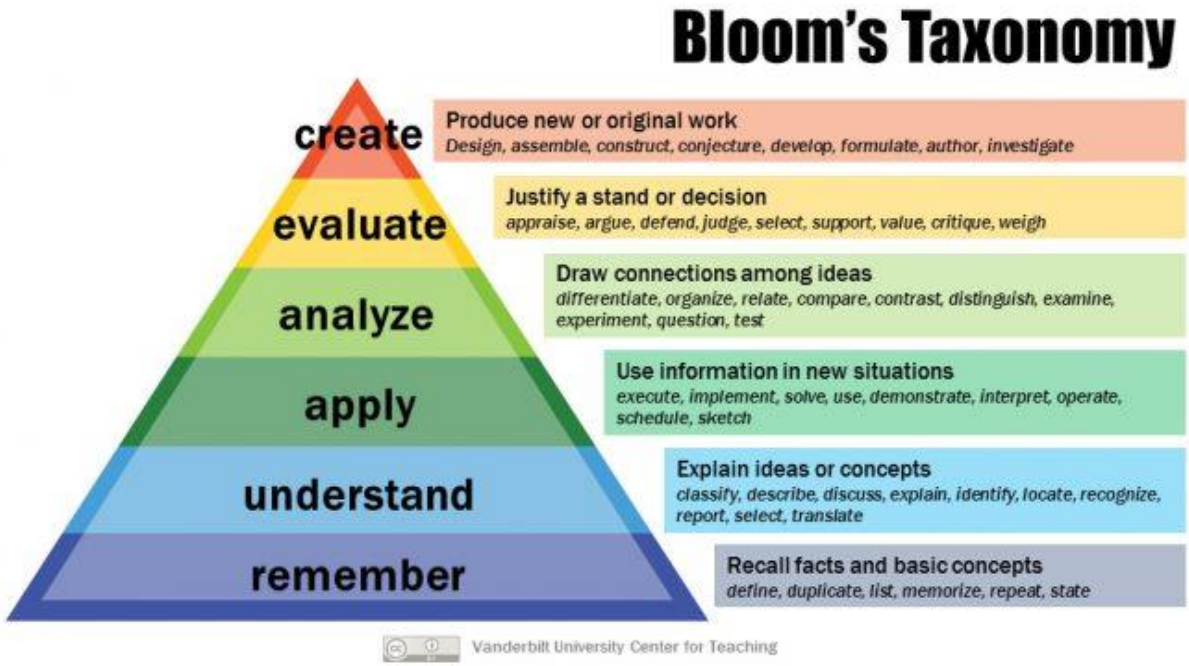
COURSE OUTCOMES

Blooms Theory is based upon the idea that there are levels of observable actions that indicate something is happening in the brain (cognitive activity.) By creating learning objectives using measurable verbs, indicating explicitly what the student must do in order to demonstrate learning.



Remember, Understand, Apply, Analyze, Evaluate, Create

R, U, Ap, Az, E, C

CLINICAL NUTRITION AND DIETETICS

SEMESTER I

Remember, Understand, Apply, Analyze, Evaluate, Create : R, U, Ap, Az, E, C

Title of the Course: Introductory Nutrition			
Sem- I	**Credits: 4**	**Course Code: CND102**	**Year/Group: I CN&D,BC,C HPW: 4**

Course Outcomes		Blooms Level
CO1	Understand the role of nutrients and apply the knowledge of nutrition in meal management	U
CO2	understand the classification, functions, digestion, absorption and metabolism of carbohydrates and lipids	U
CO3	understand classification, functions and deficiencies of protein and properties of enzymes	U
CO4	understand the significance of water, it's balance and deficiency and learn and explore the endocrine hormones and their mode of action	U

Title of the Course: Introductory Nutrition -Practicals			
Sem- I	**No. of practical- 7**	**Course Code: CND102P**	**Year/Group: I CN&D, BC, C HPW: 2**

Course Outcomes		Blooms Level
CO1	**learn and remember to calculate the nutritive value of foods and to create diet plan for adult man and woman during different physical activities**	6
CO2	**create cereal, pulses, vegetable, meat and milk-based preparations**	6

