

S.D. COLLEGE, BARNALA

Programme Outcomes

Programme Specific Outcomes

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Course Outcomes

Name of Programme: BVoc (MLMDT)
(Medical Laboratory and Molecular Diagnostic Technology)

Programme Outcomes of BVoc (MLMDT)

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| <u>PO1</u> | Students will be able to diagnose diseases through the use of clinical laboratory tests. |
| <u>PO2</u> | MLMDT students become specialized at analysis of body matters such as fluid, tissue and blood, micro-organism screening, chemical analysis, and cell count. |
| <u>PO3</u> | Students also learn to handle advanced lab equipments and perform accurate laboratory tests |
| <u>PO4</u> | This course offers wide career opportunities as laboratory technologists at hospitals, Pharmaceutical laboratories, Public Health Laboratories and Research Organization. |
| <u>PO5</u> | Students receive a restorative and supportive academic experience along with a financially successful social life. |

Programme Specific Outcomes of BVoc (MLMDT)

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| <u>PSO1</u> | The graduates will have knowledge required for establishing medical laboratories. |
| <u>PSO2</u> | The graduates will be able to function efficiently, confidently and safely in clinical laboratory settings including high-pressure hospital environments. |
| <u>PSO3</u> | The graduates will be capable of ethical handling of social issues associated with laboratory and healthcare. |
| <u>PSO4</u> | The graduates will have updated knowledge of research trends in health care. |

Course Outcomes of Elementary Punjabi/Mudra Gyan

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| <u>CO1</u> | Students will be able to learn the local language specially the students belonging to other states. |
| <u>CO2</u> | Students will be able to communicate easily with the local people. |

Course Outcomes of Fundamentals of Anatomy and Physiology

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| <u>CO1</u> | Students will be able to understand human anatomy as well as have practical edge to understand the various organs and functions as well. |
| <u>CO2</u> | The course is a classic blend of anatomy and physiology, enabling the students to understand the fundamentals as well as the advanced level of the course. |

Course Outcomes of Basics of Biochemistry

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|-------------------|---|
| <u>CO1</u> | Students will be able to understand the fundamentals of Biochemistry. |
| <u>CO2</u> | Students will be able to perform various laboratory diagnostic tests for biochemical abnormalities. |

Course Outcomes of General Pathology

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|-------------------|---|
| <u>CO1</u> | Students will get an insight of various diseases |
| <u>CO2</u> | Students will learn the diagnostic tests to study the pathology of different diseases |

Course Outcomes of Basics of Microbiology

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|-------------------|---|
| <u>CO1</u> | Students will get familiarized with various instruments used in a Microbiology Laboratory including the working of microscopes. |
| <u>CO2</u> | Students will learn to handle various microorganisms. |
| <u>CO3</u> | Students will be able to understand sterilization and the other related concepts. |

Course Outcomes of Diagnostic Molecular Biology

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|-------------------|---|
| <u>CO1</u> | Students will be able to learn the use and applications of the advanced laboratory techniques |
| <u>CO2</u> | Students will be able to perform various new diagnostic tests. |

Course Outcomes of Hematology

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|-------------------|---|
| <u>CO1</u> | Students will be able to learn various components of blood and diseases associated with the abnormal blood cells. |
| <u>CO2</u> | Students will learn to detect these abnormalities by various laboratory tests. |

Course Outcomes of Drug Abuse : Problems, Management and Prevention

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|-------------------|---|
| <u>CO1</u> | Students learn about drug abuse and its prevalence in the society. |
| <u>CO2</u> | Students get the knowledge of different types of drugs and their short and long term effects. |
| <u>CO3</u> | Students become aware of causes and consequences of drug abuse. |

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| <u>CO4</u> | Students get information of management and prevention of drug abuse. |
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Course Outcomes of Basics of Computers

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| <u>CO1</u> | Students will get familiarized with Fundamentals of Computer and IT applications. |
| <u>CO2</u> | It enables the student to get practical exposure to MS –Office tools. |

Course Outcomes of Communication Skills

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| <u>CO1</u> | Students will understand the importance of Communication and its associated components in the hard core corporate sector. |
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Course Outcomes of EVS and Road Safety Awareness

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| <u>CO1</u> | Keeping in view the modern status of environment, the course primarily aims at providing various awareness programs required for the welfare of the environment apart from the emphasis on the general and conventional issues surrounding the environment. |
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Course Outcomes of Clinical Biochemistry

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|-------------------|---|
| <u>CO1</u> | Students will be able to understand the fundamentals of Clinical Biochemistry. |
| <u>CO2</u> | Students will be able to perform various laboratory diagnostic tests for biochemical abnormalities. |

Course Outcomes of Histopathology and Histo-techniques

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|-------------------|--|
| <u>CO1</u> | Students will be able to learn various histo-techniques. |
| <u>CO2</u> | Students will learn about the changes in tissues under disease conditions and their diagnosis. |

Course Outcomes of Immunology and Serology

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|-------------------|---|
| <u>CO1</u> | Students will be able to apply principles of safety, quality assurance and quality control in Immunology/Serology. |
| <u>CO2</u> | Students will be able to describe the principles involved in the immune response. |
| <u>CO3</u> | Students will be able to explain the principles of and perform serological tests as well as evaluate and correlate test results with associated diseases or conditions. |

Course Outcomes of Statistics

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|-------------------|---|
| <u>CO1</u> | Students will be able to organize, manage and present data. |
| <u>CO2</u> | Students will be able to analyze statistical data graphically using frequency distributions and cumulative frequency distributions. |

Course Outcomes of Medical Parasitology

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|-------------------|--|
| <u>CO1</u> | Students will be able to learn morphologic criteria to differentiate the most common protozoan and helminthes parasites. |
| <u>CO2</u> | Students will improve their diagnostic skills by solving basic and advance diagnostic exercises using a microscope. |

Course Outcomes of Pathogenic Microbiology

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|-------------------|---|
| <u>CO1</u> | The student will be able to identify common infectious agents and the diseases that they cause. |
| <u>CO2</u> | The student will be able to evaluate methods used to identify infectious agents in the clinical microbiology lab. |
| <u>CO3</u> | The student will be able to recognize and diagnose common infectious diseases from the clinical presentation and associated microbiology. |

Course Outcomes of Biomedical Waste Management

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|-------------------|---|
| <u>CO1</u> | The student will be able to characterize the waste and apply the knowledge of laws for municipal solid waste management, for handling of biomedical wastes and for handling of plastic wastes. |
| <u>CO2</u> | The student will be able to apply the knowledge of mathematics, science, and engineering for effective solid waste collection systems, for waste collection route optimization and for processing of solid waste. |

Course Outcomes of Clinical Endocrinology

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| <u>CO1</u> | Students will be able to study endocrine hormones and their disorders. |
| <u>CO2</u> | Students will be able to diagnose endocrine diseases. |

Course Outcomes of Quality Lab Management

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|-------------------|--|
| <u>CO1</u> | The course addresses on identification, evaluation and control of laboratory crucial quality issues. |
| <u>CO2</u> | Students will minimise lab errors by adopting risk management strategy. |

Course Outcomes of Patient Education and counseling

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|-------------------|--|
| <u>CO1</u> | Patient education promotes patient-centered care and increases adherence to medication and treatments. |
| <u>CO2</u> | Educating patients ensures continuity of care and reduces complications related to the illness. |

Course Outcomes of personality Development

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|-------------------|---|
| <u>CO1</u> | This course will help the students to groom their personality and prove themselves as good Samaritans of the Society. |
| <u>CO2</u> | It will also help to develop an understanding and practice of personal and professional responsibility |

Course Outcomes of Medical Ethics

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|-------------------|---|
| <u>CO1</u> | The student will be able to explain the foundational principles of medical ethics through a careful examination of the essential features of the doctor-patient relationship. |
| <u>CO2</u> | The student will be able to explain the medical concept of capacity and related legal concept of competence and analyze the essential elements |

Course Outcomes of Molecular Diagnostics

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|-------------------|--|
| <u>CO1</u> | This course provides an overview of the principles of clinical molecular diagnostics. |
| <u>CO2</u> | The use of molecular techniques to diagnose disease, quality assurance in the molecular lab and DNA based tissue typing. |

Course Outcomes of Social and Preventive Medicine

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| <u>CO1</u> | It's concerned with the measures taken to prevent diseases and promote health. |
| <u>CO2</u> | It deals with the health problems of not only a single person but the entire community at large. |

Course Outcomes of Drug Abuse: Problem, Management & Prevention

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|-------------------|---|
| <u>CO1</u> | Students learn about drug abuse and its prevalence in the society. |
| <u>CO2</u> | Students get the knowledge of different types of drugs and their short and long term effects. |
| <u>CO3</u> | Students become aware of causes and consequences of drug abuse. |
| <u>CO4</u> | Students get information of management and prevention of drug abuse. |

Course Outcomes of Environmental & Road Safety Awareness

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|-------------------|---|
| <u>CO1</u> | Environmental Studies is a multidisciplinary subject that gives information about our surroundings. |
| <u>CO2</u> | Students learn about various types of pollutions, their causes and preventions. |
| <u>CO3</u> | Students learn about various renewable and nonrenewable natural resources as well as the ways of energy conservation. |
| <u>CO4</u> | Students become aware of safety on roads, traffic signs, rules as well as first aid in road safety. |

Name of Programme: B.Voc. (Software Development)

Programme Outcomes of B.Voc.(Software Development)

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| <u>PO1</u> | Workshops, seminars and guest lectures by industry experts, study tours and regular industry visits outside Barnala give students valuable exposure to the corporate environment and important insights into the real world which helps them acquire job-related skills. |
| <u>PO2</u> | Students are able to join Government Sector jobs. |
| <u>PO3</u> | Students can do M.Voc., MBA, MCA course. |

Program Specific Outcomes of B.Voc.(Software Development)

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| <u>PSO1</u> | The programme aims to create trained manpower with the requisite practical and employability skills and capabilities for the job roles mentioned below and mould students into competent young and productive professionals. |
| <u>PSO2</u> | Software Developer. |
| <u>PSO3</u> | Web Developer |
| <u>PSO4</u> | Graphics Designer |
| <u>PSO5</u> | Software/Application Developer |
| <u>PSO6</u> | Entrepreneurs |

Course Outcomes of B.Voc.(Software Development)

