

Roll No. : .....

Total No. of Questions : 11 ]

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# **HOMESSEM-133**

**M.Sc. (Ist Semester) Examination Dec., 2022**

**FOOD AND NUTRITION**

Paper - IV

**(Advanced Nutritional Biochemistry)**

*Time : 3 Hours ]*

*[ Maximum Marks : 40*

The question paper contains three Sections.

**Section-A** (Marks : 1 × 10 = 10)

*Note* :- Answer all *ten* questions (Answer limit **50** words). Each question carries **1** mark.

**Section-B** (Marks : 3 × 5 = 15)

*Note* :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **3** marks.

**Section-C** (Marks : 5 × 3 = 15)

*Note* :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **5** marks.

**Section-A**

1. (i) Acid number.
- (ii) Saponification.

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- (iii) FSH.
- (iv) Amino acids.
- (v) Redox Potential.
- (vi) Disaccharides.
- (vii) Denaturation of proteins.
- (viii) Nucleosides.
- (ix) Galactosemia.
- (x) Gluconeogenesis.

**Section-B**

2. Write short note on purines and pyrimidines.

*Or*

Give a brief description of the biochemical role of iron and calcium.

3. Write short note on biochemical role of thyroid stimulating hormone.

*Or*

Write short note on important reactions of monosaccharides.

4. Give the classification of enzymes.

*Or*

What is the Biochemical role of Vitamin C ?

5. Write a brief description of properties of plasma proteins.

*Or*

Give the classification of amino acids.

6. What is Phenylketonuria ? Give the clinical changes of Phenylketonuria.

*Or*

Explain the Urea cycle.

### **Section-C**

7. Explain the process of transcription in detail.
8. Explain the process of glycolysis.
9. Explain the types of polysaccharides in detail.
10. Explain in detail, the citric acid cycle.
11. Explain the general properties of enzymes.