SEMESTER II

Title of the Course: Basic Nutrition			
Sem- II	**Credits: 4**	**Course Code: CND202**	**Year/Group: I CN&D,BC,C HPW: 4**

Course Outcomes		Blooms Level
CO1	**understand the basic concepts of energy and evaluate the concepts basal metabolism, factors affecting it and energy requirements of adults**	U
CO2	**understand the classification, functions and sources of vitamins and minerals**	U
CO3	**analyse physiology, nutritional requirements, complications in pregnancy and nutritional requirements during infancy and lactation**	AZ
CO4	**analyse nutritional requirements of pre-schoolers , school going children, adolescents and geriatrics**	AZ

Title of the Course: Basic Nutrition -Practicals				
Sem-II	**No. of practical-6**	**Course Code: CND202P**	**Year/Group: I CN&D, BC, C**	**HPW: 2**
Course Outcomes				Blooms Level
CO1	**create balanced diet for pregnant and lactating woman during different physical activities and for pre-school and school going child**			6
CO2	**create balanced diet for adolescent girl, adolescent boy and senior citizen**			6

SEMESTER III

Title of the Course: Basic Dietetics				
Sem-III	**Credits: 4**	**Course Code:CND302**	**Year/Group: II CN&D, BC,C**	**HPW: 4**
Course Outcomes				Blooms Level
CO1	Understand the role of dietitian in hospital and learn about routine hospital diets and special feeding methods			U
CO2	Learn the importance of diet modification in infections, surgical conditions, obesity and liver diseases			U
CO3	Evaluate the dietary management in diabetes mellitus and peptic ulcer			E
CO4	Learn about the diet plans needed to manage hypertension, renal and cardiovascular diseases			U

Title of the Course: Basic Nutrition -Practicals				
Sem-III	**No. of practical-10**	**Course Code: CND302P**	**Year/Group: I CN&D, BC, C**	**HPW: 2**
Course Outcomes				Blooms Level
CO1	**To create standardized recipes and routine hospital diets**			6
CO2	**To create day's diet for various diseased conditions**			6

SEMESTER IV

Title of the Course: Basic Dietetics				
Sem-III	**Credits: 4**	**Course Code: CND302**	**Year/Group: II CN&D, BC,C**	**HPW: 4**
Course Outcomes				Blooms Level
CO1	Understand the composition, nutritive value of cereals, millets, pulses and their use in preparations			U
CO2	Learn the composition, nutritive value of dairy and meat products			U
CO3	Learn about the vegetables , fruits and oils, composition, nutritive value and their usage			E
CO4	Understand the significant role of spices and food additives in increasing the value of foods			U

Title of the Course: Food Science-Practicals				
Sem-III	**No. of practical-7**	**Course Code: CND402P**	**Year/Group: I CN&D, BC, C**	**HPW: 2**
Course Outcomes				Blooms Level
CO1	**To create different food group's recipes**			6
CO2	**To create recipes for different meal times**			6

-IV

Title of the Course: Basic Dietetics-Practicals				
Sem-III	**Credits: 4**	**Course Code: CND302**	**Year/Group: II CN&D, BC,C**	**HPW: 2**
Course Outcomes				Blooms Level
CO1				U
CO2				U

Title of the Course:Patient Counselling Skills			
Sem-III	**Credits: 4**	**Course Code: SEC CND 2A**	**Year/Group: II/ I CN&D,BC,C HPW: 2**
Course Outcomes			Blooms Level
CO1	Learn to prepare questionnaire specific for the assessment of the patient		U
CO2	Develop skills of counselling the patients and suggest them appropriate diet plans		AZ

Title of the Course:Bakery and Confectionery			
Sem-III	**Credits: 4**	**Course Code: SEC CND 2B**	**Year/Group: II/ I CN&D,BC,C HPW: 2**

Course Outcomes		Blooms Level
CO1	Learn about the essential bakery ingredients and their usage	U
CO2	Evaluate the process of setting up of a Bakery unit and become an Entrepreneur in the Bakery business	AZ

