

Second Year B.Pharm Degree Supplementary Examinations July 2017

**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 pathway involved in the oxidation of glucose to pyruvate.
2. What are enzymes. Explain the influence of substrate concentration on enzyme activity with Michaelis plot. (2+8)
3. Define lipids. Name the essential fatty acids. Explain the pathway of beta-oxidation of palmitic acid. (2+2+6)

Short notes

(14x5=70)

4. Transcription and translation
5. What are amino acids and how are they classified
6. Structure and functions of chromosomes.
7. Biosynthesis of pyrimidine nucleotides.
8. Mechanism of enzyme action.
9. Metabolism of sulphur containing amino acids.
10. Catabolism of phenylalanine and its metabolic disorders.
11. Eicosanoids.
12. HMP Shunt.
13. Atherosclerosis.
14. Oxidative phosphorylation.
15. Synthesis and significance of histamine.
16. Redox potential.
17. Transport across cell membrane
