



**AMREF INTERNATIONAL UNIVERSITY**  
**SCHOOL OF MEDICAL SCIENCES**  
**DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES**  
**KENYA REGISTERED COMMUNITY HEALTH NURSING**  
**End Semester April 2025 Examinations**

**COURSE CODE AND TITLE: DNS 119: Immunisation**

**DATE:11-4-2025**

**TIME: 2 HOURS**

**Start: 2:00PM**

**Finish: 4:00PM**

**INSTRUCTIONS**

- 1. This exam will be marked out of 70 Marks**
- 2. ALL Questions are compulsory.**
- 3. The Examination has Three Sections: Section I- Multiple Choice Questions, Section II: Short Answer Questions, Section III: 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 CHOICE QUESTIONS (20 MARKS )

1. One of the following is true concerning vaccines
  - a. They are given only to treat specific infections
  - b. They are used prophylactically
  - c. They are also known as antibodies
  - d. They completely prevent the occurrence of a disease
  
2. Antibodies:-
  - a. Can eliminate any form of antigen
  - b. Are also known as immunogens
  - c. Are produced by antigens
  - d. Neutralize antigens
  
3. An attenuated antigen means:-
  - a. Its more virulent
  - b. Can cause disease in certain circumstances
  - c. Lacks pathogenic capabilities
  - d. Has been lyophilized
  
4. Mr T has just recovered from covid-19. The type of immunity he now against covid-19 is:-
  - a. Natural active
  - b. Artificial active
  - c. Natural passive
  - d. Artificial passive
  
5. Innate immunity is mediate by:-
  - a. Infections
  - b. Antigen-antibody reactions
  - c. Phagocytes
  - d. Pathogens
  
6. The type of immunity that confers immediate protection is:-
  - a. Artificial passive
  - b. Natural active
  - c. Herd immunity
  - d. Artificial active

7. The following vaccine elicits very poor immune response:-
- Pneumococcal vaccine
  - Pneumococcal conjugate vaccine
  - Hepatitis B vaccine
  - Measles vaccine
8. Toxoid vaccines includes:-
- Oral polio and sabin vaccine
  - Acellular pertussis and diphtheria vaccine
  - Tetanus vaccine and diphtheria vaccine
  - Rotavirus and yellow fever vaccine
9. A vaccine constituent that helps increase the shelf-life of the vaccine is:-
- Preservatives
  - Antimicrobials
  - Antiseptics
  - Stabilizers
10. A baby who is brought to the health facility for the first time aged 15 days will eligible for:-
- BCG and oral Polio birth dose
  - BCG, pentavalent 1, Oral polio 1 and rotavirus vaccine
  - BCG vaccine only
  - Pentavalent 1, oral polio 1, PCV 10 and rotavirus vaccine
11. Master G was given his childhood vaccines at 6 weeks. He then was never seen in a health facility until he was four (4) months old. As the nurse in the facility, you will:-
- Admonish the mother for not bringing the her child for vaccines and start all over afresh
  - Provide health education on the importance of following vaccine schedules and give the vaccines scheduled for week 10
  - Provide health education on the importance of vaccine schedules and start the vaccination schedule afresh
  - Tell the mother the child has grown past the scheduled vaccines and advice on infection preventions

12. An example of a polysaccharide vaccine is:-
- Sabin vaccine
  - Salk vaccine
  - Haemophilus influenza type b vaccine
  - Pneumococcal conjugate vaccine
13. One of the following is not a vaccine preventable disease
- Typhoid
  - Cervical cancer
  - Cholera
  - Asthma
14. Which of the following BEST describes the term “cold chain” and how it is maintained?
- The cold chain is a method of maintaining appropriate cool temperature of the vaccines during transport.
  - The cold chain refers to the chain of people involved with transporting and handling vaccines.
  - The cold chain maintains appropriate cool temperatures while storing vaccines.
  - The cold chain refers to all equipment and procedures used to ensure that vaccines are protected from inappropriate temperatures and light, from the time of transport from the manufacturer to the time of administration.
15. Commonly available bivalent oral polio vaccine contains:-
- Serotypes 1 and 2
  - Serotypes 2 and 3
  - Serotypes 2 and 2
  - Serotypes 1 and 3
16. The first vaccine to be developed was against:-
- Smallpox
  - Chicken pox
  - Measles
  - Polio

17. The importance of herd immunity is:-
- It increases the chance of an outbreak, which allows for the population to formulate natural active immunity.
  - It protects those who are not immunized or for whom the vaccine did not work, in a community that has adequate coverage.
  - It lowers the cost of vaccines when buying in bulk.
  - It eliminates all vaccine preventable diseases.
18. A nurse reconstituted BCG vaccine vial containing 20 doses. She gave 10 children the vaccines who were under 12 months. However, the remaining dose was given to children over one year. How many children over one year were vaccinated if all the remaining doses were administered?
- 10
  - 5
  - 15
  - 1
19. The most heat sensitive vaccine is:-
- BCG
  - Oral polio
  - Pentavalent
  - Tetanus
20. The elderly should be vaccinated against:-
- Tetanus
  - Pertussis
  - Pneumonias
  - Rabies

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

1. State five (5) reasons why oral polio vaccine is preferred over inactivated polio vaccine in the fight against poliomyelitis ( 5 marks)
2. Outline five (5) reasons why immunization is important in a community ( 5 marks)
3. State five (5) reasons why uptake of childhood vaccines is still low in less developed and developing countries
4. Outline five (5) daily activities a nurse does to maintain vaccine cold chain at a health facility
5. State five (5) interventions for a managing anaphylaxis in a client following immunization session
6. Outline five (5) obligations of the unit of vaccine and immunization services in Kenya( 5 marks)

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

1. Tabulate the childhood vaccination schedule as per the division for vaccines and immunization in Kenya ( 20 marks)