

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF  
BACHELOR OF SCIENCE IN NURSING**

**NURS 374 – COMMUNITY HEALTH NURSING IV (ENVIRONMENTAL AND  
OCCUPATIONAL HEALTH)**

**STREAMS: BSC (NURS) Y3S2**

**TIME: 2 HOURS**

**DAY/DATE: MONDAY 12/07/2021**

**8.30 A.M. – 10.30 A.M.**

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**INSTRUCTIONS**

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

**SECTION 1: MULTIPLE CHOICE QUESTIONS [10 MARKS]**

1. What is the estimated proportion of Argon in dry air?
  - a) 0.63%
  - b) 0.73%
  - c) 0.83%
  - d) 0.93%
  
2. Where is troposphere found in the earth's atmosphere
  - a) 0 to 12 km
  - b) 12 to 50km
  - c) 50 to 80km
  - d) 80 to 700km

3. Which one of the following diseases has a comparative higher burden from environmental factors
  - a) Cancer
  - b) Diarrhoea diseases
  - c) Diabetes
  - d) Musculoskeletal diseases
  
4. Which one of the following is not a groundwater water catchment technology
  - a) Springwater collection
  - b) Dug well
  - c) Catchment and storage dams
  - d) Drilled wells
  
5. Which one of the following disease conditions is associated with presence of excess nitrate and nitrite in water
  - a) Fluorosis
  - b) Methaemoglobinaemia
  - c) Nitritetis
  - d) Melanoma
  
6. At what temperature do most pathogens in water die
  - a) 100°C
  - b) 90°C
  - c) 80°C
  - d) 70°C
  
7. Which one of the following methods of water treatment is not dependent on sun's Ultraviolet rays (UV rays)
  - a) SODIS Method
  - b) Lifestraw method
  - c) Solvatten method
  - d) NEDAP method
  
8. What is the WHO guideline value for fluoride in drinking water
  - a) 0.5 mg/l
  - b) 1.5 mg/l
  - c) 2.5 mg/l
  - d) 3.5 mg/l
  
9. What is "grey water"
  - a) Liquid waste from washrooms, laundries and kitchens
  - b) Wastewater generated from toilet/latrine containing faecal matter and urine
  - c) Urine with or without flush water

d) Rainfall run off from roofs, roads and other surfaces

10. Which one of the following is not a type of vector responsible for diseases in many tropical and subtropical countries

- a) Arthropods
- b) Parasites
- c) Snails
- d) Rodents

**SECTION II: SHORT ANSWER QUESTIONS [40 MARKS]**

1. Define the following terms

- 1) Refuse [2 marks]
- 2) Environmental Health [2 marks]
- 3) Sanitation [2 marks]

2. State four (4) critical times when a person in the general population is required to wash hands. [4 marks]

3. Outline five (5) requirements for a safe household water storage receptacle. [5 marks]

4. What is the Public Health importance of Solid Wastes? [5 marks]

5. Chlorination is one of the ways of treating water at the household level. Discuss the concept, and the advantages and drawbacks of chlorination at the household level. [10 marks]

6. Good air quality depends on pollution prevention and on limiting what is emitted. Discuss five (5) general methods of controlling air emissions. [10 marks]

**SECTION III: LONG ANSWER QUESTIONS [20 MARKS]**

1. Hazards can enter the food supply chain at any point from production, harvest, post-harvest, packaging, transport, storage, processing, distribution to consumption, and therefore hazards need to be controlled and minimized in all stages of the food chain. Discuss the “five keys to safe food” as applied in promotion of food safety and quality control. [20 marks]

2. There are various hazards responsible for occupational injuries and diseases. Using relevant examples, discuss at least five (5) different classes of hazards commonly found

in workplaces.  
marks]

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[20