



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF
BACHER OF SCIENCE IN CLINICAL MEDICINE AND COMMUNITY HEALTH
THIRD SEMESTER 2022/2023
[MAY-AUGUST, 2023]**

COMH 102: ENVIRONMENTAL HEALTH

STREAM: Y1S3

TIME: 2 HOURS

DAY: WEDNESDAY, 2:00 – 5:00 PM

DATE: 26/07/2023

INSTRUCTIONS

1. *Do not write anything on this question paper.*

SECTION I: SHORT ESSAY QUESTIONS

Answer all questions in this section

1. Rodents especially rats are important in community medicine
 - a) Give reasons as to why it is important (5mks)
 - b) Describe the *clinical features* of at least one disease associated with rats which is recognizable at community level (2mks)
 - c) What are the *control measures* for rats (3mks)

2. (a) Mention at least *five* classes of occupational hazard (5mks)
(b) Give at least one *control measure* for each (5mks)

3. There's an outbreak of Cholera in your area.
 - a) State the *clinical manifestations* of Cholera disease (5mks)
 - b) Describe the *clinical intervention for the disease* (5mks)
5. *Outline the prevention and control measures* you will for Cholera (10mks)

4. Discuss the various methods of waste management (10mks)

5. Water plays an important role in environment. Discuss the methods of water purification on small and large scale (10mks)

6. Describe *methods of medical waste disposal* from a level four hospital (10mks)
7. Overcrowding and poor ventilation constitutes a health hazard. Discuss (10mks)
8. Describe the Typical Risk-Control Hierarchy (10mks)
9. Describe the responsibilities of employers in OSHA (10mks)
10. Classify and describe the Occupational problems/diseases (10mks)

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

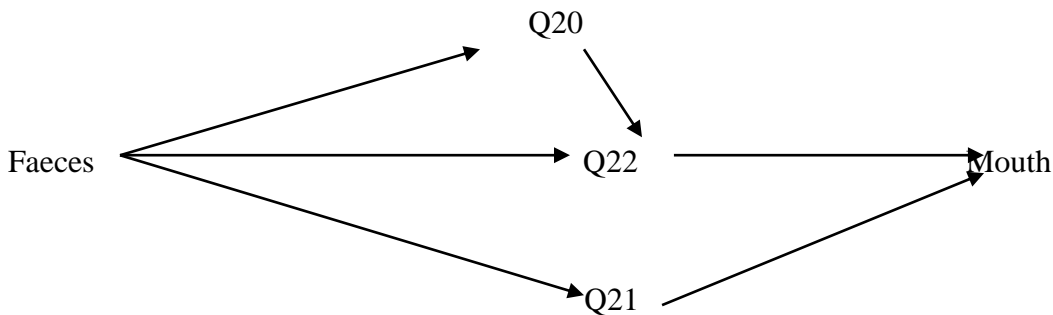
MCO: only one true answer

1. The first activity of a clinician at an accident scene is;
 - (a) Identify himself and start treating the victims
 - (b) Organize for ambulatory transport
 - (c) Triage the victims
 - (d) Inform the medical officer of health
2. The principal recipient of feedback in a communication process is?
 - (a) The whole community
 - (b) The specific audience during the process
 - (c) The communication
 - (d) The target audience for the intended message
3. The operational work force at the community level are;
 - (a) Traditional birth attendants (TBAs)
 - (b) The herbalist
 - (c) Community health workers
 - (d) Community midwives
4. Which of the following is a PHC principal?
 - (a) Equality
 - (b) Control of all endemic diseases
 - (c) Accessibility
 - (d) Adequate water supply and sanitation
5. Which of the following work place hazards appears entirely in physical state?
 - (a) vibrations,
 - (b) spores
 - (c) Carbon Monoxide Carbon monoxide
 - (d) workstation design and height
6. the following is health hazards enter your body except:
 - (a) Breathing (inhalation)
 - (b) Swallowing (ingestion)
 - (c) Skin (absorption)
 - (d) chewing
7. The host factors that influence diseases causation include;
 - (a) Dosage