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| <u>CO1</u> | Students can become Website Developer using HTML, DHTML, ASP.NET, PHP. |
| <u>CO2</u> | Students will become expert in Office Automation. |
| <u>CO3</u> | Student can design different software using different programming languages. |
| <u>CO4</u> | Student can become expert of Networking modules. |

Department of B.Voc. (Journalism and Multimedia Technologies)

Programme Outcomes of B.Voc. (Journalism and Multimedia Technologies)

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| <u>PO1</u> | Students can pursue MJMC after B. VOC. (JMT) in Journalism & Mass Communication. |
| <u>PO2</u> | Students will be eligible to get job as journalists, news reporters, news anchors and many other media oriented jobs, be it in Print Media, Broadcast Media or Digital Media. |

Program Specific Outcomes of B.Voc. (Journalism and Multimedia Technologies)

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| <u>PSO1</u> | Students can become Public Relation Officers as well after completing MJMC |
| <u>PSO2</u> | They can also join Advertisement Industry |

Course Outcomes of B.Voc. (Journalism and Multimedia Technologies)

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|-------------------|--|
| <u>CO1</u> | Students become eligible to pursue M.Phil. or Ph.D. They can also appear for NET to pursue their career in teaching. |
| <u>CO2</u> | Students can make career in entertainment Industry too after the completion of MJMC degree. |

Name of Program: Bachelor of Science (B.Sc. Non-Medical)

Programme Outcomes of B.Sc. (Non-Medical)

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| <u>PO1</u> | Students are able to join Government sector jobs. |
| <u>PO2</u> | Students can do B.Ed., M.A., MBA, MFC course. |

Program Specific Outcomes of B.Sc. (Non-Medical)

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|--------------------|---|
| <u>PSO1</u> | Students are able to become Quality Control Manager in Industries as well as Government sector. |
| <u>PSO2</u> | Students are able to become Medical Representative. |
| <u>PSO3</u> | Students can do M.Sc. Physics, Chemistry and Mathematics. |

Course Outcomes of Mathematics

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| <u>CO1</u> | To understand the concept of limit, continuity and differentiability of function of one and two variables, maxima and minima of function of several variables, Euler's theorem on homogeneous functions, Leibnitz's theorem for nth derivative, Tracing of curves |
| <u>CO2</u> | To solve first and higher order differential equations, to study series solution, Bessel and Legendre functions, Rodrigue's formula |
| <u>CO3</u> | To study operations on matrices, Row rank, Column rank, solution of system of linear equations, Eigen values and vectors, Cayley-Hamilton theorem, vector space, Linear transformations, Rank Nullity theorem |
| <u>CO4</u> | To study Double and Triple integral for finding area, volume, centre of gravity & moments of inertia, to study the vector analysis, Line integral, Green Gauss and stock theorems with its applications |
| <u>CO5</u> | To solve first and higher order Homogeneous and Non Homogeneous Partial differential equations, Heat, Wave equations and Laplace equation |
| <u>CO6</u> | To study Conics, Oblique axis in two Dimensional Geometry and Sphere, cone and Cylinder in three Dimensional Geometry |
| <u>CO7</u> | To study sequences, series and their convergence, uniform convergence of sequences, series of functions, the Riemann integration and improper integrals. |
| <u>CO8</u> | To study the solution of Linear programming problems, Transportation problems, Assignment problems |
| <u>CO9</u> | To know various topics in mechanics such as parallelogram law of forces, equilibrium of forces, couples, simple harmonic motion and projectile motion etc. |
| <u>CO10</u> | To understand the functions of bounded variation, rectifiable curves and |

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| | Riemann-Stieltjes integrals. |
| <u>CO11</u> | To grasp the basic elements of numerical methods and error analysis and to understand the basics of approximation, integration and differentiation. |
| <u>CO12</u> | To understand the Divisibility, congruences and their applications, Chinese remainder theorem, Primitive roots, Quadratic reciprocity law and the applications of Cryptography. |
| <u>CO13</u> | To study the group and ring theory, Ideals, Principal Ideal Domain, Euclidean Domains. |
| <u>CO14</u> | To study Laplace Transforms, Inverse Laplace Transforms and their applications in the solution of Ordinary differential equations, Simultaneous ordinary differential equations, Wave equation, Heat Equation and Laplace Equation |
| <u>CO15</u> | To study Principle of Inclusion and Exclusion, Pigeon Hole Principle, Graph Theory, Trees, circuits and paths |
| <u>CO16</u> | To study the Concepts of replacement and inventory models and their applications, the methods to solve job sequencing problems of n jobs on m machines and the network models |
| <u>CO17</u> | To study Fourier Series, Hankel Transforms, Fourier Transforms and their Applications to solve one dimensional Wave equation, Heat Equation |
| <u>CO18</u> | To study Analysis of Algorithms-Time Complexity. Complexity of Problems, solution of Recurrence Relations, Boolean Algebras-Lattices and Algebraic Structures and Switching Circuits. |

Course Outcomes of Chemistry

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| <u>CO1</u> | Students can demonstrate the application of chemistry in different spheres of life like agriculture, medicines, kitchen chemistry, etc. |
| <u>CO2</u> | Students can demonstrate various methods for classification, identification and characterization of different chemical compounds. |
| <u>CO3</u> | Students can demonstrate the methods for checking adulteration in food products. |
| <u>CO4</u> | Students can understand formulation of various drugs, soaps & detergents, cosmetics, etc. |
| <u>CO5</u> | Students gain knowledge regarding causes of soil, air and water pollution and remedies to check it. |
| <u>CO6</u> | Students gain insight of all the basic elements of which the whole universe is made up of such as plastics, paints, dyes, cement, glass, etc. |

Course Outcomes of Physics

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|-------------------|--|
| <u>CO1</u> | Display intellectual curiosity about and intuition into the processes of the physical universe. |
| <u>CO2</u> | Evaluate a physical problem to determine there levant parameters and approximation schemes to be used within the frame work of the fundamental laws of nature. |

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| <u>CO3</u> | Demonstrate proficiency in mathematics and the mathematical concepts needed for a proper understanding of physics. |
| <u>CO4</u> | Demonstrate a rigorous understanding of the core theories and principles of classical mechanics, quantum mechanics, electromagnetism, nuclear and particle physics, statistical and thermal physics, optics and be able to apply this knowledge to analyze a broad range of physical phenomena. |
| <u>CO5</u> | Learn laboratory skills, enabling them to take measurements in a physics laboratory and analyze the measurements to draw valid conclusions. |
| <u>CO6</u> | Demonstrate proficiency in the collection, analysis and interpretation of data. |

Course Outcomes of English

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| <u>CO1</u> | It will help the students to develop literary sensibility, critical thinking, and sharp vision, penetrating to create a thrust for literature. |
| <u>CO2</u> | The objective of this course is to take an integrative approach to the appropriate use of English in different situations and for different purposes. |
| <u>CO3</u> | It cuts across the curriculum and broadens the learners' perceptions of the world by exposing them to a variety of topics based on contemporary socio-cultural issues. |
| <u>CO4</u> | Students are trained in communication at various levels by providing proactive training in Speech, Oral, Writing and Business Skills. |
| <u>CO5</u> | Students are empowered to be active participants /contributors in the critical societal issues. |
| <u>CO6</u> | The learners are equipped with skills that will enable them to cope with understanding the core theoretical principles behind grammar. It is also intended to develop continuing proficiency in communication. |

Course Outcomes of Punjabi Compulsory

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|-------------------|--|
| <u>CO1</u> | Develop regard in the mother tongue. |
| <u>CO2</u> | Students can self expression. |
| <u>CO3</u> | Students will understand the other scholar's thoughts. |
| <u>CO4</u> | Create interest in reading books. |
| <u>CO5</u> | Increase the knowledge of students. |
| <u>CO6</u> | Develop moral values in students. |

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| <u>CO7</u> | Develop interest in creativity. |
| <u>CO8</u> | All round development |

Course Outcomes of Drug Abuse: Problem, Management & Prevention

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|-------------------|---|
| <u>CO1</u> | Students learn about drug abuse and its prevalence in the society. |
| <u>CO2</u> | Students get the knowledge of different types of drugs and their short and long term effects. |
| <u>CO3</u> | Students become aware of causes and consequences of drug abuse. |
| <u>CO4</u> | Students get information of management and prevention of drug abuse. |

Course Outcomes of Environmental & Road Safety Awareness

| | |
|-------------------|---|
| <u>CO1</u> | Environmental Studies is a multidisciplinary subject that gives information about our surroundings. |
| <u>CO2</u> | Students learn about various types of pollutions, their causes and preventions. |
| <u>CO3</u> | Students learn about various renewable and nonrenewable natural resources as well as the ways of energy conservation. |
| <u>CO4</u> | Students become aware of safety on roads, traffic signs, rules as well as first aid in road safety. |

Name of Program: B.Sc. (Computer Applications)

Programme Outcomes of B.Sc. (Computer Applications)

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|-------------------|---|
| <u>PO1</u> | Students are able to join Government sector jobs. |
| <u>PO2</u> | Students can do B.Ed., M.A., MBA, MFC course. |

Program Specific Outcomes of B.Sc. (Computer Applications)

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| <u>PSO1</u> | Students are able to become Quality Control Manager in Industries as well as Government sector. |
| <u>PSO2</u> | Students are able to become Medical Representative. |
| <u>PSO3</u> | Students can do M.Sc. Physics, Information Technology and Mathematics. |

Course Outcomes of B.Sc. (Computer Applications)

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|-------------------|--|
| <u>CO1</u> | Students can understand the concept of different programming languages. |
| <u>CO2</u> | Students can design web pages using HTML, DHTML. |
| <u>CO3</u> | Students can learn how to make power point presentation. |
| <u>CO4</u> | Students can design different programs using different programming techniques. |
| <u>CO5</u> | Students can understand concept database management system and how to design good data base. |
| <u>CO6</u> | Students can learn about basic networking modules and installation of different software. |

Name of Program: Bachelor of Science (B.Sc. -Medical)

