

# **2010 Scheme**

**QP CODE: 207006**

**Reg. No: .....**

## **Second Year B. Pharm Degree Supplementary Examinations February 2024 Applied Biochemistry & Molecular Biology**

**Time: 3 Hours**

**Total Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary.*

### **Essay**

**(3x10=30)**

1. Why Tricarboxylic acid (TCA) cycle is called common catabolic pathway for most of the nutrients. Explain the steps of TCA cycle along with enzymes and coenzymes involved.
2. Define DNA replication. Explain the steps in the semiconservative mode of DNA replication with illustration.
3. Discuss the biosynthesis of cholesterol starting from acetyl Co-A.

### **Short Notes**

**(14x5=70)**

4. Define energy rich compounds and classify with examples.
5. Classification and nomenclature of enzymes based on International Union of Biochemistry (IUB).
6. Therapeutic and diagnostic applications of enzymes.
7. Define co-enzymes. Add a note on vitamins as co-enzymes and their biochemical significance.
8. Define inhibitors of Electron transport and oxidative Phosphorylation with examples.
9. Explain the biological conversion of polysaccharides into glucose -1-Phosphate.
10. Immunological methods in diagnosis of diseases.
11. Ketolysis and its biological significances.
12. Give an account on disorders of chromosomal functions.
13. Synthesis and biological significance of creatine.
14. Atherosclerosis and its consequences.
15. Uronic acid pathway and its significance.
16. Define and classify amino acids.
17. Explain the causes and consequences of glycogen storage disorders.

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