



**AMREF INTERNATIONAL UNIVERSITY  
SCHOOL OF MEDICAL SCIENCES  
DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES  
KENYA REGISTERED COMMUNITY HEALTH NURSING  
END OF SEMESTER EXAMINATIONS  
AUGUST 2023**

**DNS 223: EPIDEMIOLOGY, DEMOGRAPHY AND COMMUNICABLE DISEASES  
DATE: 9<sup>th</sup> August 2023**

**TIME: 2 Hours                      Start: 2: 00 PM                      Finish: 4:00 PM**

**INSTRUCTIONS**

- 1. This exam will be marked out of 70 Marks**
- 2. This Exam has THREE Sections. Section A: Multiple Choice Questions, Section B: Short Answer Questions and Section C: Long Answer Question**
- 3. Answer ALL Questions in the Answer booklet provided**

**SECTION I: MULTIPLE CHOICE QUESTIONS (20 MARKS).**

1. Koplik's spots are:
  - a. Pinpoint petechiae noted on both legs
  - b. Whitish vesicles located across the chest
  - c. Petechiae spots that are reddish and pinpoint on the soft palate
  - d. Small, blue-white spots with a red base found on the buccal mucosa.
2. An anti-TB medication that causes red discoloration of body fluids is:
  - a. Rifampicin.
  - b. Isoniazid.
  - c. Pyrazinamide.
  - d. Ethambutol.
3. The treatment of choice for TB meningitis would be:
  - a. 2SRHZE/10RH
  - b. 2SRHZE/4RH.
  - c. 4RHZE/2RH
  - d. 2RHZE/10RH
4. A person in the population identified as having the signs and symptoms plus laboratory confirmation for a particular disease but has no clinical symptoms is:
  - a. Suspect.
  - b. Confirmed.
  - c. Probable.
  - d. carrier.
5. A patient is exhibiting an inability to flex the leg when the thigh is flexed anteriorly at the hip. The nurse suspects:
  - a. Meningitis
  - b. Spinal cord injury
  - c. Intracranial bleeding
  - d. Decreased cerebral blood flow

6. The occurrence in excess of new cases of a disease in a population clearly in excess of expectancy is referred to as:
- Incidence.
  - Prevalence.
  - Epidemic.
  - Endemic.
7. Direct methods of disease transmission include:
- Contact, vertical.
  - Vertical, airborne.
  - Droplet, fomite.
  - Fomite, vectors.
8. Contagious diseases include:
- HIV, TB
  - Malaria, Measles.
  - Scabies, HIV.
  - Trachoma, TB.
9. Diseases prevented by droplet precautions include:
- Epiglottitis, Measles
  - Influenza (flu), chicken pox
  - Meningitis, Mumps
  - Mycoplasma, varicella.
10. The black fly (*Simulium damnosum*) is a vector for:
- Brugiamalayi.
  - Onchocerca volvulus
  - Loa loa
  - Dracunculus medinensis
11. Copepods are a vector for:
- Brugiamalayi.
  - Onchocerca volvulus
  - Loa loa
  - Dracunculus medinensis

12. A diagnostic sample for *Schistosoma mansoni* is:

- a. Stool for ova
- b. Urine.
- c. Blood.
- d. Bone marrow

13. Indicate whether True or False:

- a. Pauci-bacillary (PB) leprosy is treated using two drugs.
- b. Multi-bacillary (MB) leprosy is the severe form of Leprosy.

14. Dermatophytes that affect the nails are called:

- a. *T. Capitis*
- b. *T. Unguium*
- c. *T. Cruris*
- d. *T. Corporis*

15. The infective form of *Dracunculus medinensis* is:

- a. L1 larvae.
- b. L3 larvae.
- c. L3 larvae.
- d. Eggs. L4 larvae.

16. The drug of choice for amoebiasis is:

- a. Cefuroxime
- b. Cotrimoxazole
- c. Sodium stibogluconate.
- d. Metronidazole.

17. Screening for TB is an example of:

- a. Primary prevention.
- b. Premordial prevention.
- c. Secondary prevention.
- d. Tertiary prevention.

18. Treatment of TB is an examples of:

- a. Primary prevention.
- b. Premordial prevention.
- c. Secondary prevention.
- d. Tertiary prevention

19. When reading a Tuberculin skin test (TST) in a child with HIV:

- a. An induration of >5 mm is suggestive of TB infection.
- b. An induration of >5 mm is suggestive of TB disease.
- c. An induration of induration of >10 mm is indeterminate.
- d. An induration of induration of >10 mm indicates TB infection

20. Neurotransmitters affected in the pathogenesis of tetanus include:

- a. Acetylcholine, Glutamate
- b. GABA, glycine.
- c. Glycine, Noreadrenalline.
- d. Dopamine, Serotonin

**SECTION II: SHORT ANSWER QUESTIONS**

**(30 MARKS).**

1. Outline eight (8) ways of malaria control in the community (8 Marks).
2. Describe the pathophysiology of tetanus (6 Marks).
3. State six (6) health messages you will share regarding TB control in the community (6 Marks)
4. Outline five (5) preventive measures for amoebic dysentery (5 Marks)
5. State five (5) way in which Hepatitis B is transmitted (5 Marks)

**SECTION III: LONG ANSWER QUESTIONS (20 MARKS).**

1. Cholera is an important public health threat in Kenya.
  - a. Describe the pathophysiology of cholera (5 Marks)
  - b. Describe the management of severe cholera in the first 24 hours (12 Marks).
  - c. State three (3) ways of preventing cholera (3 Marks)