Programme Outcomes of B.Sc. -Medical

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| <u>PO1</u> | Students can learn discipline of specific knowledge and understanding of Virus, bacteria, Cell-biology, Genetics, Concepts of Evolution, Environmental Ecology, Taxonomy along with specific topics. |
| <u>PO2</u> | Students can learn specific topics of Zoology (Nonchordates, Chordates, Biochemistry and Physiology Embryology, Diseases, Lab. Techniques) |
| <u>PO3</u> | Students can learn specific topics of Botany (Diversity of microbes, cryptogams; systematic of Gymnosperms and Angiosperms; plant anatomy, plant physiology, economic botany; development and reproduction of flowering plants). |
| <u>PO4</u> | Students learn Chemistry, English, Punjabi, Environmental studies. |
| <u>PO5</u> | Oral and written communication: Communicate with clarity and coherence, concepts and arguments in Biological Sciences. |
| <u>PO6</u> | Numeracy: Demonstrate the capacity to analyze and criticize data from experimental procedures. |
| <u>PO7</u> | Team working: Demonstrate the ability to work as part of a group. |
| <u>PO8</u> | Problem solving: Apply a scientific approach to the solution of problems in context of their chosen specializations and appreciate the rationale of experimental design. |
| <u>PO9</u> | Information handling: Demonstrate the capacity to access a variety of materials and to analyze evidence from both experimental procedures and the literature. |
| <u>PO10</u> | The ability to think independently, set tasks and solve problems. |
| <u>PO11</u> | Skills for lifelong learning: Demonstrate the acquisition of the skills and attributes necessary for life-long learning, including: intellectual independence, effective time management, the ability to work as part of a team, and the capacity to access and utilize a variety of materials. |

Program Specific Outcomes of B.Sc. -Medical

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| <u>PSO1</u> | On graduating with a degree in B. Sc. Medical one can apply their knowledge of biology to study, identify and classify living organisms. |
| <u>PSO2</u> | One can design, optimize, analyse and scale up a bioprocess to develop value added products. One can engage in apiculture, sericulture, pisciculture mushroom cultivation etc. in better way. |

Course outcomes of Professional Skills

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| <u>CO1</u> | Students are eligible to pursue for B.Ed., Post graduation or jobs in various fields like education, industry, business or agriculture, field etc. |
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| <u>CO2</u> | Students can appear for state level and National level exams for Government jobs in different sectors like Banking, FCI, police services etc. |
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Course outcomes of Practical skills

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| <u>CO1</u> | Students can demonstrate various techniques like section cutting, staining, mounting; temporary and permanent slide preparation; chromatography, biochemical analysis and their effective utilization for study of various aspects of plants, animals. |
| <u>CO2</u> | Students learn to analyze observations statistically in ecological and genetic studies. |
| <u>CO3</u> | Students can perform various medical laboratory tests. |
| <u>CO4</u> | Students can identify plants and animals on the basis of their external characters. |
| <u>CO5</u> | Students can demonstrate the dissection of organisms to study body systems. |
| <u>CO6</u> | Students can carry out routine investigations as instructed, using ecological methodologies and data analyses. |

Course outcomes of B.Sc. -Medical

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| <u>CO1</u> | Describe the structure, diversity and reproduction of the organisms studied; describe how organisms are classified and identified; describe mechanisms for the life processes and also how the physiology of an organism fits it for its environment; show an appreciation of the integration of metabolism; describe knowledge of the basic genetic principles and evolution in general and of the organisms studied; appreciate the interactions of organisms with each other and the environment; appreciate the importance of the behavior of the organisms studied. |
| <u>CO2</u> | Understand how the chemistry and structure of the major biological macromolecules, including proteins and nucleic acids determines their biological properties; understand how the principles of genetics under lie much of the basis of modern molecular biology; understand the main principles of gene expression, the structure and function of cell membranes and other cell organelle; cell differentiation; cell metabolism including the main anabolic and catabolic pathways; have knowledge of enzyme structure and function. |
| <u>CO3</u> | Demonstrate knowledge of biogeochemical cycles and pathways; describe and exemplify nutrient and energy flow through individuals, populations and communities; describe the structure, biogeography and diversity of ecosystems in relation to climate, geology, soils, palaeo-historical and evolutionary factors; fossilization and geological time scale: students can know about evolutionary development of organisms from unicellular to most advanced ones; describe and exemplify patterns of distribution of organisms in relation to biotic and abiotic factors; population processes, |

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| | dynamics and interactions, and community structure, and awareness of human interactions with natural populations and ecosystems including habitat modification, pollution, exploitation and conservation; significance of species as resources and as damage-causing organisms. |
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Name of Program: Bachelor of Arts (B.A.)

Programme Outcomes of Bachelor of Arts (B.A.)

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| <u>PO1</u> | Students are able to do MBA, MCA or other Higher education courses. |
| <u>PO2</u> | Students are able to join Civil Services. |
| <u>PO3</u> | Students are able to join Government sector jobs. |

Program Specific Outcomes of Bachelor of Arts (B.A.)

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| <u>PSO1</u> | Students are able to do M.A. in any subject which they have studied in graduation. |
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Course Outcomes of Economics

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| <u>CO1</u> | Students can recognize and appreciate the diversity of views that have historically been expressed about economic problems and alternative economic systems. |
| <u>CO2</u> | Students can understand the concepts such as supply and demand, the consumer and the producer equilibrium, the determination of price in different markets, various aspects and problems of Indian economy. |
| <u>CO3</u> | Students can identify, interpret, and analyze quantitative economic data to discuss the accuracy, the bias and variance of possible measurement and estimation procedures by expressing relationships between concepts through mathematical tools, graphs and statistical analysis. |
| <u>CO4</u> | Students can understand the role of public policies in addressing issues of unemployment, poverty, inflation, exchange rates, balance of payments and economic growth in a liberalized world. |
| <u>CO5</u> | Students can understand macroeconomic tools and concepts to address policy issues such as National income, investment, choice of technique, international trade and role of Public Finance. |
| <u>CO6</u> | Students can understand the theories of International trade and role of various national and international organizations and institutions in developing international trade in recent times. |
| <u>CO7</u> | Students can understand the concepts of under development, the human development, the various models of economic development and can evaluate the role of planning in India. |

Course Outcomes of History

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|-------------------|--|
| <u>CO1</u> | Students will be able to demonstrate thinking skills by analyzing, synthesizing and evaluating Historical information from multiple sources. |
| <u>CO2</u> | Students will develop the ability to distinguish between fact and fiction while understanding that there is no one Historical truth. |
| <u>CO3</u> | Students will produce well researched written work that engages with both Primary Sources and Secondary Literature. |
| <u>CO4</u> | Students will develop an informed familiarity with multiple cultures. |
| <u>CO5</u> | Students will employ a full range of techniques and methods used to gain historical knowledge. |
| <u>CO6</u> | Students will develop an ability to convey verbally their historical knowledge. |
| <u>CO7</u> | Students will demonstrate their understanding of cause and effect along with their knowledge of the general chronology of Human experience. |

Course outcomes of Political Science

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|-------------------|--|
| <u>CO1</u> | Students can do M.A. in Political Science. |
| <u>CO2</u> | Students can join Civil Services. |
| <u>CO3</u> | Awareness of Political System. |
| <u>CO4</u> | Awareness of Constitution. |
| <u>CO5</u> | Awareness about Fundamental Rights. |
| <u>CO6</u> | Awareness about Right to Service. |
| <u>CO7</u> | Awareness about Right to Information. |

Course outcomes of Physical Education

| | |
|-------------------|--|
| <u>CO1</u> | It will help the students to become Instructors in Physical Education, Directorate, Coaches and Dieticians. |
| <u>CO2</u> | Students are able to become Referees to conduct games, Commentators, Teachers in Schools, Colleges & Universities. |

Course outcomes of Music Instrumental

| | |
|-------------------|--|
| <u>CO1</u> | Students may get job as Music Teacher in schools after graduation. |
| <u>CO2</u> | Students can do post graduation in Music Instrumental. |

Course outcomes of Tabla

| | |
|-------------------|--|
| <u>CO1</u> | Students may get job as Tabla Player in Music Departments of schools & colleges. |
| <u>CO2</u> | Students can do post graduation in Tabla. |

Course outcomes of Public Administration

| | |
|-------------------|---|
| <u>CO1</u> | Awareness about Indian Administration. |
| <u>CO2</u> | Awareness about District Administration. |
| <u>CO3</u> | Awareness about Panchayati Raj Institution. |
| <u>CO4</u> | Process of making Indian Budget. |

Course outcomes of Journalism & Mass Communication (JMC)

| | |
|-------------------|--|
| <u>CO1</u> | Students can pursue MJMC after B.A. in Journalism and Mass Communication, which will make them eligible to get job as journalists in media (Print/Broadcast or online) industry. Students can become Public Relation Officers too after MJMC. They can also join Advertisement Industry. |
| <u>CO2</u> | Students become eligible to pursue M.Phil. or Ph.D They can also appear for NET to pursue their career in teaching. |
| <u>CO3</u> | Students can make career in film Industry too after the completion of MJMC degree. |

Course outcomes of Computer Applications

| | |
|-------------------|--|
| <u>CO1</u> | Can get the basic knowledge of Information Technology. |
| <u>CO2</u> | Can become a Java Programmer. |
| <u>CO3</u> | Can become a System Administrator after getting the knowledge of Networking. |
| <u>CO4</u> | Can become a website designer. |
| <u>CO5</u> | Can become a C programmer. |
| <u>CO6</u> | Installation of software and Operating systems on various computers. |

Course outcomes of English Literature

| | |
|-------------------|--|
| <u>CO1</u> | Studying literary books gives students access to the full range of English studies. |
| <u>CO2</u> | Alongside the traditional range of English Literature, students can develop their skill in creative writing and film scripts, popular song and new media. |
| <u>CO3</u> | It helps students develop practical understanding of the representation of allegedly 'natural' or 'universal' concepts. |
| <u>CO4</u> | It boosts students imagination thereby it enhances their capability to respond independently and intellectually to make informed choices for future development. |
| <u>CO5</u> | By understanding the world around them through different literatures in English students. It makes them better human being. |

