



(University of Choice)

**MASINDEMULIROUNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2016/2017 ACADEMIC YEAR**

FIRST YEAR, THIRD TRIMESTER EXAMINATION

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN PHYSIOTHERAPY**

COURSE CODE: HPE 204

**COURSE TITLE: HUMAN NUTRITION AND INTELLECTUAL
DEVELOPMENT**

MAIN PAPER

DATE:

TIME:

INSTRUCTIONS TO CANDIDATES

SEC A: Multiple Choice Questions (MCQ)	20 MARKS.
SEC B: Short Answer Questions (SAQ)	40 MARKS.
SEC C: Long Answer Question (LAQ)	40 MARKS

Time: 3 HOURS

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

Correct in SAQ & LAQ
Jeh
6/8/2017

Sec A: Multiple Choice Questions (MCQ)**20 Marks**

- 1) The nutrient density is define as the :-
 - a) Amount of kcalories in a food divided by the amount of kcalories needed in a day.
 - b) Amount of a particular nutrient in a serving of food divided by the number of kcalories in that serving.
 - c) Amount of a particular nutrient in a serving of food divided by the number of grams of protein
 - d) Amount of nutrient in a serving of food divided by the amount of the nutrient needed for that day.
- 2) What is the recommended daily protein intake for a sedentary adult
 - a) 0.2g/kg body weight
 - b) 0.8g/kg body weight
 - c) 1.2g/kg body weight
 - d) 1.8g/kg body weight
- 3) The Recommended Dietary Allowance for nutrients generally are:-
 - a) Designed to be adequate for almost all healthy people.
 - b) More than twice the requirements.
 - c) The minimum amounts the average adult male requires.
 - d) Designed to prevent deficiency disease in half the population.
- 4) The B vitamins generally function as
 - a) coenzymes
 - b) emulsifiers
 - c) antioxidants
 - d) reducing agents
- 5) Dietary sources for vitamin K include:
 - a) Legumes and citrus fruits
 - b) Milk and yellow vegetables
 - c) Liver and green vegetables
 - d) Meat and whole grains
- 6) The major source of lactose is:-
 - a) Butter milk
 - b) Broccoli
 - c) Honey
 - d) Lactose
- 7) The three (3) most important minerals responsible for hardening of teeth are:
 - a) Calcium, phosphorus, fluoride
 - b) Potassium, calcium, iodine
 - c) Phosphorus, iron, fluoride
 - d) Calcium, iron, iodine
- 8) One of the major functions of sodium in the body includes:
 - a) Oxidation of carbohydrates
 - b) Transmission of nerve impulses
 - c) Hardening of bone and teeth
 - d) Formation of blood
- 9) Fat is transported in body on which form
 - a) Phospholipid

- b) Micelles
 - c) Lipoprotein
 - d) Triglyceride
- 10) Scurvy, is characterized by:
- a) Seborrhoeic dermatitis
 - b) Pernicious anaemia
 - c) Instability of cell membranes
 - d) Swollen gums that bleed easily
- 11) Thermogenesis refers to all of the following except
- a) Brown adipose tissue contributes to thermogenesis especially in hibernating animals.
 - b) The ability to regulate body temperature within narrow limits.
 - c) Shivering when cold and fidgeting are examples of thermogenesis.
 - d) The energy you require during sleep at night.
- 12) Xerophthalmia is caused by a deficiency of:
- a) Vitamin C
 - b) Vitamin D
 - c) Vitamin B₁
 - d) Vitamin A
- 13) The following are fat soluble vitamins
- a) A B D K
 - b) C D E K
 - c) B D E A
 - d) A D E K
- 14) Most vitamin A is stored in the
- A. Adipose tissue.
 - B. liver
 - C. Small intestine.
 - D. Kidneys
- 15) In order to prevent malnutrition one requires.
- a) Nutritional education.
 - b) Nutritional rehabilitation.
 - c) Supplementary feeding
 - d) Comprehensive child care
- 16) A disorder in which frequent bingeing and possibly purging occurs is called
- a) Compulsive overeating.
 - b) Anorexia nervosa.
 - c) hypoglycaemia
 - d) Bulimia
- 17) Most of the health problems in bulimia arise from
- a) binge eating
 - b) eating sweets
 - c) vomiting
 - d) using laxatives
- 18) A major characteristic of an anorectic that significantly inhibits successful treatment is
- a) Projection.
 - b) Rationalization of the problem.
 - c) Denial of the problem.
 - d) Suppression of feelings.
- 19) Health issues appear to be associated with all of the following except

- a) omega-3 fatty acids
 - b) trans fatty acids
 - c) partially hydrogenated fats
 - d) saturated fats
- 20) Many cancer patients are in negative nitrogen balance. This means they are
- a) building body proteins such as hemoglobin and hair
 - b) healing and rebuilding body tissues
 - c) breaking down more protein than they are making
 - d) taking in too much protein

Section B: Short Answer Questions

(SAQ) 40 Marks.

1. Define the following terms as used in nutrition concept
 - i. Reference daily intake (1 mark).
 - ii. Crude fiber (1 mark).
 - iii. Gluconeogenesis (1 mark).
 - iv. Fortified (1 mark).
 - v. Enzyme (1 mark)
2. Discuss five (5) factors that influence choices of food (10 marks)
- 3 State four (4) organic nutrients (4 marks)
- 4 Mrs. David prepared and served breakfast for his family today which includes, 2 slices a whole meal bread with table spoon of pinned butter. It constituted constitute carbohydrates 32 Kcal, protein 14 kcal, and 18 kcals of fats.
 - a) Calculate the total energy available in the above serving of meal (5 marks)
 - b) Evaluate and compare with normal recommended dietary allowance values (5 marks)
5. Describe the pathophysiology of lactose intolerance (5 marks)
6. *state four* Name three complication caused by total parenteral feeding (4 marks).
7. *state two* Name functions of water as part of health diet (3 marks)

Section C: Long Answer Question (LAQ)

40 Marks

Question 1.

Discuss the (five) principles used in nutritional intervention (20 marks)

Question 2.

The school cateress of a local high school has on her menu for Sunday lurch as shown below.

Discuss the physiology of digestion process of the above presented menu (20 marks)

provide the menu for question two.