Title of the Course:Nutrition and Fitness			
Sem-IV	**Credits: 4**	**Course Code: SEC CND 4A**	**Year/Group: II CN&D,BC,C HPW: 2**

Course Outcomes		Blooms Level
CO1	Learn the general guidelines for physical exercise and the nutritional recommendations	U
CO2	Assess the factors influencing weight gain and loss and its management through proper nutrition	AZ

Title of the Course:Food Service Management			
Sem-IV	**Credits: 4**	**Course Code: SEC CND 4A**	**Year/Group: II CN&D,BC,C HPW: 2**

Course Outcomes		Blooms Level
CO1	Learn the general guidelines for physical exercise and the nutritional recommendations	U
CO2	Assess the factors influencing weight gain and loss and its management through proper nutrition	AZ

B.Sc. Biochemistry- Course Outcomes

UG -SEMESTER I

Title of the Course: Chemistry of Biomolecules			
Sem-I	**Credits: 4**	**Course Code: BIC 101**	**Year/Group: I CN&D,BC,C HPW: 4**

Course Outcomes		Blooms Level
CO1	Understand the significance of water, Buffers and stereochemistry of Carbohydrates and amino acids	U
CO2	To learn the classification, structure, properties and functions of the aminoacids and proteins	R
CO3	To learn the classification, structure, properties and functions of carbohydrstes	C
CO4	To learn the classification, structure, properties and functions of lioids	E

Title of the Course: Chemistry of Bio molecules – Practicals			
Sem-I	**Credits: 2**	**Course Code: BIC 101 P**	**Year/Group: I CN&D,BC,C HPW: 2**

Course Outcomes		Blooms Level
CO1	Understand the concepts of Lab safety & hygiene and prepare the standard solutions, buffers and determine pH	U
CO2	To characterize the given sample by performing qualitative analysis	AP/AZ

UG -SEMESTER II

Title of the Course: Chemistry of Nucleic acids and Biochemical techniques				
Sem-II	**Credits: 4**	**Course Code: BIC 201**	**Year/Group: I CN&D,BC,C HPW: 4**	
Course Outcomes				Blooms Level
CO1	Understand the composition and properties of nucleic acids			U
CO2	Learn the structure, classification and functions of DNA and RNA			U
CO3	Learn the principle, working ad applications of spectroscopy and Centrifugation techniques			U
CO4	Apply the principles of electrophoresis, colorimetry and spectrophotometry in research and industry.			Ap

Title of the Course: Quantitative Analysis of Biomolecules - Practicals			
Sem-II	**Credits: 4**	**Course Code: BIC 201P**	**Year/Group: I CN&D,BC,C HPW: 2**

Course Outcomes		Blooms Level
CO1	Learn to estimate the amount of amino acids and proteins using a colorimeter	U
CO2	Analyse the composition and estimate the concentration of sugars colorimetrically	AZ

SEMESTER III

Title of the Course: Bioenergetics, Biological oxidations and Enzymology			
Sem-III	**Credits: 4**	**Course Code: BIC303**	**Year/Group: II/ I CN&D,BC,C HPW: 4**

Course Outcomes		Blooms Level
CO1	Understand the laws of thermodynamics and basics of bioenergetics	U
CO2	Categorize the electron carriers & illustrate the mechanism of electron transport chain, oxidative phosphorylation	E
CO3	Learn the classification, specificity and purification of enzymes	U
CO4	Evaluate the Enzyme kinetics and mechanism of enzyme action and regulation	E

Title of the Course: Enzymology Practicals			
Sem-III	**Credits: 4**	**Course Code: BIC303**	**Year/Group: II/ I CN&D,BC,C HPW: 2**

Course Outcomes		Blooms Level
CO1	Determine the activity of various enzymes	AZ
CO2	Study the effect of various factors on the enzyme activity	U

Title of the Course: Basics in Biochemical Calculations and Biostatistics			
Sem-III	**Credits: 4**	**Course Code: SECBIO2A**	**Year/Group: II/ I CN&D,BC,C HPW: 2**

Course Outcomes		Blooms Level
CO1	Learn to prepare solutions by applying the knowledge of Biochemical Calculations	U
CO2	Manage the biological data, understand the sampling methods, relate two variables and apply the laws of probability to determine the outcome of an experiment	AZ

