2010 Scheme

Q.P. Code: 105001 **Reg. No.: ……**

First Professional MBBS Degree Supplementary Examinations
January 2024
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. Define gluconeogenesis. Name the substrates for gluconeogenesis. Trace the pathway of gluconeogenesis from pyruvate to glucose. Add a note on its regulation. (1+2+4+3)

Short essays **(2x5=10)**

2. Discuss the structural and functional organization of the electron transport chain. Add a note on its inhibitors.
3. Describe the reactions of Beta oxidation in the mitochondrial matrix. Add a note on ATP yield from palmitate.

Short notes **(5x3=15)**

4. Write briefly on the biologically important compounds synthesized from Glycine.
5. Describe any two Shuttle mechanisms across the mitochondrial membrane.
6. Classification of enzymes with suitable examples.
7. Functions of Phospholipids.
8. Fluid mosaic model.

Answer briefly **(5x2=10)**

9. Hartnup's disease.
10. Compare and contrast amylose and amylopectin.
11. Primary structure of protein.
12. Write briefly on Covalent modification of enzymes with two suitable examples.
13. Von Gierke's disease.

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

14. Enzyme defect in (a) Maple Syrup Urine Disease (b) Albinism.
15. In glycolysis, which enzyme is inhibited by fluoride.
16. Give suitable example for suicide enzyme inhibition.
17. Give the normal plasma levels of following parameters
    (a) Cholesterol (b) Triglycerides
18. Which fatty acid accumulation gives rise to Refsum's disease.

****