the environment and population in terms of their quality and spatial distribution pattern.
3. This syllabus has proved to be beneficial for the students who learned the contemporary issues facing the global communities section.
4. Students have learned the relation of human being with space and place.
5. Students have learned cultures, economies and interactions.

Programme Outcomes B .A. Geography

1. Students have studied and understood different geographical concepts.
2. Students have learned the classical tradition in political theory from .
3. They have understood the explanation and analysis of great masters.
4. Students have acquired the knowledge of recent social and political science explanations of political processes and events.
5. Students have understood the evolution of local self-government.
6. Students are well acquainted with various committees of local self government in Maharashtra.
7. Students have understood public administration and new administration

4. Department Of History

FYBA

History General Paper-1 (G1) Shivaji and His Times (1630-1760) (1177)

1. Introduce innovative study techniques in the study of History of Maratha to make it value based, conceptual and thought provocative.
2. Introduce International elements in the study of Marathas to facilitate comparative analysis of this history.
3. Highlight the importance of past in exploration of present context.
4. Understand the Socio –economic, cultural and political background of 17th century Maharashtra.
5. Increase the spirit of healthy Nationalism & Secularism among the student.

SYBA

History General Paper-II (G2) : -Modern India (1857-1950) (2177)

1. Help students to know- History of freedom movement of India, aims, objectives, problems and progress of Independent India.
2. Enable students to understand the processes of rise of modern India.
3. Acquaint students with fundamental aspects of Modern Indian History.
4. Explain the basic concepts/ concerns/ frame work of Indian History.

History Special Paper-I (S1): Ancient India (3000 B.C. to 1206 AD) (2178)

1. Survey the sources of History of Ancient India.
2. Provide an Understanding of the social, economic, religious and institutional bases of Ancient India.
3. Study an ancient Indian agriculture, Industry, trade.
4. Study the development of the concept of Nation- State background of political history.
5. Study ancient Indian Art & Architecture.

History Special Paper-II (S2) : Medieval India (1206-1707 D) (2179)

1. To survey the sources of History of medieval India.
2. Provide an understanding of the social, economic, religious bases of medieval India.
3. Study medieval Indian art & architecture.

TYBA

History General Paper III (G3)

1. History of the World in 20th Century (1914-1992) (3177)
2. Help students to know Modern World and acquaint with the Socio- economic & Political developments in other countries. And understand the contemporary world in the light of its background History.
3. To orient the students with political history of Modern World.
4. Acquaint with the main developments in the Contemporary World (Understand the important development in the 20th century World.)
5. Impart knowledge about world concepts.
6. Enable students to understand the economic transition in World during the 20th Century.

History Special Paper III (S3)

1. Introduction to History (3178)
2. Orient students about how history is studied, written and understood.
3. Explain the methods and tools of data collection
4. Understand the meaning of Evolution of Historiography.
5. Study the Various Views and approaches to Historiography.
6. Study the types of Indian Historiography.

History Special Paper IV (S4):History of Asia in 20th Century (1914-1992) (3179)

1. Orient students with political history of Asia. Enable students to understand the economic transition in Asia during 20th Centuries.
2. Understand the important developments in the 20th century Asia in a thematic approach.
3. Provide students with an overall view and broad perspective about different movements connected with Nationalist aspirations in the region of Asia in general.
4. Empower students to cope with the challenges of globalization.

2. Faculty of Commerce

F.Y.B.Com.

Financial Accounting course

Code: 102

1. Impart knowledge of various accounting concepts
2. Knowledge about accounting procedures, methods and techniques.
3. Acquaint with practical approach to account writing by using software package.

Business Economics (Micro) Course

Code: 103

1. Expose students of Commerce to basic micro economic concepts and inculcate an analytical approach to the subject matter.
2. Stimulate students' interest by showing the relevance and use of various economic theories.
3. Apply economic reasoning to problems of business.

Business Mathematics and Statistics

Course Code: 104 (A)

1. Prepare for competitive examinations.
2. Understand the concept of Simple interest, compound interest and the concept of EMI.
3. Understand the concept of shares and to calculate Dividend
4. Understand and to calculate various types of averages and variations.
5. Understand the concept and application of profit and loss in business.
6. Solve LPP to maximize the profit and to minimize the cost.

Banking and Finance [Fundamentals of Banking]

Course Code: 105 – (B)

1. Acquaint the students with the fundamentals of banking.
2. Develop the capability of students for knowing banking concepts and operations.
3. Make the students aware of banking business and practices.
4. Give thorough knowledge of banking operations.
5. Enlighten the students regarding the new concepts introduced in the banking system

Marketing and Salesmanship [Fundamentals of Marketing]

Course Code: 106 – (C)

1. Create awareness about market and marketing.
2. Establish link between commerce/Business and marketing.
3. Understand the basic concept of marketing.
4. Understand marketing philosophy and generating ideas for marketing research.
5. Know the relevance of marketing in modern competitive world.
6. Develop an analytical ability to plan for various marketing strategy.

S. Y. B. Com.

Business Communication

1. Understand the concept, process and importance of communication.
2. Develop awareness regarding new trends in business communication.
3. Provide knowledge of various media of communication.
4. Develop business communication skills through the application and exercises.

Corporate Accounting

1. Create awareness about Corporate Accounting in conformity with the provisions of Companies Act and Accounting as per Indian Accounting Standards.
2. Make aware about the conceptual aspect of corporate accounting.
3. Enable students to develop skills for Computerized Accounting.
4. Enable students to develop skills about accounting standards.

Business Management

1. Provide basic knowledge & understanding about business management concept.
2. Understand various functions of management.

Elements of Company Law

1. Impart knowledge of fundamentals of Company Law.
2. Update the knowledge of provisions of the Companies Act of 2013.
3. Apprise students about new concepts involving in company law regime.
4. Acquaint with the duties and responsibilities of Key Managerial Personnel.
5. Impart students with the provisions and procedures under company law.

Business Economics (Macro)

1. Understand the concept National Income , credit Creation process and importance of Economics theories.
2. Develop awareness regarding new trends in business.
3. To Provide the knowledge of various Economics Activities.
4. To develop business skills through the application and exercises.
5. Understand the concept of Inflation & Deflation .

B. Special Paper II. Cost and Works Accounting. Course Code -: 206 – E.

1. Impart the Knowledge of Basic Cost concepts.
2. Impart the Knowledge of Ascertainment of Material and Labour Cost.

II. Business Laws & Practices. Course Code -: 206 – C.

1. Impart the students with the knowledge and understanding important Business Laws.
2. .Acquaint the students with Laws of Insurance, Life Insurance, Marine Insurance, Fire and other insurance.

III. Marketing Management.

1. Orient the student's recent trends in marketing management.
2. Create awareness about marketing of eco friendly products in the society through students.
3. Inculcate knowledge of various aspects of marketing management through practical approach.
4. .Acquaint the students with the use of E-Commerce in competitive environment.
5. Help the students understand the influences of marketing management on consumer behavior.

T.Y. B.Com.

Business Regulatory Framework (Mercantile Law)

1. Acquaint students with the basic concepts, terms & provisions of Mercantile and Business Laws.
2. Develop the awareness among the students regarding these laws affecting business, trade and commerce.

Advanced Accounting

1. Impart knowledge of various accounting concepts
2. Instill knowledge about accounting procedures, methods and techniques.
3. Acquaint with practical approach to accounts writing by using software package.

Auditing and Taxation

1. Acquaint with the concept and principles of Auditing, Audit process, Assurance Standards, Tax Audit, and Audit of computerized Systems.
2. Get knowledge about preparation of Audit report.
3. Understand the basic concepts and to acquire knowledge about Computation of Income, Submission of Income Tax Return, Advance Tax, and Tax deducted at Source, Tax Collection Authorities under the Income Tax Act, 1961.

Indian & Global Economic Development

1. To expose students to a new approach to the study of the Indian Agriculture ,Industrialization &
2. Global Economic activity.
3. To understand Regional & International Economics Co-Operation .
4. To Provide the knowledge of Indian Agricultural Activities & Development .
5. To understand relation between Agriculture, Industry & Market .

B. Special Paper II

Cost and Works Accounting Special Paper II

1. Provide Knowledge about the concepts and principles application of Overheads
2. Understand various methods of costing and their applications.

