

**UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF MIDWIFERY SCIENCE
FINAL EXAMINATION: DECEMBER 2014**

COURSE TITLE: COMMUNITY-BASED MIDWIFERY

COURSE CODE: MID 443

TIME ALLOCATED: 2 HOURS

MARKS ALLOCATED: 75

INSTRUCTIONS:

- 1. PLEASE ANSWER ALL QUESTIONS**
- 2. THERE ARE TWO SECTIONS IN THIS PAPER:**
 - i) SECTION A: MULTIPLE CHOICE [25 MARKS]**
 - ii) SECTION B: SHORT ANSWERS [50 MARKS]**
- 3. USE THE PROVIDED ANSWER SHEET FOR ALL YOUR ANSWERS**
- 4. FOR QUESTION 4 (SECTION B), CALCULATORS MAY BE USED**
- 5. CHECK THAT YOUR QUESTION PAPER HAS 9 PRINTED PAGES**
- 6. DO NOT OPEN THE QUESTION PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR**

SECTION 1A: Multiple Choice Questions

For each of the following questions, write clearly the letter that corresponds with the most appropriate answer e.g. 1. D

1. In epidemiology, which one of the following terms describes the total number of new HIV infections among pregnant women attending ANC during a particular period of time?
 - A. Incidence
 - B. Pandemic
 - C. Prevalence
 - D. Epidemic

2. In which of the following STIs will a client NOT have a vaginal discharge?
 - A. Gonorrhoea
 - B. Candida
 - C. Trichomonas
 - D. Syphilis

3. Which one of the following approaches is NOT ideal for the management of STIs in HIV infection?
 - A. Syndromic
 - B. Secondary prophylaxis
 - C. Diagnostic
 - D. None of the above

4. A midwifery student is giving health education to a group of *Qomintaba* community police. One of the participants asks the student if condoms are really safe and effective. Which of the following is/are the appropriate response(s) expected from the student?
 - A. That condoms are effective but errors are caused by users by either 'breaking condoms' or using them incorrectly e.g. smearing them with vaseline
 - B. That all condoms are 100% effective, either approved by the Food and Drug Administration (FDA) or not
 - C. That studies investigating the effectiveness of condoms were carried out among discordant couples, and the HIV negative were found not infected even though they reported incorrect condom use
 - D. All of the above

5. Which one of the following abbreviated MDGs are related to maternal neonatal and child health?
- A. Goals: 1, 3, 5, 6
 - B. Goals: 2, 3, 5, 6
 - C. Goals: 3, 4, 5, 6
 - D. Goals: 2, 4, 6, 8
6. Which one of the following is NOT a form of child abuse?
- A. Physical abuse
 - B. Neglect
 - C. Accidental injury or poisoning of the child
 - D. None of the above
7. Which one of the following is the LEAST effective contraceptive method?
- A. An injection
 - B. A combined contraceptive pill
 - C. An intrauterine contraceptive device
 - D. Spermicides
8. Which of the following intrapartum interventions to reduce the risk of HIV transmission are correct?
- A. Avoiding prolonged rupture of membranes to reduce infection risk
 - B. Performing episiotomies to enhance the speed of birth and provide less exposure time for the infant
 - C. Vigorously suctioning the infant's mouth and pharynx immediately after birth to reduce infant exposure to infected body fluids
 - D. All of the above
9. Which one of the following is the current estimate of the proportion of HIV positive pregnant women attending antenatal care in Swaziland?
- A. 2.66%
 - B. 3.9%
 - C. 26%
 - D. 41.1%
10. Which one of the following is NOT a criterion for establishing causality in epidemiological studies?
- A. A weak association between the exposure and outcome
 - B. Presence of a physiological mechanism (explained by science)
 - C. The exposure must precede outcome
 - D. Repeated findings from different study designs, populations

11. A HIV positive client comes to the STI clinic complaining about the presence of an ulcer around the genitals. Which one of the following statements refers to the difference between a chancroid ulcer and a syphilitic ulcer?
- A. A syphilitic ulcer will be soft and painful with irregular shaped red margins, while a chancroid is painless with firm borders that feel like the tip of the nose
 - B. The client will report that he has had either of these before and therefore he is sure that it is not an STI
 - C. A chancroid ulcer will be soft and painful with irregular shaped red margins, while a syphilitic ulcer is painless with firm borders that feel like the tip of the nose
 - D. There will be no differences by clinical inspection, instead the health worker must order blood tests to be done in order to tell if it is a chancroid or syphilitic ulcer
12. When drafting a public health policy, which one of the following is a characteristic of the strategic and action plan?
- A. Non-specific
 - B. Measurable
 - C. Unachievable
 - D. None of the above
13. Which one of the following does NOT refer to the role of the community-based midwife as a primary health care nurse?
- A. Health promotion and illness prevention
 - B. Antenatal and postnatal care
 - C. Treatment and care of people with minor ailments
 - D. None of the above
14. Which of the following describe(s) the gestational age at which all pregnant women who test HIV positive but are not eligible for HAART must be offered AZT as a prophylaxis?
- A. 14 weeks of their pregnancy
 - B. 28 weeks of their pregnancy
 - C. 10 weeks of their pregnancy
 - D. At the beginning of labour
15. Which of the following types of prevention is a student midwife practising when he/she assists the senior midwife working at FLAS to perform a Pap-smear?
- A. Primary prevention
 - B. Secondary prevention
 - C. Tertiary prevention
 - D. Any of the above

