

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**Third Year B.Sc. Medical Laboratory Technology Degree Examination – 12-Dec-2022**

**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. Classify Jaundice. Write in detail about bilirubin metabolism
2. Define quality control. Add a note on internal and external quality control programme

**OR**

List the various renal function tests. What is the glomerular filtration rate? Write in detail creatinine clearance test

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

**10 x 5 = 50 Marks**

3. Name plasma proteins and enumerate the functions of plasma proteins
4. Ion selective electrodes
5. Post transcriptional and translational modification

**OR**

Frederickson's classification of hyper lipoproteinemia

6. Isoenzymes
  7. Renal regulation of acid base balance
  8. Write briefly about osmometry
  9. Semi conservative DNA replication
  10. Write in detail about CSF analysis
- OR**
- Procedure of ammonium chloride loading test and interpretation
11. Discuss about Phenyl Ketonuria and Alkaptonuria
  12. Mention a preparation of calibration curve. Add a note on its uses

**SHORT ANSWER**

**10 x 3 = 30 Marks**

13. Variable in quality control
14. Enumerate different forms and location of creatinine kinase
15. Cardiac Troponins
16. Normal serum levels of TSH T<sub>3</sub> and T<sub>4</sub>
17. Oncogenes
18. Disorders of acid base balance
19. Define Jaundice. Write the normal value of total. Conjugated and un-conjugated bilirubin
20. Order of draw for venous blood collection
21. Diagnostic significance of alkaline phosphatase
22. Chemiluminescence

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