

Rajiv Gandhi University of Health Sciences, Karnataka

Second Semester B.Pharm Degree Examination – JAN-2019

Time: Three Hours**Max. Marks: 75 Marks**

Biochemistry

Q.P. CODE: 5007

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. Explain the biosynthesis of pyrimidine nucleotides in the body.
2. Describe the β -Oxidation of palmitic acid along with the energetics.
3. Explain glycolysis and its energetics.

SHORT ESSAYS (Answer any Seven)**7 x 5 = 35 Marks**

4. Define coenzymes. Discuss the different types of coenzymes.
5. Explain the semi-conservative mode replication of DNA.
6. Explain the chemiosmotic theory of oxidative phosphorylation.
7. Explain competitive enzyme inhibition with examples.
8. How ketone bodies are formed?
9. Describe the hormonal regulation of blood glucose level.
10. Give the structure and biological significance of ATP and Cyclic AMP.
11. Give the significance of cholesterol. How it gets converted to bile acids?
12. Explain Glycogenesis and Glycogenolysis.

SHORT ANSWERS (Answer All)**10 x 2 = 20 Marks**

13. Give the therapeutic importance of enzymes.
14. Write the types of diabetes mellitus.
15. Name the different types of porphyrias.
16. Define nucleosides and nucleotides.
17. What is gout?
18. Name the glucogenic amino acids.
19. Define K_m and write its significance.
20. Mention the bases of DNA and RNA.
21. Name the enzymes and coenzymes present in Pyruvate dehydrogenase complex.
22. Amphibolic nature of TCA cycle.
