

Q.P. Code: 105001

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
