

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**Third Year B.Sc. Medical Laboratory Technology Degree Examination – 15-May-2025**

**Time: Three Hours**

**Max. Marks: 100 Marks**

**BIOCHEMISTRY – III (RS-4)**

**Q.P. CODE: 3282**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS (Second Question Choice)**

**2 x 10 = 20 Marks**

1. Define variables. Write a note on pre-analytical, analytical and post analytical variables
2. Write a note on theory of formation and analysis of renal and gall stones

**OR**

Describe various tests employed to assess liver function

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

**10 x 5 = 50 Marks**

3. Classification and characteristics of tumor markers
4. HMP shunt pathway
5. Functions of thyroid hormones

**OR**

Salient features of genetic code

6. ELISA and its application
7. Types of jaundice
8. Point of care testing
9. Quality control charts
10. Write a note on mutations

**OR**

Lipoproteins and their significance

11. AFP (Alpha Feto Protein)
12. Glycogen storage disorders

**SHORT ANSWER**

**10 x 3 = 30 Marks**

13. Isoenzymes
14. CA-125
15. Normal serum levels of total bilirubin and its significance
16. Enumerate the steps of protein synthesis
17. Functions of albumin
18. Gout
19. Sensitivity and specificity
20. Arterial blood gas analysis
21. Biologically important compounds synthesized from cholesterol
22. Order of sample draw for venous blood collection

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