

Rajiv Gandhi University of Health Sciences, Karnataka

Second Semester B.Pharm Degree Examination – 22-Mar-2021

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

All the questions are compulsory

LONG ESSAYS

1. Describe urea cycle and explain the general reaction of amino acids

OR

Explain the factors affecting enzymes activity. Derive Michealis-Menten equation and line weaver burke plot

2. Describe biosynthesis of purines nucleotides

2 x 10 = 20 Marks

SHORT ESSAYS

3. Explain about HMP Pathway and its significance

OR

Write note on catabolism of tyrosine

4. Explain the double helical structure of DNA

OR

Explain β -oxidation saturated fatty acids

5. Explain about formation and utilization of ketone bodies

6. Explain the disorders of lipid metabolism

7. Explain about electron transport chain

8. Write note on gluconeogenesis and its significance

9. Write note on hormonal regulation of blood glucose level

7 x 5 = 35 Marks

SHORT ANSWERS

10 x 2 = 20 Marks

10. Name the therapeutic application of enzymes

11. Write chemical structure of following amino acids a) Tryptophan b) Glutamic acid

12. Types of glycogen storage diseases

13. Write significance of 5-hydroxy tryptamine and noradrenaline

14. What is hyper bilirubinemia?

15. Name the inhibitor and uncouplers of electron transport chain

16. Define essential amino acids with examples

17. What is Gout? Mention the symptoms

18. Name the enzymes present in DNA replication

19. Define competitive and non-competitive enzyme inhibition
