

**UNIVERSITY OF SWAZILAND  
FACULTY OF HEALTH SCIENCES  
DEPARTMENT OF GENERAL NURSING**

**FINAL EXAMINATION, DECEMBER 2017**

**COURSE TITLE: HIV PREVENTION, INFECTION AND MANAGEMENT  
OF AIDS**

**COURSE CODE: GNS/HSC 113**

**TIME ALLOCATED: TWO (2) HOURS**

**MARKS ALLOCATED: 75**

- **THERE ARE 14 PRINTED PAGES EXCLUDING COVER PAGE**

**INSTRUCTION:**

- **ANSWER ALL QUESTIONS ON THE SEPARATE ANSWER SHEET PROVIDED**
- **CIRCLE THE MOST CORRECT RESPONSE**

**DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO BY  
THE INVIGILATOR**

**Instructions:** For each question, choose the most appropriate response and **circle** your answer in the given answer sheet, e.g. 76 B. Each correct response carries 1 mark.

1. Dan is a second year University of Swaziland student who has made a decision not to get married because of his religious commitment. Dan's decision to abstain from sexual activity is referred to as \_\_\_\_\_
  - A. Asexual
  - B. Celibacy
  - C. Safer sex
  - D. Confused gender identity
  
2. Tony has been living with HIV for 12 months. His doctor advised him to have a viral load test. Which of the following indicates what the viral load test measures?
  - A. The amount of antibodies in an individual infected with HIV
  - B. The amount of viral particles in an individual living with HIV
  - C. The amount of white blood cells in an individual infected with HIV
  - D. The number of new infections in a population.
  
3. Which of the following signs and symptoms are characteristic of primary syphilis?
  - A. Gummas of the heart
  - B. A painless sore
  - C. Rash on the palms of the hand
  - D. Bone softening
  
4. Which of the following sexually transmitted infections present with sores?
  - A. Gonorrhoea
  - B. Chancroid
  - C. Candidiasis
  - D. Genital warts
  
5. Which of the following is a characteristic of people with a positive self concept?
  - A. They are unable to form and maintain relationships
  - B. They are likely to be unsuccessful in life
  - C. They can never be infected with HIV because they value themselves
  - D. They are better able to adapt to changes that occur in their lives

6. Women face a greater risk for HIV infection. Which of the following is NOT a biological risk factor associated with HIV transmission among women?
- A. Thin vaginal lining during menstruation
  - B. Delicate vaginal tissues tear during sexual intercourse
  - C. Poor safer sex negotiating skills
  - D. Immature cervix in women younger than 18years
7. Which of the following explains why people with a negative self concept will engage in risky sexual behaviour?
- A. They tend to have multiple concurrent sexual partners because everyone likes them
  - B. They are better able to form relationships
  - C. They devalue themselves
  - D. They are mostly poor thus need money to support themselves
8. Which of the following is correct about opportunistic infections in Swaziland?
- A. Meningitis is the most common opportunistic infection
  - B. They have no cure
  - C. Their development depends on the level of the CD<sub>4</sub> cell count
  - D. They are common in children
9. Which of the following sexual behaviours is associated with a high risk of HIV transmission?
- A. Masochism
  - B. Vuyourism
  - C. Heterosexual
  - D. Sadism
10. What advice would you give to a woman who has vaginal candidiasis on prevention of future episodes?
- A. Bath less frequently
  - B. Ensure thorough cleaning of the vagina by using jik
  - C. Wear cotton underwear
  - D. Use perfumed soap to keep the area smelling fresh

11. Recent research in Swaziland has revealed that the number of new HIV cases has gradually reduced. Which of the following summarizes these findings?
- A. The prevalence of HIV is gradually reducing
  - B. The incidence of HIV is reducing
  - C. HIV is now an endemic in Swaziland
  - D. The viral load among Swazi people is gradually reducing

**Scenario**

Ntombizile, 23 year-old, is a 3<sup>rd</sup> year student of the University of Swaziland. She comes from a disadvantaged background. She uses her allowance to support her younger siblings. She has an older boyfriend, aged 33 years, who supports her financially. In the last three months Ntombizile has been treated for a number of sexually transmitted infections (STIs) and mentions that she and her partner only use the condom towards ejaculation to prevent pregnancy. The following questions (23 & 24) relate to this scenario.

