

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR BACHELOR OF SCIENCE IN  
PUBLIC HEALTH**

**NURS 121 NUTRITION AND HEALTH**

**STREAMS: Y1SI (BSC PUBLIC HEALTH)**

**TIME: 2 HOURS**

**DAY/DATE: MONDAY 14/12/2020**

**2.30 P.M -4.30 P.M.**

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**INSTRUCTIONS:**

1. Do not write anything on the question paper.
2. Mobile phones and any other reference materials are NOT allowed in the examination room.
3. The paper has three sections. Answer ALL questions in Sections I and II and ONE question in section III.
4. All your answers for Section I (MCQs) should be on one page.
5. Number ALL your answers and indicate the order of appearance in the space provided in the cover page of the examination answer booklet.
6. Write your answers legibly and use your time wisely

**SECTION ONE (Answer ALL QUESTIONS )**

1. What are the categories of food hazards?
  - A. Biological, Chemical, Metal
  - B. Biological, Metal, Jaundice
  - C. Biological, Physical, Allergens
  - D. Biological, Physical, Chemical
2. All of the following are nutrients found in food except \_\_\_\_\_.
  - A. plasma
  - B. Proteins
  - C. Carbohydrates
  - D. Vitamins
3. Which of the following is NOT an example of a carbohydrate?
  - A. Starch

- B. Sucrose
  - C. Glycogen
  - D. Cholesterol
4. Which of the following is the definition of an essential amino acid?
- A. An amino acid that rids the body of toxins.
  - B. An amino acid that is very healthy to eat.
  - C. An amino acid that the body needs but cannot make for itself.
  - D. Any amino acid that the body uses to make proteins
5. What is the third HACCP Principle?
- A. Establish Critical Limits
  - B. Conduct a Hazard Analysis
  - C. Assemble the HACCP Team
  - D. None of the above
6. This vitamin is needed to prevent a birth defect called Spina Bifida
- A. Vitamin D
  - B. Vitamin A
  - C. Folate
  - D. Vitamin E
7. Which one of the following chemicals has been associated with chemical food poisoning?
- A. Lead
  - B. Iron
  - C. Calcium
  - D. Phosphorus.
8. Which form of carbohydrate does the human body use to store energy?
- A. Starch
  - B. Cellulose
  - C. Glycogen
  - D. Chitin
9. All of the following are needed for strong bones except:
- A. Thiamin
  - B. Calcium
  - C. Magnesium
  - D. Vitamin D
10. Your body needs vitamins and minerals because
- A. They give the body energy
  - B. They help carry out metabolic reactions
  - C. They withdraw heat from the body
11. Calculate the body mass index (BMI) for a patient whose height is 1.75m and whose weight is 99kg?
- A. 29
  - B. 32
  - C. 39
  - D. 43
12. Causes of malnutrition can be classified as immediate, underlying and root causes. Which of the following would be in the underlying class?
- A. Low wages

- B. Unclean drinking water
  - C. Sedentary life style
  - D. All the above
13. Which of the following would be considered components of Public Health Nutrition?
- A. Dietary guidelines
  - B. Nutritional epidemiology
  - C. Fortification of foods with vitamins and minerals
  - D. All the above
14. A substance needed by the body for growth, energy, repair and maintenance is called a \_\_\_\_\_.
- A. Nutrient
  - B. Carbohydrate
  - C. Calorie
  - D. Fatty acid
15. Which one of the following groups of foods is most likely to contain some food-poisoning bacteria when purchased?
- A. Breakfast cereals
  - B. Pasteurised milk
  - C. Fresh meat and poultry
  - D. Jams and marmalades.
16. Which of the following is NOT a known advantage of including fiber in the diet?
- A. Reduced risk of brain cancer
  - B. Prevents constipation and diarrhea
  - C. Reduces hunger by making you feel full longer
  - D. Reduces risk of colon cancer
17. Which of the following is the leading cause of Type II diabetes in the world?
- A. Over nutrition
  - B. Vitamin A deficiency
  - C. Vitamin C deficiency
  - D. Iron deficiency
18. Which of the following can cause a person to develop chronic kidney disease?
- A. Chronic condition such as diabetes or hypertension
  - B. Taking medications as prescribed
  - C. Seeking medical treatment in a timely manner
  - D. Maintaining optimal blood sugar and blood pressure control
19. The correct method for measuring body composition is
- A. Underwater weighing
  - B. Skinfold test
  - C. Body mass index
  - D. Weight
20. What is the primary method of dietary assessment used in epidemiological studies?
- A. Weighted diary
  - B. 24-hour recall
  - C. Diet history

D. Food frequency questionnaire

**(20 marks)**

**SECTION TWO (Answer ALL QUESTIONS)**

1. Define the following terms: **(3 marks)**
  - a) Nutrient
  - b) Diet
  - c) Hygiene
  
2. Explain any four causes of the increase in chronic diseases in Kenya **(4 marks)**
3. Elucidate the importance of good nutrition during pregnancy. **(6 marks)**
4. For each of the following nutritional disorders, indicate the causes and symptoms **(12 marks)**
  - a) Scuvry
  - b) Beriberi
  - c) Pellegra
  - d) Kwashiokor
  
5. Discuss any five factors that influence nutrient requirements. **(5 marks)**

**(30 marks)**

**SECTION THREE (Answer ONLY ONE QUESTION)**

1. Nutrition assessment is important as it assists in the determination of nutritional status of individuals in the population. Critically analyze the methods used in nutritional assessment. **(20 marks)**
  
  2. The prevalence of child malnutrition and especially stunting has increased in Kenya. Using the UNICEF Framework analyze on the causes of malnutrition in Kenya. **(20 marks)**
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