

KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF THE
DIPLOMA IN CLINICAL MEDICINE AND SURGERY
THIRD SEMESTER 2021/2022
[JUNE-SEPTEMBER, 2022]

CIMS 0173: ENVIRONMENTAL HEALTH AND OCCUPATIONAL HEALTH

STREAM: Y1S3

TIME: 3 HOURS

DAY: MONDAY, 2:00 – 5:00 PM

DATE: 12/09/2022

INSTRUCTIONS

- 1. Do not write anything on this question paper.**
- 2. Answer ALL Questions.**

SECTION I: SHORT ESSAY QUESTIONS

Answer ALL questions in this section

- Rodents especially rats are important in community medicine
 - Give reasons as to why it is important (5marks)
 - Describe the **clinical features** of at least one disease associated with rats which is recognizable at community level (2marks)
 - What are the **control measures** for rats (3marks)
- Mention at least **five** classes of occupational hazard (5marks)
 - Give at least one **control measure** for each (5marks)
- There's an outbreak of Cholera in your area.
 - State the **clinical manifestations** of Cholera disease (3marks)
 - Describe the **clinical intervention for the disease** (3marks)
 - Outline the prevention and control measures** you will undertake (4marks)
- Discuss the **factors that may hinder** Proper Health Education. (10marks)
- Describe the current **DVI schedule** in Kenya. (10marks)
- Describe **methods of medical waste disposal** from a level four hospital. (10marks)

SECTION II: LONG ESSAY QUESTIONS

Answer any TWO questions

1. Water plays an important role in environment. Discuss the methods of water purification on small and large scale. (20 marks)
2. Overcrowding and poor ventilation constitutes a health hazard. Discuss. (20 marks)
3. Discuss the various methods of waste management. (20 marks)

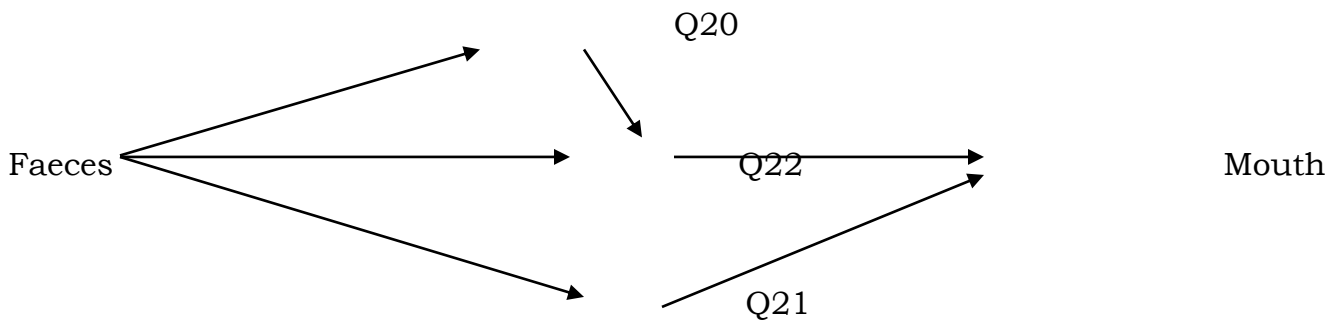
SECTION III: MULTIPLE CHOICE QUESTIONS **CIRCLE/CHOOSE ONE CORRECT RESPONSE**

MCQ: only one true answer

1. The operational work force at the community level I are;
(a) Traditional birth attendants (TBAs)
(b) The herbalist
(c) Community health workers
(d) Community midwives
2. Which of the following work place hazards appears entirely in physical state?
(a) Gases
(b) Particulates
(c) Dusts
(d) Carbon monoxide
3. The difference between biological monitoring and environmental monitoring at work place is that;
(a) In the former body fluids are used and in the latter it is the working area which is assessed
(b) Environmental monitoring is expensive than the biological
(c) Biological monitoring is done in the workers breathing space
(d) Biological monitoring is entirely practiced by environmental hygienist
4. The host factors that influence diseases causation include;
(a) Dosage
(b) Age
(c) Mortality
(d) Prognosis
5. Which of the following is a priority for a clinical officer carrying out a community diagnosis activity?
(a) Identifying resources necessary for basic health development
(b) Planning for mitigation when natural disaster occurs
(c) Establishing infrastructure for local disease response
(d) Deploying staff for local disease needs

6. Which of the following diseases is water borne?
 - (a) Malaria
 - (b) Typhoid
 - (c) Bilharzia
 - (d) Teaniasis
7. The best working definition of sound is;
 - (a) Noise
 - (b) Pressure variation in the natural states of matter
 - (c) A vibration which could be detected by auditory systems of a man
 - (d) A change in the inertia
8. Primary protein could be sourced from?
 - (a) Meat and beans
 - (b) Milk and water melon
 - (c) Meat and green leafy vegetables
 - (d) Beans and maize (githeri)
9. Which of the following people are most predisposed to cholera
 - (a) Children aged below six months
 - (b) Nurses and other medical workers
 - (c) Women
 - (d) Males of all ages

