Name of the Programme: B.Sc Bio chemistry

S No	Title of the Paper	Course Code	Course Objectives	Course Outcomes	Relevance
1	APPLIED MICROBIOLOGY	BC404	• To understand about mode of microbial infections, fermentation and waste management.	• By learning this subject, Students can demonstrate knowledge of microbial cell structure and metabolism, evolutionary forces and their consequences. It obtains wide knowledge as how microorganisms interact with their environment and interaction between humans. Students can describe and use new and existing methods and technologies in and out of the laboratory setting. They can also formally communicate the results of biological investigations using both oral and written. Students can demonstrate an understanding, and ability to use, the scientific method including observation, hypotheses testing,	**National developmental needs**

				data collection, analysis and interpretation.	
2	ANALYTICAL BIOCHEMISTRY	BC405	• To understand about principles, instrumentation and applications of various analytical instruments.	• Analytical biochemistry expertise the student in analyzing biochemical components found in a cell or other biological sample. It also makes the student skilled in using broad range of techniques for separation, identification, quantification and functional characterization of biological molecules. It also ensures the student to understand the insights of complex biological process in the cell. This course will develop basic knowledge on electrochemical techniques, chromatography, electrochemical radiation and atomic radiation techniques used in life science.	**National developmental needs**
3	BIOMEDICAL INSTRUMENTATION	BC520A	• To focus on biomedical instrumentation in life sciences.	• The main objective of this course is to introduce student to basic biomedical engineering technology. As a result student can understand, design and evaluate systems and devices that can measure, test and/or acquire biological information from the human body. This course will explore the students about various systems of the human physiology, signals of biological origin	**National developmental needs**

				obtained from these systems, biosensors, transducers, bioelectrodes used to acquire such signals, and amplifiers for measuring biopotentials. Electrical safety of medical devices; measurements of the blood pressure, blood flow, respiratory system, clinical laboratory equipment, medical imaging, and bioethics will also be discussed.	
4	SS1: BIOTECHNOLOGY	BC616	• To give knowledge on applied field of life sciences like DNA technology, tissue culture techniques and Fermentation technology	• Student will have a In-depth knowledge in the chemical structure and function of biomolecules, metabolism in the cell, knowledge of the concepts of molecular genetics and biosynthesis of proteins. A good theoretical and practical insight into methods used to obtain this knowledge of the relationship between structure and function at organ and/or organism level, of important cell biological communication principles and processes, and how they are regulated.	**National developmental needs**