Business Laws & Practices.

1. Impart the students with the knowledge and understanding of important business Laws including labor laws.
2. Acquaint the students with certain provisions of Company law and its governance.

Marketing Management Special Paper II

1. Understand the concept and functioning of marketing planning and sales management.
2. Get knowledge of marketing strategies and organization.
3. Inform various facets of marketing with regulatory aspects.
4. Understand marketing in globalize scenario.

Special Paper III

Cost and Works Accounting Special Paper III

1. Impart knowledge regarding costing techniques.
2. Provide training as regards concepts, procedures and legal Provisions of cost audit.

Business Laws & Practices. Paper-III Course Code -: 306 – c.

1. Impart the students with the knowledge and understanding of important business Laws including tax related laws.
2. Acquaint the students with Company law & Secretarial Practice.

Marketing Management Special Paper III

1. Knowledge of Marketing Research
2. Understand the role Brand and Distribution Management in marketing
3. Provide information about Marketing and Economic Development
4. Know the importance of control on marketing activities

Programme Outcomes(POs)

B.Com

1. Recognize, understand and imbibe soft skills required for the business world.
2. Build the abilities to become a successful entrepreneur, prepare a business plan, set up and manage own venture.
3. Maintain books of accounts of small scale and medium scale industrial units.
4. Develop skills of computation of income, submission of Income Tax Returns.
5. Acquire various costing techniques and do the Cost Audit.

3. Faculty of Science

1 PHYSICS

F.Y.B.Sc.

Semester-II

Physics Paper 1: Mechanics and Properties of Matter

1. This course would empower the student to acquire engineering skills and practical knowledge, which help the students in their everyday life.
2. The properties of solids especially knowledge of elasticity help the students to identify the materials suitable for the construction of buildings, houses etc.
3. Properties of fluids especially knowledge of viscosity and surface tension help the students in their daily life and agriculture.
4. This syllabus will cater the basic requirements for their higher studies.
5. This course will provide a theoretical basis for doing experiments in related areas.

Physics Paper 2: Physics Principles and Applications

1. This course aims to provide necessary foundation in physics and atomic theory which prepare the students for an intensive study of advanced topics at a later stage.
2. Covering the very important and fascinating areas of physics of atoms, physics of molecules and electromagnetic theory with many examples and application associated with it.

Semester-II

Physics Paper 1: Heat and Thermodynamics

1. To determine van der Waals's equation, Critical constants and concept of Boyle's temperature.
2. Understand basic concept of thermodynamics and to distinguish between work done due to Adiabatic and isothermal changes.
3. To state laws of thermodynamics and concept of internal energy.
4. To understand Carnot's ideal heat engine, Carnot cycle and its efficiency, Carnot's theorem, Otto and Diesel engines with their efficiencies.

Physics Paper 2: Electricity and Magnetism

1. Electricity and Electrodynamics have the key role in the development of modern technological world. Without electric power and communication facilities, life on earth stands still.
2. A course in electricity and electrodynamics is thus an essential component of physics programme at graduate level.

3. This course is expected to provide a sound foundation in Electricity and Electrodynamics.
4. To understand the concept of magnetism and magnetic properties of materials such as Ferromagnetic, Anti ferromagnetic and Ferrimagnetic.
5. To understand the applications of transformers, losses in transformer, and to distinguish between transformers including closed core transformer, Transformer with tapped secondary, Autotransformer, isolation transformer.

Physics Paper 3: Practical Physics

SECTION-I

1. M.I. of a disc by torsional pendulum.
2. η by torsional oscillation.
3. Determination of Y by using flat spiral spring.
4. Determination of η by using flat spiral spring.
5. Determination of coefficient of viscosity of water by Poiseuille's method.

SECTION-II

1. Verification of Kirchhoff's laws.
2. Verification of Thevenin's theorem.
3. Verification of Norton's theorem.
4. Maximum power transfer theorem.
5. Determination of time constant of LR circuit.
6. Determination of time constant of R-C circuit using charging and discharging of condenser through resistor.
7. Study of spectrometer and determination of angle of prism.
8. Use of analog/digital multimeter.
9. Study of I-V characteristics of solar cell.
10. Frequency of a. c. using vibrating wire and magnet.
11. Study tour

S.Y.B.Sc.

Semester-I

Physics Paper 1: Mathematical Method for Physics

1. To understand Complex number (Addition, Subtraction, Multiplication, Division, Complex conjugate) and Exponential form of complex number.
2. To solve problems using Euler's formula,
3. To state de-Moivre's theorem and to Trigonometrically functions Application of exponential form for power and roots of complex numbers.
4. Be able to solve relevant theoretical problems.

Physics Paper II: Electronics

1. We are living in a wonder world of Electronics.
2. The knowledge of basic principles and applications of Electronics is most necessary for a physics student.
3. Students will get the ability to identify almost all electronic components and their working principles.

Semester-II

Physics Paper 1: Waves and Oscillation

1. To demonstrate Lissajous figures by mechanical, optical and electrical methods.
2. To understand composition of two S.H.M.s of equal frequencies along same line of vibration, at right angles (analytical method with different cases).
3. To understand Free and damped oscillations.
4. To solve differential equation of damped harmonic oscillator and Energy equation.

Physics Paper II: OPTICS

1. This course aims to provide necessary foundation in optics and photonics which prepare the students for an intensive study of advanced topics at a later stage.
2. Covering the very important and fascinating areas of interference diffraction and polarization with many experiments associated with it.

Physics Paper III : Physics Practical

SECTION-I

1. Determination of the decrement factor by using Logarithmic decrement (in air / water).
2. Determination of velocity of sound by using Kundt's tube.
3. Study of electrical resonance by using series L-C-R circuit.
4. Study of acoustic resonance by using resonance tube.
5. Study of resonance using Kater's pendulum.
6. Comparison of capacities by De Saughty's method.
7. Demonstration of Lissajous figures by using C.R.O.
8. Other activities like Demo/project/poster/you tube of experiments.
9. Frequency response of CE single stage transistor amplifier and to calculate its bandwidth.
10. Other activities like Demo/project/poster/you tube of experiments.

SECTION-II (ELECTRONICS)

1. Study of full wave rectifier with capacitor filter and to calculate its ripple factor.
2. Study of zener diode as a voltage regulator.
3. Study of CE transistor characteristics to find out ' β ' of the transistor.
4. Study of logic gates (AND, OR and NOT) using diodes and transistors.
5. Verification of De Morgan's Theorems (using ICs).
6. To study the characteristics of Light Emitting Diode (LED).
7. Experimental verification of NAND gate as a universal building block.
8. Experimental verification of NOR gate as a universal building block.
9. To study I-V characteristic of (i) a resistor and (ii) a p-n junction diode and compare it.
10. Study tour

T.Y.B.Sc.

Semester-III

Physics Paper 1: Mathematical Physics

1. Students will demonstrate proficiency in mathematics and the mathematical concepts needed for a proper understanding of physics.
2. Students will demonstrate knowledge of selected topics from classical mechanics, quantum mechanics, quantum mechanics, electromagnetism, quantum mechanics, and thermal physics, and be able to apply this knowledge to analyze a broad range of physical phenomena.

Physics Paper 1I: Solid State Physics

1. Be able to account for interatomic forces and bonds.
2. Have a basic knowledge of crystal systems and spatial symmetries.
3. Be able to account for how crystalline materials are studied using diffraction, including concepts like the Ewald sphere, form factor, structure factor, and scattering amplitude.
4. Be able to perform structure determination of simple structures.
5. Understand the concept of reciprocal space and be able to use it as a tool know the significance of Brillion zones.

Physics Paper II1: Classical and Quantum Mechanics

1. This course is a prelude to advanced theoretical studies in Condensed Matter Physics, Spectroscopy, Astrophysics Electrodynamics and nuclear physics.
2. It is conceptually rich and technically difficult.
3. Special techniques are developed for attacking more realistic problems.

Physics Paper IV: Atomic and Molecular Physics

1. State and explain the key properties of vector atom model and the importance of the Pauli Exclusion Principle.
2. To explain the observed dependence of atomic spectral lines on externally applied electric and magnetic fields.
3. To state and justify the selection rules for various optical spectroscopies in terms of the symmetries of molecular vibrations.

