

M.D. DEGREE EXAMINATION

BRANCH XIII – BIOCHEMISTRY

**PAPER I – PHYSICAL AND ORGANIC ASPECTS OF BIOCHEMISTRY,
INSTRUMENTATION, BIOCHEMICAL TECHNIQUES, BIostatISTICS**

Q.P. Code: 202043

Time: Three Hours

Maximum: 100 Marks

I. Essay Questions: (2 x 15 = 30)

1. What are the different hazards in a clinical lab? How to avoid or prevent them?
2. What are the basic types of Chromatography? Explain different types of chromatography based on the separation mechanism.

II. Short notes: (10 x 5 = 50)

1. Sign test.
2. Blotting techniques.
3. Systematic error.
4. Laboratory information system.
5. Isoenzymes analysis of lactate dehydrogenase.
6. Blood group antigens.
7. Derivatives of Purine Nucleotides.
8. Quaternary structure of Protein.
9. Cholesterol structure and function.
10. Detection and measurement of Radioactivity.

III. Reasoning Out: (4 x 5 = 20)

1. Capillary electrophoresis is also termed as Micellar Electrokinetic Chromatography.
2. DNA sequencing alone cannot be used to study the primary structure of protein.
3. Liposomes are more useful in Transdermal delivery of drugs and cosmetics.
4. Decreased Cardiolipin as a cause for Cardio skeletal Myopathy.