

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

FINAL EXAMINATION, DECEMBER 2016

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

COURSE CODE: GNS/HSC 113

TIME ALLOCATED: TWO (2) HOURS

MARKS ALLOCATED: 75

INSTRUCTION:

- **ANSWER ALL QUESTIONS ON THE SEPARATE ANSWER SHEET PROVIDED**
- **THERE ARE 16 PRINTED PAGES EXCLUDING COVER PAGE**

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

For each question, choose the most appropriate response and write in your answer booklet the corresponding letter only, in **capital letters**, e.g. 76 B. Each correct response carries 1 mark.

1. In order for HIV to replicate in the CD4 cell, there are three (3) key enzymes that play an important role in this process. Which enzyme allows for the incorporation of the viral DNA into the host cell's DNA?
 - A. Reverse transcriptase
 - B. Proteinase
 - C. Protease
 - D. Integrase

2. HIV compromises the individual's immune system. Which is the most common opportunistic infection among People living with HIV in Swaziland?
 - A. Kaposi Sarcoma
 - B. Pneumocystis carinii pneumonia
 - C. Tuberculosis
 - D. Wasting syndrome

3. Different individuals engage in various forms of sexual activity. Which form of sexual activity presents the MOST risk for spreading HIV among men and women?
 - A. Vaginal intercourse
 - B. Anal intercourse
 - C. Oral sex
 - D. Thigh sex

4. Which is the MOST common route by which HIV is spread in Swaziland?
 - A. Heterosexual sexual activity
 - B. Homosexual sexual activity
 - C. IV drug use
 - D. Perinatal transmission

5. One HIV prevention strategy is the use of a condom that is made of:
- A. Latex
 - B. Natural
 - C. Organic
 - D. Animal skin
6. Which of the following risks is reduced by correct and consistent use of condoms during sexual intercourse?
- (i). HIV infection
 - (ii). Sexually transmitted infections (STIs)
 - (iii). Tuberculosis
 - (iv). Pregnancy
- A. i & iii
 - B. i & iv
 - C. i, ii & iv
 - D. i, ii, iii, & iv

Scenario:

You are an 18 year old pregnant student at Luyengo campus and your boyfriend is a 30 year old male. You and your partner engage in unprotected sexual activity and lately you developed a painless wound in the mouth, cheesy curds and a bad smelling discharge from the vagina. At the clinic you tested positive to Sexually Transmitted Infections (STI's). Questions 7 - 10 relate to this scenario.

7. Presenting with a painless wound in the mouth is typical of which STI?
- A. Syphilis
 - B. Gonorrhoea
 - C. Trachoma
 - D. Candidiasis
8. In case you do not seek treatment for the painless wound, which of the following could be a complication to your unborn baby?
- A. Blindness
 - B. Stillbirth (death)

- C. Pneumonia
 - D. Eye infection
9. The cheese curds coming from the vagina indicate which one of the following conditions?
- A. Syphilis
 - B. Gonorrhoea
 - C. Trachoma
 - D. Candidiasis
10. Presenting with a bad smelling discharge from the genitalia is present in which disorder?
- A. Syphilis
 - B. Gonorrhoea
 - C. Trachoma
 - D. Candidiasis
11. The term Frotteurism means which of the following?
- A. Observing an unsuspecting person who is naked, in the process of undressing, or engaging in a sexual activity
 - B. Sexual fantasies about exposing the penis to a stranger
 - C. Intense, recurrent sexual urges to touch and rub up against another person
 - D. Sexual arousal and satisfaction from the psychological and physical suffering of others
12. The term "seropositive" is given to a person:
- A. When he / she develops full-blown AIDS
 - B. When he /she tests positive for HIV
 - C. At the time the first opportunistic infection is diagnosed
 - D. When the CD4 cell count drops below 500
13. Khosi is a 20 year old college student who has recently been diagnosed with HIV. What education should she receive about her diagnosis?
- A. She should never get pregnant because she will pass HIV on to their child

- B. She should use condoms during sexual intercourse unless their partner is also HIV positive
- C. HIV always progresses to AIDS which is a deadly disease
- D. HIV is manageable with medications

14. What statement by Khosi would indicate a good understanding about antiretroviral therapy?

- A. "If I know I am going to miss a dose tonight, I should take double my dose in the morning."
- B. "I should keep an extra dose of ARVs with me in case I am unable to get to my usual supply on time"
- C. "Eventually I can stop the ARVs when my HIV levels are undetectable"
- D. "I should share my ARV medication with my boyfriend so he can have his HIV treated"

15. The healthcare provider is teaching Khosi about the need for multi-drug therapy. Which of the following best explains the rationale for using more than one antiretroviral medication to treat AIDS?