Physics Paper V: Computational Physics

1. This course is intended to give an insight to computer hardware and computer applications.
2. Students will familiarise with microprocessors which are the back bone of computers.
3. C programming enables the students to develop computer programmes which can solve mathematical equations which will be useful for research and job.

Physics Paper VI : Elements of Material Sciences

1. Get knowledge of Historical perspectives of materials science.To classify between advanced materials, Smart materials, Nano structured Materials.
2. To understand chemistry of organic material and its classification.
3. To understand and learn the Mechanical Properties, Thermal Properties, Electrical Properties, and Magnetic Properties of materials.
4. To understand the basic concept of Dislocations and Plastic Deformation.

Semester-IV

Physics Paper 1: Electrodynamics

1. To state Gauss law and its application to obtain electric field for different cases.
2. Describe and explain the relationship between the electric field and the electrostatic potential.
3. Understand the relation between Electric displacement vector D , Susceptibility, Permittivity, Dielectric constant.
4. To understand Lorentz force on a point charge moving in a magnetic field.
5. To state Biot and Savart's law and Ampere's circuital law to Describe and explain the generation of magnetic fields by electrical currents.
6. Be able to solve relevant theoretical problem and use their conceptual understanding of the electromagnetic laws in order to qualitatively describe the behavior of the solution to the problem.

Physics Paper II : Quantum Mechanics

1. To develop a knowledge and understanding of the concept that quantum states live in a vector space.
2. To solve quantum mechanics problems. Formulation of Schrödinger equation-time dependent and time independent forms.
3. To derive energy Eigen value and eigen functions particle in a box and 1-D harmonic oscillator.
4. To formulate the Schrödinger wave equation in terms of spherical polar coordinates for its application to solve Hydrogen atom problem.
5. To understand Postulate of quantum mechanics, operators and use of commutation and commutative algebra of operators to solve quantum mechanics problem.

Physics Paper III : Thermal and Statistical Physics

1. This course is to develop a working knowledge of Thermal and statistical mechanics and to use this knowledge to explore various applications related to topics in material science and the physics of condensed matter.
2. To understand basic concepts of probability and probability distribution.
3. To solve Random walk problem in one dimension and Gaussian probability distribution.
4. To understand specification of the state of the system (Classical & Quantum). To state ²¹ Basic postulate of equal a priori probability,

Physics Paper IV : Nuclear Physics

1. This course intended to explore the interior of nucleus and interaction between nucleons.
2. Students will get good theoretical basis of nuclear fission. Students also familiarise with fundamental particles of nature and how these particles are interacting with each other and matter.
3. To understand nuclear compositions and Elementary particles, charge symmetry and independence, spin dependence of nuclear force.
4. To state Law of radioactive decay and its application.
5. To distinguish between Types of nuclear models: Single particle shell model and

Physics Paper V : Electronic

1. To distinguish between P-N diode, Zener diode, LED and Photodiode.
2. To understand Half wave, full wave and bridge rectifiers and filters: capacitance filter, inductor filter and π filter.
3. To demonstrate voltage regulation using Zener diode.
4. To understand basic construction and operation of bipolar transistors (NPN and PNP),
5. To distinguish between transistor circuit configurations (CB, CE, CC), current gains (α , and β) and their interrelationship.

Programme Outcomes B.Sc. in Physics (UG Course)

Educational aims of the programme:

To provide graduates with a secure and demonstrable knowledge and skills base in physics, an appreciation of the context and impact of physics and the ability to apply the power of scientific methodology.

Programme Outcomes:

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas:

1. After graduating, a student should have acquired knowledge with facts and figures related to various subjects of Physics.
2. At the completion of B. Sc. in Physics students are able to: Demonstrate a rigorous understanding of the core theories & principles of physics, which includes mechanics, electromagnetism, thermodynamics, & quantum mechanics.

3. Learn the Concepts as Quantum Mechanics, Relativity, introduced at degree level in order to understand nature at atomic levels.
4. Provide knowledge about material properties and its application for developing technology to ease the problems related to the society.
5. Understand the set of physical laws, describing the motion of bodies, under the influence of system of forces.
6. Understand the relationship between particles & atom, as well as their creation & decay.
7. Relate the structure of atoms & subatomic particles.
8. Understand physical properties of molecule the chemical bonds between atom as well as molecular dynamics.
9. Analyze the applications of mathematics to the problems in physics & develop suitable mathematical method for such application & for formulation of physical theories. Learn the structure of solid materials & their different physical properties along with metallurgy, cryogenics, electronics, & material science.
10. Understand the fundamental theory of nature at small scale & levels of atom & subatomic particles.
11. Understood the basic concepts, fundamental principles, and scientific theories related to various scientific phenomena and their relevance in day-to-day life.
12. Acquired skills in handling scientific instruments, planning and performing laboratory experiments noting down the observations and drawing logical inferences from them.
13. Analyzed the given scientific data critically and systematically and drawing objective conclusions. Been able to think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems.
14. Realized how developments in any one-science subject help in the development in other science subjects and vice-versa and how interdisciplinary approach helps in providing better solutions and new ideas for sustainable developments.
15. Developed scientific outlook not only with respect to science subjects but also in all aspects related to life.
16. Realized that 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.
17. Imbued ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.

18. Developed various communication skills such as reading, listening, speaking, etc., which we will help in expressing ideas and views clearly and effectively.
19. Realized that pursuit of knowledge is a lifelong activity and in combination with untiring efforts and positive attitude all necessary qualities for leading a successful life.
20. Developed a flair for participating in various social and cultural activities voluntarily, in order to spread knowledge, creating awareness about the social evils, blind faith, etc.

PROGRAM OUTCOMES (POs) Of UG COURSES

1. Get familiar with the main mathematical methods used in physics.
2. Understand the theoretical / mathematical / conceptual development of the subject.
3. Understand the theoretical foundations / basic phenomena / concepts of physics thoroughly.
4. Understand the laws of physics deeply with the help of practical.
5. Familiarize with laboratory instruments used by faculty in the department

PROGRAM SPECIFIC OUTCOMES (PSOs) Of UG COURSE

1. Provide in depth knowledge of scientific and technological aspects of Physics .
2. Familiarize with current and recent scientific and technological developments
3. Enrich knowledge through problem solving, hand on activities, study visits, projects etc.
4. Develop skills related to research, education, industry, and market.
5. Create foundation for research and development in Electronics
6. Develop analytical abilities towards real world problems
7. Help students build-up a progressive and successful career in physics.

2 CHEMISTRY

F.Y.B.Sc.

Chemistry

Chemistry Paper - I : Physical and Inorganic Chemistry

Term - I

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. States of Matter
2. Surface Chemistry
3. Chemical Mathematics
4. Mole Concept, Stoichiometric and Numerical,
5. Oxidation- reduction

Term - II

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Atomic Structure
2. Chemical Thermodynamics
3. Chemical Bonding

Chemistry Paper - II Organic and Inorganic Chemistry

Term - I

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Chemical Bonding in Organic Molecules
2. Chemistry of Hydrocarbons
3. Chemistry of s-block elements

Term - II

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Chemistry of Functional Groups
2. Stereochemistry
3. Chemistry of p-block elements

Chemistry Paper - III Practical Course

Students are expected to perform the following experiments.

1. Physical Chemistry : 7 experiments
2. Inorganic Chemistry: 7 experiments
3. Organic Chemistry : 7 experiments

Programme outcomes of F.Y.B.Sc. Chemistry(POs)

1. The students are expected to understand the fundamentals, principles, mathematical concepts and recent developments in the subject area.
2. The practical course is in relevance to the theory courses to improve the understanding of the concepts.
3. It would help in development of practical skills of the students.
4. It is expected to inspire and boost interest of the students towards chemistry as the main subject.
5. It would enable to develop interdisciplinary approach of the subjects for students opting for specialization in other subjects at latter stages of graduation.
6. The systematic and planned curricula from first year to the third year shall motivate and encourage the students for pursuing higher studies in various disciplines of Chemistry such as Physical, Inorganic, Organic, Analytical, Drug and Biochemistry. This curriculum also enable student to shoulder the responsibility as Chemist in chemical industry.