Course outcomes of Hindi Literature

| | |
|-------------------|--|
| <u>CO1</u> | As literature is a source of knowledge and inspiration for man, Hindi literature fulfills this function by enlightening the students about the path of healthy, prosperous and generous life style. |
| <u>CO2</u> | Hindi being an official language of India is a widely spoken language in most of the states. Hindi language symbolizes national unity. |
| <u>CO3</u> | Hindi literature helps in developing moral values among students. The students from non- Hindi states like Punjab get access to the great culture, tradition and civilizations of India by studying Hindi literature. |
| <u>CO4</u> | In this course, students are empowered to learn the evolvement of different genres of literature like stories, poetry and drama and the relation of these literary forms with one another besides learning their relation with contemporary culture. |
| <u>CO5</u> | This course takes an integrative approach to the appropriate use of Hindi in different situations. |
| <u>CO6</u> | Students learn the rules of Hindi grammar and are enabled to use them in an appropriate manner. |

Course outcomes of Punjabi Literature

| | |
|-------------------|--|
| <u>CO1</u> | Students can learn phonetics, graphology, morphology, syntax, semantic, computing-linguistics, stylistics. |
| <u>CO2</u> | Students can get knowledge of all types of literature Novel, story, play, prose, poetry etc. |
| <u>CO3</u> | This subject make students perfect. In conversation, debate, Interviews, autobiography etc. |

| | |
|--------------------|--|
| <u>CO4</u> | With the help of literature, students follow grammatical rules in writing, reading language. |
| <u>CO5</u> | Literature creates interest in creativity. |
| <u>CO6</u> | Literature build language teacher which can teach Punjabi literature in future. |
| <u>CO7</u> | Students can self expression. |
| <u>CO8</u> | Students can social, intellectual and moral values develop. |
| <u>CO9</u> | Students will be able to get knowledge of culture and folklore. |
| <u>CO10</u> | Punjabi Literature develop Source of pleasure in students. |
| <u>CO11</u> | Students personality will increase and all around development. |

Course outcomes of English Compulsory

| | |
|-------------------|--|
| <u>CO1</u> | It will help the students to develop literary sensibility, critical thinking, and sharp vision, penetrating to create a thrust for literature. |
| <u>CO2</u> | The objective of this course is to take an integrative approach the appropriate use of English in different situations and for different purposes. |
| <u>CO3</u> | It cuts across the curriculum and broadens the learners' perceptions of the world by exposing them to a variety of topics based on contemporary socio-cultural issues. |
| <u>CO4</u> | Students are trained in communication at various levels by providing proactive training in Speech, Oral, Writing and Business Skills. |
| <u>CO5</u> | Students are empowered to be active participants/contributors in the critical societal issues. |
| <u>CO6</u> | The learners are equipped with skills that will enable them to cope with understanding the core theoretical principles behind grammar. It is also intended to develop continuing proficiency in communication. |

Course outcomes of Punjabi Compulsory

| | |
|-------------------|---|
| <u>CO1</u> | Develop regard in the mother tongue. |
| <u>CO2</u> | Students can self expression. |
| <u>CO3</u> | Students will understand the other scholars thoughts. |
| <u>CO4</u> | Create interest in reading books. |

| | |
|-------------------|-------------------------------------|
| <u>CO5</u> | Increase the knowledge of students. |
| <u>CO6</u> | Develop moral values in students. |
| <u>CO7</u> | Develop interest in creativity. |
| <u>CO8</u> | All round development. |

Course outcomes of Environmental & Road Safety Awareness

| | |
|-------------------|--|
| <u>CO1</u> | Environmental Studies is a multidisciplinary subject that gives information about our surroundings. |
| <u>CO2</u> | Students learn about various types of pollutions, their causes and preventions. |
| <u>CO3</u> | Students learn about various renewable and nonrenewable natural resources as well as the way of energy conservation. |
| <u>CO4</u> | Students become aware of safety on roads, traffic signs, rules as well as first aid in road safety. |

Course outcomes of Drug Abuse: Problem, Management & Prevention

| | |
|-------------------|---|
| <u>CO1</u> | Students learn about drug abuse and its prevalence in the society. |
| <u>CO2</u> | Students get the knowledge of different types of drugs and their short and long term effects. |
| <u>CO3</u> | Students become aware of causes and consequences of drug abuse. |
| <u>CO4</u> | Students get information of management and prevention of drug abuse. |

Name of Program: Bachelor of Library Science (B.Lib.)

Programme Outcomes of Bachelor of Library Science (B.Lib.)

| | |
|-------------------|---|
| <u>PO1</u> | B.Lib. Science is an Information gathering, storage and retrieval oriented field. |
| <u>PO2</u> | Knowledge and understanding of foundation of libraries. |
| <u>PO3</u> | Role of libraries in society. |
| <u>PO4</u> | Role of libraries in educational organizations. |
| <u>PO5</u> | Organize the information sources to facilitate easy and effective usage. |
| <u>PO6</u> | Classification and cataloging of documents. |

Program Specific Outcomes of Bachelor of Library Science (B.Lib.)

| | |
|--------------------|--|
| <u>PSO1</u> | Students can develop the classification scheme with the help of classification principles. |
| <u>PSO2</u> | Students can design the new Information system for gathering, storing and disseminating information. |

Course outcomes of Practical skills

| | |
|-------------------|--|
| <u>CO1</u> | Students can make traditional catalogue card. |
| <u>CO2</u> | Students can classify the subject of documents according to CCC and DDC classification scheme. |
| <u>CO3</u> | Student can work with basic application softwares like MSWORD, MS POWER POINT. |

Course outcomes of Foundation of Library and Information Science

| | |
|-------------------|---|
| <u>CO1</u> | Students can understand Concept of Library-Definition, purpose and functions. Place of library in dissemination of information. |
| <u>CO2</u> | Changing role of library in socio-economic development, education and recreation. |
| <u>CO3</u> | Students are enabled to know Librarianship as a profession & its Professional ethics, Role of library associations: ILA, IASLIC, ALA, CILIP, Promoters of Library and Information Services at national and international level. |

Course outcomes of Professional skills

| | |
|-------------------|---|
| <u>CO1</u> | Student becomes eligible to pursue post graduation and jobs in various government and private organizations, information and documentation centers. |
|-------------------|---|

Course outcomes of Knowledge organization and information processing (Classification theory)

| | |
|-------------------|--|
| <u>CO1</u> | To develop the students' skill in information processing, organization and retrieval. |
| <u>CO2</u> | Concept of Library Classification: Need and purpose. Theory of Subjects: Basic, Compound, and Complex subjects and modes of subject formation. |

Course outcomes of Library classification (practice)

| | |
|-------------------|---|
| <u>CO1</u> | The aim of library classification practice is to enable the students to classify the subject of documents with the help of colon classification scheme and DDC. |
|-------------------|---|

Course outcomes of Management of libraries and information centers

| | |
|-------------------|--|
| <u>CO1</u> | Students can understand organizing and managing library and information centers while applying principles, techniques and functions of management. |
| <u>CO2</u> | House keeping functions and managerial skill of library and information centers. |

Course outcomes of Library and its user

| | |
|-------------------|--|
| <u>CO1</u> | Students can develop their survey skill to check the effectiveness of services of the library by doing survey of users. |
| <u>CO2</u> | Students can understand different categories of users and their information needs and familiarize them with types of information systems and information services. |

Course outcomes of Knowledge organization and information processing (Cataloging theory)

| | |
|-------------------|---|
| <u>CO1</u> | Students learn theory of cataloging and to study the principles. Students learn theoretical standard codes of cataloging CCC, AACR2, RDA. |
|-------------------|---|

Course outcomes of Knowledge organization and information processing (Cataloging practice)

| | |
|-------------------|--|
| <u>CO1</u> | Students are able to do cataloging of documents practically according to classified catalogue code (CCC) and Anglo American cataloging rules(AACR2). |
|-------------------|--|

Course outcomes of Information Sources and Services

| | |
|-------------------|---|
| <u>CO1</u> | To develop the knowledge of students regarding basic reference and information source, to give them practice in the use of these in answering queries of users. |
| <u>CO2</u> | Students are able to use information sources like encyclopedias, biographical, geographical, news digests. |

Course outcomes of Information and communication technology: Basics

| | |
|-------------------|--|
| <u>CO1</u> | To develop the usage of ICT in modern society to give the services of library to users effectively. |
| <u>CO2</u> | Student acquaint with computers, computer architecture, system's software, application software and use of ICT in libraries. |

Course outcomes of Media and Information literacy

| | |
|-------------------|--|
| <u>CO1</u> | Students can understand functions of media and information channels in society. |
| <u>CO2</u> | Students are enabled to develop advanced skill of information gathering and acquaintshem with various information sources. |
| <u>CO3</u> | Students also understand the role of global and national level organizations for promoting media and information literacy. |

Name of Program: Bachelor of Commerce (B.Com.)

Programme Outcomes of B.Com.

| | |
|-------------------|--|
| <u>PO1</u> | Students become effective communicators on matters related to economics and commerce. |
| <u>PO2</u> | Students gain knowledge to effectively Participate in discussion and debate on national and international issues related to the disciplines of the faculty. |
| <u>PO3</u> | Students become effective decision makers in business and commerce. |
| <u>PO4</u> | Students develop ethical and collegial in professional practice. |
| <u>PO5</u> | Students develop specific skills to go in for Law, Chartered Accountancy, Masters in Commerce, Business Management programs, Banking Sector, Company Secretaries and host of other opportunities in corporate world. |

Program Specific Outcomes of B.Com.

| | |
|--------------------|---|
| <u>PSO1</u> | Students learn labour laws, business laws, negotiable instruments law, cyber law, microeconomics, macroeconomics, financial accounting (including e-accounting) in first year of Bachelor of Commerce study. |
| <u>PSO2</u> | In second year students gain knowledge of Corporate Accounts, Company Law, Auditing, Business Mathematics, Statistics, Income Tax Law and Management Thought. |
| <u>PSO3</u> | Third year equips the students with vast knowledge of Indirect Taxation (Newly introduced GST), Cost Accounting, Management Accounting, Governance, Ethics and Corporate Social Responsibility, Banking, Money & Insurance matters. |

Course outcomes of Commerce

| | |
|-------------------|--|
| <u>CO1</u> | Students can develop ability for analysis and evaluation of evidence in the commerce disciplines in support of an argument, proposition or solution to problems in organizations and in society. |
| <u>CO2</u> | Students are empowered to learn strategic and critical thinking in relation to business and commerce related issues. |
| <u>CO3</u> | Students are empowered to gain knowledge across disciplines; Accountancy, Law, Audit, Economics, Taxation (direct\in direct taxes). |
| <u>CO4</u> | Students are educated to synthesis of knowledge across disciplines and relate them with daily emerging business developments. |
| <u>CO5</u> | Students develop problem solving ability through the application of appropriate theories, principles and data. |
| <u>CO6</u> | Students learn skills in the use of computer systems and software used in commerce and business through practical assignments, exercises and demonstrations. |

