

Rajiv Gandhi University of Health Sciences, Karnataka

I Year Pharm-D Examination - MAY 2017

Time: Three Hours

Max. Marks: 70 Marks

MEDICINAL BIOCHEMISTRY (RS & RS2)

Q.P. CODE: 2853

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 an enzyme. Outline the IUB classification of enzymes with examples. Explain the mechanism of enzyme action.
2. Define glycolysis. Describe the biochemical pathway for the breakdown of glucose to pyruvate and lactate. Write about the energetics.
3. Describe the biosynthesis of cholesterol. Add a note on the role of cholesterol in the body.

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. Explain the β -oxidation of saturated fatty acids. Calculate the ATP generated on complete oxidation of palmitic acid.
5. What is oxidative phosphorylation? How does it differ from substrate level phosphorylation?
6. Describe the reactions of urea cycle.
7. Define mutation. Explain various types of the same.
8. Explain any two liver function tests.
9. What is radioimmuno assay? Give its principle and application.
10. Define genetic code and describe its characteristic features.
11. List out different kidney function tests Explain any two of them.

SHORT ANSWERS

10 x 2 = 20 Marks

12. What are high energy compounds? Give two examples.
13. Give therapeutic uses of any two enzymes.
14. What is ELISA? Give its significance.
15. What is Diabetes mellitus? Mention its types
16. Give the significance of HMP shunt.
17. What is ketosis? Name the two conditions which lead to ketosis.
18. What are transaminases? Write the diagnostic importance of two transaminases.
19. What is the role of kidney in water balance?
20. Enumerate the purine and pyrimidine bases present in DNA and RNA.
21. How is the level of sodium determined in the body fluids?