Programme Specific outcomes of F.Y.B.Sc. Chemistry(PSOs)

1. At first year of under-graduation. The basic topics related to the fundamentals of chemistry covered. Since chemistry is an experimental subject, practical courses is intended to achieve the basic skills required for understanding the concepts and authenticating the basic laws and principles of Chemistry.
2. Students are provide in-depth knowledge of scientific and technological aspects of Chemistry
3. Students are familiarize with current and recent developments in Chemistry
4. Students got enrich knowledge through programmes such as industrial visits, projects etc.
5. Students are trained in skills related to Chemistry for academic and industrial requirement.
6. foundation for research and development in Chemistry is created Students.
7. Analytical abilities for independent thinking are developed in the students.
8. It helps students to build-up a progressive and successful career in Chemistry

S.Y.B.Sc.

Semester - I

CH-211 : PHYSICAL & ANALYTICAL CHEMISTRY

Section – I Physical Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Elementary Chemical Kinetics
2. Photochemistry
3. Distribution law

Section – II Analytical Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Introduction to Analytical Chemistry
2. Errors in Quantitative Analysis
3. Inorganic Qualitative Analysis
4. Analysis of Organic Compounds (Qualitative & Quantitative)

CH-212 : ORGANIC & INORGANIC CHEMISTRY

Section – I Organic Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Stereoisomerism
2. Organic reaction Mechanism

Section – II Inorganic Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. General Principles of Metallurgy
2. Metallurgy of Aluminium (Electrometallurgy)
3. Metallurgy of Iron and Steel (Pyrometallurgy)
4. Corrosion and Passivity

Semester - II

CH-221 PHYSICAL & ANALYTICAL CHEMISTRY

Section – I Physical Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Free Energy and Equilibrium
2. : Solutions of Liquids in Liquids

Section – II Analytical Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Introduction to volumetric analysis
2. Non Instrumental volumetric analysis

CH-222 ORGANIC & INORGANIC CHEMISTRY

Section – I Organic Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Reagents in Organic Synthesis
2. Chemistry of heterocyclic compounds with one hetero atom.
3. Introduction of Bio-molecules

Section – II Inorganic Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Chemistry of d-block elements
2. Organometallic Chemistry
3. Acids, Bases and Solvents
4. Acids, Bases, Solvents and reactions in non-aqueous solvents
- 5.

Programme outcomes of S.Y.B.Sc. Chemistry (POs)

1. At second year under-graduation: The level of the theory and practical courses shall be one step ahead of the first year B.Sc. Courses based on content of first year shall be introduced. For the development of vertical growth in the subject, advanced level topics are introduced so as to make the student mature enough to pursue the career in Chemistry.
2. student should be able to verify theoretical principles experimentally.
3. Acquire skill of crystallisation, record correct m. p. / b. p.
4. Perform the complete chemical analysis of the given organic compound and should be able to recognize the type of compound.
5. Write balanced equation for all the reactions, they carry in the laboratory.
6. Perform the given organic preparation according to the given procedure.
7. Follow the progress of the reaction by using TLC technique.
8. Set up the apparatus properly for the given experiments.
9. Perform all the activities in the laboratory with neatness and cleanness
10. Student should understand concept of different reagents used in the one type of

conversion and the merits & demerits of different reagents

11. Define and classify heterocyclic compounds. and Huckel rule to predict aromaticity.

Programme Specific outcomes of S.Y.B.Sc. Chemistry (PSOs)

1. Student should be able to explain laws of photochemistry, quantum yield, measurement of quantum yield, types of photochemical reactions
2. To understand errors and its interpretation
3. To study the theory underlying Inorganic Qualitative analysis.
4. To disseminate knowledge of qualitative & quantitative analysis of organic compounds
5. Define Erythro, threo, meso, diastereoisomers with suitable examples.
6. Able to find R/S configuration in compounds containing two chiral centers
7. To know physico-chemical principles involved in metallurgy
8. To conceptualize phenomenon of free energy and equilibria.
9. Meaning of equivalent weight, molecular weight, normality, molality, primary and secondary standards.
10. To learn and equip with non instrumental volumetric techniques.
11. Know different biomolecules.
12. After completion of practical course student should be able to

Verify theoretical principles experimentally ,Interpret the experimental data , Improve analytical skills and correlate the theory and experiments and understand their importance

T.Y.B.Sc. Chemistry

To be implemented from June 2015

T.Y.B.Sc. Chemistry is consisting of six theory and three practical courses.

Course outcomes of T.Y.B.Sc. Chemistry(COs)

Semester III

CH-331: Physical Chemistry

Students are expected to know the basic and thorough knowledge of the following topics.

1. Chemical Kinetics
2. Electrolytic Conductance
3. Investigation of

4. Molecular Structure 5. Phase Rule

CH-332: Inorganic Chemistry

Students are expected to know the basic and thorough knowledge of the following topics.

1. Molecular Orbital Theory
2. Coordination Chemistry

CH-333: Organic Chemistry

Students are expected to know the basic and thorough knowledge of the following topics.

1. Strength of organic acids and bases
2. Stereochemistry of disubstituted cyclohexane
3. Nucleophilic substitution at aliphatic Carbon
4. Reactions of unsaturated hydrocarbons and carbon oxygen double bond
5. Elimination Reactions
6. Aromatic Electrophilic and Nucleophilic Substitution Reactions

CH-334: Analytical Chemistry

Students are expected to know the basic and thorough knowledge of the following topics.

- 1 Gravimetric Analysis
- 2 Thermal methods of analysis
- 3 Spectrophotometry
- 4 Polarography
- 5 Atomic Absorption Spectroscopy
- 6 Flame Emission Spectroscopy

CH-335: Industrial Chemistry

Students are expected to know the basic and thorough knowledge of the following topics.

1. Modern Approach to Chemical Industry
2. Agrochemicals
3. Manufacture of Basic Chemicals
4. Petrochemicals and eco-friendly fuels
5. Food and Starch Industry
6. Cement and Glass industry

OPTIONAL COURSE: CH-336-D Environmental and Green Chemistry

Students are expected to know the basic and thorough knowledge of the following topics.

1. Concepts and scope of Environmental Chemistry
2. Atmosphere and Air Pollution
3. Hydrosphere and water pollution
4. Introduction to Green Chemistry
5. Green Chemistry and Technology for sustainable development
6. Green Chemistry and Hazardous Organic Solvents

Semester IV

CH-341: Physical Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Electrochemical Cells
2. Nuclear Chemistry
3. Crystal Structure
4. Quantum Chemistry

CH-342: Inorganic Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Chemistry of f-block element
2. Metals Semiconductors and Superconductors
3. Ionic Solids
4. Homogeneous Catalysis
5. Heterogeneous Catalysis
6. Bioinorganic Chemistry

CH-343: Organic Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Carbanions and their reactions
2. Retrosynthetic analysis and applications
3. Rearrangement reactions
4. Spectroscopic methods in structure and determination of Organic compounds
5. Natural Products

CH-344: Analytical Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

- 1 Solvent Extraction
- 2 Chromatography
- 3 Gas Chromatography
- 4 High Performance Liquid Chromatography
- 5 Electrophoresis

6 Nephelometry and Turbidimetry

CH-345: Industrial Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Polymer chemistry
2. Sugar and Fermentation Industry
3. Soap, detergents and Cosmetics
4. Dyes and paints
5. Chemistry of pharmaceutical industries
6. Pollution prevention and waste management

OPTIONAL COURSE : CH-346-D Environmental and Green Chemistry

Students are expected to know the basic concepts and thorough knowledge of the following topics.

1. Water treatment and effluent management
2. Soil and solid waste management
3. Instrumental methods in environmental analysis
4. Green House Effect and Global Warming
5. Water the ultimate Green solvent
6. Energy Relations

Physical Chemistry Practicals : CH- 347

Students are expected to perform the following experiments.

Group A

1. Chemical Kinetics
2. Viscosity
3. Adsorption
4. Phenol-water system
5. Transport number
6. Refractometry

Group B

1.Colorimetry 2.Potentiometry 3.pH metry 4.Radioactivity 5.Conductrometry

CH-348: Inorganic Chemistry Practicals

Students are expected to perform the following experiments.