Use the link below on oral – faecal routes to answer questions 20 – 23



10. The point marked Q20 represents
 - (a) Flies
 - (b) Mosquitoes
 - (c) Cockroaches
 - (d) Rodents
11. The point marked Q21 represents
 - (a) Food
 - (b) Faeces
 - (c) Water
 - (d) Fingers

12. The central point at Q22 could be
- (a) Food or waters
 - (b) Fingers or faeces
 - (c) Flies of faeces
 - (d) Feaces or water
13. In Kenya, one of the reason why people avoid the construction of pit latrines is;
- (a) Weak collapsible soils
 - (b) Deep soil profiles
 - (c) Brittle rocks
 - (d) Ignorance and government policies
14. Factors which increase the susceptibility of a community to the impact of hazards could be summed up as
- (a) Risks
 - (b) Vulnerability
 - (c) Resilience
 - (d) Causes of disasters
15. In VIP toilet, the provision that controls fly nuisance is;
- (a) Self closing doors
 - (b) The dark interior
 - (c) The vent pipe
 - (d) The overhead fly screen

SECTION IV: MCQ: T/F

- 1. The following vaccines are live attenuated**
- (a) BCG
 - (b) Rubella
 - (c) OPV
 - (d) Measles
 - (e) Tetanus
- 2. Which of the following statements is TRUE?**
- (a) All children should complete their immunization be age of 2 years
 - (b) Several vaccines can be given at the same time
 - (c) Minimum interval between vaccine doses should be 4 weeks
 - (d) Vaccines given at 9 months includes yellow fever
 - (e) Pneumococcal vaccine can be given between 6 weeks and 12 months
3. About vibrio cholera
- (a) Is a gram-negative bacilli
 - (b) Can survive in a fly for up to 14 days
 - (c) Usually motile
 - (d) Not sensitive to acidity and drying
 - (e) Up to 1 million vibro-cholerae needed to cause disease

4. About Amoebiasis
 - (a) Exists as a trophozoite and cyst
 - (b) Incubation period of *E. Hystolytica* is 2-4 weeks
 - (c) Non-pathogenic protozoa does not need treatment
 - (d) All patients presents with fever
 - (e) *Entamoeba Dispar* is pathogenic in humans
5. Diseases spread by faeces include:
 - (a) Typhoid fever
 - (b) Poliomyelitis
 - (c) Infective Hepatitis A
 - (d) Schistosomiasis
 - (e) Amoebic dysentery
6. The following are characteristic of good housing except:
 - (a) Good ventilation
 - (b) Near a pit latrine
 - (c) Near source of water
 - (d) Adequate spacing for family members
 - (e) Have access to community services
7. The following diseases need Quarantine as part of management
 - (a) Ebola
 - (b) Tuberculosis
 - (c) Cholera
 - (d) Plague
 - (e) Scarlet fever
8. A comprehensive municipal solid waste management includes the following activities
 - (a) Setting policies
 - (b) Developing and enforcing regulations
 - (c) Planning and evaluation
 - (d) Establishing training programs
 - (e) Establishing prices for services
9. Transmission of Amoebiasis includes:
 - (a) Direct fecal oral transmission
 - (b) Sexual transmission
 - (c) Colonic irrigation
 - (d) Inhalation spores
 - (e) Direct contact
10. The following statements are true about 'CHICKEN POX'
 - (a) Causative agent NOT known
 - (b) Impetigo is a differential diagnosis
 - (c) Communicable 5 days before eruption
 - (d) Diagnosis involves serum antibodies studies

- (e) Chicken pox vaccine should be given during pregnancy to avoid infection to their new-borns
11. The following are protozoal diseases
- (a) Shigellosis
 - (b) Trypanosomiasis
 - (c) Schistosomiasis
 - (d) Amoebiasis
 - (e) Plasmidiosis
12. Factors that determine/contribute to the occurrence of a disease
- (a) Absence of vectors
 - (b) Disposal of Excreta
 - (c) Water
 - (d) Lifestyle
 - (e) Poverty
13. The following are NOT household hazardous waste:
- (a) Paint thinners
 - (b) Pesticides
 - (c) Insecticides
 - (d) Antifreeze
 - (e) Batteries
14. Components of environmental health consist of the following except
- (a) Water supply
 - (b) Personal hygiene
 - (c) Vector control
 - (d) Food hygiene
 - (e) Human waste disposal
15. The following are qualities of safe water except
- (a) Tasteless
 - (b) Colourless
 - (c) Odourless
 - (d) turbid
 - (e) All the above