

**QP Code: 202020**

**Reg. No.....**

**Second Year B.Sc. Medical Biochemistry Examinations October 2017**

**ANALYTICAL METHODS AND INSTRUMENTATION**

**Time: 3 Hours**

**Total Marks: 80**

- **Answer all the questions**
- **Draw diagrams wherever necessary**

**Essay**

**(2x15=30)**

1. Explain the principle of chromatography. Describe molecular exclusion chromatography and its applications.
2. Describe the principle, technique, factors affecting and applications of paper electrophoresis.

**Short Essay**

**(2x10=20)**

3. Principle and applications of HPLC.
4. Uses of radioactive isotopes in biochemistry and medicine.

**Short Notes**

**(4x5=20)**

5. Radiation protection and disposal of radioactive wastes.
6. Fluorimeter.
7. Equilibrium iso-density centrifugation
8. Atomic absorption spectrophotometer

**Answer Briefly**

**(5x2=10)**

9. Tracking dyes.
10. Beer-Lambert's law.
11. RCF
12. Isoelectric focusing.
13. Measurement of radioactivity

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