

Rajiv Gandhi University of Health Sciences, Karnataka

Second Semester B.Pharm Degree Examination – 09-Jan-2020

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 urea cycle and give the deficiency symptoms of urea cycle enzymes.
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 Seven)**7 x 5 = 35 Marks**

4. Explain competitive inhibition with examples.
5. Discuss the hormonal regulation of blood glucose level in the body.
6. Write the catabolism of purine nucleotides.
7. Explain the semi-conservative mode of replication of DNA.
8. Explain the synthesis and significance of adrenaline.
9. Define coenzymes. Give the structure and biological role of NAD^+ and FAD.
10. Explain the different types of RNA.
11. What are substrate level phosphorylation and oxidative phosphorylation?
12. Explain genetic code. Give its salient features.

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

13. Give the therapeutic enzymes.
14. Define free energy and redox potential.
15. Write the amphibolic nature of Krebs cycle.
16. Give the biological significance of carbohydrates.
17. What are uncouplers? Give examples.
18. What is atherosclerosis?
19. Write four differences between DNA and RNA.
20. Name energy rich compounds.
21. What are translation and transcription?
22. Define enzyme induction.