- A) Gravimetric estimations
- B) Volumetric Estimations
- C) Inorganic preparations
- D) Colorimetric Estimations
- E) Separation of binary mixture of cations by Column Chromatography (3 mixtures)
- E) Flame Photometry
- F) Qualitative Analysis of binary mixtures including Borates and Phosphates
- G) Visit to a chemical industry and report writing is compulsory.

CH-349: Organic Chemistry Practicals

Students are expected to perform the following experiments.

A)Separation of Binary Mixtures and Qualitative Analysis (8 Mixtures)

Solid-Solid (4 Mixtures), Solid-Liquid (2 Mixtures), Liquid-Liquid (2 Mixtures).

B)Organic Estimations C)Organic Preparations (Eight)

Programme Outcomes of B.Sc. Chemistry Course(POs)

1. Students are expected to understand basic concepts of various branches of Chemistry such as Physical Chemistry, Inorganic Chemistry, Organic Chemistry, Analytical Chemistry, Industrial Chemistry, Nuclear Chemistry, Polymer Chemistry, Biochemistry, Molecular Biology, Environmental Chemistry and Agriculture Chemistry.
2. This basic knowledge will be helpful for them during their further education and research.
3. The basic concepts in the syllabus will be helpful for preparation of NET, SET and GATE examinations.

4. Students are expected to get knowledge of analytical techniques which are useful in getting them jobs in chemical and pharmaceutical industries.
5. Students are expected to perform the experiments from Physical, Inorganic and Organic Chemistry

Programme Specific Outcomes of T.Y. B.Sc. Chemistry Course (PSOs)

1. At third year under-graduation, theory papers in each semester deal with the further detailed studies of the various branches of Chemistry as well as some specialized topics like Industrial and Environmental Chemistry. Such a designing of course structure enables the student to understand fundamental as well as applied components that are pertinent to Chemistry. Also, practical courses are framed towards development of synthetic as well as analytical skills that are essential for academic and professional life.
2. Students are expected to perform the experiments like Chemical Kinetics, Viscosity, Adsorption, Phenol-water system, Transport number, Refractometry and understand their applications in chemical analysis.
3. Students are expected to perform the instrumental experiments such as Colorimetry, Potentiometry, pH metry, Radioactivity, Conductrometry, and understand their applications in chemical analysis.
4. Gravimetric estimations of Iron as Fe_2O_3 , Nickel as Ni – DMG and Al as Aluminum oxide and Ba as BaSO_4
5. Volumetric Estimations of Mn by Volhard's method, NO - by using KMnO_4 , % purity of given sample of Sodium Chloride, Analysis of Brass-Estimation of copper by Iodometry and Fertilizer analysis (PO43-)
6. Inorganic preparations such as Hexamminenickel(II), Potassium Trioxalatoferate (III), Tetraamminecopper, Manganese (III) acetylacetonate and Tris(Thiourea)Copper (I) Chloride $[\text{Cu Thiourea}]_3\text{Cl}$.
7. Colorimetric Estimations & Flame Photometry
8. Qualitative Analysis (4 mixtures including Borates and Phosphates)
9. Visit to a chemical industry and report writing is compulsory.
10. Separation of Binary Mixtures and Qualitative Analysis of Solid-Solid, Solid-Liquid, Liquid-Liquid Mixtures.
11. Organic Estimations of acetamide, Glucose, Ethyl benzoate, Monobasic and Dibasic

acids by Volumetric Methods.

12. Organic Preparations (Eight) Preparation of: Adipic acid , P-nitroacetanilide ,B-Naphthyl ether , P-Iodonitrobenzene , P-Bromacetanilide and Ethylbenzene.

3 Botany

F. Y. B. Sc.

Semester I

Botany Paper I: Plant Diversity

1. Create awareness about fundamental plant group system in nature.
2. Equip the students with all life science fundamental practical skills.

Botany Paper II: Industrial Botany I

1. Understand the important terminology in industrial economically important plant species.
2. Study its eco-friendly conservation and sustainable utilization.

Semester II

Botany Paper I: Plant Morphology and Anatomy

1. Introduce the students to understand the various forms of plants, morphological features and plant terminology.
2. Analyze the peculiar characteristics of plant groups in relation with its internal characteristics.

Botany Paper II: Industrial Botany II

1. Understand some important terminology in industrial economically important higher plant groups species.
2. Study its eco-friendly conservation and sustainable utilization of non woody forest products.

S. Y. B. Sc.

Semester I

Paper I: Taxonomy of Angiosperm and Plant Community

1. Familiarize with basic terminology, plant systematic and its different classification.
2. Students cop up with the ecosystem mechanism, analyzing plants ecosystem in its biogeochemical cycles.

Paper II: Plant Physiology

1. Make aware of mechanism in functioning of plant metabolism.
2. Understand the root level plant physiology knowledge for the other botany streams like Plant genetics and Plant biotechnology.

Semester II

Paper I: Plant Anatomy and Embryology

1. Knowledge of anatomical characterization of plant for the understanding ecological adaptation.
2. Understanding developmental botany terminology beneficial for future advance life Science courses.

Paper II: Plant Biotechnology

1. Focus on Biotechnological importance for improvement and satisfaction of all need of human kinds.
2. Inculcates the knowledge for advance study in plant sciences.

4 Mathematics

F.Y.B.Sc. (Annual)

Paper I - Algebra and Geometry

1. Students will simplify and evaluate problems in integers , matrices and solving system of linear equations in more than two variables
2. Study of three dimensional lines and circles, spheres ,cones, cylinders and their geometric properties

Paper II - Calculus and

1. Differential equations CO1. Study of functions , solving problems on continuity , differentiability and application of derivative , Study of reduction formulae in integration .
2. Application of differential equation and their geometric interpretation .

Paper III - Practical course

1. To create some techniques to solve problems related to theoretical part of syllabus .

S.Y.B.Sc.

Semester : I

Paper I-Multivariable Calculus-I

1. Study of properties of multivariable function
2. Study of continuity differentiability , partial differentiations , application of partial differentiation , double, triple integration of multivariable function

Paper II- Laplace Transform and Fourier Series

1. Study of definition and basic properties of Laplace transform and inverse Laplace transform .
2. Application of Laplace transform for solving differential equation Fourier series and its application .

Paper III- Practical course

1. To Study some techniques to solve problems related to theoretical part of syllabus .

Semester - II

Paper I - Linear Algebra

1. Study and solving problems of vector spaces and subspaces .
2. Solving problems on basis and dimension of vector spaces
3. Study of inner product spaces and its properties , Gram Schmidt process .

Paper II - Numerical methods and it's applications

1. Study of numerical methods to find the roots of transcendental and polynomial equations .
2. Use of least square method for fitting of curve , interpolation , numerical integration , Solving differential equations by Taylor series method , Euler's modified method , Rungekutta method to find the solution of differential equation of first order and first degree .

Paper III- Practical course

1. To Study some techniques to solve problems related to theoretical part of syllabus .

5 Zoology

F.Y.B.Sc.

Paper – I : Animal Systematics and Diversity

On completion of the course, students are able to:

- 1 To study Salient features, distinguishing characters and classification of various non-chordates phyla.
2. Understand the classification of Urochordata and Cephalochordata up to order.
3. Understand the classification of Pisces.
4. Understand the classification of Amphibia, Reptilia, Aves and Mammals.
5. To study the external as well as internal characters and structure of Paramecium.
6. To study the external as well as internal characters and structure of Earthworm.
7. To Study of external and internal structure of Frog.
8. Study and understand Migration in fishes, Neoteny and Parental care in Amphibia.

Paper – II : Fundamentals of Cell Biology and Genetics

On completion of the course, students are able to:

1. Understand the Scope of cell biology, because cell is the basic unit of life.
2. Understand the Main distinguishing characters between plant cell and animal cell.
3. To study and understand the whole cell organelles with their structure and function.
4. Understand the cell cycle and know the importance of various cells in body of organisms.
5. Understand the various cell types and cell divisions.
6. Understand about gene Interaction and concept of Multiple Allele.
7. To study and understand Chromosome morphology, types and chromosomal aberrations.
8. Understand the types of sex determination.
9. To study and understand Human genetics.

Paper – III - Practical course.

