

Second Year B.Pharm Degree Supplementary Examinations February 2017

Applied Biochemistry & Molecular Biology

(2012 Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. Describe the reactions and energetics of TCA cycle
2. Define enzymes. Discuss the different types of enzyme inhibitions, with the aid of Lineweaver-Burk plot(or double reciprocal plot)
3. Explain in detail the biosynthesis of cholesterol

Short notes

(14x5=70)

4. Glycogenesis
5. Mechanism of oxidative phosphorylation
6. Various components and steps involved in a polymerase chain reaction
7. Vectors of recombinant DNA technology
8. Active transport across the cell membrane
9. Structure of DNA
10. Isoenzymes and its diagnostic applications
11. Different types of enzymes in biological oxidation with suitable examples
12. β -oxidation of fatty acids
13. Ketogenesis
14. Glucogenic and ketogenic nature of tyrosine
15. Formation of urea from carbamoyl phosphate
16. Human purine degradation
17. Synthesis and degradation of cyclic AMP