Name of Program: Bachelor of Computer Applications (BCA)

Programme Outcomes of BCA

| | |
|-------------------|--|
| <u>PO1</u> | Knowledge and understanding of Information Technology Fundamentals, C Language Basics, Office Automation, Digital Electronics, Data Structure, Basic Mathematics (Year I) |
| <u>PO2</u> | Knowledge and understanding of C++ Basics, Database Management System, Computer Organization & Architecture, Management Information System, Computer Oriented Numerical & Statistical Methods, Computer Networks (Year II) |
| <u>PO3</u> | Knowledge and understanding of Web Technology, Java Programming, System Analysis & Design, System Software, Java Programming (Year-III) |
| <u>PO4</u> | Knowledge and understanding of English and Punjabi. |

Program Specific Outcomes of BCA

| | |
|--------------------|---|
| <u>PSO1</u> | Students can apply their knowledge of programming techniques to design different of software. |
| <u>PSO2</u> | Students are able to become Medical Representative. |
| <u>PSO3</u> | Students can take admission in Master of Computer Applications (MCA) Program. |
| <u>PSO4</u> | Students become eligible for Government Computer Teachers in state schools. |

Course outcomes of BCA

| | |
|-------------------|---|
| <u>CO1</u> | Students can understand the concept of different programming languages. |
| <u>CO2</u> | Students can design web pages using HTML, DHTML. |
| <u>CO3</u> | Students can learn how to make power point presentation. |
| <u>CO4</u> | Students can design different programs using different programming techniques. |
| <u>CO5</u> | Students can understand concept database management system and how to design good database. |

| | |
|-------------------|---|
| <u>CO6</u> | Students can learn about basic networking modules and installation of different software. |
|-------------------|---|

Course Outcomes of Practical Skills

| | |
|-------------------|--|
| <u>CO1</u> | Students can execute and develop codes of different programs in Computer Labs. |
| <u>CO2</u> | Students can design different types of Web Pages using HTML, JAVA Script in Computer Labs. |
| <u>CO3</u> | Students can demonstrate the Computer Oriented Numerical & Statistical Methods in Computer Labs. |

Course Outcomes of Professional Skills

| | |
|-------------------|---|
| <u>CO1</u> | Students are eligible to pursue B.Ed., Post graduation or jobs in various Multinational Companies, Banks, Industries and other office jobs. |
| <u>CO2</u> | Students can appear for State and National level exams for Government jobs. |

Name of Program: Bachelor of Business Administration (BBA)

Programme Outcomes of BBA

| | |
|-------------------|--|
| <u>PO1</u> | BBA program is a strong foundation in core business disciplines, helping students to acquire competency needed by all business management. |
| <u>PO2</u> | The outcome of the program is providing business knowledge and skills while handling the activities |
| <u>PO3</u> | Effective interaction and communication skills to promote respect, trust and relationships |
| <u>PO4</u> | Provide a platform for students to demonstrate their understanding of current business events, world culture or global economies |
| <u>PO5</u> | Develop appropriate leadership skills, creativity and entrepreneurship to maximize employee productivity. |
| <u>PO6</u> | Analyze and develop solutions for business problems and issues by using logical reasoning & patterns for evaluating information materials and data |
| <u>PO7</u> | Choose careers in the Public, Private and Government sector. |
| <u>PO8</u> | Further study in advanced level program in management studies |

Program Specific Outcomes of BBA

| | |
|--------------------|---|
| <u>PSO1</u> | First year is to build the basic concepts of various business related management principles, management functions and economics. |
| <u>PSO2</u> | Second year is devoted to specialized subjects i.e. marketing management, human resource management, and business accounting and mercantile laws. |
| <u>PSO3</u> | In the third year they learn about business research methods, Organizational behavior and values, Industrial relations. |
| <u>PSO4</u> | Students will be exposed to current business events, world culture and global economies. |

Course outcomes of BBA (Management)

| | |
|-------------------|--|
| <u>CO1</u> | Students can learn the major concepts in the functional areas of accounting, marketing, finance, information technology and management |
| <u>CO2</u> | Students can learn legal, social, ethical and economic environment of business in a global context |
| <u>CO3</u> | Students can solve organizational problems, individually and /or in teams, using quantitative, qualitative, and technology based approaches |
| <u>CO4</u> | During this three year program students take up live projects related to marketing, human capital management, finance and policies concerning business management etc., aiming to have a hold on theoretical aspects of different concepts of business administration. |

Name of Program: M.Sc. (MATHEMATICS)

Programme Outcomes of M.Sc. Mathematics

| | |
|------------|---|
| PO1 | To provide sufficient Mathematical knowledge to students to begin a career in mathematics, applied mathematics or a related field. |
| PO2 | To provide solid foundation to students by opting papers which are useful to students for preparing UGC-NET Examination |
| PO3 | To provide the skills of pure Mathematical thinking as well as applied Mathematics to the students which are important for science, research and industry. |
| PO4 | To give the students an exposure to advanced mathematical disciplines to make them able to conduct research in Mathematics in the future as well to become successful teachers. |
| PO5 | To provide the students the clarity and coherence of Mathematical thoughts for preparing them to meet challenges in their future academic career. |

Program Specific Outcomes of M.Sc. Mathematics

| | |
|-------------|---|
| PSO1 | Ability to learn mathematics through modeling real world situations. |
| PSO2 | Ability to effectively communicate various concepts of Mathematics using examples, their geometrical visualizations and symbolic, graphical, numerical and written representations of Mathematical ideas. |
| PSO3 | Ability to gain experience while exploring open ended problems and conjectures |
| PSO4 | Ability to inculcate the habit of self-learning. |
| PSO5 | Ability to acquire knowledge and skills through logical reasoning. |
| PSO6 | Ability to discover the challenge of research in Mathematics and Statics |
| PSO7 | Ability to learn how to access and utilize resources that will facilitate further Mathematical study or research. |

Course outcomes of ALGEBRA-1

| | |
|------------|--|
| CO1 | To study Structure theory of groups, Sylow theory, solvability and nilpotency of groups, Lagrange's theorem, class equation etc. |
| CO2 | To study Simple groups, symmetric groups, Alternating groups and their simplicity |
| CO3 | To study basic properties of Ring theory, Ideals and algebra of Ideals |
| CO4 | To study Field of Quotients of Integral Domain, Matrix Rings |

Course outcomes of MATHEMATICAL ANALYSIS

| | |
|------------|--|
| CO1 | To understand the concept of Functional of several variables, concept of norms, inverse function theorem and Implicit function theorem |
| CO2 | To study measure theory include measurable sets, measurable function, Measure Spaces , Lebesgue measure |
| CO3 | To study the concept of Lebesgue integral and relation between Riemann integrals and |

| | |
|------------|---|
| | Lebesgue integrals, Fatu's Lemma |
| CO4 | To understand the concept of Function of bounded variations and differentiation of an integrals, absolute continuity, Jensen's inequality |

Course outcomes of TOPOLOGY-1

| | |
|------------|---|
| CO1 | To understand the difference between finite, countable and uncountable sets. |
| CO2 | To study properties of topological spaces like compactness, connectedness |
| CO3 | To understand the concept of Bases and Sub-bases |
| CO4 | To know the how metric space becomes a special case of a topological space |
| CO5 | Understand how points of space are separated by open sets, Hausdroff spaces and their importance. |

Course outcomes of DIFFERENTIAL GEOMETRY

| | |
|------------|---|
| CO1 | To calculate the curvature and torsion of the space curves. |
| CO2 | To study the geometry of surfaces and its types using calculus techniques. |
| CO3 | Use of first and second fundamental forms to find the length of curves on surfaces and curvature of surfaces |
| CO4 | To have an idea about the surfaces of the Gaussian ,mean and principal curvatures. |
| CO5 | To Study geodesics theory and apply it to find geodesics curvature, geodesic equation, geodesics of surfaces of revolution. |
| CO6 | Use of Gauss remarkable theorem to find Gaussian curvature of the surfaces. |

Course outcomes of LINEAR PROGRAMMING

| | |
|------------|--|
| CO1 | To make students able to model a real world problem as a Linear Programming Problem and to find its optimal solution using Simplex Method. |
| CO2 | To make students able to understand dual nature of the Linear Programming Problem and to find its solution by using relationship between solutions of Primal Problem and Dual Problem |
| CO3 | To make students able to analyze the effect of discrete changes in parameters (cost vector, requirement vector and co-efficient matrix), addition of new variable or constraint and deletion of a variable or constraint on the optimal solution of the Linear Programming Problem |
| CO4 | To make students able to understand the methods to solve job sequencing problems of n jobs on m machines |
| CO5 | To make students able to understand the methodology of solving replacement problems for replacement of items that deteriorates with time with/without considering change in money value. |

Course outcomes of ALGEBRA-II (RINGS AND MODULES)

| | |
|------------|---|
| CO1 | To understand the Polynomial rings, UFD, ED, PID and relation between UFD, ED and PID |
| CO2 | Design, analyze and implement the concepts of Gauss Lemma, Einstein's irreducibility criterion, separable extensions etc. |

| | |
|------------|--|
| CO3 | To understand the concepts of modules, submodules and their properties. |
| CO4 | To understand the difference between modules and vector spaces. |
| CO5 | To know the concepts of Simple modules, Artinian Modules, Noetherian Modules and their simple characterizations. |

Course outcomes of TOPOLOGY-II

| | |
|------------|---|
| CO1 | To understand regular and normal spaces and some important theorems in these spaces. |
| CO2 | To understand the universal properties through the study of Stone Cech Compactification of Tichonov spaces. |
| CO3 | To study about the Identification spaces and their applications. |
| CO4 | To understand the modern language of Categories and Functors through the study of Homotopy. |
| CO5 | To prepares the student for their future study of Algebraic Topology. |

Course outcomes of DIFFERENTIAL EQUATIONS-I

| | |
|------------|--|
| CO1 | Understanding about the existence and uniqueness of solutions of first order ODE's. |
| CO2 | To understand eigen values and eigen functions of Sturm–Liouville BVP's. |
| CO3 | To know the concepts of linear system of differential equations. |
| CO4 | To learn the dependency of solutions on initial condition and parameter in first order ODE's |
| CO5 | To investigate the qualitative behavior of solutions of system of differential equations. |