12. Which of the following drivers for HIV does Ntombizile present with?
- i. Gender inequality
  - ii. Intergenerational sex
  - iii. Inconsistent condom use
  - iv. Sexually transmitted infections
- A. i only
  - B. i & iv
  - C. ii, & iii, iv
  - D. i, ii, iii & iv
13. Which of the following is the likely mode in which Ntombizile can acquire HIV infection?
- A. Mother-to-child transmission
  - B. Needle prick during treatment for STIs
  - C. Inconsistent condom use
  - D. Heterosexual
14. Which part of the immune system is directly destroyed by HIV?
- A. The red blood cells
  - B. The non-specific immunity
  - C. The lymphocytes
  - D. A and C

15. Which of the following is correct regarding the pathophysiology of HIV?
- A. GP 120 and GP41 are the first ones to enter the CD 4
  - B. Only the viral core enters the CD 4
  - C. Reverse transcription occurs inside the CD 4 cell nucleus
  - D. Integration occurs outside the CD4 cell nucleus
16. The main enzymes that participate in the pathophysiology of HIV include
- 
- A. GP 120 and GP 41
  - B. P17 and P24
  - C. RNA and DNA
  - D. Integrase and protease
17. Isaac has a CD4 cell of 1200cells/ml. Based on your knowledge of the pathophysiology of HIV, which of the following statement describe Isaac?
- A. He is likely to be in stage 4 of HIV progression.
  - B. He is likely to have TB of other parts of the body (extrapulmonary TB)
  - C. He may be HIV negative
  - D. A and B
18. Which of the following is correct?
- A. HIV is an opportunistic infection
  - B. HIV is an STI
  - C. All STIs are opportunistic infection and vice versa
  - D. An STI cannot be an opportunistic infection

**Scenario:**

You have a very sick uncle Mr Mathobela, your mother's only remaining sibling. He lives alone about 15 kilometers away from your homestead. Your mother decides to bring him to live with your family for just four weeks or until he gets better. He will then go back to his home. During his presence in your family you realize that he is on TB treatment and on antiretroviral therapy. From then on you decide to educate your mother on how to handle him. Questions 19-20 relate to the above scenario:

19. Your mother must treat people of known HIV status according to the universal precautions.
- A. Yes
  - B. No
  - C. Maybe
  - D. Sometimes
20. Your mother's first line of defense from infections is
- A. Using household disinfections
  - B. Washing hands
  - C. Using gloves always
  - D. Soaking used items with jik
21. Which of the following statements is **INCORRECT** in the case where both partners are HIV positive?
- A. It is necessary to use condoms if both partners are HIV positive
  - B. New infections increase viral load resulting in decreased CD4 cells affecting further weakening of immune system
  - C. Re - infection can also cause one to contract other sexually transmitted infections
  - D. HIV becomes less dangerous if partners living with HIV trust each other
22. \_\_\_\_\_ consists of taking a combination of antiretroviral medications for about a month depending on the type of exposure.
- A. Prevention of Mother-to-child transmission (PMTCT)
  - B. Post Exposure Prophylaxis (PEP)
  - C. Highly Active Anti-Retroviral Therapy (HAART)
  - D. Treatment as prevention
23. The following practices are high risk for getting HIV infection; EXCEPT:
- A. Swallowing semen
  - B. Using personal sex toys
  - C. Vaginal or anal sex using lubricant (vaseline)
  - D. Contact with menstrual blood
24. The most infectious period(s) in an individual with HIV infection is (are)
- A. Chronic period
  - B. Window period
  - C. Primary infection phase

D. B and C

25. The following are maternal factors that increase the risk of mother to child transmission; EXCEPT:
- A. Low viral load
  - B. Low immunity
  - C. Poor nutrition
  - D. Multiple sexual partners
26. Pregnant women infected with HIV\_\_\_\_\_.
- (i) Can reduce chances of transmitting HIV to her unborn child by maintaining a low viral load.
  - (ii) Can maintain a nutritious diet in order to reduce the risk of mother-to-child transmission during childbirth.
  - (iii) Cannot overlook antiretroviral medications for complimentary management of HIV.
  - (iv) Can increase chances of survival of her baby by augmenting her spiritual health.
- A. i only
  - B. i & iv
  - C. ii, & iii, iv
  - D. i, ii, iii & iv
27. The following are fat soluble vitamins, with the exception of.....
- (i). Vitamin A
  - (ii). Vitamin B
  - (iii). Vitamin C
  - (iv). Vitamin D
- A. i, ii
  - B. ii, iii
  - C. iii, iv
  - D. iii only

**Scenario:** Mlungisi is 26 years of age and has tested HIV positive with a CD4 count of  $350\text{mm}^3$ . He has been advised to take Antiretroviral Therapy (ART). After a couple of counselling sessions he finally decided to start ART. However,

he is keeping his status and treatment a secret. Mlungisi who was less interested in religion has suddenly become committed to God's work. Questions 28– 33 relate to this situation.

