

QP Code: 212020

Reg. No.....

**Second Year B.Sc Medical Biochemistry Degree Supplementary
Examinations April (December), 2020**

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 ELISA. Describe in detail the principle, types, various substrates, enzymes and applications of ELISA.
2. What is Radio Immuno Assay. What is its principles and different methods. Add a note on its application

Short Essays:

(2x10=20)

3. What is colorimetry and its principle and the laws behind it. How will you select filters.
4. What are Isotopes, different types of Radiation and describe briefly the hazards of Radioactivity.

Short Answer

(6x5=30)

5. Different types of centrifuge
6. Ion exchange chromatography
7. Scintillation and GM counter
8. Tracking dyes of PAGE
9. Iso electric focusing
10. Reverse phase chromatography

Comment on

(10x2=20)

11. Rotors
12. Half-life of isotopes
13. Turbidimetry
14. Separation technique
15. Solubilizers
16. Ultra centrifugation
17. Factors affecting electrophoresis
18. Atomic number
19. Isotopes used for bone and blood flow studies
20. Alpha particles