Course outcomes of COMPLEX ANALYSIS-I

| | |
|------------|---|
| CO1 | To study the concept of function of complex variable, limit, continuity and differentiability of function of complex variable |
| CO2 | To understand the concept of Analyticity and differentiability of function of complex variable and C-R equations |
| CO3 | To understand various methods to deal with Complex integration and concept of Contour integration |
| CO4 | To study the concept of zeros and singularities and behaviour of a function at the singularities |
| CO5 | To understand the concept of analytic continuation by extending the domain of analyticity |

Course outcomes of FUNCTIONAL ANALYSIS-I

| | |
|------------|--|
| CO1 | To study the concept of Normed linear spaces with applications of uniform boundedness principle, Open mapping theorem, Closed graph theorem, |
| CO2 | To study the theory of Banach spaces with Hahn-Banach theorem |
| CO3 | To know the concept of Hilbert Spaces include orthogonal sets, orthonormal sets and |

| | |
|------------|--|
| | Bessel's inequality |
| CO4 | To know the relationship between Banach Space and Hilbert Space and related theorems |
| CO5 | To study the applications of Contraction mapping and Approximation theory in Differential equations and integral equations |

Course outcomes of DIFFERENTIABLE MANIFOLDS

| | |
|------------|---|
| CO1 | To study the theory of Differentiable manifold, Local coordinate approach |
| CO2 | To understanding the concept of Differential geometric structure on manifold, Tangent vectors ,Lie Brackets |
| CO3 | To study the theory of Tensor product, Torsion tensor , Curvature tensor |
| CO4 | To define Various differentiable mappings and connection on manifolds and Bianchi's identities |
| CO5 | To study the Concept of Riemannian manifolds with Riemannian metric |

Course outcomes of FIELD THEORY

| | |
|------------|--|
| CO1 | To identify and analyze different types of algebraic structures such as Algebraically closed fields, Splitting fields, Finite field extensions to understand and use the fundamental results in Algebra. |
| CO2 | To understand the basic notions of Field theory like Normal Extensions, Separable Extensions etc. |
| CO3 | To create, select and apply appropriate algebraic structures such as Galois extensions, Automorphisms of groups and fixed fields. |
| CO4 | To understand Fundamental theorem of Galois theory and to apply the Galois correspondence to solve problems of Field theory. |
| CO5 | To identify the challenging problems in advanced Algebra to pursue further research. |

Course outcomes of DIFFERENTIAL EQUATIONS-II

| | |
|------------|---|
| CO1 | Understanding about the existence and uniqueness of solutions of first order ODE's in complex system. |
| CO2 | To know the concept of continuation of solution of first order ODE's in complex system. |
| CO3 | To study Laplace equation in Cartesian, polar, cylindrical and spherical coordinates and its solution using separation variable method and its applications in physics. |
| CO4 | Concepts of Green's function in Laplace equation. |

Course outcomes of NUMERICAL ANALYSIS

| | |
|------------|--|
| CO1 | To learn how to obtain numerical solution of initial value problem using single and multi-step method. |
| CO2 | To understand the concept of finite difference technique in solving partial differential equation (parabolic, elliptic and hyperbolic). |
| CO3 | Knowledge about error, stability and convergence of methods for solving IVP. |
| CO4 | Knowledge about error, stability and convergence of methods for solving partial differential equations using finite difference approach. |

Course outcomes of OPTIMIZATION TECHNIQUES-I

| | |
|------------|---|
| CO1 | To make students able to analyze the effect of discrete changes in parameters (cost vector, requirement vector and co-efficient matrix), addition of new variable or constraint and deletion of a variable or constraint on the optimal solution of the Linear Programming Problem. |
| CO2 | To study the concept of finding integer solutions of Linear programming problem and their algorithms |
| CO3 | To understand the concept of Dynamic programming algorithms and its applications in various problems |
| CO4 | To know the concept of finding Optimal solution of many problems like Transportation problem, assignment problem, Travelling salesman problem |
| CO5 | To study the concept of Game theory and various problems in Game Theory |

Course outcomes of OPTIMIZATION TECHNIQUES-II

| | |
|------------|---|
| CO1 | To solve Quadratic Programming, Goal Programming, Separable Programming Problems. |
| CO2 | Able to understand constrained and unconstrained Geometric Programming Problem |
| CO3 | To study Simulation and its applications to Inventory, Queueing, Capital Budgeting, Financial Planning, Maintenance, Job Sequencing, Networks |
| CO4 | To study Decision Theory which is used in solving various problems |
| CO5 | To study Linear Complementary Problem |

Course outcomes of COMMUTATIVE ALGEBRA

| | |
|------------|--|
| CO1 | To understand the key definitions in the theory of commutative algebra and critical awareness of how they interact and support each other. |
| CO2 | Being able to decide if an exact sequence of modules is exact. |
| CO3 | To study about the Primary ideals and the theorems regarding decomposition of ideals as product of Primary Ideals. |
| CO4 | To understand Integral Dependence of rings, Going up and Going down theorems. |
| CO5 | To pursue further research in Algebraic Number Theory, Algebraic Topology, Algebraic Geometry etc. |

Course outcomes of OPERATION RESEARCH

| | |
|------------|--|
| CO1 | To gain knowledge about the different queuing models and their applications. |
| CO2 | Concepts of replacement and inventory models and their applications |
| CO3 | To understand the mathematical tools that are needed to solve optimization problems. |
| CO4 | To demonstrate the network models and to learn the various algorithms for their solution. |
| CO5 | To enable the students to identify and develop operation research models from the real system. |

Course outcomes of ANALYTIC NUMBER THEORY

| | |
|------------|---|
| CO1 | To study the concept of Various Arithmetic function and Multiplicative function, various theorems of arithmetic functions include Gauss theorem, Euler's theorem, Inversion formula and their extension |
| CO2 | To know the concept of Dirichlet product and Averages of arithmetical functions |
| CO3 | To study the concept of distribution of prime numbers, Abel's identity and some equivalent forms of distribution of primes |
| CO4 | To understand Prime number theorem and theorems of primes are the form $4n+1$ etc. |
| CO5 | To understand the concept of Dirichlet Character and relationship with group theory |

Course outcomes of MATHEMATICAL METHODS

| | |
|------------|---|
| CO1 | To study the concept of converting Linear differential equations to integral equations and conversely |
| CO2 | To understand the concept of Fredholm and volterra integral equations of first, second and third types |
| CO3 | To study the concept of calculus of variations include Euler's equations of different kind and concept of maxima and minima of functional |
| CO4 | To know the various applications of Integral equations and calculus of variations in various fields |
| CO5 | To solve the brachistochrone and isoperimetric problem, Able problem and Hadamard theorem |

Name of Program: M.A. English

Programme Outcomes of M.A. English

| | |
|-------------------|--|
| <u>PO1</u> | Students can pursue B.Ed. which will make them eligible to get jobs in schools as teachers. |
| <u>PO2</u> | Students can appear for State and National level exams for various Government Jobs including the prestigious exams like UPSC or PPSC as there is one full fledged paper of English in these exams. |
| <u>PO3</u> | They can also appear for banking exams, FCI and other such exams. |

Program Specific Outcomes of M.A. English

| | |
|---------------------|--|
| <u>PSO1</u> | Students become eligible to pursue M.Phil. and Ph.D. |
| <u>PSO2</u> | They can also appear for NET to pursue their career in teaching. |
| <u>PSO3</u> | Students are enabled to translate the literary works of other authors of Hindi, Punjabi etc. |
| <u>PSO4</u> | They can setup independent translation firms as well as become eligible for official translators in embassies and for official visits of the dignitaries from foreign countries. |
| <u>PSO5</u> | They can do reporting, public relations, proof reading, interpreting, free lancing. |
| <u>PSO6</u> | They can be bloggers or content writers for add agencies. |
| <u>PSO7</u> | Students can be creative writers and they can author books. |
| <u>PSO8</u> | They can write information for magazines, websites, doctors or any other firm. |
| <u>PSO9</u> | They can avail overseas scholarships and get jobs there. |
| <u>PSO10</u> | They can try their hands as independent literary critics writing for print or online publications. |
| <u>PSO11</u> | With a pen, paper and empowered with language students can be executive communication administrators or business communication experts. |
| <u>PSO12</u> | They can be campaign managers or speech writers. |
| <u>PSO13</u> | As postgraduates from this field, they develop ample critical ability to analyze and reproduce matter easily, so they can avail job opportunities in |

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| | national as well as international magazines such as India Today, Vogue or National Geographic etc. |
|--|--|

Course outcomes of M.A. English

| | |
|-------------------|--|
| <u>CO1</u> | Students learn English Literature from Medieval Age to Victorian Age including poetry, novel, drama and criticism. |
| <u>CO2</u> | They also learn English Literature from Modern Age to the Contemporary Times including poetry, drama, novel and criticism in addition to English Literature. |
| <u>CO3</u> | The students are also acquainted with Indian Literature in English, World Literature in English and translated works. |

Name of Program: M.A. (Punjabi)

Programme Outcomes of M.A. (Punjabi)

| | |
|-------------------|--|
| <u>PO1</u> | Students can pursue B.Ed. which will make them eligible to get jobs in schools as teachers. |
| <u>PO2</u> | Students can appear for State and National level exams for various Government Jobs including the prestigious exams like UPSC or PPSC as there is one full fledged paper of Punjabi in these exams. |
| <u>PO3</u> | They can also appear for banking exams, FCI and other such exams. |

Program Specific Outcomes of M.A. (Punjabi)

| | |
|--------------------|---|
| <u>PSO1</u> | Students become eligible to pursue M.Phil. and Ph.D. They can also appear for NET to pursue their career in teaching. |
| <u>PSO2</u> | Students gain ability to translate the literary works of other authors of Hindi, English etc. |

Course outcomes of M.A. (Punjabi)

| | |
|-------------------|--|
| <u>CO1</u> | Students learn History of Punjabi Literature, novel, drama, poetry and criticism |
| <u>CO2</u> | They also learn Linguistics, prose, Gurmat poetry, Legends, Sufi Poetry, Punjabi culture and Folk lore |
| <u>CO3</u> | Students come to know about the emergence of different genres in different time periods. |