SEC

SEC

Title of the Course: Medical Lab Technology			
Sem-III	**Credits: 4**	**Course Code: SECBIO2B**	**Year/Group: II/ I CN&D,BC,C HPW: 2**

Course Outcomes		Blooms Level
CO1	Perform the clinical laboratory tests to identify the components of blood	AP
CO2	Prepare immuno-histochemical slides and give the report	AP

SEMESTER IV

Title of the Course: Intermediary Metabolism			
Sem-IV	**Credits: 4**	**Course Code: BCH404**	**Year/Group: II/BC,M,C HPW: 4**

	Course Outcomes	Blooms Level
CO1	Understand the anabolism and catabolism of Amino acids , the regulatory mechanisms and the inborn errors associated with metabolism	U
CO2	Learn the mechanism of the Carbohydrate metabolism , regulation and the disorders associated with it	U
CO3	learn the metabolism of lipids, regulation and the disorders associated with it	U
CO4	Evaluate the anabolic and catabolic pathways , regulation and disorders of nucleotide metabolism	E

Title of the Course: Biochemical Preparations and Separations-Practicals			
Sem-IV	**Credits: 4**	**Course Code: BCH404**	**Year/Group: II/CN&D,BC,C HPW: 2**

	Course Outcomes	Blooms Level
CO1	Learn the principle and procedure of biochemical preparation and isolate them	U
CO2	Evaluate the biochemicals based on separation technique such as chromatograohy and spectrophotometry	E

SEC PAPERS

Title of the Course: Biochemical Preparations and Separations				
Sem-IV	**Credits: 4**	**Course Code: BCH404**	**Year/Group: II/CN&D,BC,C HPW: 2**	
Course Outcomes				Blooms Level
CO1	Learn the principle and procedure of biochemical preparation and isolate them			U
CO2	Evaluate the biochemicals based on separation technique such as chromatograohy and spectrophotometry			E

M.Sc. BIOCHEMISTRY COURSE OUTCOMES

SEMESTER-I

PAPER-I

Title of the Course: Chemistry of Biomolecules				
Sem- I	**Credits: 3**	**Course Code: BI101T**	**Year/Group: I MSc. Biochemistry HPW: 3**	
Course Outcomes				Blooms Level

CO1	**Develop knowledge on the structure, classification, properties and functions of aminoacids, peptides and proteins**	AZ
CO2	**Learn the structure, classification , reactions and functions of simple and complex carbohydrates**	U
CO3	**understand the structure, properties and biological significance of simple, derived and complex lipids**	U

Title of the Course: Chemistry of Biomolecules-Practicals				
Sem- I	**Credits: 2**	**Course Code: BI101P**	**Year/Group: I MSc. Biochemistry**	**HPW: 4**
Course Outcomes				Blooms Level
CO1	**Perform both Qualitative analysis And Quantitiative estimation of amino acids and proteins**			AZ
CO2	**Perform both Qualitative analysis And Quantitiative estimation of carbohydrates**			AZ

PAPER-II

Title of the Course: Endocrine Biochemistry, Vitamins and Nucleic Acids				
Sem- I	**Credits: 3**	**Course Code: BI102T**	**Year/Group: I MSc. Biochemistry**	**HPW: 3**
Course Outcomes				Blooms Level
CO1	**understand the Structure, function and regulation and the disorders of the endocrine glands and their hormones**			U

CO2	**learn the Structure and the functions of water soluble and fat soluble vitamins analyse various disorders of Vitamin deficiencies and toxicit**	U
CO3	**learn the structure , properties, metabolism and functions of nucleic acids**	U

Title of the Course: Endocrine Biochemistry, Vitamins and Nucleic Acids-Practicals				
Sem- I	**Credits: 2**	**Course Code: BI102P**	**Year/Group: I MSc. Biochemistry**	**HPW: 4**
Course Outcomes				Blooms Level
CO1	**learn the estimation of Vitamins , Nucleic acids and Sugars**			U
CO2	**Determine the presence of hormones using ELISA and chromatographic techniques**			AZ

