

QP Code: 212020

Reg. No.....

**Second Year B.Sc Medical Biochemistry Degree Examinations  
October 2018**

**Paper VII – Analytical Methods and Instrumentation**

**(2016 Scheme)**

**Time: 3 hours**

**Max: Marks: 100**

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

**Long Essays:**

**(2x15=30)**

1. Enumerate the different types of radiation. Discuss the various methods for the measurement of radioactivity. Add a note on radiation protection.
2. Give the principle of chromatography. List the different types. Discuss the principle and application of molecular exclusion chromatography.

**Short Essays:**

**(2x10=20)**

3. Describe the principle, technique and application of nephelometry.
4. Discuss the principle, technique and application of paper electrophoresis.

**Short Answer**

**(6x5=30)**

5. Radioimmunoassay (RIA)
6. Cell fractionation by differential centrifugation.
7. Flame photometry
8. Immuno electro focusing
9. Principle and application of spectrophotometry
10. pH meter and its application

**Comment on**

**(10x2=20)**

11. Turbidimetry
12. Solubilizers
13. Beer-Lambert's law
14. Tracking dyes.
15. Isopycnic centrifugation.
16. Radioisotopes in clinical practice
17. Enzymes used in ELISA technique.
18. Rotors.
19. Nebulizers
20. Factor affecting electrophoresis

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