On completion of the course, students are able to:

1. To study and understand the classification of phylum Protozoa, Porifera , coelenterate , Platyhelminthes , Aschelminthes and Annelida .
2. Study and understand of live *Paramecium*.
3. Understand the external characters, digestive system, reproductive and nervous system of Earthworm.

4. Study and understand of prokaryotic and eukaryotic cell.
5. To study and understand the classification of Hemichordata, Urochordata and Cephalochordata.
6. Study and understand of external characters, sexual dimorphism and digestive system of Frog.
7. Study and understand of monohybrid ratio and dihybrid ratio.
8. Study and understand of *Drosophila*.
9. Study and understand of human genetic traits , karyotype and blood group in human .

S. Y. B. Sc.

Paper I- Animal Systematics and Diversity

On completion of the course, students are able to

1. Study and understand Salient features and classification of Arthropoda , Mollusca and Echinodermata.
2. Understand the General Topics like Mouthparts in Insects, Shell and foot modification in mollusc, Metamorphosis in Insects, Mimicry and Economic importance of Insects.
3. Understand the external characters digestive system and water vascular system in sea star.
4. Study and understand Salient features of Class Reptilia, Aves and Mammalia.
5. To study and understand general topics like Poisonous and non-poisonous snakes, Desert adaptations in reptiles, Beak and feet modifications in birds, Migration in birds, Egg laying mammals and Aquatic mammals.
6. Study and Understand External characters , digestive system , blood vascular system and brain of Scoliodon.

Paper II - Applied Zoology

On completion of the course, students are able to:

1. Introduce the term apiculture to the students.
1. To aware the students and provides the economic importance of Apiculture.
2. Understand the Bee keeping equipments and apiary management.
3. To study and understand the various species of Bee.
4. Introduction to fisheries and its types, Different types of ponds used in fishery.
5. Understand the Habit, habitat and culture methods of following freshwater fishes like rohu, catla and mrigal.
6. Understand the Harvesting methods of some marine forms.
7. Learn about Crafts and gears in Indian Fishery, fishery byproduct and Fish preservation technique.
8. Learn about various Agricultural Pests and their control.
9. Introduce the term apiculture sericulture to the students.
10. Students can learn about Cultivation and Harvesting of Mulberry and rearing technique of silkworm .

Paper III – Practical Course

On completion of the course, students are able to:

1. Study and classification of some non-chordates and chordates phyla.
2. Understand shell and foot in Mollusca.
3. Study of Starfish and various systems in it.
4. Study and Understand External characters, digestive system, blood vascular system and brain of Scoliodon.
5. Study and Understand External characters, digestive system and water vascular system of Starfish.
6. Study and Understand the Identification, Classification and habit, habitat of fresh water fishes.
7. To Study Agricultural pests with respect to marks of identification, nature of damage and economic importance.
8. Understand practicals based on Apiculture and sericulture.

4 B.B.A.(Computer Application)

Course outcomes of B.B.A. Course.

F.Y.B. B. A.(Computer Application) course (Sem I & II)

Subject Name -101 Modern Operating Environment And MS Office

1. . To enable the students to acquire sound knowledge of basic concept of computer system
2. To develop knowledge about operating system & MS office suits
3. To acquiring knowledge about excel sheets ,presentation, documentation.
4. To acquiring the skill & knowledge about such computer hardware etc.

Subject Name - 102Financial Accounting

1. To enable the students to acquire sound knowledge of basic concepts of accounting
2. To impart basic accounting knowledge
3. To impart the knowledge about recording of transactions and preparation of final accounts
4. To acquaint the students about accounting software packages

Subject Name -103 Principles of Programming and Algorithms

- 1.To develop Analytical / Logical Thinking and Problem Solving capabilities
2. To find out multiple solutions regarding problems
3. To develop graphical representation of regarded problems.

Subject Name -104 Business Communication

1. To understand the concept, process and importance of communication.
2. To develop an integrative approach where reading, writing, presentation skills are used together to enhance the students' ability to communicate and write effectively.
3. To create awareness among students about Methods and Media of communication.
4. To make students familiar with information technology and improve job seeking skills.

Subject Name -105 Principles of Management

1. To provide the fundamental knowledge about working of business organization
2. To make students well acquainted with management process , functions and principles.

3. To make the students familiar with recent trends in management.

Semester II

Subject Name - 201 Procedure Oriented Programming using C

1. Student can develop working module of any information system using software development techniques and programming languages.
2. To make students well acquainted with management process , functions and principles.
3. To increase logical conditions for problem solve.

Subject Name - 202 Database Management Systems

1. To acquired knowledge about table ,entities, primary keys, connections etc.
2. To handle exact database by group by value & group by methods.
3. To increasing key skills regarding handling back office database & its regarded operations.

Subject Name -203 Organizational Behavior

- 1) To equip the students to understand the impact that individual, group & structures have on their behavior within the organizations.
- 2) To help them enhance and apply the knowledge they have received for the betterment of the organization.

Subject Name -204 Elements of Statistics

1. To understand the power of excel spreadsheet in computing summary statistics.
2. To understand the concept of various measures of central tendency and variation and their importance in business.
3. To understand the concept of probability, probability distributions and simulations in business world and decision making.

Subject Name - 205 E-Commerce Concepts

1. Students can deals with organizations ,person to person chat, business deals.
2. It can also be develop online networking selling & purchasing with some rules & regulations
3. It should be access such modern techniques like as be net payment, e-cash, e-cheques.
4. It access the knowledge about hackers, viruses etc.

S.Y.B. B. A.(Computer Application) course (Sem. III & IV)

301 : RDBMS (Relational Database Management System)

1. It Enables students to understand relational database concepts and transaction management concepts in database system.
2. It provides students to write PL/SQL programs that use: procedure, function, package, cursor and trigger
3. They can easily define and design database techniques to store and manipulate large amount of data using computer system.
4. Students can easily understand the PL/SQL

302 :- Data Structure Using C

1. To understand different methods of organizing large amounts of data
2. To provide student efficiently knowledge to implement different data structure
3. To efficiently implement solution for different problems
4. To get more knowledge on C programming language
5. Students can easily understand the sorting concepts

303 :- Introduction to Operating System

1. Students enables to know the system programming
2. It provides students the services of operating system
3. To know the Scheduling concepts
4. It can easily understand design issues related to process management and various related algorithms.
5. Student can learn To understand design issues related to memory management and various related algorithms.
6. Students enables to understand the process scheduling

304 :- Business Mathematics

1. It provides information about the profit and loss
2. It enables students to know the matrices and determination
3. To know the linear programming problem(L.P.P)
4. It enables students to know the transportation problem.

305 :- Software Engineering

1. Students can easily understand How to apply the software engineering lifecycle by demonstrating competence in **communication, planning, analysis**, design, construction, and deployment.
2. This course enables students to understand system concepts and its application in Software development.

SEMESTER (IV)

401 :- Object Oriented Programming Using C++

1. Students acquire an understanding of basic object-oriented concepts and the issues involved in effective class design.
2. Enables student to write C++ programs that use: object-oriented concepts such as information hiding, constructors, destructors, inheritance.

402 :- Programming in Visual Basic

1. Students can easily understand object-oriented programming techniques including *classes*, objects, methods, instance variables, composition, and inheritance, and polymorphism
2. To learn properties and events, methods of controls and how to handle events of different controls. To understand the use of active controls and how to design VB application To learn connectivity between VB and databases.

403 :- Computer Networking

1. Student could know about computer network.
2. It enables to understand different topologies used in networking
3. Student could enables to learn different types of network
4. To understanding the use of connecting device used in network.

404 :- Enterprise Resource Planning and Management.

1. Student could enables to know what is ERP.
2. To learn different ERP technologies.
3. Students can learn different ERP technologies and it really helpful to them for data warehousing and data mining.

405 :- Human Resource Management

1. To acquaint the students with the Human Resource Management its different functions in an organization and the Human Resource Processes that are concerned with planning, motivating and developing suitable employees for the benefit of the organization.
2. Students could enables performance appraisal training and development

T.Y.B. B. A.(Computer Application) course outcome(Semester V & VI)

501 : Java Programming

1. Students can Develop software in java programming language.
2. Students can Create user interface application using javas API.
3. Students can Debug software application returning java programming language.

