

Rajiv Gandhi University of Health Sciences, Karnataka

I Year Pharm-D Examination - 22-Nov-2022

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 enzyme inhibition and discuss the different types of enzyme inhibitions.
2. Describe the de novo synthesis of purine nucleotides.
3. Define glycolysis? Describe the biochemical pathway for the breakdown of glucose to pyruvate and lactate. Write about the energetics.

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. Explain the hormonal regulation of blood glucose level in the body.
5. What are ketone bodies? Explain the formation and importance of ketone bodies.
6. What is oxidative phosphorylation? How does it differ from substrate level phosphorylation?
7. Explain the deamination reactions involved in the catabolism of amino acids.
8. Mention the different kidney function tests. Explain in detail any two.
9. Write the composition and functions of lipoproteins.
10. What is ELISA? Give its principle and applications.
11. Discuss the biochemical role and deficiency symptoms of vitamin B₁₂.

SHORT ANSWERS

10 x 2 = 20 Marks

12. What are the two models to explain the active site of enzymes?
13. What is Galactose tolerance test? Write its significance.
14. Give therapeutic uses of any two enzymes.
15. Name three unsaturated fatty acids. Write the structure of one of them.
16. What is maple syrup urine disease? What are its characteristics?
17. What are bile pigments, name the disease associated with their metabolism.
18. What is onion peel model of DNA replication?
19. Name the tests to assess hepatic function.
20. What are high energy compounds? Give two examples.
21. Define hypokalemia and hyponatremia.
