

**First Year M.Sc Medical Physiology Degree Regular/Supplementary
Examinations September 2021**

(FOUNDATION COURSE)

Paper II – Biochemistry

Time: 3 hrs

Max. Marks: 70

- *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:

(2x10=20)

1. How phenylalanine is metabolized in our body. Add a note on inborn errors related to phenylalanine metabolism. (6+4)
2. What are the different steps involved in eukaryotic translation? Add a note on post-translational modifications (6+4)

Short Notes:

(6x5=30)

3. Significance of HMP shunt pathway
4. Structure of biomembranes
5. Complications of diabetes mellitus
6. Steps of beta oxidation
7. Metabolic acidosis
8. Biochemical functions of vitamin D

Answer briefly:

(10x2=20)

9. Competitive inhibition
10. Cori's cycle
11. Essential fatty acids
12. Congenital erythropoietic porphyria
13. Iron absorption
14. Creatinine clearance
15. Lipotropic factors
16. Anion gap
17. Tumor suppressor genes
18. Lesch Nyhan syndrome