502 : Web Technologies

1. Student can Create application oriented website.
2. Student can Develop Dynamic Web Pages.
3. Students can Write server side as well as client side programming.

503 : Dot Net Programming

- 1.Students will be able to .Implement Data Base Application..
2. Students can Develop interface using visual basic .net
- 3.Students can Perform Test, Resolve defects and revise existing code.

504 : Object Oriented Software Engineering

1. Students can be able to analyze and design software blue print using various uml diagrams.
2. Students Learn to understand how to design object oriented application.

1. Advanced Web Technologies

1. Student is able to understand and use the basics of the XML.
2. Student can design and implement user interface based on the AJAX technology.
3. Student is able to understand and define and utilize the Web Services.

602 : Advanced Java

1. Student will build on their understanding of Object Oriented Design and Programming application and applets.
2. Student will gain practical knowledge of programming for networking and database connectivity.
3. Student can perform programming for web services using servlet programming.

603 : Recent Trends in IT

1. Student will get familiar with the new current trends in market industries of information technology.
2. Student can apply current technical concepts and practices in core information technologies.

604 : Software Testing

1. Student learns the various tools of the software testing to find out the bugs in the program.
2. Student learn how to plan a test project, design test cases on data and conduct testing operation by Generating testing report.

5 B.Sc. Computer Science

Course outcomes of B.Sc. (Computer Science)

F.Y B.Sc. (Comp. Sci.) Course Outcome

Paper – I Computer Science Theory Paper – I

1. **Subject Name-** Introduction to Programming and ‘C’ Programming
 - i) To develop a programming logic
 - ii) To teach basic principles of programming
 - iii) To develop skills for writing programs using ‘C’

Paper – II Computer Science Theory Paper – II

2. **Subject Name-** File Organization and Fundamental of Databases

- i) To teach fundamental concepts of files
- ii) To teach principles of databases
- iii) To teach database management operation

3. **Subject Name-** Paper – I Discrete Mathematics

- i) Simplify and evaluate basic logic statements including compound statements, implications, inverses, converses, and contra positives using truth tables and the properties of logic.

4. **Subject Name-** Paper – II Algebra and Calculus

students will be able to:

- i) Plot points and equations and interpret information using the rectangular coordinate system. (This would include finding equations of lines, parallel lines, and perpendicular lines.)
- ii) Solve linear and rational equations in one variable.
- iii) Use mathematical equations to model real-life problems.
- iv) Perform operations with real and complex numbers.

5. **Subject Name-** Paper – I Principles of Analog Electronics

Through this course, the students-

- i) Acquire a basic knowledge in solid state electronics including diodes, MOSFET, BJT, and operational amplifier.
- ii) Develop the ability to analyze and design analog electronic circuits using discrete components.
- iii) Observe the amplitude and frequency responses of common amplification circuits.
- iv) Design, construct, and take measurement of various analog circuits to compare experimental results in the laboratory with theoretical analysis.

6. **Subject Name-** Paper – II Principles of Digital Electronics

Upon completion of this course, the student will be able to-

- i). Perform decimal, octal, hexadecimal, and binary conversions.
- ii). Apply Boolean algebra to solve logic functions.

- iii). Identify, select, and handle display devices.
- iv). Analyze pulse circuits.
- v). Analyze digital multiplexing circuits.

7. **Subject Name-** Paper – I Statistical method –I

Students should be familiar with the terminology and special notation of statistical analysis. The terminology consists of the following:

i) Statistical Terms

ii) Measurement Terms

iii) Research Terms

iv) Students should learn how statistical techniques fit into the general process of science.

8. **Subject Name-** paper-II Statistical method –II

i) Students should learn how statistical techniques fit into the general process of science

ii). Students should learn the notation, particularly summation notation.

iii). Students should understand the concept of a frequency distribution as an organized display showing where all of the individual scores are located on the scale of measurement.

iv). Students should be able to organize data into a regular or a grouped frequency distribution table, and understand data that are presented in a table.

S.Y.B.Sc.(Computer Science) Sem – III

1)CS 211- DATA STRUCTURES USING ‘C’

1. To learn the systematic way of solving problem
2. To understand the different methods of organizing large amount of data
3. To efficiently implement the different data structures
4. To efficiently implement solutions for specific problem
- 5.To learn different searching and sorting techniques.

2) CS-212-Relational Database Management System

- 1.To teach fundamental concepts of RDBMS (PL/PgSQL)
- 2.To teach principles of databases
- 3.To teach database management operations
- 4.To teach data security and its importance
- 5.To teach client server architecture

3) Paper – I Digital System Hardware (ELC 211)

1. To study the applications of logic gates.
2. To use K-maps for digital circuit design.
3. To study and understand basics of microprocessors
4. To understand fundamentals of multicore technology

4) Paper-II: Analog Systems (ELC 212)

- 1) To understand basics of analog electronics
- 2) To study different types of sensors
- 3) To understand different types of signal conditioning circuits
- 4) To learn data conversion techniques
- 5) To apply knowledge of analog systems in different applications

5) MTC 211 Applied Algebra

- 1) A student should get a relational understanding of mathematical concepts and concerned structures,
and should be able to follow the patterns involved, mathematical reasoning.

6)MTC 211 Numerical System

- 1)A student should be able to recall basic facts about mathematics and apply their knowledge to transform the verbal information into the mathematical forms.

7)Technical English

1. To introduce students to the best uses of language in literature.
2. To familiarize students with the communicative power of English

3. To enable students to become competent users of English in real life situations
4. To expose students to varied cultural experiences through literature
5. To contribute to their overall personality development by improving their communicative and soft skills

S.Y.B.Sc.(Computer Science) Sem – IV

1) Object oriented programming using ‘C’

1. To learn the systematic way of solving problem using object oriented terminology
2. To understand the different methods of organizing large amount of data

2) Software Engineering

- 1) Students can easily develop system and Designing Strategies.
- 2) students can able to test system modules using Software testing

T.Y B.Sc. (Comp .Sci.) Course Outcome

Course Outcomes

Semester -V

331-System Programming

Student Enables-

1. To understand the design structure of a simple editor.
2. To understand the design structure of Assembler and macro processor for an hypothetical simulated computer.
3. To understand the working of linkers and loaders and other development utilities.
4. To understand Complexity of Operating system as a software.

332-Theoretical Computer Science

Student Enables-

1. To have an understanding of finite state and pushdown automata.
2. To have a knowledge of regular languages and context free languages.
3. To know the relation between regular language, context free language and corresponding recognizers.
4. To study the Turing machine and classes of problems.

333-Computer Networks-I

Student Enables To-

1. Understand different types of networks, various topologies and application of networks.
2. Understand types of addresses, data communication.
3. Understand the concept of networking models, protocols, functionality of each layer.
4. Learn basic networking hardware and tools.

334-Internet Programming-I

Student Enables To-

1. Learn Core-PHP, Server Side Scripting Language.
2. Learn PHP-Database handling.

335-Programming In Java-I

Student Enables-

1. To learn Object Oriented Programming language.
2. To handle abnormal termination of a program using exception handling.
3. To create flat files.
4. To design User Interface using Swing and AWT.

336-Object Oriented Software Engineering

Student Enables To-

- 601 Understanding importance of Object Orientation in Software engineering.
- 602 Understand the components of Unified Modeling Language.
- 603 Understand techniques and diagrams related to structural modeling.
- 604 Understand techniques and diagrams related to behavioral modeling.
- 605 Understand techniques of Object Oriented analysis, design and testing

Sem-VI

341-Operating Systems

Student Enables-

1. To understand design issues related to process management and various related algorithms.
2. To understand design issues related to memory management and various related algorithms.

3. To understand design issues related to File management and various related algorithms

342-Compiler Construction

Student Enables-

1. To understand design issues of a lexical analyzer and use of Lex tool.
2. To understand design issues of a parser and use of Yacc tool.
3. To understand issues related to memory allocation.
4. To understand and design code generation schemes

343-Computer Networks-II

Student Enables To-

1. Understand Basic networking concepts.
2. Understand wired and wireless networks, its types, functionality of layer.
3. Understand importance of network security and cryptography.

