Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (MLT) Degree Examination - 21-Nov-2024

Time: Three Hours   **Max. Marks: 80 Marks**

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. Define enzymes. Explain different types of enzyme inhibition with example.

2. Define Beer-lamberts law. Draw a neat diagram and explain the parts and applications of colorimeter.

3. Explain the regulation of blood glucose level in body. Add a note on glycated HbA1c.

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

4. What is the difference between normal and molar solution? What is the normality of 1000 ml of 2M Sulfuric acid?

5. Creatinine clearance test.

6. Transamination reaction and its importance.

7. Explain how starch is digested.

8. Functions and deficiency manifestations of Niacin.

9. Principle and applications of chromatography.

10. Secondary structure of proteins.

11. Collection of venous sample for fasting plasma glucose estimation.

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

12. Pleural fluid.

13. Write normal levels of Serum Urea, Serum Creatinine and Fasting plasma glucose.

14. What is gout? Enumerate two causes of gout.

15. Name any three Urine preservatives.

16. Name any three normal constituents of urine. Name one test each used to detect them.

17. What are essential amino acids? Give two examples.

18. Preparation of calibration curve.

19. Name the defective enzyme in a) Maple syrup urine disease b) Alkaptonuria c) Phenyl Ketonuria.

20. Functions of Cobalamin.

21. Invert sugar.

22. Difference between DNA and RNA.

23. Principle of Freezing Point Depression of Osmometry.

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