

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (MLT) Degree Examination - 23-May-2025

Time: Three Hours

Max. Marks: 80

BIOCHEMISTRY – PAPER II (RS3)

Q.P. CODE: 3156

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Any Two)

2 x 10 = 20 Marks

1. Discuss site, reactions and energetics of Krebs' citric acid cycle
2. Discuss principle, instrumentation and applications of partition chromatography
3. Explain the technique of venous sample collection. Add a note on instructions to be given to patients for timed sample collection

SHORT ESSAY (Any Six)

6 x 5 = 30 Marks

4. Classify enzymes with suitable example
5. List any FIVE functions of carbohydrates
6. Name the coenzyme forms of Niacin. Write any THREE reactions requiring them as coenzyme
7. Explain secondary structure of proteins
8. Write the principle of any ONE method of estimation of Blood Urea Nitrogen. Mention any THREE conditions in which it is increased
9. Structure and function of tRNA
10. Tests for tubular functions of kidney
11. Name the tests used for the detection of abnormal constituents of urine. Write the principle of any ONE of them

SHORT ANSWERS (Any Ten)

10 x 3 = 30 Marks

12. What is absolute specificity? Give ONE example
13. What are antivitamin? Give TWO examples
14. What is transamination? Give ONE example
15. Principle of glucometer
16. Name the different grades of chemicals with their uses
17. Preparation of 500 ml of 0.9% NaCl solution
18. How to prepare calibration curve using stock standard solution?
19. What are anomers? Give TWO examples
20. What is rate reaction method? Name any TWO rate reaction methods used in quantitative estimation
21. Name any THREE organic constituents of normal urine. Mention the tests used for their detection in urine
22. Explain about the oral glucose tolerance test
23. Criteria for diagnosis and management of Diabetes mellitus
