

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Pharm Degree Examination – Aug / Sep 2011

Time: Three Hours**Max. Marks: 80 Marks**

APPLIED BIOCHEMISTRY (RS - 2)

Q.P. CODE: 1959

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 I U B system of classification of enzymes with examples. Discuss how pH & temperature affect the activity of enzymes
2. Describe the steps involved in the complete oxidation of pyruvate in TCA cycle. Give the overall energetics in the anaerobic and aerobic glucose catabolism
3. Describe the steps involved in the biosynthesis of cholesterol. Explain the various products derived from cholesterol

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

4. Describe the reactions of urea cycle
5. What is mutation? Discuss its repair mechanism
6. Give the salient features of Watson & Crick model of DNA
7. Explain the process of deamination of amino acid with examples
8. Biosynthesis of pyrimidine nucleotides
9. Describe the steps involved in the biosynthesis of creatinine
10. Explain the process of initiation of protein synthesis with diagrams
11. Explain kidney function tests
12. What are high energy compounds? Explain giving examples
13. Explain the enzymes of biological oxidation

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

14. Uncouplers of ETC
15. Competitive enzyme inhibition
16. Role of carnitine in β oxidation
17. Ketosis
18. Coenzymic forms of pyridoxine
19. Role of TPP
20. Structure and function of phosphatidyl choline
21. Transamination
22. Enzymes of fatty acid synthase complex
23. Cyclic AMP