Name of Program: M.Sc. (Information Technology)

Programme Outcomes of M.Sc.(Information Technology)

| | |
|-------------------|----------------------------------|
| <u>PO1</u> | Students can do B.Ed. |
| <u>PO2</u> | Can do M.A. |
| <u>PO3</u> | Can join government sector jobs. |

Program Specific Outcomes of M.Sc.(Information Technology)

| | |
|--------------------|---------------------------------------|
| <u>PSO1</u> | Students are able to do M.Tech., MCA. |
| <u>PSO2</u> | Students can become programmers. |
| <u>PSO3</u> | Become website designers. |
| <u>PSO4</u> | Become System Analysts. |
| <u>PSO5</u> | Become computer teachers. |

Course outcomes of Information Technology

| | |
|-------------------|--|
| <u>CO1</u> | Can get the basic knowledge of Information Technology. |
| <u>CO2</u> | Can become a Java Programmer. |
| <u>CO3</u> | Can become a System Administrator after getting the knowledge of Networking. |
| <u>CO4</u> | Can become a website designer. |
| <u>CO5</u> | Can become a C programmer. |
| <u>CO6</u> | Installation of software and Operating systems on various computers |

Name of Program: M.Sc. (Information Technology) Lateral Entry

Programme Outcomes of M.Sc. (Information Technology) Lateral Entry

| | |
|-------------------|----------------------------------|
| <u>PO1</u> | Students can do B.Ed. |
| <u>PO2</u> | Can do M.A. |
| <u>PO3</u> | Can join government sector jobs. |

Program Specific Outcomes of M.Sc. (Information Technology) Lateral Entry

| | |
|--------------------|---------------------------------------|
| <u>PSO1</u> | Students are able to do M.Tech., MCA. |
| <u>PSO2</u> | Students can become programmers. |
| <u>PSO3</u> | Become website designers. |
| <u>PSO4</u> | Become System Analysts. |
| <u>PSO5</u> | Become computer teachers. |

Course outcomes of Information Technology

| | |
|-------------------|--|
| <u>CO1</u> | Can get the basic knowledge of Information Technology. |
| <u>CO2</u> | Can become a Java Programmer. |
| <u>CO3</u> | Can become a System Administrator after getting the knowledge of Networking. |
| <u>CO4</u> | Can become a website designer. |
| <u>CO5</u> | Can become a C programmer. |
| <u>CO6</u> | Installation of software and Operating systems on various computers |

Name of Program: Post Graduation of Computer Applications (PGDCA)

Programme Outcomes of Post Graduation of Computer Applications (PGDCA)

| | |
|-------------------|---|
| <u>PO1</u> | Students can join Government & Private sector jobs. |
|-------------------|---|

Program Specific Outcomes of Post Graduation of Computer Applications (PGDCA)

| | |
|--------------------|--|
| <u>PSO1</u> | Students are able to do M.Sc.(IT) Lateral Entry. |
| <u>PSO2</u> | Students can become programmers. |
| <u>PSO3</u> | Become Computer Technicians. |

Course outcomes of Computer Applications

| | |
|-------------------|--|
| <u>CO1</u> | Can get the basic knowledge of Information Technology. |
| <u>CO2</u> | Can become a Java Programmer. |
| <u>CO3</u> | Can become a System Administrator after getting the knowledge of Networking. |
| <u>CO4</u> | Can become a website designer. |
| <u>CO5</u> | Can become a C programmer. |
| <u>CO6</u> | Installation of software and Operating systems on various computers. |

Name of Program: Master of Commerce (M.Com. Regular)

Programme Outcomes of M.Com. Regular

| | |
|-------------------|---|
| <u>PO1</u> | To provide a systematic and rigorous learning and exposure to Banking and Finance related disciplines. |
| <u>PO2</u> | To train the student to develop conceptual, applied and research skills as well as competencies required for effective problem solving and right decision making in routine and special activities relevant to financial management and Banking Transactions of a business. |
| <u>PO3</u> | To acquaint a student with conventional as well as contemporary areas in the discipline of Commerce. |
| <u>PO4</u> | To enable a student well versed in national as well as international trends. |
| <u>PO5</u> | To facilitate the students for conducting business, accounting and auditing practices, role of regulatory bodies in corporate and financial sectors nature of various financial instruments. |
| <u>PO6</u> | To provide in-depth understanding of all core areas specifically Advanced Accounting, International Accounting, Management, Security Market Operations and Business Environment, Research Methodology, Direct tax laws and planning and Corporate legal framework. |

Program Specific Outcomes of M.Com. Regular

| | |
|--------------------|--|
| <u>PSO1</u> | After Completing Masters in Commerce students are able to do Research work. |
| <u>PSO2</u> | Develop an ability to apply knowledge acquired in problem solving. |
| <u>PSO3</u> | Ability to work in teams with enhanced interpersonal skills and communication. |
| <u>PSO4</u> | The students can work in different domains like Teaching, Accounting, Taxation, HRM, Banking and Administration. |

Course outcomes of MANAGEMENT CONCEPT & ORGANIZATIONAL BEHAVIOR

| | |
|-------------------|---|
| <u>CO1</u> | Acquire theoretical and practical acquaintance of management behaviour, procedures and practices; understand the process of planning, organising, controlling, staffing and decision making, behaviour of the individuals and members of the group. |
| <u>CO2</u> | Develop ability to know the basic structure of management functions, policies and procedures, to know about how to manage individuals at place of work. |
| <u>CO3</u> | Acknowledge leadership and motivational theories which help students to develop insights and to manage work relations. |

| | |
|-------------------|--|
| <u>CO4</u> | Understand different types of group dynamics, team development and to know the significance of organizational culture and how to deal with organisational change and work stress. |
| <u>CO5</u> | Analyse and Interpret different types of organisation structures, understand two way communication process and Enlarge capability to overcome or remove barriers to effective communication. |

Course outcomes of ACCOUNTING FOR MANAGERIAL DECISIONS

| | |
|-------------------|--|
| <u>CO1</u> | Acquire theoretical and practical knowledge of financial statements, their analysis techniques and recent trends of the corporate houses, analyse and interpret various accounting ratios to know the profitability position and financial position of the corporations. |
| <u>CO2</u> | Enlarge capability to understand the basic structure of cash flow and funds flow statements, this will further help them in planning for intermediate and long- term finances. |
| <u>CO3</u> | Understand the concept and applications of marginal costing and philosophy behind the strategic cost management, its key element and cost drivers. |
| <u>CO4</u> | Develop ability to understand the role and limitations of budgets in organisations, interpret the difference between performance and zero based budgeting. |
| <u>CO5</u> | Analyse and Interpret common business management decisions such as pricing and outsourcing from a financial perspective, grasp knowledge of responsibility accounting, group work and communication skills. |
| <u>CO6</u> | Interpret financial statements of an enterprise and make appropriate suggestions. |

Course outcomes of BUSINESS ECONOMICS

| | |
|-------------------|---|
| <u>CO1</u> | Understand the nature and scope of business economics, various objectives of firm and fundamental economic concepts. |
| <u>CO2</u> | Analyse demand functions, elasticity of demand and consumer equilibrium with utility and indifference curve analysis including revealed preference theory and theory of consumer choice under risk. |
| <u>CO3</u> | Use the techniques of demand forecasting, production function and cost analysis. |
| <u>CO4</u> | Comprehend the market forms and apply the pricing techniques to determine the prices of products. |
| <u>CO5</u> | Understand classical theory of employment and Keynesian objection to the classical theory, meaning of consumption function and investment. |
| <u>CO6</u> | Assess business fluctuations, expansions and recessions, theories of business cycle and concept of Inflation. |

Course outcomes of RESEARCH METHODOLOGY & STATISTICAL TECHNIQUE

| | |
|-------------------|---|
| <u>CO1</u> | Develop the understanding of research and its types, objectives of doing research, research process, sampling methods, data collection methods and computer assisted information acquisition. |
| <u>CO2</u> | Understand the various probability distributions. |
| <u>CO3</u> | Develop awareness of data analysis and hypothesis testing procedure. |
| <u>CO4</u> | Use of various parameteric and non-parametric test, chi square test, t test, f test and z test. |
| <u>CO5</u> | Familiarize with mechanics of report writing. |

Course outcomes of FINANCIAL MANAGEMENT

| | |
|-------------------|--|
| <u>CO1</u> | Acquire basic knowledge of finance function in a corporate enterprise. |
| <u>CO2</u> | Demonstrate the applicability of the concept of Financial Management to understand the managerial Decisions and Corporate Capital Structure. |
| <u>CO3</u> | This course also highlights the emerging issues of corporate restructuring, mergers and acquisition decisions. |
| <u>CO4</u> | Explain alternative sources of finance and investment opportunities and their suitability in particular circumstances. |
| <u>CO5</u> | Analyse a company's performance and make appropriate recommendations |

Course outcomes of ADVANCED ACCOUNTING

| | |
|-------------------|--|
| <u>CO1</u> | Expound and interpret various contemporary issues in Accounting along with their usage in strategy formulation by business. |
| <u>CO2</u> | Enlist the steps involved in process of development of accounting standards and their convergence with IFRS and understand their scope , significance and disclosure. |
| <u>CO3</u> | Have an insight of accounting for price level changes, Accounting for human resources and measurement corporate social performance and utilize this knowledge for practical exposure. |
| <u>CO4</u> | Understand Corporate reporting practices in India and concept of creative and environment accounting in order to go for higher education or advanced research in the field of Commerce and management. |

Course outcomes of BUSINESS ENVIRONMENT

| | |
|-------------------|--|
| <u>CO1</u> | Chalk out business policies and understand the impact of environment on business, changing dimensions of business environment and use different demand forecasting techniques. |
|-------------------|--|

| | |
|-------------------|--|
| <u>CO2</u> | Learn objectives and targets of five years plans and understand importance of economic policies including Fiscal, Monetary, Industrial and EXIM policy. |
| <u>CO3</u> | Analyze positive and negative impact of economic reforms on Indian economy. |
| <u>CO4</u> | Familiarize with provisions of Consumer Protection Act, Right to Information Act, Environment Protection Act and Competition Act. |
| <u>CO5</u> | Understand the current trends in global economy and the functioning of international economic institutions including IMF, World Bank, IFC, IDA, and ADB. |
| <u>CO6</u> | Analyse Indian Economy in light of changing government regulatory policies. |