- (b) Age
 - (c) Mortality
 - (d) Prognosis
8. The process of taking water from its source for analysis by the government chemist or national health public health laboratories is known as;
 - (a) Sampling
 - (b) Epidemiological investigations
 - (c) Biological monitoring
 - (d) Chemical analysis
 9. Which of the following makes a final decision that unclaimed dead body should be disposed?
 - (a) Police officer
 - (b) Medical officer
 - (c) Public health officer
 - (d) Judge
 10. Drug abuse
 - (a) Simply means using drugs without prescription
 - (b) Is when one starts craving for drugs routinely
 - (c) Means having to depends largely or entirely on drugs
 - (d) Is a significant impairment after a period of sustained use of drugs
 11. The psychoactive drug heroine is a
 - (a) Stimulant
 - (b) Depressant
 - (c) Hallucinogen
 - (d) Suppressant
 12. The difference between drug tolerance and craving is;
 - (a) Craving leads to dependency and tolerance leads to resistance
 - (b) Craving leads to resilience and tolerance leads to dependency
 - (c) Tolerance leads to resilience and craving leads to resistance
 - (d) Though cravings is psychological and tolerance is biological they both lead to dependency
 13. 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
 14. The most recent development for the KEPI programme is
 - (a) Is introduction of 2nd dose measles vaccine
 - (b) The introduction of vitamin A as both a food supplement and a vaccine
 - (c) Beyond Zero campaigns and National immunization days
 - (d) The introduction of Rotavirus vaccinations
 15. Routinely at 14 weeks;
 - (a) All children must received all vaccines previously missed
 - (b) All children should get polio 3 and Penta 3 vaccines doses
 - (c) Yellow fever vaccine is given but only is selected sub-counties within the Rift valley region

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

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



20. The point marked Q20 represents
- Flies
 - Mosquitoes
 - Cockroaches
 - Rodents
21. The point marked Q21 represents
- Food
 - Feaces
 - Water
 - Fingers
22. The central point at Q22 could be

- (a) Food or waters
 - (b) Fingers or faeces
 - (c) Flies of faeces
 - (d) Faeces or water
23. In Kenya, one of the reasons 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
24. One of the main aims of the KEPI programme is;
- (a) To improve primary school enrolment rates
 - (b) Reduce population and habits of nomad communities
 - (c) Reduce and control mortality and morbidity in children below one year
 - (d) Fight cholera
25. 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
26. During her child bearing ages, a pregnant mother receives a total of 5 tetanus toxoids for periods of up to 4th pregnancy only because;
- (a) Subsequently she develops enough oestrogen to counter any injuries
 - (b) Subsequently she accumulates progesterone to counter injuries
 - (c) No woman give birth after the 4th pregnancy
 - (d) It is what is recommended in the immunization schedule
27. Which of the following is a counseling skill for drug addicts?
- (a) Teaching
 - (b) Role modeling
 - (c) Story telling
 - (d) Empathy
28. Which of the following is a PHC element?
- (a) The empowerment of women
 - (b) Maternal and child health
 - (c) Environmental sustainability
 - (d) community participation
29. 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

30. Which one of the following is a factor in the competition between man and the disease-causing organism

- (a) The condition of the environment
- (b) Religion of the community
- (c) Infrastructure
- (d) Skills and technology

31. The following vaccines are live attenuated except

- (a) BCG
- (b) Rubella
- (c) Measles
- (d) Rota virus

32 The following statements is true about immunization except

- (a) Children cannot contact the disease they are vaccinated against.
- (b) Several vaccines can be given at the same time
- (c) Vaccines given at 9 months includes yellow fever
- (d) Pneumococcal vaccine can be given between 6 weeks and 12 months

33. The following are true about vibrio cholera except

- (a) Is a gram-negative bacillus
- (b) Is anaerobic
- (c) Usually, motile
- (d) Not sensitive to acidity and drying

34. The following is true about amoebiasis except

- (a) Exists as a trophozoite and cyst
- (b) Incubation period of *E. histolytica* is 2-4 weeks
- (c) Amoebic cysts do not need treatment
- (d) Most patients present with fever

35. The following diseases are spread through fecal matter except?

- (a) Typhoid fever
- (b) Poliomyelitis
- (c) Infective Hepatitis A
- (d) Schistosomiasis

