

**QP CODE:207006**

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

Second Year B.Pharm Degree Examinations - October 2012

**APPLIED BIOCHEMISTRY & MOLECULAR BIOLOGY**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw diagrams wherever necessary.

**Essay**

**(3x10=30)**

1. Explain the term deamination. Discuss urea cycle with its significance.
2. Define coenzymes. Classify them with examples and explain the enzymatic action of folic acid and thiamine.
3. Describe the reactions involved in oxidation of fatty acids.

**Short notes**

**(14X5=70)**

4. Biological significance of amino acids.
5. Explain gluconeogenesis and its significance.
6. Structure and functions of cholesterol.
7. Describe IUB classification of enzyme.
8. Describe the structure and function of t-RNA.
9. Compare substrate level phosphorylation with oxidative phosphorylation.
10. Ketogenesis.
11. Classify amino acids with examples.
12. Inhibitors and uncouplers of ETC.
13. List out the factors affecting enzyme activity and describe any two factors.
14. Discuss the biosynthesis and biochemical significance of creatinine.
15. Explain about semi conservative replication of DNA.
16. Explain diabetes mellitus and any two glycogen storage diseases.
17. Explain the biosynthesis of any one purine nucleotide.

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