



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR
SECOND YEAR FIRST TRIMESTER**

**SCHOOL OF PURE, APPLIED AND HEALTH
SCIENCES**

DIPLOMA IN FOODS, NUTRITION, AND DIETETICS

**COURSE CODE: DND 2105
COURSE TITLE: FUNDAMENTALS OF DIET
THERAPY II**

DATE: 13TH DECEMBER, 2023

TIME: 1400-1600

INSTRUCTION TO CANDIDATES

Section A: Multiple Choice Questions. Answer ALL Questions

Section B: Short Answer Questions. Answer ALL Questions

Section C: Long Answer Questions. Answer Question ONE and any other ONE question.

This paper consists of 6 printed pages. Please turn over.

SECTION A: MULTIPLE CHOICE QUESTIONS (20 MARKS) SELECT THE CORRECT ANSWER.

1. What is the primary nutrient need for rapid wound healing and convalescence from surgery?
 - A. Carbohydrates
 - B. Fats
 - C. Proteins
 - D. Vitamins
2. What term describes "difficulty in swallowing"?
 - A. Gastroesophageal Reflux Disease (GERD)
 - B. Dysphagia
 - C. Achalasia
 - D. Hiatal hernia
3. What is the main dietary recommendation for patients with peptic ulcers?
 - A. Avoid all fats and carbohydrates
 - B. Consume spicy foods to stimulate healing
 - C. Eat small, frequent meals and avoid irritating foods
 - D. Fast for extended periods to reduce acid production
4. Which condition results from an abnormal gap in the diaphragm, allowing the upper stomach to protrude into the chest cavity?
 - A. GERD
 - B. Hiatal hernia
 - C. Achalasia
 - D. Dysphagia
5. Which musculoskeletal disorder is characterized by loss of bone mass and increased fragility of bones?
 - A. Gout
 - B. Osteoarthritis
 - C. Osteoporosis
 - D. Rheumatoid arthritis
6. Which of the following is NOT a common cause of peptic ulcers?
 - A. Bacterial infection (*Helicobacter pylori*)
 - B. Psychological stress
 - C. Non-steroidal anti-inflammatory drugs (NSAIDs)
 - D. Vitamin C deficiency

7. Which condition results in the formation of small pouches or sacs in the intestinal walls?
 - A. Cystic fibrosis
 - B. Diverticular disease
 - C. Crohn's disease
 - D. Short bowel syndrome
8. What is the recommended treatment for acute diarrhea?
 - A. Antibiotics
 - B. Oral Rehydration Therapy (ORT)
 - C. Laxatives
 - D. Fasting
9. Dumping syndrome is a complication often associated with which type of surgery?
 - A. Brain surgery
 - B. Gastric surgery
 - C. Orthopedic surgery
 - D. Cardiac surgery
10. How is bowel rest achieved in acute periods of ulcerative colitis?
 - A. High-fiber diet
 - B. Parenteral feeding (TPN)
 - C. Antibiotics
 - D. Surgery
11. What is the primary symptom that characterizes jaundice?
 - A. Skin rash
 - B. Abdominal pain
 - C. Yellow discoloration of the skin and eyes
 - D. Muscle weakness
12. What is the first stage of Alcoholic Liver Disease characterized by the abnormal retention of lipids within liver cells?
 - A. Alcoholic hepatitis
 - B. Cirrhosis
 - C. Hepatic steatosis
 - D. Liver necrosis
13. What is the final stage of chronic liver disease that results in extensive scarring and impaired liver function?
 - A. Hepatic encephalopathy

