

**Q.P. Code: 105001****Reg. no.: .....**

First Professional MBBS Degree Examinations, August 2014

**BIOCHEMISTRY- PAPER I****Time: 3 Hours****Total Marks: 50**

- Answer all questions
- Draw diagrams wherever necessary

**Essay****(10)**

1. Define beta oxidation. Explain the reactions of beta oxidation of palmitic acid. Add a note on its energetics (1+6+3=10)

**Short essays****(2x5=10)**

2. Tricarboxylic Acid Cycle
3. Important compounds derived from glycine.

**Short notes****(5x3=15)**

4. Enumerate three types of enzyme specificity.
5. Lactose intolerance.
6. Transamination
7. Significance of the HMP shunt
8. Uncouplers of oxidative phosphorylation

**Answer briefly****(5x2=10)**

9. Active methionine
10. Biological action of glutathione
11. Hartnup's disease
12. Clinical significance of ALP
13. Alkaptonurea

**Give precise answers****(5x1=5)**

14. Name the deficient enzyme in Niemann Pick disease
15. Mention the normal level of serum creatinine
16. What is iso-electric pH
17. Mention any two key enzymes of glycolysis
18. Name four lipotropic factors

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