28. Since Mlungisi is on ART you would expect his CD4 count to -----.
- A. Increase
  - B. Decrease
  - C. Be unstable
  - D. Remain the same
29. Should Mlungisi fail to adhere to ART, his viral load will -----.
- A. Decrease
  - B. Increase
  - C. Be unstable
  - D. Remain the same
30. In order for Mlungisi to adhere to ART, he needs all of the following **EXCEPT**;
- (i). To take six drugs per day
  - (ii). Support group
  - (iii). Friend
  - (iv). A family
- A. ii only
  - B. i & iii
  - C. ii & iv
  - D. i only
31. Which of the following constitute eligibility criteria for initiation of ART in Swaziland
- A. An individual who has tested HIV positive irrespective of his CD4 count
  - B. A 6 months old HIV positive baby
  - C. A man with a CD4 count of 250 cells/mm<sup>3</sup>
  - D. All people regardless of HIV status



32. Mlungisi's diet comprises of micro and macro-nutrients. Which of the following is NOT a micro-nutrient?
- (i). Minerals
  - (ii). Vitamins
  - (iii). Water
  - (iv). Carbohydrates
- A. ii & iii  
B. iii & iv  
C. iv only  
D. i only
33. How many glasses of water should Mlungisi consume ideally daily?
- A. Up to 3  
B. 5  
C. 8  
D. 8 to 10
34. Reasons to consider ARV regimen (combination) "switch / change" include:
- A. Occurrence of nausea and vomiting.  
B. Reduction in viral load.  
C. ARV treatment failure  
D. Increase in CD4 blood level count.
35. For ARV's to be effective and to prevent treatment failure, adherence must:
- A. Be less than 3 missed doses/month  
B. Greater than 95%  
C. 100%  
D. A and B
36. The reasons for using triple therapy include the following **EXCEPT**:
- A. To produce more CD4 cells  
B. To prevent resistance  
C. To stop the production of new HIV copies  
D. To promote adherence

37. One of these statements is **True** about Nutritional requirements in PLWHIV
- A. During the symptomatic stage of disease, they require an additional full meal/day.
  - B. ARV therapy is adversely affected by good nutrition
  - C. Fats should not be taken by people who receive Stavudine because they become displaced.
  - D. Beef is not the ideal source of protein for people on ART.
38. Majaha is having AIDS and is receiving palliative care. The following are necessary for his care at this stage.
- (i). Pain Management & good nutrition
  - (ii). Enough sleep and rest
  - (iii). Writing a will and relaying his funeral wishes.
  - (iv). Making peace with God or his ancestors.
- A. i, iii & iv
  - B. i & ii
  - C. iii & iv.
  - D. i, ii, iii & iv
39. The following negatively influence adherence to ART, EXCEPT:
- A. Young age
  - B. Male gender
  - C. Poverty
  - D. Female gender
40. The attitude relates to prejudice, whereas the behavior relates to \_\_\_\_\_.
- A. Discrimination
  - B. Natural action
  - C. Social norm
  - D. A and C
41. According to Kubler Ross stages, the first few days following the death of a loved one are filled with confusion and disbelief this period is labeled as \_\_\_\_\_.
- A. Shock
  - B. Yearning
  - C. Numbness
  - D. Denial

42. Family level impact of HIV and AIDS includes all, EXCEPT:
- A. Dependent family members are converted to the state of destitution
  - B. Impoverishment due to funeral expenses
  - C. Costs of cleansing ceremonies
  - D. Early retirement
43. The most important priority of care for a dying person is.
- A. Pain Management
  - B. Care of individual's family
  - C. Providing lots of water
  - D. Providing food
44. A client on hospice who is only on pain relief medication develops pneumonia, as a caregiver what would you do?
- A. Increase pain medications to decrease respirations
  - B. Ask the medical team to treat the pneumonia; and keep pt comfortable by using prescribed pain medication
  - C. Nothing unless the patient complains of being uncomfortable
  - D. Increase pain medication to decrease pain

**Instructions:** Match the following stages of grieving in column A according to Kubler Ross, with the explanation thereof in column B.

<b>Column A: Stage of grieving</b>	<b>Column B: Explanation of stage</b>
45. Bargaining	A. Individual feels overwhelmingly lonely and withdraws from interpersonal interactions
46. Anger	B. The individual blames others for his/her status and wishes to revenge
47. Denial	C. The individual admits and understand his/her diagnosis of HIV and looks forward to the future
48. Acceptance	D. The individual has a feeling that the situation may be reversible miraculously
49. Depression	E. The individual does not believe or understand that infection has occurred

50. Which of the following cultural practices best help girls to reduce the risk of early involvement in sexual activities?
- The reed dance
  - The wearing of the tussel (*umcwasho*)
  - The cutting of the shrub (*lusekwane*)
  - The joining of age regiments
51. Which of the following best describe chastity values?
- Abstinence due to age
  - Abstinence due religious reasons
  - Abstinence due to cultural and public interest reasons
  - Abstinence due to religious or cultural reasons
52. Culturally, which groups of people are better able to hold meaningful dialogue with youth on sexual conduct?
- Teachers and friends
  - Mothers and fathers
  - Grandparents and aunts
  - Brothers and sisters

**Scenario:** Zodwa visited you for counselling after being forced by her father to marry a rich farmer in the village. The farmer is an educated young man of 40years with two wives. Zodwa has not had any sexual activity before even with the farmer she is about to marry. She is afraid there might be HIV in the family but she is afraid to talk with her fiancée about the topic. Base on the scenario above please answer question 53-55.

