

Q.P. Code: 105001

Reg. No.:

**First Professional MBBS Degree Supplementary Examinations
January 2019**

Biochemistry – Paper I

Time: 3 Hours

Total Marks: 50

- Answer all questions
- Draw diagrams wherever necessary

Essay (10)

1. Define gluconeogenesis. Describe how glucose is synthesized from alanine and add a note on its regulation. (2+6+2)

Short essays (2x5=10)

2. Classify carbohydrates with suitable examples. What are epimers.
3. What are the functional and therapeutic role of prostaglandins.

Short notes (5x3=15)

4. Formation and characters of peptide bond
5. Essential amino acids.
6. Competitive inhibition.
7. Digestion of proteins
8. Significance of 2,3 BPG

Answer briefly (5x2=10)

9. What are the criteria to diagnose diabetes mellitus.
10. What are exopeptidases and mention examples.
11. Uncouplers of oxidative phosphorylation.
12. Which is good cholesterol and why it is called so.
13. Anaplerotic role of TCA cycle

Give precise answers: (5x1=5)

14. Enzyme defect in galactosemia.
15. What is the clinical significance of transketolase.
16. Which is the decarboxylation product of histidine.
17. What are the amino acids that take part in the synthesis of carnitine.
18. What is the function of lysosomes.