PAPER-III

Title of the Course: Cell Biology and Bioenergetics				
Sem- I	**Credits: 3**	**Course Code: BI103T**	**Year/Group: I MSc. Biochemistry**	**HPW: 3**
Course Outcomes				Blooms Level

CO1	**Learn the basic concepts of Bioenergetics**	U
CO2	**Evaluate the structure, composition and dynamics of biological membranes**	E
CO3	**Evaluate the structure and functions of cells , Cell Cycle and Cell death**	AP

Title of the Course: Cell Biology and Bioenergetics -Practicals			
Sem- I	**Credits: 2**	**Course Code: BI103P**	**Year/Group: I MSc. Biochemistry HPW: 4**
Course Outcomes			Blooms Level
CO1	**Study the Morphology of cell and cell division and identify the special chromosomes**		U
CO2	**Learn TLC, Enzyme Assay and preparation of membranes**		U

PAPER-IV

Title of the Course: Basic Bioanalytical Techniques			
Sem- I	**Credits: 3**	**Course Code: BI104T**	**Year/Group: I MSc. Biochemistry HPW: 3**
Course Outcomes			Blooms Level
CO1	**understand the principle , working and applications of spectroscopic and Chromatographic techniques**		U

CO2	**Learn and evaluate the principle and application of centrifugation methods and analyse the tracer techniques**	U
CO3	**Understand the principle of various microscopy and their applications in the study of cells**	U

Title of the Course: Basic Bioanalytical techniques-Practicals				
Sem- I	**Credits: 2**	**Course Code: BI104P**	**Year/Group: I MSc. Biochemistry**	**HPW: 4**
Course Outcomes				Blooms Level
CO1	**Characterize the biomolecules based on spectroscopy and chromatography techniques**			AZ
CO2	**analyze the content of different biomolecules using Cell disruption and centrigation methods**			AZ

SEMESTER II

PAPER-I

Title of the Course: Intermediary Metabolism				
Sem- II	**Credits: 3**	**Course Code: BI201T**	**Year/Group: I MSc. Biochemistry**	**HPW: 3**
Course Outcomes				Blooms Level
CO1	understand the anabolism and catabolism of amino acids and proteins and their regulation			U
CO2	Evaluate the pathways involved in the metabolism of carbohydrates and nucleic acids			E
CO3	Learn the significance of lipid metabolism and its regulation			U

Title of the Course: Intermediary Metabolism				
Sem- II	**Credits: 3**	**Course Code: BI201T**	**Year/Group: I MSc. Biochemistry**	**HPW: 3**
Course Outcomes				Blooms Level

CO1	Learn the quantitiative estimation of biological amino acids, proteins and porphyrins using spectroscopy	U
CO2	**Learn the estimation of sugars, lipids and nucleic acids using spectroscopic and colorimetric methods**	U

PAPER-II

Title of the Course:Enzymology			
Sem- II	**Credits: 3**	**Course Code: BI202T**	**Year/Group: I MSc. Biochemistry HPW: 3**
Course Outcomes			Blooms Level
CO1	Learn about the Role of enzymes and coenzymes		U
CO2	Evaluate the kinetics of Enzyme action		E
CO3	Apply the knowledge of Kinetics to study the various enzymes		AP

Title of the Course: Enzymology -Practicals			
Sem- II	**Credits: 2**	**Course Code: BI202T**	**Year/Group: I MSc. Biochemistry HPW: 3**
Course Outcomes			Blooms Level
CO1	**learn about Isolation and Purification of Enzymes**		U
CO2	**Evaluate the factors affecting Enzyme Activity and determine Km and Vmax**		E

PAPER-III

Title of the Course: Molecular Biology				
Sem-II	Credits: 3	Course Code: BI203T	Year/Group: I MSc Biochemistry	HPW: 4
Course Outcomes				Blooms Level
CO1	Learn the process of DNA Replication and Repair mechanism and its significance			U
CO2	Illustrate the stages of gene expression and regulation			R
CO3	Evaluate the biological significance of protein targeting and post translational modifications			A

