



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
END OF SEMESTER SEPTEMBER- DECEMBER 2022 EXAMINATIONS**

DNS 119 IMMUNISATION

DATE: 9TH DECEMBER 2022

Duration: 2 HOURS

Start: 11 A.M.

Finish: 1:00 P.M.

INSTRUCTIONS

1. This exam is out of 70 marks
2. This Examination comprises THREE Sections. Section A: Multiple Choice Questions (20 marks) Section B: Short Answer Questions (30 marks) and Section B: Long Answer Questions (20 marks)
3. Answer ALL Questions.
4. Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

SECTION A: MULTIPLE CHOICE QUESTIONS

(20 MARKS)

1. The vaccine that may be administered subcutaneously is: -
 - A. BCG vaccine
 - B. IPV
 - C. OPV
 - D. Measles vaccine

2. The following is a combined vaccine: -
 - A. Tetanus toxoid vaccine
 - B. MMR vaccine
 - C. Measles vaccine
 - D. Pneumococcal conjugate vaccine

3. The process of introducing a weakened pathogen into a human body is: -
 - A. Immunization
 - B. Vaccination
 - C. Attenuation
 - D. Injection

4. The type of vaccine that uses attenuated (weakened) form of the virus is: -
 - A. Live vaccine
 - B. Killed vaccine
 - C. Inactivated vaccine
 - D. Lyophilized vaccines

5. The following is not a vaccine preventable disease: -
 - A. Cervical cancer
 - B. Asthma
 - C. Hepatitis B
 - D. Rabies

6. An example of a polysaccharide vaccine is: -
 - A. Sabin and Salk vaccines
 - B. Hib vaccine
 - C. Hepatitis A vaccine
 - D. Pneumococcal conjugate vaccine

7. A baby who presents to the health facility for the first time at 13 days is given: -
 - A. BCG and hepatitis B vaccine
 - B. Oral polio vaccine 1 and pentavalent vaccine 1
 - C. BCG and OPV1
 - D. BCG and OPV 0

8. Appropriate action for a preterm born at 34 weeks gestation is: -
 - A. Delay vaccination by 3 weeks to ensure the neonate catches up with term age
 - B. Delay immunization until the neonate is 3.5kgs
 - C. Immunize according to approved childhood vaccination schedule
 - D. Ensure the neonate is admitted to gain weight then only immunize at discharge

9. The importance of maintaining adequate “herd immunity” is: -
- A. It increases the chance of an outbreak, which allows for the population to formulate natural active immunity.
 - B. It protects those who are not immunized or for whom the vaccine did not work, in a community that has adequate coverage.
 - C. It lowers the cost of vaccines when buying in bulk.
 - D. It eliminates all vaccine preventable diseases.
10. The following BEST describes the term “cold chain” and how it is maintained: -
- A. The cold chain is a method of maintaining appropriate cool temperature of the vaccines during transport.
 - B. The cold chain refers to the chain of people involved with transporting and handling vaccines.
 - C. The cold chain maintains appropriate cool temperatures while storing vaccines.
 - D. 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.
11. The minimum interval between pentavalent vaccines in a schedule is: -
- A. 6 weeks
 - B. 4 weeks
 - C. 16 weeks
 - D. 2 months
12. Contraindications to giving live vaccines include: -
- A. Allergy to vaccine component including eggs, preterm delivery, small for gestational age, and cardiac anomaly.
 - B. Allergy to vaccine component including eggs, severely immunocompromised, and concurrent minor illness (i.e. cold, cough).
 - C. Allergy to vaccine component, severely immunocompromised, pregnancy, breastfeeding.
 - D. Allergy to vaccine component, severely immunocompromised, pregnancy.
13. A monovalent vaccine is: -
- A. A vaccine given only once to induce immunity
 - B. A vaccine that contains a single purified strain of antigen
 - C. A vaccine that must be given several times, as a single dose
 - D. A vaccine that cannot be combined with other vaccines
14. The most heat sensitive vaccine is: -
- A. BCG vaccine
 - B. Oral polio vaccine
 - C. Measles vaccine
 - D. PCV 10 vaccine
15. Commonly available bivalent oral polio vaccine contains: -
- A. Serotypes 1 and 3
 - B. Serotypes 2 and 3
 - C. serotypes 1 and 2
 - D. Serotypes 1 and inactivate polio vaccine

16. The best action to take after a baby vomits oral vaccine within 5 minutes after administration is: -
- A. Re-administer during the next visit
 - B. Repeat after 30 minutes
 - C. Give the baby inactivated polio vaccine instead
 - D. Repeat immediately and pinch the baby's nose to ensure the drug is swallowed
17. Concerning measles vaccine: -
- A. It is given at 6 months in case of measles outbreak and in HIV exposed babies
 - B. It is contraindicated in HIV exposed children
 - C. It is an inactivated vaccine
 - D. When administering, wipe the skin with an antiseptic
18. Regarding yellow fever vaccine: -
- A. A single dose is enough for life protection
 - B. In Kenya, is given in all the 47 counties
 - C. Is safe in pregnancy
 - D. Booster dose is needed every 10 years
19. Regarding Rabies vaccine: -
- A. Must be given to anyone who has a pet at home
 - B. Five doses are given and booster a year after
 - C. A single dose is enough for life immunity
 - D. Children always get half the adult dose
20. Toxoid vaccines are given against the following: -
- A. Tetanus
 - B. Diphtheria
 - C. Chickenpox
 - D. Both A & B above

SECTION B: SHORT ANSWER QUESTIONS (30 MARKS)

1. State four (4) differences between active and natural immunity (4 Marks)
2. Explain three (3) adverse effects of vaccines (6 Marks)
3. State five (5) immunization related interventions for a child who is brought to the hospital for the first time at 3 months after birth (5 Marks)
4. Outline five (5) key points to put in place when conducting immunization services as nurse (5 Marks)
5. State five (5) ways of preventing vaccine drop-out rates in immunization programs (5 Marks)
6. Outline five (5) causes of vaccine wastages in immunization programs (5 Marks)

SECTION C: LONG ANSWER QUESTION (20 MARKS)

1. Vaccines need to be maintained within an optimum temperature between +2 to +8 °C at the facility level.
 - a. State five (5) tools that a nurse uses to monitor and maintain these temperature ranges (5 marks)
 - b. Outline five (5) challenges a nurse may face while trying to maintain the cold chain of vaccines in the health facility (5 marks)
 - c. Describe the KEPI schedule for a 9 month old infant (10 marks)