# Rajiv Gandhi University of Health Sciences, Karnataka

Second Year B.Sc. (M.L.T) Degree Examination - 23-May-2025

Time: Three Hours Max. Marks: 100 Marks

# BIOCHEMISTRY - II (RS-4) Q.P. CODE: 3279

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

### **LONG ESSAYS (Second Question Choice)**

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

- Mention the normal and abnormal constituents of urine. Write in detail about examination of abnormal constituents of Urine.
- 2. Write the principle, procedure and applications of paper chromatography.

#### **OR**

Explain principle, instrumentation and applications of spectrophotometry. Add a note on standardization of spectrophotometer.

## **SHORT ESSAYS (Question No 5 & 10 choice)**

 $10 \times 5 = 50 \text{ Marks}$ 

- 3. Write the principle, instrumentation and applications of Turbidometry.
- 4. Describe the working of p<sup>H</sup> meter.
- 5. Write the types of weighting balances. Add a note double pan balance.

#### OR

Principle, instrumentation and applications of Glucometer.

- 6. Explain with example Competitive inhibition.
- 7. Different types of flasks used in laboratory and its uses.
- 8. Write in detail about the types, symptom, management and diagnosis of Diabetes Mellitus.
- 9. Urea cycle and disorders.
- 10. Define normality give the formula to calculate the normality of concentrated sulphuric acid. How to prepare 100ml of 1N sulpluric acid.

#### OR

Saturated and supersaturated solutions.

- 11. Synthesis of creatinine and its significance.
- 12. Give a brief account of Mucopolysaccharides.

# SHORT ANSWER 10 x 3 = 30 Marks

- 13. Preparation of protein free filtrate.
- 14. Benedict's test.
- 15. Describe various anticoagulants used in blood sample collection.
- 16. What are the functions of protein?
- 17. Define a) Tripod stand b) Cuvette c) Folin-Wu
- 18. Quaternary structure of proteins.
- 19. Epimers.
- 20. Refrigerators.
- 21. Definition and classification of SI units.
- 22. Ketosis.