



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
END OF SEMESTER DECEMBER 2024 EXAMINATIONS**

COURSE CODE AND TITLE: DOP 121: Applied Nutrition in Oncology

DATE: 4-DECEMBER 2024

Duration: 2 HOURS

Start: 9:00 AM

Finish: 11: AM

INSTRUCTIONS

- 1.** This exam is out of 70 marks
- 2.** This Examination comprises **THREE** Sections. Section I: Multiple Choice Questions (20 marks) Section II: Short Answer Questions (30 marks) and Section III: Long Answer Questions (20 marks)
- 3.** Answer **ALL** Questions.
- 4.** Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

SECTION I: MULTIPLE CHOICE QUESTIONS

(20 MARKS)

1. A nutritional expert qualified to design meal plans for patients with medical conditions;
 - A. Diet registrar
 - B. Registered dietician
 - C. Certified wellness coach
 - D. Social worker
2. Best nutrition recommendation for a patient undergoing cancer treatment;
 - A. Avoid Micronutrients
 - B. Maintain a Healthy Weight
 - C. Lower Your Intake of Macronutrients
 - D. Avoid Dietary Fats
3. These micronutrients are natural chemicals found in plant-based foods that provide nutrients for healing and repair;
 - A. Proteins
 - B. Carbohydrates
 - C. Phytochemicals
 - D. Fats
4. The following is not part of current advice for cancer prevention;
 - A. Maintain normal body weight
 - B. Increase intake of red meat
 - C. Minimize alcohol intake
 - D. Eat at least 400g/day of fruits and vegetables
5. Diets high in fiber have been proposed to protect against colorectal cancer by which one of the following mechanisms;
 - A. Antioxidant effect, which quenches free radicals
 - B. Increases repair of damaged DNA
 - C. Increases induction of detoxifying enzymes
 - D. More rapid removal of potential carcinogens
6. Aflatoxins are potent carcinogens in;
 - A. The brain
 - B. Liver
 - C. Lungs
 - D. None of the above
7. Dietary factor with the greatest impact on cancer risk (protective or negative);
 - A. Fiber
 - B. Meat
 - C. Fruits and vegetables
 - D. carbohydrates

8. Goal of nutrition in palliation;
- A. ENSURING maintenance of quality of life
 - B. Ensuring nutrition does not cause stress
 - C. Ensuring meals are enjoyable
 - D. Facilitate good nutritional state
9. The following is not a consequence of malnutrition in cancer patients;
- A. increase length of hospital stay
 - B. decrease quality of life
 - C. increase morbidity
 - D. decrease incidence of infections
10. All the following are factors known to be related to cancer development, EXCEPT;
- A. Underweight and high intensity exercise
 - B. Smoking and alcohol intake
 - C. Genetic mutation
 - D. Overweight and lack of physical activity
11. Example of effective nutritional management of nausea;
- A. Small frequent meals
 - B. Use of favorite foods to increase appetite
 - C. Light exercise
 - D. Providing room temperature/cold foods
12. The formula for the body mass index is;
- A. A person's weight in kilograms squared divided by the square of his/her height in meters (kg^2/m^2)
 - B. A person's weight in kilograms squared divided by his/her height in meters (kg^2/m)
 - C. A person's weight in kilograms divided by his/her height in meters (kg/m)
 - D. A person's weight in kilograms divided by the square of his/her height in meters (kg/m^2)
13. Medical diagnosis of obesity is based on a BMI cut-off point of;
- A. 25.0
 - B. 30.0
 - C. 35.0
 - D. 40.0
14. Greatest risk for cancer of the esophagus;
- A. Processed meat
 - B. Fruits and vegetables
 - C. Salts
 - D. Alcohol
15. The following is an ABSOLUTE contraindication to parenteral nutrition;
- A. Diarrhea
 - B. Liver cirrhosis
 - C. Malignancy
 - D. Active Infection

16. All are nutritional supplements for cancer patients, except;
- A. Purines
 - B. Melatonin
 - C. Oral glutamine
 - D. Probiotics
17. All of the following are important in managing treatment related anorexia, EXCEPT?
- A. Eat foods that are high in protein and calories
 - B. Add extra protein and calories to food, such as using protein-fortified milk
 - C. Drink large amounts of liquids during meals
 - D. Try new foods and new recipes
18. Food that is encouraged for use during acute diarrhea
- A. Fried foods
 - B. Spiced foods
 - C. Dairy products
 - D. Water
19. Daily water requirement for a healthy adult;
- A. 35mls/kg/day
 - B. 120mls/kg/day
 - C. 45mls/kg/day
 - D. 100mls/kg/day
20. All are symptoms of cancer cachexia, except;
- A. Reduced lipolysis
 - B. Increased albumin levels
 - C. Muscle atrophy
 - D. Reduced appetite

SECTION II: SHORT ANSWER QUESTIONS (30marks)

1. Outline eight (8) goals of nutrition in cancer care (8marks)
2. Outline six (6) the nutritional messages that would help a cancer patient manage nausea in their home setting(6marks)
3. Highlight six (6) roles of the government in ensuring reduction of Nutritional related disorders (6marks)?
4. Outline four (4) complications of parenteral nutrition in cancer care(4marks)
5. Outline six (6) risks of nutritional support at the end of life (6marks)

SECTION III: LONG ANSWER QUESTION (20marks)

1. Mrs. Jane has been admitted at the Oncology ward with Esophageal cancer stage IV, presenting with Dysphagia grade three, dehydration, nausea, and substantial weight loss.
 - a. Briefly, with justification describe two (2) priority intervention for Mrs. Jane to help improve her nutritional state (4marks)
 - b. If Mrs. Jane, was able to feed orally, outline six (6) nutritional advice that you would give her to help cope with nausea (6marks)
 - c. If a stent was to be fashioned to assist with feeding, what are some of the common complications associated with stenting that would impede proper feeding (5marks).
 - d. Briefly outline five (5) roles of the oncology nurse in ensuring that Mrs. Jane gets back to Normal Nutritional status(5marks)