

**M.Sc Sem-3 Examination****504****Food Science & Nutrition****November-2024****Time : 2-30 Hours]****[Max. Marks : 70**

**Instructions:** All questions in Sections I & II carry equal marks

Illustrate your answers with neat diagrams wherever necessary.

**Question 1 Write the following**

- (i) Describe the metabolic response in trauma in phases. (7 Marks)
- (ii) Define Malnutrition, its causes, and consequences in hospitalized patients. (7 Marks)

**OR**

- (i) Describe metabolic changes and adaptation in infection. (7 Marks)
- (ii) Discuss key components of SGA and MNA in detail. (7 Marks)

**Question 2 Write the following**

- (i) What is the difference between TPN and PPN? (7 Marks)
- (ii) What are the calorie and protein goals in critically ill patients? (7 Marks)

**OR**

- (i) Discuss the different types of Enteral formulas (7 Marks)
- (ii) What are the most common indications for parenteral nutrition? (7 Marks)

**Question 3 Write the following**

- (i) How does the disaster management cycle work? (7 Marks)
- (ii) What are the strategies for ensuring adequate nutrition in disaster-affected areas? (7 Marks)

**OR**

- (i) What are the specific roles of key national and international organizations in disaster response and recovery? (7 Marks)
- (ii) What are the primary responsibilities of the National Disaster Management Authority (NDMA)? (7 Marks)

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**Question 4 Write the following**

- (i) Mention the names of microorganisms and the biological hazards they cause (7 Marks) to the food supply.
- (ii) Explain in detail about incidental adulteration. (7 Marks)

**OR**

- (i) Intentional adulteration is a big problem explain how? (7 Marks)
- (ii) What are the problems caused by metallic contamination and packaging (7 Marks) hazards? Explain.

**Question 5 Attempt any seven out of twelve**

(14 Marks)

- (i) Give any two reasons for intentional adulteration?
  - (ii) How will you identify if the cloves if have brought from market are adulterated?
  - (iii) Write the full form of FSSAI. What role FSSAI plays in the food industry sector?
  - (iv) What happens to metabolic rate after surgery?
  - (v) List out phases of the Nutrition care process.
  - (vi) MUST stand for \_\_\_\_? Describe it in brief.
  - (vii) Brief role of Arginine in metabolic stress.
  - (viii) Define Immunonutrition and give any two immunonutrients
  - (ix) Expand MODS and SIRS
  - (x) What is Refeeding syndrome?
  - (xi) Define Starvation.
  - (xii) Define Nutritional Assessment.
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