344-Internet Programming-II

Student Enables To-

1. Learn different technologies used at client Side Scripting Language.
2. Learn XML,CSS and XML parsers.
3. Learn One PHP framework for effective design of web application.
4. Learn JavaScript to program the behavior of web pages.
5. Learn AJAX to make our application more dynamic.

345-Programming In Java-II

Student Enables-

1. To learn database programming using Java.
2. To study web development concept using Servlet and JSP.
3. To develop a game application using multithreading.
4. To learn socket programming concept

346-Computer Graphics

Student Enables-

1. To study how graphics objects are represented in Computer.
2. To study how graphics system in a computer supports presentation of graphics information.

3. To study how interaction is handled in a graphics system.
4. To study how to manipulate graphics object by applying different transformations.
5. To provide the programmer's perspective of working of computer graphics

6 Master of Commerce (M.Com.)

M.Com. Part I Semester I

A) Compulsory Paper

Subject Name -: Management Accounting Course Code -: 101.

1. Enable students to acquire sound Knowledge of concepts, methods and techniques of management accounting and to make the students develop competence with their usage in managerial decision making and control.

Subject Name -: Strategic Management Course Code -: 102.

Subject Title -: Advanced Accounting. Course Code -: 103.

- 1.) Lay a theoretical foundation of Accounting and Accounting Standards.
- 2.) Gain ability to solve problems relating to Company Accounts, Valuations and special types of situations

Subject Title -: Income Tax. Course Code -: 104

1. Gain knowledge of the provisions of Income - tax including Rules pertaining there to, relating to the topics.
2. Develop ability to calculate taxable Income of 'Individual', 'Hindu Undivided Family' and 'Firm' assesses.

Subject Title -: Advanced Cost Accounting. Course Code -: 107

1. Acquaint the students with the significance of Cost Accounting in Global Competitive environment.
2. Enable students to learn application of different methods of costing in Manufacturing and

Service Industry.

Subject Title -: Costing Techniques and Responsibility Accounting. Course Code -: 108

- 1) Equip the students for designing and implementing cost control, cost reduction programme and different cost system.
- 2) Relevant Cost Accounting Standard are to be studied.
- 3) Level of knowledge –Advanced Techniques of Costing.

Subject Title -: Production and Operations Management Course Code -: 113

1.) Production/operations management involves the integration of numerous activities and processes to produce products and services in a highly competitive global environment. Many companies have experienced a decline in market share as a result of their inability to compete on the basis of product design, cost or quality.

Subject Title -: Financial Management Course Code -: 114

1.) provided information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions." Financial statements should be understandable, relevant, reliable and comparable.

M.Com. Part I Semester II

Course Outcomes (COs)

A) Compulsory Paper

Subject Name -: Financial Analysis & Control. Course Code -: 201.

1.) The course is to enable students to acquire sound knowledge of concepts, methods and techniques of management accounting and to make the students develop competence with their usage in managerial decision making and control.

Subject Name -: Industrial Economics Course Code -: 202 - A.

- 1.) Study the basic concepts of Industrial Economics.
- 2.) Study the significance and problems of Industrialization.
- 3.) Study the impact of Industrialization on Indian Economy.

Subject Title -: Specialized Areas in Accounting. Course Code -: 203

- 1.) Develop competency of students to solve problems relating Special areas in accounting including accounting for Services Sector.
- 2.) Understanding of Financial Reporting Practices.
- 3.) Familiarize the student with procedure of accounting for Taxation.

Subject Title -: Business Tax Assessment & Planning Course Code -: 204

- 1.) Provided understanding of Direct Taxes including Rules pertaining thereto and their application to different business situations.

Subject Title -: Application of Cost Accounting. Course Code -: 207

- 1.) Provided knowledge on advanced cost accounting practices.
2. Relevant Cost Accounting Standard are to be studied.

Subject Title -: Cost Control and Cost System. Course Code -: 208

- 1) Equip the students for designing and implementing cost control, cost reduction programme and different cost systems.
- 2.) Relevant Cost Accounting Standards are to be studied.

Subject Title -: Business Ethics and Professional Values Course Code -: 213

- 1.) As a result of reading course texts, and participating in lecture presentations and class discussions, students will identify and apply ethical principles to human decisions typical of business; analyze ethical positions taken on these matters; and formulate moral defenses of decisions, by completing course activities, written analyses, tests and exams, and a review of a movie relevant to business ethics.

Subject Title -: Elements of Knowledge Management Course Code -: 214

- 1) Use a framework and a clear language for knowledge management concepts.
- 2) Describe how valuable individual, group and organizational knowledge is managed throughout the knowledge management cycle.
- 3) Define the different knowledge types and explain how they are addressed by knowledge management.
- 4) Describe the major roles and responsibilities in knowledge management implementations.

M.Com. Part II Semester III

Course Outcomes (COs)

A) Compulsory Paper

Subject Name -: Business Finance. Course Code -: 301.

1) Enable students to acquire sound knowledge of concepts, nature and structure of business finance.

Subject Name -: Research Methodology for Business. Course Code -: 302

1. Acquaint the students with the areas of Business Research Activities.
2. Enhance capabilities of students to conduct the research in the field of business and social sciences.
3. Enable students, in developing the most appropriate methodology for their research studies.
4. Make them familiar with the art of using different research methods and techniques.

Subject Title -: Advanced Auditing. Course Code -: 303

1) Impart knowledge and develop understanding of methods of auditing and their application.

Subject Title -: Specialized Areas in Auditing. Course Code -: 304

1) Impart knowledge and develop understanding of methods of audit in specialized areas.

Subject Title -: Cost Audit Course Code -: 307

1) Provided adequate knowledge on Cost Audit Practices. Level of Knowledge – Advanced.

Subject Title -: Management Audit. Course Code -: 308

1) Equip the students with the knowledge of the techniques and methods of planning and executing the Management Audit. Level of Knowledge: Advanced.

Subject Title -: Organizational Behaviour Course Code -: 314

1. Make the students understand various concepts of organization behaviour.
2. Provided in depth knowledge about process of formation of group behaviour in an Organization set up.

M.Com. Part II - Semester IV

Course Outcomes (COs)

Compulsory Paper

Subject Name -: Capital Market and Financial Services. Course Code -: 401.

1) Enable students to acquire sound knowledge, concept and structure of capital market and financial services.

Subject Name -: Industrial Economic Environment. Course Code -: 402-A

1. Study the basic concepts of Industrial Finance.
2. Study the effects of New Economic Policy.
3. Study the impact of Labor reforms on Industries.

Subject Title -: Recent Advances in Accounting, Taxation & Auditing. Course Code -: 403

1. Up-dated the students with latest developments in the Subject.

2. Inculcated the habit of referring to various periodicals and publications in the given subject, apart from text books and reference books.

3. Developed the ability to read, understand, interpret and Summarize various articles from newspapers, journals etc.

Subject Title -: Recent Advances in Cost Auditing and Cost System

Course Code -: 407

1) Provided knowledge on recent advances in cost accounting and cost systems.

Subject Title -: Recent Advances in Business Administration

Course Code -: 413

1. Familiarized the students with the recent advancements in business administration.

2. Developed an understanding about tools and their application in the business.

Subject Title -: Project Work / Case Studies. Course Code -: 404

Subject Title -: Project Work / Case Studies Course Code -: 408

Subject Title -: Project Work / Case Studies. Course Code -: 414

Programme Outcomes(POs)

M.Com

1. Recognize, understand, analyze and accept the challenges of business world.
2. Opportunity for study and analysis of advanced commercial and business methods and processes.
3. Develop independent logical thinking and facilitate personality development.
4. Nurture the skills of maintaining books of accounts of business organizations.
5. Exposure to modern banking systems and digital transactions.

Programme Specific Outcomes (PSOs)

1. Equip and train students to accept the challenges of changing Business World.
2. Study and analyze the new industrial and commercial culture.
3. Make aware the students for acquiring the knowledge of specialized subjects.
4. Develop independent logical thinking and facilitate personality development.
5. Equip students for seeking suitable careers and entrepreneurship abilities.


IQAC Co-ordinator
Hon. Balasaheb Jadhav
Arts, Commerce and Science College,
Ale (Pune)




Principal
B.J.Arts, Commerce & Science College
Ale, Tal. Junnar, Dist. Pune. Pin-412411