Rajiv Gandhi University of Health Sciences, Karnataka III Year B.Sc. (MLT) Degree Examination - 12-Dec-2022

Time: Three Hours Max. Marks: 80 Marks

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 in detail HMP shunt and write its significance.
- 2. Explain the principle, instrumentation and uses of Atomic absorption spectrophotometry.
- 3. Explain the hormonal regulation of serum calcium level add a note on the functions and deficiency features of calcium.

SHORT ESSAY (Any Six)

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

- 4. Outline the steps of beta oxidation of fatty acids.
- 5. Post transcriptional modifications.
- 6. Role of blood buffers in pH regulation.
- 7. Detoxification by conjugation.
- 8. Write any 5 qualitative tests for the analysis of renal calculi.
- 9. Classify tumor markers and give examples.
- 10. Dietary fibres.
- 11. Functions of phosphorous.

SHORT ANWERS (Any Ten)

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

- 12. Kwashiorkor.
- 13. What is the difference between semiautomated and fully automated analysers used in laboratory?
- 14. Define Coefficient of Variation.
- 15. Uses of Vitamin K.
- 16. Vandenberg test.
- 17. Cardiac troponins.
- 18. Hereditary fructose intolerance.
- 19. Chemiluminescence-principle and use.
- 20. Functions of albumin.
- 21. Hemosiderosis.
- 22. Write the normal serum range of potassium, sodium and chloride.
- 23. Name the enzymes used in ELISA.
