Rajiv Gandhi University of Health Sciences, Karnataka

Second Semester B.Pharm Degree Examination - MAY-2018

Time: Three Hours

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)

- 1. Explain the De novo biosynthesis of fatty acids along with the enzyme system involved.
- 2. Explain the general reactions involved in the metabolism of amino acids.
- 3. Explain the various reactions involved in Krebs cycle with energetics.

SHORT ESSAYS (Answer any Seven)

- 4. Define Gluconeogenesis. Explain the reactions involved in it and write its importance.
- 5. Write the formation of ketone bodies in the body.
- 6. Give the chemical classification of amino acids.
- 7. Describe the double helical structure of DNA.
- 8. Explain the disorders of lipid metabolism.
- 9. Define genetic code and give its salient features.
- 10. Explain competitive enzyme inhibition with examples.
- 11. Discuss the hormonal regulation of blood glucose level in the body.
- 12. Define Enthalpy and Entropy. Explain the relationship between them.

SHORT ANSWERS (Answer All)

- 13. Define essential fatty acids with examples.
- 14. Give the physiological functions of serotonin.
- 15. What is Phenylketonuria?
- 16. What are the functions of t-RNA?
- 17. Write the biological functions of proteins.
- 18. Write any two biochemical functions of cholesterol.
- 19. What are lipotropic factors? Name them.
- 20. Write four differences between DNA and RNA.
- 21. Define energy rich compounds with examples.
- 22. What is ketosis?

10 x 2 = 20 Marks

2 x 10 = 20 Marks

 $7 \times 5 = 35$ Marks

Max. Marks: 75 Marks