

**Second Year B.Pharm Degree Supplementary Examinations
December 2018**

**Applied Biochemistry & Molecular Biology
(2010 Scheme)**

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Draw diagrams wherever necessary.

Essay

(3x10=30)

1. Explain the TCA cycle and its significance. (6+4)
2. Describe the oxidation of fatty acids and write the energetics for palmitic acid oxidation (6+4)
3. Explain the various factors which affect the enzyme activity with special emphasis on substrate concentration. (6+4)

Short notes

(14x5=70)

4. Determination of change in free energy from equilibrium
5. Structure of DNA.
6. Essential fatty acids.
7. Cyclic AMP
8. Define carbohydrates and mention its biological role.
9. Coenzymes.
10. Mechanism of electron transport chain.
11. Dopamine
12. Metabolism of sulphur containing amino acids.
13. Glycogen storage disease
14. Genetic code
15. Synthesis and significance of histamine.
16. Discuss the synthesis of purine nucleotides.
17. Classification of amino acid.