- B. Alcoholic hepatitis
 - C. Cirrhosis
 - D. Hepatic steatosis
14. Which dietary approach is recommended for managing hypertension and emphasizes fruits, vegetables, low-fat dairy products, whole grains, poultry, fish, and nuts while limiting red meat and saturated fats?
- A. Mediterranean diet
 - B. Atkins diet
 - C. DASH diet (Dietary Approach to Stop Hypertension)
 - D. Vegan diet
15. How is the size of a burn typically assessed?
- A. By the number of layers of skin affected
 - B. By the depth of the burn
 - C. By the percentage of total body surface area (%TBSA) affected
 - D. By the number of body parts involved
16. Which of the following is a risk factor for hypertension?
- A. Young age
 - B. Low salt intake
 - C. Obesity
 - D. Low genetic predisposition
17. What is the purpose of good nutrition before and after surgery?
- A. To reduce the need for surgery
 - B. To ensure fewer post-operative complications
 - C. To increase the risk of malnutrition
 - D. To promote rapid weight loss
18. What is the main factor that increases the energy requirements of burn patients
- A. Loss of electrolytes
 - B. Hypermetabolism
 - C. Oedema
 - D. Dehydration
19. What is the recommended approach to managing dysphagia in cancer patients?
- A. Encourage dry, rough foods for stimulation
 - B. Provide soft, non-chew or pureed foods
 - C. Avoid altering food consistency

- D. Offer extremely hot foods to stimulate taste buds
20. Hiatal hernia is more commonly seen in which group of individuals?
- A. Athletes
 - B. Pregnant women
 - C. Children
 - D. Elderly men

SECTION B: SHORT ANSWER QUESTIONS (40 MARKS). ANSWER ALL QUESTIONS.

- 1) Explain the roles of the following nutrients in the management of patients with burns.
 - i. Proteins (3 Marks)
 - ii. Vitamin C (2 Marks)
 - iii. Vitamin B complex (1 Marks)
- 2) Outline six goals of diet therapy in patients with liver diseases (6 Marks)
- 3) Highlight six dietary recommendations for a patient who has been diagnosed with gout and is seeking guidance. (6 Marks)
- 4) Describe the following musculoskeletal disorders
 - i. Gout (2 Marks)
 - ii. Osteoporosis (2 Marks)
- 5) Outline five key factors involved in the development of malnutrition in individuals with alcoholic liver disease (5 Marks)
- 6) State seven strategies for managing nausea and vomiting in cancer patients undergoing chemotherapy or radiotherapy treatment. (7 Marks)
- 7) Jennifer, experiencing constipation, seeks to understand its causes. Enumerate six factors contributing to her condition (6 Marks)

SECTION C: LONG ANSWER QUESTIONS (40 MARKS).QUESTION ONE IS COMPULSORY, THEN CHOOSE EITHER QUESTION 2 OR 3.

1. a) Outline the dietary and lifestyle modifications recommended for managing hypertension. (14 Marks)
b) Explain six strategies for individuals looking to adopt the DASH diet and make gradual lifestyle changes to improve their cardiovascular health. (6 Marks)
2. Nutrition care within the context of surgical procedures is an indispensable component of comprehensive patient management. It assumes a pivotal role in advancing positive surgical outcomes and expediting the recovery process. The provision of meticulously tailored and thoughtfully designed nutritional regimens is instrumental in mitigating potential complications, thus enhancing the patient's holistic post-surgical experience.
 - i) Define surgery and explain the role of nutrition in the recovery process. (7 Marks)
 - ii) State three consequences of poor nutrition before surgery (3 Marks)
 - iii. Gastrectomy refers to the partial or total removal of the stomach due to peptic ulcers, gastric cancer or damage after a trauma. Identify 5 problems experienced by patients who have undergone this operation (10 Marks)
3. Neuromuscular disorders encompass a spectrum of conditions characterized by disruptions in the interaction between the nervous system and the muscles it regulates. These disorders can manifest due to a multitude of factors and give rise to a diverse array of symptoms.
 - a) State 6 disorders affecting the neuromuscular system (6 Marks)
 - b) Enumerate five prominent symptoms commonly associated with neuromuscular disorders (5 Marks)
 - c) Outline four functions of the nervous system (4 Marks)
 - d) List five issues complicating nutrition therapy in neuromuscular diseases (5 Marks)

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