Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (MLT) Degree Examination - 23-Dec-2022

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)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Explain the formation of urea. Add a note on energetics, regulation and disorders of urea cycle.
- 2. Explain Renal Function Tests in detail.
- 3. Define enzymes. Explain the factors affecting enzyme activity.

SHORT ESSAY (Any Six)

 $6 \times 5 = 30 \text{ Marks}$

- 4. Diabetes mellitus-types and diagnosis.
- 5. Reactions of degradation of purine nucleotides.
- 6. Structure of DNA.
- 7. Oral Glucose tolerance test-procedure and preparation of patient.
- 8. Collection and chemical analysis of cerebrospinal fluid.
- 9. Functions of Folic acid.
- 10. Parts and uses of spectrophotometer.
- 11. 24 hours urine sample collection, storage and preservatives.

SHORT ANWERS (Any Ten)

 $10 \times 3 = 30 \text{ Marks}$

- 12. Primary structure of insulin.
- 13. Give reference range of serum creatinine. Name any two conditions in which it is increased.
- 14. Define Km, mention its significance.
- 15. Define a) Molarity b) Percent solution c) Normality.
- 16. Principle of Nephelometry.
- 17. Biochemical defect and features of Phenyl Ketonuria.
- 18. Mention any six normal constituents of urine.
- 19. What is Mutarotation? Give one example.
- 20. Limitations of Beer's Law.
- 21. Name any three glycogen storage diseases with their enzyme defect.
- 22. Epimers definition and example.
- 23. What is Rf value? How it is calculated? What is its application?
