

Second Year B.Pharm Degree Examinations July 2018**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 significance, reactions and energetics of citric acid cycle.
2. Define enzyme. Classify the enzymes according to IUB classification. Describe factors influencing the activity of enzymes.
3. Discuss the structure of DNA and explain the process of semiconservative replication of DNA with emphasis on different enzymes involved in this process.

Short notes**(14x5=70)**

4. Active transport and facilitated diffusion.
5. Biological significance of ATP.
6. Co-enzymes
7. Enlist the ketone bodies. How are they produced in the body. What is their biological significance.
8. Gluconeogenesis and its significance.
9. Explain oxidative phosphorylation.
10. Purine biosynthesis
11. Transcription
12. Mutations.
13. Urea cycle
14. Hyperbilirubinemia
15. Atherosclerosis
16. Genetic code
17. Polymerase chain reaction
