Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (MLT) Degree Examination - 28-Oct-2026

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 the pathway of glycolysis that occurs in RBC. Add a note on its energetics
2. Discuss principle, care, maintenance and standardization of spectrophotometer
3. List the functions of kidney. Explain the tests done to assess glomerular and tubular function

SHORT ESSAY (Any Six) **6 x 5 = 30 Marks**

4. Explain the analytical role of enzymes in detail
5. Mention principle and application of osmometry
6. Enumerate the biochemical functions of Riboflavin with reactions
7. Explain denaturation of proteins
8. What is urea? Outline the reactions of urea cycle
9. Explain chemical analysis of cerebrospinal fluid
10. Name any THREE anticoagulants used in clinical laboratory with their mechanism of action
11. Structure and function of DNA

SHORT ANWERS (Any Ten) **10 x 3 = 30 Marks**

12. What is Maple syrup urine disease
13. Principle and interpretation of Molisch test
14. Mention any ONE condition each with increased serum level of non protein nitrogenous compounds
15. Types of water and their use
16. What is linearity of a method? What has to be done when test value is more than linearity limit?
17. What are the types of solutions used in laboratory
18. What is mutarotation? Give example
19. Principle of any ONE reaction used for precipitation of proteins
20. Name the types of RNA. Mention their function
21. Name the organic and inorganic constituents of normal urine. Write principles of detection of any ONE of them
22. Name the ketone bodies. Write any ONE condition in which ketone bodies are present in urine
23. Principle and applications of turbidimetry

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