



# **GRETSA UNIVERSITY - THIKA**

## **UNIVERSITY EXAMINATIONS JANUARY - APRIL 2017 SEMESTER**

### **CERTIFICATE IN COMMUNITY NUTRITION AND DIETETICS**

**COURSE CODE: CIND 001**

**COURSE TITLE: INTRODUCTION TO HUMAN NUTRITION**

**DATE: 3 APRIL 2017**

**TIME: 3.00 PM - 5.00 PM**

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#### **INSTRUCTIONS TO CANDIDATES**

1. SECTION A IS **COMPULSORY**.
2. SECTION B: ANSWER ANY OTHER **THREE** QUESTIONS.
3. **DO NOT** WRITE ANYTHING ON THIS QUESTION PAPER AS IT WILL BE AN EXAM IRREGULARITY.
4. ALL ROUGH WORK SHOULD BE AT THE BACK OF YOUR ANSWER BOOKLET AND CROSSED OUT.

**CAUTION:** All exam rooms are under CCTV surveillance during the examination period.

**MULTIPLE CHOICE QUESTIONS [1-5] [ONE MARK EACH]**

1. What percentage of one's general energy needs are fueled by proteins?
  - A. Less than or equal to 5%
  - B. 10% to 15%
  - C. 50% to 60%
  - D. 65% to 75%
  
2. Which of the following is not a macro nutrient
  - A. Water
  - B. Carbohydrate
  - C. Vitamin B12
  - D. Lipid
  
3. Which condition is associated with iron deficiency
  - A. Pellagra
  - B. Scurvy
  - C. Cretinism
  - D. Anaemia
  
4. Which of the following nutrient is stored as adipose tissue when taken in excess
  - A. Minerals
  - B. Vitamins
  - C. Fats
  - D. Protein
  
5. Which of the following is not a simple sugar
  - A. Sucrose
  - B. Glucose
  - C. Fructose
  - D. Galactose

6. Define the following terms
  - a. Nutrition status (2 marks)
  - b. Malnutrition (2 marks)
  - c. Metabolism (2 marks)
  - d. Micro nutrients (2 marks)
  - e. Nutrition assessment (2 marks)
  
5. State the role of nutrients in the human body (5 marks)
6. Differentiate between essential and non-essential nutrients (5 marks)
7. Explain the importance of dietary fiber (5 marks)
8. Highlight five clinical signs of kwashiorkor (5 marks)
9. State the functions of proteins in the human body (5 marks)

## SECTION B

## [CHOOSE ANY THREE QUESTIONS]

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1. a) Discuss the general principles of meal planning (10 Marks)
  - b) Discuss the functions of lipids in the human body (10 marks).
  
  2. a) Describe the levels for causes of child malnutrition (10 marks)
  - b) Discuss the factors influencing the energy and nutrient requirement of an individual (10 marks)
  
  3. a) Discuss the purpose of nutrition assessments (10 marks)
  - b) State the role of the following micro nutrients to the human body.
    - i. Iron
    - ii. Zinc
    - iii. Iodine
    - iv. Vitamin A
    - v. Potassium (10 marks)
  
  4. a) Describe the different methods of nutritional assessment (12 marks)
  - b) Discuss the risks of consuming excess saturated fats to the health of a person (8 marks)
  
  5.
    - a) Discuss the dietary management of diabetes (10 marks)
    - b) Discuss the advantages of biochemical method of nutrition assessment (10 marks)