

Roll No.

--	--	--	--	--	--	--

25-BC-23

**M.Sc. II SEMESTER [MAIN/ATKT] EXAMINATION
MAY - JUNE 2025**

BIOCHEMISTRY
Paper - III
[Nutritional Biochemistry]

[Max. Marks : 75]

[Time : 3:00 Hrs.]

[Min. Marks : 26]

Note : Candidate should write his/her Roll Number at the prescribed space on the question paper.
Student should not write anything on question paper.
Attempt all five questions. Each question carries an internal choice.
Each question carries **15 marks**.

Q. 1 Discuss direct and indirect Calorimetry.

OR

Write notes on -

- i) Basal Metabolic Rate.
- ii) Calorigenic action of the foods.

Q. 2 Explain Nutritional aspects of unavailable carbohydrates under following headings -

- i) Requirements.
- ii) Functions.
- iii) Adverse Effects.

OR

Write notes on -

- i) Essential Fatty Acids.
- ii) Available carbohydrates.

Q. 3 Discuss Nitrogen balance along with factors influencing nitrogen balance.

OR

Explain nutritional aspects of proteins under following headings -

- i) Quality of Proteins
- ii) Functions of Protein
- iii) Requirements.

P.T.O.

Q. 4 Discuss dietary sources, requirements, biochemical functions and deficiency disorders of any one water soluble vitamins.

OR

Describe nutritional significance, sources daily requirements and deficiency disorders of Iron and Zinc.

Q. 5 Discuss various method of food processing add a note on loss of nutrients during processing.

OR

Write notes on -

- i) Naturally occurring anti nutrients.
- ii) Obesity.

—○—