

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B. Pharm Degree Examination – 20-Jan-2020

Time: Three Hours**Max. Marks: 70 Marks****APPLIED BIOCHEMISTRY (RS - 4)****Q.P. CODE: 2633**

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. Define enzymes. Write the IUB classification of enzymes in detail with examples.
2. Define Glycolysis and explain the various reactions involved in it with energetics.
3. Explain the process of β -oxidation of fatty acids with energetics considering palmitic acid as example.

SHORT ESSAYS (Answer any Six)**6 x 5 = 30 Marks**

4. Define vitamins. Give the daily requirement, biochemical functions and deficiency disorders of vitamin A.
5. Write the formation of ketone bodies in the body.
6. Give the chemical classification of amino acids.
7. Describe the double helical structure of DNA.
8. Explain electron transport chain.
9. Explain any one kidney function test and its significance.
10. Explain Glucose Tolerance Test (GTT) and its significance.
11. What is substrate level phosphorylation and oxidation phosphorylation?

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

12. Name the essential fatty acids.
13. Give the physiological functions of serotonin.
14. What is Phenylketonuria?
15. What are the functions of tRNA?
16. Write the properties of proteins.
17. Write any two biochemical functions of biotin.
18. What are Lipotropic factors? Name them.
19. Write four differences between DNA and RNA.
20. Name energy rich compounds.
21. What is ketosis?