53. Zodwa will marry the farmer in a month. What advice would you give Zodwa?
- Empower her with knowledge about HIV and AIDS.
  - Empower her with negotiation skills
  - Encourage her to be assertive on condom use.
  - Strongly recommend pre marriage counselling and testing for both.
- i, ii, & iv
  - ii, iii, & iv
  - i, ii, iii, & iv
  - i, ii, & iii

54. Zodwa has been successful in convincing her fiancé to go for HIV testing and she discovered that he is HIV positive. What advice would you give Zodwa to limit the chance of HIV Transition?
- Refuse to marry the fiancé.
  - Request that the husband use a condom at all times
  - Use a female Condom together with the male condom
  - Request her fiancé to take all the wives for testing.
55. After marriage Zodwa becomes pregnant and delivers an HIV free baby, even though she is HIV positive; what kind of baby feeding should she negotiate with her mother in-law?
- Mixed feeding
  - Exclusive breastfeeding
  - Artificial feeding.
  - A and C
56. Child-headed families are mainly the result of.....
- Modernization
  - Cold and flu outbreaks
  - HIV and AIDS
  - Migration
57. The following statements are true about Swazi Culture **EXCEPT**
- Culture influences attitudes and behavior related to the epidemic.
  - It also shapes gender relations and roles that prevent women and men from risk of infection.
  - It influences the choice of taking or not taking the risk of contracting HIV, of accessing treatment and care.
  - It determines the level of support towards or discrimination against people living with HIV and AIDS and their families.

**Scenario:** Mandla (17years), Sipho (15 years) and Musa (12 years) are friends. They together decide that they want to be circumcised so that they can protect themselves from HIV. Upon arrival at the clinic, the Health Care Worker (HCW) advises them that they need to be tested for HIV before they can be circumcised. They all agree to be tested. A rapid HIV test is used for each of them. Mandla's result comes back negative, Sipho's is positive while Musa's is inconclusive. Questions 58-62 refers to the scenario:

58. The approach to HTC used in the above scenario is referred to as:
- A. Opt-out Approach
  - B. Opt-In approach
  - C. Provider Initiated Approach
  - D. Client Initiated Approach
59. Which of these three (3) boys is likely to be in the window period?
- A. Mandla
  - B. Sipho
  - C. Musa
  - D. Both Mandla and Musa
60. What advice is the nurse likely to give to the boy regarding the idea that he could be in the "window period".
- A. That he shall come back after a month to check HIV again
  - B. That he shall bring partner for couple testing
  - C. That he shall come for a re-test in 8 -12 weeks.
  - D. That he must always use a condom so that the window period state does not change.
61. Musa's results were inconclusive. This means that:
- A. He is HIV negative, but has a bacterial infection
  - B. He is only a carrier for HIV
  - C. He is too young to be given the results
  - D. None of the above
62. When you consider the ages of the boys in the scenario, who do you think needs a guardian to consent for testing?
- A. Musa because is 12 years.
  - B. Sipho because his results are positive and he's only 15
  - C. A& B
  - D. None of the boys

**State whether each of the following statements is true (T) or false (F) and circle the corresponding letter only**

63. Opportunistic infections only infect HIV positive people.
64. Some sexually transmitted infections have no cure.
65. Disinfection can be done by boiling, chemical soaking or pasteurization.
66. Antiretroviral drugs can be used for HIV prevention.
67. Pregnancy fluid (amniotic fluid), fluid from the brain, heart, and chest do not require universal precautions.
68. Children express grief much differently than adolescents and adults do.
69. Bereavement also includes grief and mourning and does not proceed in sequential stages.
70. Hospice care focuses on only the patient's needs during the final stages in life.
71. The traditional Swazi homestead was generally large due to the extended family network and the need for manual labor.
72. The head of the Swazi family has power as the guardian of the family but exercises power in consultation with the elders of the family.
73. According to the Swaziland Integrated HIV Management Guidelines, all people should be counselled prior to being tested for HIV regardless of who they are.
74. Pregnant mothers who refuse to be tested for HIV should be forced to do so as testing will help protect the unborn child if the mother is HIV positive.
75. Routine HIV testing means that every person at risk for HIV must be tested with or without his or her consent.