

**First Year M.Sc Medical Physiology Degree Supplementary
Examinations April 2025**

(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 ketone bodies are formed and how they are utilized. Add a note on diabetic ketoacidosis. (5+2+3)
2. Explain recombinant DNA technology. What are the applications of recombinant DNA technology. Describe the steps of recombinant DNA technology. (1+3+6)

Short Notes:

(6x5=30)

3. Cardiac markers
4. Significance of HMP pathway
5. Porphyria.
6. Inborn errors of tyrosine metabolism
7. Secondary structure of proteins
8. Complications of diabetes mellitus

Answer briefly:

(10x2=20)

9. Regulation of iron absorption
10. Lipid profile
11. VonGierke's disease
12. Iron deficiency anaemia
13. Respiratory acidosis
14. Cori's cycle
15. Fatty liver
16. Lactose intolerance
17. Principles of calorimetry
18. Transamination
