Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. (MLT) Degree Examination - 15-May-2025

Time: Three Hours Max. Marks: 80

BIOCHEMISTRY - PAPER III (RS-3) Q.P. CODE: 3159

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 pathway of Beta oxidation of Palmitic acid. Add a note in its energetics and significance
- 2. Define Principle of electrophoresis and discuss the procedure of serum protein electrophoresis by Agarose gel electrophoresis method and its clinical significance
- 3. Give an account of nutritional importance of Proteins and lipids

SHORT ESSAY (Any Six)

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

- 4. Add a note on different types of automation in clinical laboratory
- 5. Isoenzymes and their clinical significance
- 6. Explain Visual cycle
- 7. Fredericksons's classification of hyper lipoproteinemias
- 8. Role of Blood buffers in regulation of blood pH
- 9. Write the principle, types and applications of ELISA
- 10. Discuss in detail various Thyroid Function Tests
- 11. Levey-Jennings' control chart and Westgard rules

SHORT ANWERS (Any Ten)

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

- 12. Disorders of Fructose metabolism
- 13. Point mutation
- 14. Haemolytic Jaundice
- 15. Cardiac Troponins
- 16. Prostate specific antigen
- 17. Kwashiorkar
- 18. Write the normal values of Amylase, Lipase, CK-MB
- 19. Van-den Bergh test
- 20. Hypocalcemia
- 21. Composition of Renal stones
- 22. Detoxification by conjugation
- 23. Write the significance of HMP pathway
