

QP Code: 212020

Reg. No.....

**Second Year B.Sc Medical Biochemistry Degree Supplementary  
Examinations November 2022**

**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. Describe the principle, technique and application of paper chromatography.
2. Describe the use of radioactive isotopes in medicine. Add a note on biological effects of radiation.

**Short Essays: (2x10=20)**

3. Describe the factors affecting electrophoresis.
4. Describe the principle, technique and application of atomic absorption spectrophotometer.

**Short Answers (6x5=30)**

5. PAGE.
6. Nephelometry.
7. Ultracentrifugation.
8. Radiation protection and disposal of radioactive wastes.
9. ELISA.
10. Cell fractionation.

**Comment on (10x2=20)**

11. Fluorimeter.
12. Gels used in gel electrophoresis.
13. Isoelectric focussing.
14. Rotors.
15. Application of centrifugation.
16. pH meter.
17. Beer-Lamberts law.
18. Filters.
19. Column chromatography.
20. Partition coefficient.

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