

Postgraduate Programme
M.Sc. (Food and Nutritional Sciences)

Time: 2 Hours

Max. Marks: 25 + 50 = 75

Note: Answers should be written separately in the answer sheets provided.

Common for all groups of candidates

(25 x 1 = 25 marks)

25 Multiple Choice Questions

Home Science Major candidates

(5 x 10 = 50 marks)

SAMPLE QUESTIONS

Answer any five of the following questions. Each Question carries 5 marks.

1. Explain the role of UNICEF in combating malnutrition.
2. What is extension education? Discuss the principles of extension education.
3. Describe different types of traditional embroideries in India.
4. Define and discuss food pyramid and balanced diet.
5. Mention deficiency symptoms of vitamin A and discuss prophylactic measures used in India to control the deficiency.
6. Define work simplification. Describe various techniques used in work simplification.

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Chemistry Major candidates

(5 x 10 = 50 marks)

Answer any five of the following questions. Each Question carries 5 marks.

SAMPLE QUESTIONS

1. Discuss the principle and applications of any two chromatographic techniques.
2. What are colloids? Explain preparation and purification of colloids.
3. Explain the following:
 - Optical rotation
 - Isoelectric p^H
 - Isomerism

4. Bring out differences between the following and give examples:
 - Isotopes and Isobars
 - Molarity and Normality
 - Oxidant and Reductant
5. What is a buffer solution? Describe mechanism of buffer action with an example.
6. Discuss influence of p^H and temperature on the rate of enzyme catalysed reactions.

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Bioscience Major candidates

(10 × 5 = 50 marks)

Answer **any five** of the following questions. Each Question carries 5 marks.

SAMPLE QUESTIONS

1. Describe the morphology and functions of lysosome and Golgi bodies.
2. Explain the following:
 - Immunoglobulins
 - Free radicals
 - Blood coagulation
3. Give the steps involved in the development of r DNA. Add a note on the applications.
4. Discuss different types of culture techniques used in microbiology.
5. Discuss transport of electrons through electron transport chain (ETC) in mitochondria.
6. Discuss biosynthesis of proteins in eukaryotes. Add a note on post translational modifications.

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