- A. "This combination of medications will eliminate the AIDS virus from your body."
- B. "This is intended to keep the virus from developing resistance to the medications."
- C. "You will not be able to transmit the disease while you take this medication combination."
- D. "You will experience fewer side effects when you take a combination of medications."

16. When teaching a person with HIV infection about ART, you explain that these drugs _____.

- A. work in various ways to decrease viral replication in the blood.
- B. boost the ability of the immune system to destroy the virus
- C. destroy intracellular virus as well as lowering the viral load
- D. increase the number of CD4+ cells available to fight the HIV

17. You are a leader in your community and started a community education group about AIDS. You inform the class that the most common method of transmission of the HIV currently is _____.
- A. perinatal transmission to the fetus
 - B. sharing equipment to inject illegal drugs
 - C. transfusions with HIV-contaminated blood
 - D. sexual contact with an infected partner
18. As a community leader you understand that young women are particularly at risk for contracting HIV. This is partly because _____
- A. Women frequently have multiple concurrent partners
 - B. Women have a weaker immune system compared to men
 - C. Women are more susceptible to HIV due to biologic factors
 - D. More women are IV drug users
19. What should you teach your community regarding universal precautions?
- A. Hospitalized people with HIV should be isolated to prevent the spread of bodily fluids to others
 - B. Extra precaution should be taken when you are working closely with someone with known HIV
 - C. If someone's blood lands on your intact skin, you should immediately wash the area and come to a clinic to receive post-exposure prophylaxis.
 - D. We all should take precautions by putting on gloves if handling body fluids of any individual
20. One of the community members asks you why there isn't a vaccine available for HIV. Which of the following factors makes developing a vaccine for HIV difficult?
- A. HIV is a virus.
 - B. HIV matures early.
 - C. HIV mutates easily.
 - D. HIV spreads through body secretions.
21. HIV re-infection is a concern because _____
- A. A person could become infected with a resistant strain

- B. It would indicate that the person is NOT practicing safer sex
- C. It could hasten disease progression to AIDS
- D. A and C

22. The following are the 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

23. One of the strategies for Primary prevention of mother to child transmission is _____.

- A. Provide Prevention of mother to child transmission Package
- B. Behaviour change
- C. Monitoring and follow up care.
- D. Management of opportunistic infections

24. The following are the coping skills in HIV prevention except:

- A. Self efficacy
- B. Aggressiveness
- C. Ability to handle peer pressure
- D. Problem solving skills

25. Pregnant women infected with HIV _____

- A. can reduce chances of transmitting HIV to her unborn child by maintaining a low viral load
- B. can maintain a nutritious diet in order to reduce the risk of mother-to-child transmission during childbirth
- C. can overlook antiretroviral medications for complementary management of HIV
- D. can increase chances of survival of her baby by augmenting her spiritual health

26. Objectives of ART include:

- A. Improvement of Quality of Life (QoL)
- B. Entire elimination of HIV from the body
- C. Lowest possible reduction in viral load
- D. Facilitate adherence

27. Inadequate nutrition in people with HIV infection may NOT result from one of the following factors; and that factor is:

- A. Diarrhoeal infections
- B. Increased absorption of nutrients
- C. Decreased food intake
- D. Oral sores

28. Providing nutritional support to individuals living with HIV may help to do the following, EXCEPT _____

- A. Tackle common nutritional problems associated with HIV disease and its treatment
- B. Enhance immune response
- C. Pace up disease progression and prolong life
- D. Improve quality of life

29. Correct and consistent use of latex condoms during sex greatly reduces the risk of _____

- A. AZT (Zidovudin)
- B. HIV infection and other STI
- C. Tuberculosis
- D. Opportunistic infections

30. A client with HIV is receiving 3 antiretroviral drugs under the highly active anti-retroviral therapy (HAART) protocol. The client asks why she must take 3 different medications when she doesn't feel sick. Your best response as an HSC/GNS 113 student will be based on the knowledge of which of the following?

- A. The combination therapy helps to reduce the incidence of drug resistance in the HIV client.

- B. The combination therapy is necessary since there is no way to identify which drug will be effective.
- C. The combination therapy helps to prevent opportunistic infections.
- D. The combination therapy is used to treat opportunistic infections.