Title of the Course: Molecular Biology - Practicals				
Sem-II	Credits: 2	Course Code:BI203P	Year/Group: I MSc Biochemistry HPW: 4	
Course Outcomes				Blooms Level
CO1	To understand the concept of isolation of DNA from various sources			U
CO2	To learn the key techniques of characterizing the DNA such as Spectrometry, electrophoresis etc			AZ

PAPER-IV

Title of the Course: Biochemical Genetics

Sem- II	Credits: 3	Course Code: BI204T	Year/Group: I MSc. Biochemistry HPW: 3
Course Outcomes			Blooms Level
CO1	Learn about the laws of inheritance and deviations and the concept of mutations		U
CO2	Apply the concept of recombination and linkage in mapping the chromosomes ,develop the pedigrees and assess the risk		AP
CO3	Explore the gene transfer and recombination in bacteria and the role of model organisms in the study of Biological process		E

Title of the Course: Biochemical Genetics-Practicals			
Sem- II	**Credits: 2**	**Course Code: BI204T**	**Year/Group: I MSc. Biochemistry HPW: 3**
Course Outcomes			Blooms Level
CO1	**Create and analyse concepts of Mendelian Genetics, linkage and mapping based on numerical calculations**		AP
CO2	**Identify barrbodies, apply chisquare test and study the model organisms, Drosophila and Arabidopsis**		AZ

SEMESTER III

PAPER-I

Title of the Course: Gene expression and Advanced bio analytical techniques – Theory			
Sem-III	**Credits: 3**	**Course Code:BI301T**	**Year/Group: II MSc Biochemistry HPW: 4**
Course Outcomes			**Blooms Level**
CO1	**Understand regulation of Gene expression in prokaryotes &eukaryotes**		**U**

CO2	**learn the key concepts of recombinant DNA technology and Genetic engineering**	**R**
CO3	**learn the advanced Bioanalytical techniques, basic principles and applications**	**U**

Title of the Course: Molecular Biology-Practicals				
Sem-II	**Credits: 2**	**Course Code:BI203P**	**Year/Group: I MSc Biochemistry HPW: 4**	
Course Outcomes				**Blooms Level**
CO1	**Analyze the regulation of gene expression by performing experiments**			**AP/AZ**
CO2	**Understand and perform bio analytical techniques – nanoparticle synthesis , flame photometry etc**			**AP**

PAPER-II

Title of the Course: Immunology and Immunotechnology				
Sem- III	**Credits: 3**	**Course Code: BI302T**	**Year/Group: I I MSc. Biochemistry HPW: 3**	
Course Outcomes				Blooms Level
CO1	**Understand the structure and function of the components of the immune systemand explore the mechanism of immune response**			U
CO2	**Analyse the role of immune response in hypersensitivity, autoimmunity and immuno deficiencies and disorders**			AZ
CO3	**Apply the knowledge of Immunotechniques in evaluating the concepts of the immune responses**			AP

Title of the Course: Immunology and Immunotechnology-Practicals			
Sem- III	**Credits: 2**	**Course Code: BI302P**	**Year/Group: I I MSc. Biochemistry HPW: 4**

Course Outcomes		Blooms Level
CO1	**Prepare, purify and study the characteristics of the immunoglobuins**	C
CO2	**study the mechanism of antigen and antibody reactions using Various immunotechniques**	U

PAPER-III

Title of the Course: Nutrition and Clinical Bochemistry			
Sem- III	**Credits: 3**	**Course Code: BI303T**	**Year/Group: II MSc. Biochemistry HPW: 3**

Course Outcomes		Blooms Level
CO1	**Study the basic concepts of balanced diet and role of nutrition in Health and diseases**	U
CO2	**Learn the various aspects of Clinical Biochemistry and the role of nutrient-drug and drug-receptor interactions.**	U
CO3	**Evaluate the role of liver and enzymes in the detoxification of xenobiotics**	E

Title of the Course: Nutrition and Clinical Biochemistry -Practicals			
Sem- III	**Credits: 2**	**Course Code: BI303P**	**Year/Group: II MSc. Biochemistry HPW: 4**

