

# **2010 Scheme**

**QP CODE: 207006**

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

**Second Year B.Pharm Degree Supplementary Examinations July 2022**

## **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. Write the IUB classification of enzymes and discuss therapeutic applications of enzymes.
2. Discuss HMP shunt and gluconeogenesis.
3. Explain on biosynthesis of purines and pyrimidine nucleotides.

**Short Notes**

**(14x5=70)**

4. Structure and biochemical functions of golgi complex and lysosomes.
5. Biological significance of ATP and Cyclic AMP.
6. Vitamins and metals as co-enzymes.
7. Mechanism and role of electron transport chain.
8. Diabetes mellitus and glycogen storage diseases.
9. Biosynthesis of cholesterol.
10. Classification of aminoacids and catabolism of tyrosine.
11. Urea cycle and associated metabolic disorders.
12. Chemistry of nucleosides and nucleotides.
13. Central dogma of molecular biology.
14. Regulation of gene expression.
15. Beta oxidation of unsaturated fatty acids.
16. Glycolysis and its significance.
17. Structure of DNA and RNA.

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