



Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (M.L.T) Degree Examination – APRIL 2015

Time: Three Hours

Max. Marks: 80 Marks

BIOCHEMISTRY – II

Q.P. CODE: 3156

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Describe the chemistry, sources, RDA, functions and deficiency manifestations of "Vitamin C".
2. What are "clearance tests"? Give a detailed account of the procedure for carrying out the endogenous creatinine clearance test. Add a note on the biological reference intervals and the clinical significance.
3. Explain the principle of Spectrophotometry. Draw a schematic diagram of a single – beam spectrophotometer. Add a note on standardization of Spectrophotometer.

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. Types of water in a laboratory. Discuss the NCCLS specification for laboratory water.
5. What are coenzymes? Discuss the salient features of coenzymes. Add a note on metalloenzymes.
6. Explain the preparation of a calibration curve citing an example. Add a note on the linearity of the method based on the calibration curve.
7. Discuss Gouty arthritis in detail. Give the principle for the estimation of uric acid.
8. Explain the tissue distribution and functions of chondroitin sulfate and heparin.
9. Explain the tertiary structures of proteins citing an example.
10. Urea cycle and energetics.
11. Procedure for ammonium chloride loading test and interpretation.

SHORT ANSWERS (Answer any Ten)

10 x 3 = 30 Marks

12. Anaplerotic role of TCA cycle.
13. Types of RNA
14. Albuminometer and Urinometer.
15. Preparation of protein free filtrate for quantitative estimations-Glucose by Reductometric method and Creatinine by Jaffe's method in blood.
16. What is meant by Timed sample collection? Explain with one example each under serum and urine.
17. Name three glycogen storage disorders and the enzyme associate with it.
18. Discuss different sample collection tubes used during phlebotomy. Add a note on the order of draw during multiple specimen collection.
19. Functions of DNA
20. Classification of proteins based on nutritional value.
21. Inhibitors of glycolysis.
22. Microalbuminuria.
23. Riboflavin