Course Outcomes		Blooms Level
CO1	**Demonstrate the blood and urine analysis by determining various components experimentally**	C
CO2	**study the proximate analysis of common foods wrt carbohydrate and lipid content with emphasis on knowledge of adulterants in milk, oil and food stuffs**	U

PAPER-IV

Title of the Course: Physiology and Reproductive Biology			
Sem- III	**Credits: 3**	**Course Code: BI304T**	**Year/Group: II MSc. Biochemistry HPW: 3**

Course Outcomes		Blooms Level
CO1	**Understand the basics of physiology of the Nervous system and also the nerve transmission.**	U
CO2	**Evaluate the coordinated functioning of the muscular system and the disorders**	E
CO3	**Compare and contrast the structure of male and female reproductive systems and the hormonal regulation of the process of reproduction**	AZ

Title of the Course: Physiology and Reproductive Bioogy			
Sem- III	**Credits: 2**	**Course Code: BI304P**	**Year/Group: II MSc. Biochemistry HPW: 4**

Course Outcomes		Blooms Level
CO1	**Analyze the components of blood and urine experimentally**	AZ

CO2	**Learn the Histopathology of muscle and the reproductive syste microscopic observation**	U

SEMESTER IV

PAPER-I

Title of the Course: Biostatistics and Bioinformatics			
Sem- IV	**Credits: 3**	**Course Code: BI401T**	**Year/Group: II MSc. Biochemistry HPW: 3**

Course Outcomes		Blooms Level
CO1	**Learn the concepts of sampling , Data presentation, parametric and non parametric tests and design the experiments**	U
CO2	**Learn the various Databases and apply the alignment and sequencing tools to analyze the proteins and nucleic acids**	U
CO3	**Evaluate the various aspects of Genomics and proteomics**	E

Title of the Course: Bioinformatics and Biostatistics			
Sem- IV	**Credits: 2**	**Course Code: BI401P**	**Year/Group: II MSc. Biochemistry HPW: 4**

Course Outcomes	Blooms Level

CO1	**Learn the Sequence Retrieval from Different Databases and apply ir methods using Bioinformatics tools**	U
CO2	**Apply and Analyze the concepts of Insilico PCR, Insilico Restriction mapping and Translation using tools of Bioinformatics**	AP

PAPER-II

Title of the Course: Cell-cell communication and signalling			
Sem-IV	**Credits: 3**	**Course Code: BI402T**	**Year/Group: II MSc Biochemistry HPW: 3**

Course Outcomes		**Blooms Level**
CO1	**understand the types of membrane transport ,molecules of ECM and cell –cell junctions, cell cycle & impairment of cell cycle and cancer**	**U**
CO2	**Develop knowledge on cell signalling and signal transduction through various signalling pathways**	**R**
CO3	**learn cell signalling and signal transduction in animal systems-in Bacteria and plants**	**R**

Title of the Course: Cell-cell communication and signalling - Practicals				
Sem-II	**Credits: 2**	**Course Code: BI402P**	**Year/Group: II MSc Biochemistry**	**HPW: 4**

Course Outcomes		**Blooms Level**
CO1	**perform basic experiments to understand cell to cell communication**	**AZ**
CO2	**understand signal transduction in bacteria and yeast by performing experiments**	**AZ**

PAPER-III

Title of the Course: Biotechnology			
Sem- IV	**Credits: 3**	**Course Code: BI403T**	**Year/Group: II MSc. Biochemistry HPW: 3**

Course Outcomes		Blooms Level
CO1	**learn the use of microorganisms in the production of useful biochemical products and their applications**	U
CO2	**learn the basic concepts of Plant Biotechnology and evaluate the pros and cons of the Genetically modified plant products based on case studie**	U
CO3	**Learn the basics of animal Biotechnology, production of therapeutic agents and protein Engineering**	U

Title of the Course: Biotechnology			
Sem- IV	**Credits: 2**	**Course Code: BI403P**	**Year/Group: II MSc. Biochemistry HPW: 3**

Course Outcomes		Blooms Level
CO1	**Develop Bacterial culture using various sterilization and culturing methods the pathogens using Widal and VDRL tests**	C
CO2	**Learn the concept of Biotrasformation and produce industrially importa experimentally**	U