

# **2012 Scheme**

**QP CODE: 217006**

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

## **Second Year B.Pharm Degree Supplementary Examinations February 2021**

### **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. Derive Michaelis-Menten equation. Describe in detail about different types of enzyme inhibitions.
2. Explain citric acid cycle and its energetics.
3. Explain beta oxidation of saturated fatty acids.

**Short notes**

**(14x5=70)**

4. Polymerase chain reaction
5. Theories of enzyme action
6. Allosteric regulation of glycogen synthesis and degradation.
7. Explain amphipathic nature of fatty acids. Enlist the essential fatty acids. Why are they known as essential fatty acids. Mention their biological significance.
8. Transamination reaction
9. Reactions of urea cycle
10. Glucogenic and ketogenic amino acids.
11. Translation
12. Atherosclerosis
13. Genetic code
14. Briefly outline the prostaglandin synthesis
15. Hyperbilirubinemia
16. Electron transport chain
17. Glycolysis

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