



**AMREF INTERNATIONAL UNIVERSITY**  
**SCHOOL OF MEDICAL SCIENCES**  
**DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES**  
**KENYA REGISTERED COMMUNITY HEALTH NURSING**  
**End Of April-August Semester Examinations**

**DNS 223 : Epidemiology, Demography And Communicable Diseases**

**TIME: 2 HOURS**

**Start: 0900 HOURS**

**Finish: 1100 HOURS**

**INSTRUCTIONS**

1. This exam will be marked **out of 70 Marks**
2. ALL Questions are compulsory.
3. The Examination has Three Sections: Section A- Multiple Choice Questions, Section B: Short Answer Questions, Section C: Long Essay Questions
4. Answer all Questions in the ANSWER BOOKLET provided
5. Do not write anything on the question paper
6. Use the back of your booklet for rough work if need be.

**SECTION I: MULTIPLE ANSWER QUESTION (20 MARKS)**

1. The primary role of descriptive epidemiology is:-
  - a. Identifying causal relationship between exposure and diseases
  - b. Explaining the distribution of diseases in relation to person, place and time
  - c. Conducting randomized controlled trials to test interventions
  - d. Developing new diagnostic tests for disease
  
2. The following is not a component of the epidemiological triad:-
  - a. Agent
  - b. Host
  - c. Treatment
  - d. Environment
  
3. The goal of secondary prevention in public health is:-
  - a. Preventing the emergency of risk factors
  - b. Managing established disease and preventing complications
  - c. Early detection and prompt treatment of diseases
  - d. Promoting health through vaccination
  
4. The term denoting the number of new cases of a disease in a specific population is:-
  - a. Prevalence
  - b. Incidence
  - c. Morbidity rate
  - d. Mortality rate
  
5. Herd immunity is:-
  - a. Complete immunity after one infection
  - b. Protection offered by isolation techniques
  - c. Immunity developed by animals
  - d. Community- level protection when high percentage of people are immune

6. Most common method of cholera transmission is: -
  - a. Contaminated food
  - b. Contaminated water
  - c. Airborne droplets
  - d. Direct skin contact
  
7. The hallmark sign of severe dehydration in cholera is: -
  - a. Sunken eyes
  - b. Hypertension
  - c. Fever and chills
  - d. Persistent nausea and vomiting
  
8. Poliomyelitis primarily affects the:-
  - a. Respiratory system
  - b. Digestive system
  - c. Central nervous system
  - d. Gastrointestinal system
  
9. A distinguishing symptom of amoebiasis from to dysentery is: -
  - a. High grade fever
  - b. Bloody diarrhea with mucus
  - c. Watery stool
  - d. No abdominal pain
  
10. The Hepatitis virus transmitted via fecal-oral route is : -
  - a. Hepatitis B
  - b. Hepatitis C
  - c. Hepatitis D
  - d. Hepatitis A
  
11. A key preventive measure for food poisoning is:-
  - a. Taking multivitamin daily
  - b. Cooking and storing food at appropriate temperatures
  - c. Avoid outdoor exercise
  - d. Consuming raw meat

12. Campylobacter infection is most commonly associated with consumption of: -
- Unwashed fruits
  - Raw or undercooked poultry
  - Canned food
  - Boiled vegetables
13. A Common clinical sign of fungal skin infections (dermatophytosis) is:-
- Vesicular rash on the trunk
  - Circular, itchy patches with central clearing
  - Ulcerating wounds
  - Black necrotic spots
14. The First line treatment for scabies is: -
- Oral antibiotics
  - Topical permethrin 5% cream
  - Antifungal powder
  - Hydrocortisone cream
15. The organism commonly responsible for tinea infection is:- -
- Escherichia coli
  - Pseudomonas aeruginosa
  - Trichophyton species
  - Neisseria gonorrhoea
16. The distinguishing feature of impetigo, a bacterial skin infection is:-
- White scaly plaques
  - Fluid-filled blisters only in mouth
  - Honey-colored crusts on the skin
  - Black eschar on the face
17. A classic symptom of measles in its prodromal phase is: -
- Koplik spots on the buccal mucosa
  - Bull's eye rash
  - White patches on tonsils
  - Blisters on palms

18. Which clinical feature best differentiates viral sore throat from a bacterial one is:-
- White exudates on tonsils
  - Absence of cough
  - Sudden high fever
  - Presence of runny nose and cough
19. The standard post-exposure prophylaxis for rabies includes: -
- Oral antibiotics
  - Rabies vaccine and immunoglobulin
  - Surgical wound debridement
  - Passive immunization only
20. A common occupational group at risk for anthrax is: -
- Teachers
  - Factory workers
  - Farmers and livestock handlers
  - Food servers

### **SECTION II: SHORT ANSWER QUESTIONS (30 MARKS)**

- Outline the five primary objectives of epidemiology (5Marks)
- State five types of carriers in disease transmission process (5Marks)
- Outline five pre-requisites for transmission of a communicable disease (5Marks)
- State five role of nurses in infectious disease surveillance and reporting (5Marks)
- Outline five preventive measure necessary for the control of filariasis in the community (5 Marks)
- Outline five role of the government on Kenya in prevention and control of communicable diseases (5 ,marks)

### **SECTION III: LONG ANSWER QUESTION (20MARKS).**

- Mrs. LX was admitted to the hospital with complain of pink eyes, purulent eye discharge, scaring in the eyelids, light sensitivity. On history taking, she admitted to have interacted with a patient who had trachoma
  - State the causal micro-organism for trachoma (1 Marks)
  - Describe the pathophysiology of Trachoma (6 Marks)
  - Describe seven community interventions that will help prevent the spread of trachoma (14 Marks)