

**QP Code:103103**

**Reg. No.:.....**

**PG Degree Regular/Supplementary Examinations in Biochemistry  
(MD) January 2025**

**Paper III – Nutrition and Metabolism**

**Time: 3 hrs**

**Max marks:100**

- *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: (20)**

1. Explain sources, RDA, functions, and deficiency manifestations of folic acid. Add a note on folate antagonists.

**Short essays: (8x10=80)**

2. Reactive oxygen species.
3. Balanced diet for a child suffering from PEM.
4. What are the causes, metabolic disturbances, and role of Leptin in Obesity.
5. Explain the role of Vitamin D with special reference to calcium and phosphorus in the body.
6. How Alcohol is metabolized in the body. What is Korsakoff Syndrome.
7. Explain Glycine Cleavage System. Name important Compounds derived from Glycine and mention their functions.
8. Explain Triacylglycerol metabolism in adipose tissue and add a note on role of Perilipin.
9. Biochemistry of muscle contraction.

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