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

First Professional MBBS Degree Supplementary Examinations - February 2015

BIOCHEMISTRY- PAPER I

Time: 3 Hours Total Marks: 50

- Answer all questions
- Draw diagrams wherever necessary

Essay (10)

1. Explain the reactions of glycogenesis and glycogenolysis in flow diagrams. Describe how these processes are regulated. (4+4+2=10)

Short essays (2x5=10)

- 2. Describe the role of lipoproteins in cholesterol transport.
- 3. Chemiosmotic mechanism of ATP synthesis.

Short notes (5x3=15)

- 4. What is active methionine. Mention two examples of transmethylation reaction.
- 5. What is glucose alanine cycle and mention its significance.
- 6. Fatty liver
- 7. Name different types of specificity shown by enzymes with examples.
- 8. Denaturation of proteins.

Answer briefly (5x2=10)

(5x1=5)

- 9. Define Km value and state its importance.
- 10. What is the role of bile salts in fat digestion and absorption.
- 11. What is phenylketonuria and name the enzymatic defect.
- 12. Dietary fibre
- 13. Bence Jones protein

Give precise answers

- 14. List two examples of mucopolysaccharides.
- 15. Name four essential amino acids.
- 16. Name two therapeutic enzymes.
- 17. List any four high energy compounds.
- 18. Mention the biochemical defect in fructosuria
