

**Rajiv Gandhi University of Health Sciences, Karnataka****I Year B.P.T. Degree Examination — OCT-2019****Time: Three Hours****Max. Marks: 80 Marks****BIO-CHEMISTRY (RS-3 & RS-4)****Q.P. CODE: 2703**

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

LONG ESSAYS (Answer any Two)**2 x 10 = 20 Marks**

1. Enumerate any six functions of liver. Classify liver function tests with example and their utility.
2. Explain how acid base status is regulated by the kidney in the body.
3. Explain the steps involved in β oxidation of palmitic acid. Add a note on energetics.

SHORT ESSAYS (Answer any Eight)**8 x 5 = 40 Marks**

4. Explain the steps of glycogenesis.
5. Explain briefly the process of muscle contraction.
6. Define hormones. Classify hormones with examples.
7. Explain how iron levels in the body is maintained and stored. Add a note on deficiency manifestations.
8. What are the active forms of vitamin A? What are its functions?
9. What are the difference between kwashiorkor and Marasmus?
10. How ammonia is detoxified in the body?
11. What are the functions of cholesterol?
12. Explain Ketogenesis.
13. Define diabetes mellitus. Classify its different types.

SHORT ANSWERS**10 x 2 = 20 Marks**

14. Rothera's test
15. What is lactose intolerance? What are its features?
16. What is phenyl Ketonuria? What is the enzyme defect in it?
17. Functions of mitochondria
18. Enumerate four key gluconeogenic enzymes,
19. Enumerate any two biologically important peptides.
20. What are essential amino acids? Give example.
21. What is PUFA?
22. What is the function of VLDL and LDL?
23. Enumerate any two functions of Phospholipids.