36. 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

37. The following diseases need Quarantine as part of management Except

- (a) Ebola
- (b) Tuberculosis
- (c) Cholera
- (d) Plague

38. A comprehensive municipal solid waste management includes the following activities except

- (a) Setting policies
- (b) Developing and enforcing regulations
- (c) Establishing training programs
- (d) Establishing prices for services

39. Transmission of Amoebiasis includes:

- (a) Direct fecal oral transmission
- (b) Sexual transmission
- (c) Colonic irrigation
- (d) Inhalation spores

40. The following statements are true about 'CHICKEN POX' except

- (a) Causative agent NOT known
- (b) Impetigo is a differential diagnosis
- (c) Communicable 5 days before eruption
- (d) Its caused by a virus varicella-zoster virus

41. The following are protozoal diseases Except

- (a) Shigellosis
- (b) Trypanosomiasis
- (c) Amoebiasis
- (d) Giardiasis

42. Factors that determine/contribute to the occurrence of a disease

- (a) Absence of vectors
- (b) Disposal of Excreta
- (c) Availability of water
- (d) Poverty

43. The following are NOT household hazardous waste:

- (a) Paint thinners
- (b) Pesticides
- (c) Insecticides
- (d) Antifreeze

44. Components of environmental health consist of the following except

- (a) Clean air
- (b) stable climate
- (c) adequate water
- (d) Human waste disposal

45. The following are qualities of safe water except

- (a) Tasteless
- (b) Colourless
- (c) Odour less
- (d) turbid

46. Unsafe injection practices may transmit the following infections except

- (a) Hepatitis B virus
- (b) Hepatitis C virus
- (c) Leukemia
- (d) HIV AIDS

47. Which of the following is a Water washed disease

- (a) Cholera
- (b) Poliomyelitis
- (c) Hepatitis A
- (d) Amoebiasis
- (e) Scabies

48. The following are ways of measuring radiation exposure except ?

- (a) Geiger Muller survey
- (b) Ionization chamber
- (c) Sphygmomanometer
- (d) Pocket dosimeter

49. Which one is not a source of river pollution

- (a) Landfill activity
- (b) Mining
- (c) Petroleum exploration
- (d) deforestation

50. Control of noise pollution at source involves;

- (a) Enclosing the source
- (b) Insulating the source
- (c) Using silencers on the vehicle exhaust
- (d) Using amplifiers

51. The following are chemical methods of abating pollution except:-

- (a) Grease traps
- (b) Neutralization
- (c) Coagulation
- (d) Flocculation

52. The following are diseases associated with chemical exposure to environment except:

- (a) Silicosis
- (b) Anthracosis
- (c) Asbestosis
- (d) tuberculosis

53. Which of the following is the main cause of environmental pollution

- (a) Agricultural activities
- (b) Industrialization
- (c) Population growth
- (d) Urbanization

54. The following statement about types of environment are true except

- (a) Abiotic environment consists of flora and fauna
- (b) Biotic environment is also known as physical exam
- (c) Lithosphere consist of rocks, stones
- (d) Hydrosphere is known as sphere of water

55. Which of the following diseases is not occupational diseases?

- (a) Tuberculosis
- (b) Pneumoconiosis of any type
- (c) Cholera
- (d) HIV/AIDS

56. The following environmental factors may not influence the community health

- (a) Life support
- (b) Micro organisms
- (c) Toxins
- (d) Agricultural waste

57. Which of the following is true about food preservation

- (a) Sun drying method is the most commonly used method
 - (b) Refrigeration changes the food colour and smell
 - (c) Smoking involves putting salt into meat product and allowing them to dry
 - (d) All of the above is correct
58. The elements of health promotion in disease prevention according to WHO except
- (a) Good governance for health
 - (b) Health literacy
 - (c) Healthy cities
 - (d) Healthy environment
59. Which of the following is NOT among the millennium development goals?
- (a) Promotion of gender equality and empowerment of men
 - (b) Reduction of adult mortality
 - (c) Improvement in maternal health
 - (d) Combating HIV AIDS, Ebola and other diseases
60. General strategies that may NOT strengthen preventive health service
- (a) Occupation health and safety
 - (b) Rehabilitation
 - (c) Research and development
 - (d) Financing the health care delivery system