



AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
MAY-AUGUST 2026 EXAMINATION

COURSE CODE AND TITLE: BSM 325: Public Health in Midwifery

DATE: 4th August 2026

Duration: 2 Hours

Start: 9am

Finish: 11am

INSTRUCTIONS

1. This exam is out of 70 marks
2. This Examination comprises THREE Sections. Section I: Multiple Choice Questions (20 marks) Section II: Short Answer Questions (30 marks) and Section III: 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 I: MULTIPLE ANSWER QUESTION (20 MARKS)

1. During vaccine storage, the nurse notices that the inner square of the Vaccine Vial Monitor (VVM) is darker than the outer circle. The nurse should:
 - a) Use the vaccine immediately
 - b) Shake the vaccine before use
 - c) Return the vaccine to freezer compartment
 - d) Discard the vaccine
2. The following statement BEST describes a missed opportunity for immunization;
 - a) Failure of a caregiver to bring a child for vaccination
 - b) Failure to vaccinate an eligible child during a health facility visit
 - c) Administration of an expired vaccine
 - d) Delay in national vaccine supply
3. A healthcare worker receives Hepatitis B vaccination before beginning clinical duties. This is an example of:
 - a) Secondary prevention
 - b) Tertiary prevention
 - c) Rehabilitation
 - d) Primary prevention
4. A 9-month-old child presents for routine immunization and is due for the Measles-Rubella (MR) vaccine. The appropriate route of administration is;
 - a) Oral
 - b) Intramuscular
 - c) Intradermal
 - d) Subcutaneous
5. Influenza is an infectious disease caused by:
 - a) DNA viruses of the family Herpesviridae
 - b) RNA viruses of the family Orthomyxoviridae
 - c) RNA viruses of the family Coronaviridae
 - d) DNA viruses of the family Adenoviridae
6. West Nile Virus (WNV) is best classified as a:
 - a) Water-borne bacterial disease
 - b) Mosquito-borne zoonotic arboviral disease
 - c) Food-borne parasitic disease
 - d) Airborne viral disease
7. The following disease is considered a re-emerging infectious disease;
 - a) COVID-19
 - b) Mpox
 - c) Tuberculosis
 - d) Ebola Virus Disease
8. The following factor is most likely to contribute to the re-emergence of communicable diseases:
 - a) High vaccination coverage
 - b) Antimicrobial resistance
 - c) Improved environmental sanitation
 - d) Effective disease surveillance

9. Vibrations and radiations are classified under:
- Chemical hazards
 - Ergonomic hazards
 - Physical hazards
 - Biological hazards
10. Dyspnoea on exertion, pulmonary fibrosis, impaired total lung capacity, and eventual cardiac or respiratory failure are characteristic manifestations of:
- Pneumoconiosis
 - Pulmonary tuberculosis
 - Silicosis
 - Asbestosis
11. The following demonstrates the correct ergonomic technique when lifting a heavy object from the floor:
- Position the feet apart, bend at the waist, and lift while keeping the load close to the body.
 - Keep the back straight, hold the load close to the body, and rotate the trunk while lifting.
 - Bend the knees, keep the back straight, and lift close to the body.
 - Squat close to the load, keep the knees bent, and lift the object quickly.
12. The concept of accessibility in Primary Health Care refers to all the following EXCEPT;
- Geographical location
 - Affordable Cost
 - Acceptable technology
 - Culturally acceptable
13. The following are pillars of Primary Health Care **EXCEPT**;
- Equity
 - Appropriate technology
 - Full participation of community
 - Multi sectoral Collaboration
14. The characteristics of Primary Health Care include;
- Using the most recent infrastructure in provision of health services
 - Inclusion of the community during service provision
 - Ensuring services provided satisfy the health needs of the people
 - Ensuring the family planning commodities provided are safe
15. The following Sustainable Development Goal ensure sustainable provision of water and sanitation for all;
- SDG 5
 - SDG 6
 - SDG 7
 - SDG 8
16. The level of prevention that aims at early detection and prompt treatment of occupational diseases is:
- Primordial prevention
 - Primary prevention
 - Secondary prevention

- d) Tertiary prevention
17. A community health nurse advocates for the “5 Rs” of waste management. The following option correctly represents these principles;
- Reduce, Rebuild, Replace, Recover, Remove
 - Refuse, Reduce, Reuse, Recycle, Recover
 - Recycle, Return, Refuse, Repair, Remove
 - Reuse, Repair, Reduce, Restore, Rebuild
18. The following vaccine is MOST sensitive to freezing;
- OPV
 - Measles-Rubella vaccine
 - Pentavalent vaccine
 - BCG vaccine
19. In occupational health, the hierarchy of hazard control places the following intervention at the HIGHEST level of effectiveness;
- Use of personal protective equipment
 - Administrative controls
 - Elimination of the hazard
 - Worker training
20. The following is considered a biological vector;
- Housefly
 - Cockroach
 - Anopheles mosquito
 - Rat

SECTION II: SHORT ANSWER QUESTIONS: 30 MARKS

- Describe three (3) interventions that can be adopted in the community to improve immunization uptake. (6 Marks)
- A health facility serving children under one year reported that during the previous year, 1,450 children received BCG vaccine, 1,400 received OPV 1, 1,380 received Pentavalent 1, 1,150 received Pentavalent 3, and 1,020 received Measles-Rubella 1 (MR1) vaccine.
 - Calculate the immunization drop-out rate. Show your working. (4 marks)
 - Interpret the findings and comment on the performance of the immunization programme in the facility. (2 marks)
- State six (6) methods used in the prevention and control of water pollution. (6 Marks)
- Using examples, analyze any three categories of occupational hazards and explain their effects on workers' health. (6 Marks)
- Outline six (6) essential elements of Primary Health Care as recommended in the Alma-Ata Declaration. (6 Marks)

SECTION III: LONG ANSWER QUESTIONS: 20 MARKS

A level 5 hospital receives three patients presenting with fever, vomiting, diarrhea, and hemorrhagic manifestations after attending a traditional burial ceremony. Laboratory investigations confirm Ebola Virus Disease.

a) Describe the Objectives of the Ebola Virus Outbreak Investigation (8 Marks)

b) Discuss the steps that the outbreak response team should implement at both health facility and community levels to investigate the outbreak. (12 Marks)

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