

TILAK MAHARASHTRAVIDYAPEETH, PUNE
M.SC. IN NUTRITION & FOOD SCIENCE
EXAMINATION : NOVEMBER/DECEMBER - 2025
THIRD SEMESTER
Sub. : Medical Nutrition Therapy (MNT)Part-II (MSC24N-313TH)

Date: 26/11/2025

Total marks: 60

Time: 2.00 pm to 4.30 pm

Instructions:

- 1) All questions are compulsory and carry equal marks.
- 2) Any kind of misconduct is punishable.

Q. 1 Fill in the right answer (10)

1. Which of the following is rapid-acting insulin?
 - a) Insulin glargine
 - b) Regular insulin
 - c) Insulin lispro
 - d) NPH insulin
2. _____ is known to reduce serum cholesterol.
 - a) Saturated fats
 - b) Omega-3 fatty acids
 - c) Trans fats
 - d) Simple sugars
3. Kidney stones are usually composed of _____.
 - a) Calcium oxalate
 - b) Glucose
 - c) Uric acid only
 - d) Cholesterol
4. Most common nutritional problem in cancer patients is _____.
 - a) Hyperglycemia
 - b) Malnutrition
 - c) Hypertension
 - d) Hyperlipidemia
5. Food intolerance differs from allergy because it _____.
 - a) Is immune-mediated
 - b) Is not immune-mediated
 - c) Causes anaphylaxis always
 - d) Only occurs in children
6. Nutritional management in HIV includes _____.
 - a) High-energy, high-protein diet
 - b) Low-protein diet
 - c) Avoiding vitamins
 - d) Only liquid diet
7. Major nutritional concern in burn patients is _____.
 - a) Increased energy and protein needs
 - b) Reduced calorie needs
 - c) Fluid restriction
 - d) Low protein
8. Omega-3 fatty acids regulate gene expression involved in _____.
 - a) Inflammation
 - b) Muscle contraction
 - c) Hair growth
 - d) Vision only
9. Osteoarthritis is characterized by _____.
 - a) Joint cartilage degeneration
 - b) Muscle hypertrophy
 - c) Nerve inflammation
 - d) High blood glucose
10. Hypertension is a major risk factor for _____.

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|-----------------|--------------|
| a) Diabetes | b) Stroke |
| c) Osteoporosis | d) Hepatitis |

Q. 2 Answer the following questions. (Any 2) (30)

1. Discuss in detail about food allergy – definition, pathophysiology, and dietary management.
2. Explain glomerulonephritis, its etiology & dietary management.
3. Mr. Aniket, a 52-year-old IT professional visits your clinic with a history of frequent urination, excessive thirst, and unexplained weight loss over the past 3 months.

Anthropometric data:

- Weight = 85 kg,
- Height = 1.72 m
- Waist circumference = 102 cm
- Hip circumference = 105 cm,
- WHR = 0.97.

Biochemical Data:

- Fasting blood glucose = 160 mg/dL
- HbA1c = 8.2%
- Total cholesterol = 240 mg/dL
- LDL = 160 mg/dL
- HDL = 38 mg/dL
- Triglycerides = 210 mg/dL
- Blood pressure = 145/90 mmHg.

Tasks:

1. Design a nutritional management plan with diet modifications for one day. (No need of calculating exchange list).
2. Also, suggest lifestyle interventions.

Q. 3 Write Short Note (Any 4) (20)

1. Metabolic syndrome and the role of nutrition in its prevention.
 2. Hypoglycemia & its dietary management
 3. Dietary recommendations for hypertension
 4. MNT for Epilepsy
 5. MNT for OA & RA
 6. Nutritional management for acute fever
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