

**BE Semester- III<sup>RD</sup> (Biomedical Department) Question Bank**  
**(BIOCHEMISTRY)**

**All questions carry equal marks (10 marks)**

Q.1	Explain in detail: Analysis of carbohydrates
Q.2	Write down the basic principles of: mass spectrometry, electrophoresis, centrifugation & electro elution.
Q.3	Elaborate the applications of Radiotracer techniques Gel electrophoresis techniques in biochemistry.
Q.4	Explain nucleic acid in detail along with its importance in body and how it is analyzed?
Q.5	Differentiate between Potentiometric and conductometric methods.
Q.6	Explain in detail three chemical biosensors.
Q.7	Discuss in detail centrifugation.
Q.8	What do you understand by buffers & explain its role in biochemistry?
Q.9	What is electrophoresis? Explain different types in detail.
Q.10	What do you understand by electroblotting and electroelution? Differentiate between them.
Q.11	What do mean by gel electrophoresis & explain in detail its role in biochemistry.
Q.12	Differentiate FPLC & HPLC.
Q.13	What do you understand by photometry & explain its application in biochemistry?
Q.14	Discuss structure of carbohydrates & various types of carbohydrates.
Q.15	What are the general principles of biochemistry? Explain them in detail.
Q.16	Define the following: biochemistry, chromatography, lipids, molecular weight, immunology.
Q.17	Define the following: protein, enzyme, denaturation, biosensors, and carbohydrates.
Q.18	Explain in detail ELISA TEST.
Q.19	Explain in detail MADI-TOF Mass spectrometry.
Q.20	Explain in detail gel permeation & ion exchange in detail.
Q.21	Write a short note on different methods for determination of molecular weights.
Q.22	Discuss capillary electrophoresis along with its applications.
Q.23	Elaborate on API-electrospray also include applications.
Q.24	Explain Radiotracer techniques & its applications in detail.
Q.25	Discuss electroblotting and electroelution in detail.
Q.26	Elaborate on Immunochemical methods of analysis.
Q.27	Explain applications of biochemistry in diagnostics.
Q.28	Explain in detail Enzyme immobilization techniques.
Q.29	Explain in detail: analysis of Lipids
Q.30	Explain mass spectrometry in detail with its application in biochemistry.
Q.31	Explain in detail: analysis of proteins
Q.32	Explain in detail: analysis of nucleic acids
Q.33	Explain in detail cell immobilization techniques.
Q.34	Explain the different protein structures in detail.
Q.35	Explain in detail the different types of Electroanalytical methods.
Q.36	Write a short note on: reverse phase & affinity chromatography.
Q.37	What do you mean by biosensors? Explain any two.
Q.38	Explain HPLC in detail.
Q.39	Explain FPLC in detail.
Q.40	Discuss in detail Gel electrophoresis techniques