

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. (M.L.T) Degree Examination – SEP-2016

Time: Three Hours

Max. Marks: 80 Marks

BIOCHEMISTRY – III (RS-2)

Q.P. CODE: 2901

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. Classify and enumerate functions of liver. Write briefly about liver function tests.
2. Define an acid, base, metabolic acidosis, metabolic alkalosis, respiratory acidosis and respiratory alkalosis. Explain the renal regulation of acid base balance.
3. Describe the sources, daily requirement and normal levels of phosphate. Enumerate any five functions of phosphate. Explain briefly how phosphate level is regulated.

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. Enumerate any three functions each of iron and calcium.
5. Write the procedure and utility of RIA.
6. Enumerate any three causes of metabolic acidosis and respiratory acidosis.
7. Enumerate any three cardiac biomarkers. Explain the chronobiogram and clinical utility of CK-MB.
8. Enumerate any six immuno assay techniques. Explain the principle of Electrochemiluminescence.
9. Explain briefly how to manually analyse renal stones.
10. Write the principle and applications of radio immuno assay.
11. Write the normal level of potassium. Write any two causes of Hypokalemia and Hyperkalemia.

SHORT ANSWERS (Answer any Ten)

10 x 3 = 30 Marks

12. Enumerate the post transcriptional modifications.
13. Enumerate the post translational modifications.
14. What is standard deviation? Explain with suitable example.
15. Enumerate different forms and location of LDH.
16. Enumerate the diagnostically important enzymes in pancreatic disease.
17. Enumerate any six Westgard rules.
18. Enumerate the biologically important products synthesized from Glycine.
19. Define and write the normal levels of anion gap.
20. What is the enzyme defect seen in Galactosemia and essential fructosuria.
21. Define jaundice. Write the normal value of total, conjugated and unconjugate bilirubin.
22. Write different types of Vanden Bergh reaction and its utility.
23. Principle of ELISA
