

2010 Scheme

Q.P. Code: 105001

Reg. No.:

First Professional MBBS Degree Supplementary Examinations January 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 mitochondrial electron transport chain. What is substrate level phosphorylation. Give two examples.

(5+3+2)

Short essays

(2x5=10)

2. Explain the effect of Temperature and Substrate concentration on enzyme activity.
3. Describe how ketone bodies are formed and degraded in the human body.

Short notes

(5x3=15)

4. Cardiac biomarkers.
5. Describe the secondary structure of proteins. Give examples.
6. Explain the role of Carnitine in fatty acid oxidation.
7. Describe the Malate Aspartate shuttle.
8. What is Von Gierke's disease. Name the enzyme involved.

Answer briefly

(5x2=10)

9. Essential pentosuria.
10. Liposomes.
11. Lipotropic factors.
12. Give the differences between hexokinase and glucokinase.
13. Alkaptonuria.

Give precise answers:

(5x1=5)

14. Name two biologically important peptides.
15. Name the essential fatty acids.
16. Name the key enzymes of neoglucogenesis.
17. Name two mucopolysaccharides.
18. Give the normal levels of serum Albumin and Total Protein.
