

# **2012 Scheme**

**QP CODE: 217006**

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

## **Second Year B.Pharm Degree Supplementary Examinations January 2025**

### **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*
- *Write equations wherever necessary.*

#### **Essay**

**(3x10=30)**

1. Define and explain the reaction sequences of glycolysis and its energetics.
2. Explain the factors affecting enzymes activity. Derive Michaelis-Menten equation and line weaver burke plot.
3. Describe biosynthesis of purines nucleotides.

#### **Short notes**

**(14x5=70)**

4. Define coenzymes. Discuss the different types of coenzymes.
5. IuB classification of enzymes.
6. Define gluconeogenesis. Explain the reactions involved in it and its importance.
7. Transamination reaction.
8. Explain the reactions of HMP pathway with its significance.
9. Distinguish DNA and RNA.
10. Explain the synthesis and significance of adrenaline.
11. Explain the rotary motor model of ATP generation.
12. Explain hormonal regulation of blood glucose level.
13. Briefly explain about catabolism of tyrosine.
14. Discuss the various types of glycogen storage disorders,
15. What are porphyrins. Explain the degradation of heme.
16. Atherosclerosis.
17. Polymerase chain reaction.

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