

QP Code: 202020

Reg. No.....

Second Year B.Sc. Medical Biochemistry – October 2016

ANALYTICAL METHODS AND INSTRUMENTATION

Time: 3 Hours

Total Marks: 80

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

Essay

(2x15=30)

1. Explain the theory, principle, technique, factors affecting and applications of paper electrophoresis.
2. Principle of ultra centrifugation. Cell fractionation by differential centrifugation and how to determine the molecular weight using centrifugation.

Short Essay

(2x10=20)

3. Principle, method and applications of molecular exclusion chromatography.
4. Principle and applications of TLC.

Short Notes

(4x5=20)

5. Name the substrates and enzymes used in ELISA and its applications.
6. Principle and applications of radioimmunoassay.
7. Methods of measuring radioactivity.
8. Isopycnic centrifugation.

Answer Briefly

(5x2=10)

9. Iso-electric focusing.
10. Mention two diagnostic uses of radioactive isotopes.
11. RCF.
12. Types of radiation.
13. Principle of colorimetry.
