

Course Outcome

Course	Course outcome
BC1MOO1PC1 BIOCHEMISTRY	Help learners to analyse, appreciate, understand the basic concepts of chemical reactions that occur in living systems. Ability to understand relationship between the concepts of various science fields such as biology, chemistry and biochemistry.
BC1MOO1PC2BIOPHYSICS , BIOINSTRUMENTATION AND BIOINFORMATICS	Explain models of biological systems and models dealing with statistical mechanics and transport phenomena. Solve qualitative and quantitative problems, using appropriate statistical mechanics and computing techniques. Collaborate effectively with team members for scientific investigations and for the process of learning
BC1MOO1PC3 PHYSIOLOGY AND BIOSTATISTICS	Describe the structure of major human organs and explain their role in the maintenance of healthy individuals. Explain the interplay between different organ systems and how organs and cells interact to maintain biological equilibria in the face of a variable and changing environment.
BCI MOOI PC4- CELL BIOLOGY AND GENETICS	To understand the structure, function, and organization of a cell. Helps to distinguish between prokaryotic and eukaryotic cells. Understand the complex process like cell communication, movement involved in cell development, etc.
BCIMOOIPPI- LABORATORY COURSE I	Develop practical skill among students to identify and quantify various biomolecules and metabolites in the given samples by following standard protocols.
BC2MOO2PC5-GENERAL MICROBIOLOGY	Understand the basic microbial structure and function and study the comparative characteristics of prokaryotes and eukaryotes. To know how bacteria, viruses and other microbes are classified and their involvement in pathogenesis. Understand the usefulness of microorganisms in industry and other fields. Know various Culture media and their applications and also understand various physical and chemical means of sterilization
BC2MOO2 PC6- IMMUNOLOGY	Define central immunological principles and concepts. Demonstrate the basic knowledge of immunological processes at a cellular and molecular level. outline key events and cellular players involved in immune responses, inflammation, tolerance, hypersensitivity, autoimmune diseases etc.
BC2MOO2 PC7- MOLECULAR BIOLOGY AND GENETIC ENGINEERING	Understand the chemical and molecular processes that occur in and between cells. Understand how cells respond to various signals in and outside the cell. Understand the complex process of gene expression, study basics of modern techniques used in molecular biology, the concepts of genetic engineering and its applications.
BC2MOO2PC8- METABOLISM AND BIOENERGETICS	Acquire knowledge on various metabolic pathways in living cells, understand the bioenergetics, and other integrated metabolic pathways that occur in living systems.

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BC2MOO2PP2- LABORATORY COURSE-II	Know General bacteriology and microbial techniques for isolation of pure cultures of bacteria, fungi and algae. Master aseptic techniques and be able to perform routine culture handling tasks safely and effectively. Comprehend the various methods for identification of unknown microorganisms
BC3MOO3PC9- ENZYMOLGY	Define enzyme structure, understand the mechanism of catalysis, enzyme inhibition, structure activity relationship, drug designing, and industrial application of enzyme, enzyme engineering, etc
BC3MOO3PC10-PLANT BIOCHEMISTRY	Understand plant cell structure, organization, and apply specific biochemical functions to all compartments of the plant cell. Learn about the he complex process of photosynthesis, the rich diversity of secondary compounds and metabolism in plants and how such compounds contribute to human health.
BC3MOO3PC11- MOLECULAR ENDOCRINOLOGY	To introduce the basic principles, organs and systems in mammalian (human) endocrinology. To understand and identify the organs involved in endocrine function, will know the major hormones that are produced by these organs and will know the physiological effect of these hormones. To understand the molecular mechanisms of action of many of these mediators, biochemical and signalling events at the cellular, molecular and whole animal level. Read critically, understand, evaluate, and assess scientific literature about endocrine function and pathology
BC3MOO3PC12- NEUROBIOLOGY	The student will receive instruction to understand the usefulness of genetics, cellular biology, and cognitive and behavioral tests in this complex field. The course will provide students a unique opportunity to integrate diverse approaches and principles to address complex contemporary questions about the function of the nervous system.
BC3MOO3PP3- LABORATORY COURSE- III	By the end of this course,the students will be able to plan and execute an enzyme assay, analyse enzyme kinetic data, analyse kinetic inhibition data, to determine the mechanism of inhibition, and perform library research on a specific enzyme topic
BC4MOO4PE1-CLINICAL BIOCHEMISTRY	To understand the Basic concepts and principles of Clinical Biochemistry, detail on the various biological specimens including the process of collection, preservation and storage. Understand on the etiology, types, clinical manifestations, diagnosis and treatment of various metabolic disorders.
BC4MOO4PE2- ENVIORNMENTAL SCIENCES	Make the students to recognize the interconnectedness of multiple factors in environmental challenges, to : demonstrate an integrative approach to environmental issues with a focus on sustainability, perceive ecological literacy to demonstrate an awareness, knowledge, and appreciation of the intrinsic values of ecological processes and communities.

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BC4MOO4PE3- NUTRITION HEALTH AND LIFE STYLE DISEASES	To apply dietary, energy and physical assessment methodologies, to evaluate evidence for the relationship between diet, nutrition and disease, to independently identify and explain key concepts relating to the understanding of the role of nutrition in aetiology, prevention and treatment of disease.
BC4MOO4PP4- LABORATORY COURSE IV	Gain knowledge of biological samples and their collection procedures, Perform biochemical laboratory analysis in blood and urine samples and interpret the generated results after analysis in order to determine the likely diagnosis, Assess presence and absence of normal and abnormal constituents in urine by performing qualitative urine analysis.
BC4MOO4PD- PROJECT///OR DISSERTATION	Describe a relevant area of career development, career coaching, coaching or work-related learning studies, State research questions, Identify literature for review, Critically analyse and evaluate the knowledge and understanding in relation to the agreed area of study, Integrate theory and practice, Develop responses on the basis of the evaluation and analysis undertake, Communicate in written form by integrating, analysing and applying key texts and practices.
VIVA VOCE	Evaluate the knowledge acquired by student from each course studied under MSc Biochemistry programme, The objective of this is to enable the students to attend placements and be better performers in their future.