



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

**DNS 119: Immunisation**

**DATE: TUESDAY 2<sup>ND</sup> DECEMBER 2025**

**TIME: 2 HOURS**

**Start: 1400 HOURS**

**Finish: 1600 HOURS**

**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. Antibodies: -
  - A. Are produced by antigen
  - B. Neutralize the antigens
  - C. Are also known as immunogens
  - D. Can eliminate any form of antigen
  
2. An attenuated antigen means: -
  - A. It is more virulent
  - B. It can cause a disease in human
  - C. It lacks pathogenic capabilities
  - D. It has been freeze-dried
  
3. A vaccine is:-
  - A. A medication that cures diseases
  - B. A biological preparation that provides active acquired immunity
  - C. A device used for injection
  - D. A type of antibiotic
  
4. The vaccine is used to protect against Haemophilus influenzae Type B (Hib) disease is:-
  - A. BCG vaccine
  - B. Pentavalent vaccine
  - C. Pneumococcal conjugate vaccine
  - D. Rotavirus vaccine
  
5. The purpose of the cold chain system in immunization is to:-
  - A. Store vaccines at room temperature
  - B. Distribute vaccines to health facilities
  - C. Maintain the potency of vaccines
  - D. Monitor vaccine expiration dates
  
6. According to the WHO Multi-Dose Vial Policy (MDVP), an opened multi-dose vaccine vial should be:-
  - A. Discarded immediately
  - B. Stored in a refrigerator and used within a specified period
  - C. Used for a different patient
  - D. Frozen for later use

7. An Adverse Event Following Immunization (AEFI) is:-
- A. A vaccine reaction that is mild and temporary
  - B. A vaccine reaction that is severe and requires medical attention
  - C. A vaccine reaction that is unrelated to the vaccine
  - D. A vaccine reaction that occurs after a long period
8. The vaccine is administered at birth in Kenya is:-
- A. BCG vaccine
  - B. Polio vaccine
  - C. DTP vaccine
  - D. Hepatitis B vaccine
9. The purpose of forecasting vaccine needs is:-
- A. To ensure adequate vaccine supply
  - B. To monitor vaccine expiration dates
  - C. To track vaccine distribution
  - D. To evaluate vaccine effectiveness
10. The recommended storage temperature for vaccines is:-
- A. Room temperature
  - B. 2-8°C
  - C. -2 to -8°C
  - D. -2 to 8°C
11. The vaccine conferring protection against tuberculosis is:-
- A. BCG vaccine
  - B. DTP vaccine
  - C. Polio vaccine
  - D. MMR vaccine
12. The following is a live attenuated vaccine:-
- A. DPT vaccine
  - B. BCG vaccine
  - C. Hepatitis B vaccine
  - D. HPV vaccine

13. The type of immunity providing immediate protection against infections is:-
- A. Active immunity
  - B. Passive immunity
  - C. Herd immunity
  - D. Acquired immunity
14. The primary purpose of vaccine diluents is to:-
- A. To enhance vaccine potency
  - B. To reconstitute lyophilized vaccines
  - C. To reduce vaccine side effects
  - D. To increase vaccine shelf life
15. The primary goal of safe injection practices is to
- A. Reduce vaccine waste
  - B. Prevent needle-stick injuries
  - C. Prevent the transmission of infectious diseases
  - D. Increase immunization coverage
16. Immunization waste is disposed of through:-
- A. Disposal in a regular waste bin
  - B. Autoclaving before disposal
  - C. Burying in a landfill
  - D. Recycling
17. The purpose of monitoring immunization coverage is to:-
- A. Track vaccine distribution
  - B. Evaluate vaccine effectiveness
  - C. Identify areas with low immunization coverage
  - D. Forecast vaccine needs
18. Vaccine wastage means:-
- A. Vaccine doses that are administered incorrectly
  - B. Vaccine doses that are expired or spoiled
  - C. Vaccine doses that are not administered
  - D. All of the above

19. Forecasting vaccine needs important to:-
- A. Ensure adequate vaccine supply
  - B. Reduce vaccine waste
  - C. Increase immunization coverage
  - D. Monitor vaccine effectiveness
20. The type of immunity acquired when one recovers from a disease such as covid-19 is: -
- A. Natural active
  - B. Natural passive
  - C. Artificial active
  - D. Artificial passive

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

1. Explain two types of immunity (5 Marks)
2. Describe cold chain management. (5 Marks)
3. Explain the concept of vaccine wastage and how it can be minimized. (5 Marks)
4. State five challenges in immunization programme. (5 Marks)
5. State five tools used in cold chain and management of vaccine. [5 Marks]
6. Explain steps taken in Adverse Reaction Following Immunization (5 Marks)

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

1. Discuss the stages of vaccine vial monitor (VVM) and their significance with use of a diagram (12 Marks)
2. Discuss the Immunization safety and precautions used during immunization sessions. (8 Marks)