

**Q.P. Code: 105001**

**Reg. no.: .....**

**First Professional MBBS Degree Examinations - August 2015**

**BIOCHEMISTRY- PAPER I**

**Time: 3 Hours**

**Total Marks: 50**

- Answer all questions
- Draw diagrams wherever necessary

**Essay (10)**

1. Enumerate the components of electron transport chain. Describe the synthesis of ATP. Indicate the site specific inhibitors. Mention two examples for uncouplers.

(4+2+2+2=10)

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

2. Gluconeogenesis
3. Diagnostic significance of serum enzymes

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

4. Digestion of carbohydrates
5. Essential fatty acids
6. Denaturation
7. Principle of chromatography
8. Name three glycogen storage diseases and its biochemical defect

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

9. Role of carnitine
10. Define isoelectric pH. State properties of a protein at its isoelectric pH
11. Importance of HMP shunt pathway
12. Sources of ammonia
13. Allosteric enzymes

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

14. Name the biochemical defect in Nieman-pick disease
15. Zymogen activation
16. Mention the reaction catalyzed by ATP-citrate lyase
17. Mention two biologically active peptides
18. Mention one therapeutic use of enzyme

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