16. In epidemiology, which one of the following study designs can NOT establish causality?
- A. Case-control study
 - B. Experimental studies
 - C. Prospective cohort study
 - D. Retrospective cohort study
17. Which one of the following figures is the current estimate of the number of women who die due to puerperal causes in Swaziland?
- A. 589 deaths per 100 000 women
 - B. 120 deaths per 1000 live births
 - C. 589 deaths per 100 000 live births
 - D. 120 deaths per 100 000 women
18. Which of the following is/are the correct criterion or criteria for ART eligibility in Swaziland?
- A. Pregnant women with CD4 count ≤ 350 cells/mm³, regardless of WHO clinical stage
 - B. WHO Clinical stage 3 or 4, regardless of the woman's CD4 count
 - C. All children less than 2 years who are HIV positive (no need to wait for CD4 count or clinical staging)
 - D. All of the above
19. Which of the following statements is/are NOT true about the treatment of STIs among HIV positive individuals?
- A. Appropriate treatment of STIs at the first contact is an important public health measure.
 - B. Sexual partner(s) should be notified and treated, and patients should be advised against sexual intercourse until both the patient and the partner(s) are treated.
 - C. In the case of adolescent patients, encourage over the counter treatment because they may be afraid to come to the STI clinic in future, due to peer influence and self-esteem issues
 - D. All of the above
20. Under primary health care principles, which one of the following distances does WHO recommend clients should travel when going to the nearest health facility?
- A. 80 km
 - B. 10 km
 - C. 8 km
 - D. 1 km

21. A community-based midwife wants to measure the risk of developing hearing problems among women who live around the recently opened King Mswati III International Airport. Therefore, on the day the airport is opened, she enrolls all residents aged 18 years and above who live within the airport vicinity and intends to follow them for the next 10 years. Which one of the following epidemiological study designs would you advise her to employ in order to answer her research question?
- A. Cross-sectional study
 - B. Retrospective cohort study
 - C. Case-control study
 - D. Prospective cohort study
22. Which one of the following HIV tests is ideal to check for HIV in a 2 weeks old infant born to a HIV positive mother?
- A. ELISA Rapid test
 - B. Westen blot test
 - C. Rapid antibody test
 - D. DNA-PCR
23. Which of the following statement(s) define(s) 'rates' the best?
- A. Are measures of frequency of a health event
 - B. Are defined populations in a specified time
 - C. All are proportions but not all are ratios
 - D. All of the above
24. Which of the following factors is/are associated with a higher risk of mother-to-child transmission (MTCT) of HIV?
- A. Higher viral load
 - B. Higher levels of immunity
 - C. Less advanced clinical disease
 - D. Both A and C
25. Which one of the following statements is NOT true about prevalence?
- A. Is an estimate of the risk of developing the disease
 - B. A disease with a long course will have a higher prevalence than a rapidly fatal disease that has the same rate of new cases
 - C. Prevalence includes both new and old cases in the numerator
 - D. None of the above

[Total: 25 marks]

SECTION B: SHORT ANSWERS

Question 1

- a) As a practising midwife, you are expected to know the **current** PMTCT country guidelines and recommend regimes of treatment. Demonstrate that by completing the following table appropriately: [1/2 a mark each]

	Ante-partum regimen	Intra-partum regimen	Post-partum regimen	Infant regimen
Pregnant women eligible for HAART	i)	ii)	iii)	iv)
Pregnant women not yet eligible for HAART	v)	vi)	vii)	x)
HIV+ women seen in labour who never received ARV prophylaxis	N/A	viii)	ix)	

- b) Define the eligibility criteria for ART and ARV prophylaxis for mothers and their infants in Swaziland, applying your knowledge of the current PMCT Guidelines. [3]
- c) Community-based midwifery is based on the principles of primary healthcare. Explain the concept of "Primary health care (PHC)?" [2]
- d) List two examples of activities of the community-based midwife under primary of prevention of illnesses for a pregnant woman [2]
- e) Describe signs that can inform a HIV positive mother practising exclusive breastfeeding that her baby is NOT suckling effectively [6]

[Total: 18 marks]

Question 3

A client comes to an urban clinic complaining about the presence of a painful ulcer around the genitals. You are the attending midwife that day.

- a) Motivate which STI-treatment-approach would be suitable to be used in that situation? [2]
- b) State any three (3) advantages of using the approach mentioned in a) above [3]
- c) Based on the given information above, which STI is the client most likely to be suffering from? [1]
- d) If this client develops another STI with a discharge on top of the current one, explain why she will be at an increased risk of acquiring HIV infection [3]
- e) Explain measures this client should take to prevent contracting a STI in future [5]
- f) Explain the difference between active and passive STI surveillance? [2]

[Total: 16 marks]

Question 4

You are a midwife working in the strategic unit (M&E) department of the Ministry of Health. You are asked to compile the end of year report containing key indicators for the country's MNCH program. To carry-out the said task, you have to study the data below and answer the questions that follow.

DATA FOR A DEVELOPING COUNTRY X in 2010

Population	1 500 000
HIV positive adults	75 000
Number of women 15-44 years	170 000
Live births	60 000
Deaths for children <5 years due to AIDS	2 000
Deaths for infants (>7days) due to diarrhoea	500
Fresh still births	88
Children under age 5	80 000
HIV sero-conversions among children in 2010	1 500
Deaths for women related to giving birth	60
HIV positive adults in December 2009	50 000
Abortions (>21 weeks gestation)	900
Deaths for infants (>28 days)	1 000
Number of women 15-49 years	200 000

Calculate the:

- a) under 5 mortality rate in 2010 [3]
- b) HIV incidence rate for county X in 2010 [3]
- c) peri-natal mortality rate in 2010? [3]
- d) general fertility rate for this country in 2010 [4]
- e) HIV prevalence for country X in 2010 [3]

[Total: 16 marks]