



**Q.P. Code: 105001**

**First Professional MBBS Degree Examinations July 2017**

**BIOCHEMISTRY- PAPER I**

**Time: 3 Hours**

**Total Marks: 50**

- Answer all questions
- Draw diagrams wherever necessary

**Essay (10)**

1. Define enzymes. Classify enzymes according to IUB system with one example each.  
Discuss about three enzymes commonly estimated after myocardial infarction (1+3+6=10)

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

2. Diagrammatic representation of mitochondrial electron transport chain and location of ATP synthesis (3+2=5)
3. Define transamination and explain by giving two examples. (1+4=5)

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

4. What are lipotropic factors. Enumerate three lipotropic factors.
5. Phenylketonuria
6. Enumerate irreversible steps of glycolysis with the enzymes involved.
7. Functional classification of proteins.
8. Carnitine shuttle

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

9. Enumerate essential amino acids
10. What is HbA1C and mention its clinical importance.
11. Two co-enzyme roles of NADPH
12. Four functions of phospholipids
13. Define gluconeogenic. Name the gluconeogenic substrates

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

14. Bond not broken in denaturation of protein
15. Enzyme deficiency in Cori's disease
16. Plasma lipoprotein which is inversely correlated with coronary heart disease
17. One sulphur containing amino acid
18. Enzyme defect in alkaptonuria

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