

# 2010 Scheme

Q.P. Code: 105001

Reg. No.: .....

## First Professional MBBS Degree Supplementary Examinations July 2025

### Biochemistry – Paper I

Time: 3 Hours

Total Marks: 50

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

#### Essay

(10)

1. Describe the reactions of the Citric Acid Cycle. Explain the Amphibolic nature of this cycle. Add a note on its energetics. (5+3+2)

#### Short essays

(2x5=10)

2. What are isoenzymes. Explain the clinical significance of the isoenzymes of CPK.
3. What is Phenylketonuria. Describe the catabolism of Phenyl Alanine.

#### Short notes

(5x3=15)

4. Describe the fluid mosaic model of cell membrane with a neatly labeled diagram.
5. Explain the Quarternary structure of proteins with example.
6. What is reverse cholesterol transport.
7. What are mucopolysaccharides. Give examples.
8. What is Allosteric Inhibition of enzymes. Give one example.

#### Answer briefly

(5x2=10)

9. Invert Sugar.
10. Micelles.
11. Lung Surfactant.
12. Isoelectric pH and its significance.
13. Coris Cycle.

#### Give precise answers:

(5x1=5)

14. Name two Non Reducing Disaccharides.
15. Name the essential amino acids.
16. Name two tests based on reducing nature of monosaccharides.
17. What are the substrates of Neoglucogenesis.
18. Give the normal reference range of serum Urea.

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