Course outcomes of E-COMMERCE

| | |
|-------------------|---|
| <u>CO1</u> | To develop and understanding the foundations & importance of E-commerce. |
| <u>CO2</u> | To develop & understanding of retailing in E-commerce by:-Analyzing branding & pricing strategies, Using & determine the effectiveness of market research, the effect of disintermediation. |
| <u>CO3</u> | Analyse the impact of e-commerce on business modes and strategy. |
| <u>CO4</u> | Discuss legal issues & privacy of E-commerce. |
| <u>CO5</u> | Assess Electronic payment system. |
| <u>CO6</u> | Recognize & discuss global e-commerce issues. |
| <u>CO7</u> | To make aware the ethical, social & security issues of E-commerce. |

Course outcomes of SEMINAR

| | |
|-------------------|--|
| <u>CO1</u> | Students will be able to think and scrutinize real world issue, explore creative avenues of expression, disciplinary problems, and make substantial decisions. |
| <u>CO2</u> | Learn ethical principles, develop presentation and discussion skills, integrate thoughts and bring out new ideas through creative work. |
| <u>CO3</u> | Integrate collaborative learning and self-determining study, examine, explore, achieve, and develop knowledge in the field of commerce and social sciences. |
| <u>CO4</u> | Identify and utilize resources, develop critical thinking and time management strategies & skills. |
| <u>CO5</u> | Demonstrate their questioning skills which will spark further discussion, develop voice modulation and speak persuasively with or without notes. |

Course outcomes of FINANCIAL INSTITUTIONS AND MARKETS

| | |
|-------------------|--|
| <u>CO1</u> | Have a good understanding of financial institutions and markets as applicable in real life Business Management. |
| <u>CO2</u> | Understand the banking system and describe the role of regulatory bodies in regulating how banks manage their capital. |
| <u>CO3</u> | Develop a set of skills among the students to use the financial planning at the workplace to solve business finance related and general decision for financial problems. |
| <u>CO4</u> | Analyze the financial problems and learn about markets are inter-linked, structured and regulated. |
| <u>CO5</u> | The role of regulation and monetary policy to ensure the stability and longevity of any financial system and minimize the impact of possible adverse outcomes and contagion effects implicit in any financial crisis, particularly when the financial systems are globally interconnected. |

Course outcomes of CONTEMPORARY AUDITING

| | |
|-------------------|--|
| <u>CO1</u> | After completing this course, the students will be able to get deeper insights into basic principles governing an Audit and importance of an error-free financial statement. |
| <u>CO2</u> | Understand the role of Institute of Chartered Accountants of India for issuing auditing standards to conduct audit and other assurance engagements. |
| <u>CO3</u> | Understand auditors' qualifications, disqualification, rights, duties and liabilities and will acquire knowledge and understanding of audit evidence and documentation |
| <u>CO4</u> | Demonstrate and critically examine various contemporary audit issues and challenges involved in the electronic data processing environment |
| <u>CO5</u> | Understand the inherent risk involved in assessing and evaluating the financial statements, process of formulating the audit report and communicating the same to the client |
| <u>CO6</u> | This course will help students to prepare for CA, CS and auditing specific competitive exams like audit inspectors |

Course outcomes of CORPORATE LEGAL FRAMEWORK

| | |
|-------------------|--|
| <u>CO1</u> | Students will be able to acknowledge the concept of incorporation of Company, its separate legal entity and documents required for registration of company: Memorandum of Association and Articles of Association and their alteration with a special reference to Doctrine of Ultravires and Doctrine of indoor management. |
| <u>CO2</u> | Enlist the steps involved in framing of prospectus and explicate the significance of prospectus and consequences of misrepresentation in prospectus. |

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|-------------------|--|
| <u>CO3</u> | Analyse the powers and duties of directors considering meetings of directors and shareholders and learn various forms of winding up of company. |
| <u>CO4</u> | Interpret in detail the laws relating to companies act 2013, Negotiable Instruments Act, 1881 and Competition Act, 2002 and demonstrate the relevance of foundational and theoretical knowledge of their academic major in order to gain practical exposure. |
| <u>CO5</u> | This course will provide knowledge regarding the application of these laws to practical commercial situations. |

Course outcomes of DIRECT TAX LAWS

| | |
|-------------------|--|
| <u>CO1</u> | Develop knowledge of laws pertaining to levy of direct tax in India and to enable students to apply the same practically. |
| <u>CO2</u> | Understand the basic concepts in the law of Income Tax and determine the residential status of different persons. |
| <u>CO3</u> | Identify the five heads in which income can be categorised and to compute income under different heads. |
| <u>CO4</u> | Analyse and Examine clubbing provisions, aggregate income after set-off and carry forward of losses. |
| <u>CO5</u> | Identify deductions out of gross total income and computation of total income in regard to different assesses and will be able to calculate income tax liability for various assesses. |

Course outcomes of MARKETING MANAGEMENT

| | |
|-------------------|---|
| <u>CO1</u> | Develop ability to define and analyze the marketing problems through the formulation of marketing objectives, policies, programmes and strategies. |
| <u>CO2</u> | Understand the Marketing Environment to capture the market share and size for their organization. |
| <u>CO3</u> | Understanding the concept of marketing, marketing information system and consumer behavior. |
| <u>CO4</u> | Interpret complex marketing issues and problems using relevant theories, concepts and methods with regard to ethical conduct and will learn about concept of 4P's of marketing. |
| <u>CO5</u> | Apply contemporary marketing theories to the demands of business and management practice. |
| <u>CO6</u> | The concepts of Promotional Mix will help the learners to develop and deal with the different promotional strategies in corporate successfully. |

Course outcomes of MANAGEMENT OF FINANCIAL SERVICES

| | |
|-------------------|---|
| <u>CO1</u> | Have indepth understanding of financial services and their application in business concerns. |
| <u>CO2</u> | The identification of services of Merchant Banking system and role played by regulatory bodies in the smooth and profitable functioning of business |

| | |
|-------------------|--|
| | activities. |
| <u>CO3</u> | Develop a set of skills to use the hire purchase and leasing to solve the problems related to optimum utilisation of scarce resources. |
| <u>CO4</u> | Identify role played by Venture Capital and the evaluation of various strategies so that the students can develop information based solutions. |
| <u>CO5</u> | Develop appropriate information about Mutual Funds which will further helps students to create their own portfolio. |
| <u>CO6</u> | Analyse factoring and forfeiting to ensure the smooth functioning of business and minimization of adverse outcomes of plastic money. |

Course outcomes of HUMAN RESOURCE MANAGEMENT

| | |
|-------------------|--|
| <u>CO1</u> | Acquaint the students with the concept of HRM, its relevance, objectives, functions and role in organization. |
| <u>CO2</u> | Familiarize with planning, procurement and development of human resource and their retention plans |
| <u>CO3</u> | Understand the various compensational and reward system of human resource |
| <u>CO4</u> | Implementation and Evaluation of welfare, safety and health policies, compensation and practices. |
| <u>CO5</u> | Integrate the knowledge of HR concepts of job rotation, work redesigning, job enlargement etc. to take correct business decisions. |

Course outcomes of FUNDAMENTALS OF INVESTEMENT

| | |
|-------------------|---|
| <u>CO1</u> | Develop ability to know the basic structure of investment and speculation, analyse the concept of risk and risk return framework |
| <u>CO2</u> | Critically analyse the various investment alternatives available to individuals, examine diverse innovations in Derivative market. |
| <u>CO3</u> | Construct, analyse, examine and evaluate portfolios along with a deep understanding of efficient market theory and associated models. |
| <u>CO4</u> | Understand the structure of fundamental and technical analysis along with technical indicators; evaluate bonds in terms yield and risks. |
| <u>CO5</u> | Acquire and develop knowledge of theoretical and practical aspects of portfolio management and investment analysis for security selection and manage portfolio. |

Course outcomes of BANKING & INSURANCE SERVICES

| | |
|-------------------|---|
| <u>CO1</u> | Students will be able to accumulate knowledge regarding functions, operations and instruments of a commercial bank. |
| <u>CO2</u> | Get deeper insight into the various schemes and services offered by banks along with changing trends and volume of deposits in the banking and insurance sector of India. |

| | |
|-------------------|--|
| <u>CO3</u> | Understand and expertise in various matters relating to principles of lending, credit appraisal techniques, priority sector lending, credit monitoring and management of funds. |
| <u>CO4</u> | Acquire knowledge of rising trends and changing scenarios at national level in banking and financial services like e- banking, retail banking and recent banking technologies etc. |
| <u>CO5</u> | Discover about emerging trends in insurance sector, legislative framework and the major life and non-life players in India. |
| <u>CO6</u> | Know about risk management practices in banking and insurance sector. |
| <u>CO7</u> | This course will help students to get wide range of employment opportunities in field of banking and financial sector. |

Course outcomes of CORPORATE TAX PLANNING

| | |
|-------------------|--|
| <u>CO1</u> | Students can examine the instances of tax evasion and tax avoidance, which should not be followed in tax planning. |
| <u>CO2</u> | Consider tax implications while taking business decisions regards to its nature and location |
| <u>CO3</u> | Identify managerial decisions like tax planning in regards to make or buy decision, shut down or continue decision and own or lease. |
| <u>CO4</u> | Comprehend the tax issues relating to amalgamation, Which influence the policy outcomes of amalgamating and amalgamated companies. |

Course outcomes of INTERNATIONAL FINANCE

| | |
|-------------------|---|
| <u>CO1</u> | Acquire and Develop theoretical and practical knowledge of international financial system. |
| <u>CO2</u> | Develop ability to know the basic structure of international finance, policies and procedures, to know about the recent trends and globalisation of world economy. |
| <u>CO3</u> | Understand the evolution of international monetary system and connotation of regional and global imbalances. |
| <u>CO4</u> | Critically analyse the consequence of foreign exchange exposure and market on management practices and how to manage international receivable management, significance of global crisis in both developing and developed economies. |
| <u>CO5</u> | Understand the concept of balance of payment which will further engage the students to know the deficit/surplus of trade of home country with the world economy. |
| <u>CO6</u> | Analyse and Interpret regional economic integration along with multinational working capital management, understand the concept and role of FDI and FII and their implications in global market. |