

# 2010 Scheme

Q.P. Code: 105001

Reg. No.: .....

## First Professional MBBS Degree Supplementary Examinations February 2023

### 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. What are ketone bodies. How are they formed in the body. Describe the role of ketone bodies in starvation and uncontrolled diabetes mellitus. (1½+3+ 5½)

**Short essays**

**(2x5=10)**

2. Describe HMP Shunt pathway. Add a note on the significance of this pathway
3. Describe in detail the reactions of transamination and oxidative deamination. Add a note on the significance of these reactions

**Short notes**

**(5x3=15)**

4. Nutritional classification of protein with examples
5. Define isoenzymes. Discuss the clinical significance of different isoenzyme variants of creatine kinase
6. Role of cytochromes in Electron transport chain
7. Cori's Cycle
8. Fatty liver and lipotropic factors

**Answer briefly**

**(5x2=10)**

9. What are amphipathic lipids. Add a note on its significance
10. Lactose intolerance
11. Give two examples for therapeutic uses of enzyme
12. Biologically Important peptides

13. Uronic acid pathway

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

14. Enzyme defect in (a) Alkaptonuria (b) Von Gierke's Disease
15. Give the marker enzymes for (a) Mitochondria (b) Peroxisomes
16. Give an example for substrate level phosphorylation
17. Give an example for oxidoreductases. Write one reaction catalyzed by oxidoreductase
18. Give an example for anaplerotic reaction

\*\*\*\*\*