

QP Code: 212020

Reg. No.....

**Second Year B.Sc Medical Biochemistry Degree Supplementary
Examinations August 2023**

Paper VII – Analytical Methods and Instrumentation

(2016 Scheme)

Time: 3 hours

Max: Marks: 100

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Long Essays: (2x15=30)

1. Define Electrophoresis. Write in detail about principle, technique and application of PAGE.
2. Define RIA. Write in detail about different methods and applications of RIA.

Short Essays: (2x10=20)

3. Explain the principle, technique and applications of affinity chromatography.
4. Explain the principle, technique and applications of pH meter.

Short Answers (6x5=30)

5. GM counter
6. Paper electrophoresis
7. Flame photometer.
8. Differentiate spectrophotometer and colorimeter.
9. Isoelectric focusing
10. Density gradient centrifugation

Comment on (10x2=20)

11. Role of SDS in SDS PAGE.
12. Isotopes
13. RCF and RPM
14. R_f value in chromatography.
15. Disposal of radioactive wastes.
16. Selection of filters in colorimeter.
17. Factors affecting electrophoresis.
18. Biological effects of radiation.
19. Applications of ELISA
20. Beer Lambert's Law.