31. Antiretroviral drugs acts primarily by _____.

- A. Blocking viral replication
- B. Synthesizing CD4 cells
- C. Providing the body with energy for physical activities and fighting diseases
- D. Killing all virus in the blood

32. Which of the following is correct about vitamins?

- A. Vitamin A is water soluble
- B. They are obtained from fruits and vegetables
- C. They are macro-nutrients
- D. Vitamin B is fat soluble

33. ARV drugs are categorized into _____

- (i). Reverse transcriptase
- (ii). Integrase and protease
- (iii). Reverse transcriptase inhibitors
- (iv). Protease inhibitors

- A. i, ii
- B. iii, iv
- C. ii, iv
- D. i, iii

34. Which of the following best describes the term antiretroviral therapy?

- A. Willingness to initiate ART
- B. Caring only focused on the individual who is living with HIV
- C. Only ensures the provision of antiretroviral drugs
- D. Comprehensive management of the individual living with HIV

35. Which of the following best describes palliative care?

- A. It caters for the medical needs of people living with incurable diseases.
- B. It involves the support of the patient only
- C. It is the comprehensive care of individuals with non-curable diseases and their families.
- D. It is the medical care of clients at the terminal stage of an incurable disease

36. Which of the following is a common cause of pain for people living with HIV?

- A. Headache
- B. Opportunistic infections
- C. Knowledge of HIV positive status
- D. Nausea and vomiting

37. Which of the following is the advantage of home based palliative care for an HIV infected person?

- A. HIV may infect the whole family
- B. Physical and emotional burden for the caregivers
- C. Holistic care is rendered and the patient feels at home
- D. Management requires a trained individual

38. The consequences of poor adherence includes all of the following **EXCEPT**

-
- A. Continued destruction of the immune system
 - B. Halts disease progression
 - C. Incomplete viral suppression
 - D. Development of resistant viral strains

39. Serology tests are widely used in the country for this reason?

- A. Results are available in 5 minutes
- B. It requires specialized personnel to administer
- C. It is easy to administer
- D. It is costly compared to the virology test

40. The primary goal of ART is _____

- A. Enhance disease progression

- B. Increase the number of viral copies
- C. To achieve viral suppression
- D. To enhance stigma and discrimination

Scenario: Mr. Tholeni is a foreman in one construction company. His team comprises five employees aged between 27 and 36 years. The HIV and AIDS workplace program responsible for contractors visits the company to teach about issues pertinent to HIV and AIDS. Two of the employees Sipho and Sabelo undertake the HIV test and both turn out to be HIV positive. Though they are friends, they choose to neither inform each other nor their supervisor. Questions 41 and 42 are based on this scenario

41. The possible reason for not revealing their HIV statuses to each other as well as to their supervisor is associated with _____.
- A. fear of rejection by co-workers
 - B. fear of losing their jobs
 - C. discrimination against them
 - D. all of the above
42. Suppose they informed the foremen and he started behaving indifferently toward them that would be termed as _____.
- A. external stigmatization
 - B. internal stigmatization
 - C. discrimination
 - D. none of the above
43. Which of the following statements best describes discrimination?
- A. Language of space
 - B. Avoiding to use same utensils that an individual with HIV has used
 - C. Setting boundaries to prevent children from family where there has been a death suspected to have been caused by aids
 - D. All of the above

44. The reason why some people when diagnosed as HIV positive and test several times, is because _____.

- A. they are afraid of being stigmatized
- B. positive HIV results cause them to become sad
- C. are afraid of becoming discriminated against
- D. they will be in denial

45. Suicide ideation and/or attempt after testing HIV positive is characteristic of the _____ stage of grieving according to Kubler-Ross.

- A. denial
- B. depression
- C. anger
- D. bargaining

Your son Sipho is 22 years old attending University of Swaziland, He is left with one year to graduate. As a parent you are concerned about the number of girls he bring home, a different girl every weekend; your husband is proud of his son's popularity among girls and praising him of being a real man. In an effort to protect your son and his younger brothers, and sisters who are not yet sexually active, you asked their grandfather, uncles, grandmother and aunts to encourage the boys and girls to participate in traditional and cultural ceremonies to delay their sexual debut. According to Swazi culture which practices will encourage youth to abstain.

1. Umcwasho 2. Lusekwane 3. The reed dance 4. Egumeni 5. Esangweni

46. According to Swazi culture which traditional practice(s) will encourage boys to delay sexual debut.

- A. 1,2
- B. 2,5
- C. 1,4
- D. 1,2,3

47. Which of the following cultural practices will provide a forum for boys to learn about life skills?

- A. 1
- B. 2
- C. 2,4
- D. 5

48. How has the powers enshrined in man by the Swazi culture contributed to the spread of HIV?

- A. Women are regarded as children in the family.
- B. The women lack negotiation powers because the man makes the final decision.
- C. Women lack negotiating powers to use a condom.
- D. All of the above

49. The most important action to prevent HIV infection in Swazi culture is to _____.

- A. Be faithful to your wives
- B. Sleep with one wife only.
- C. Change our sexual behavior
- D. Avoid extra marital affairs

50. How best can counselling be defined?

- A. A dialogue aimed at educating and giving advice to people with stress or psychological problems
- B. A dialogue aimed at assisting a client to cope with a difficult situation through informed decision making.
- C. The art of solving problems of people stress of psychological problems
- D. All of the above

51. Which of the following is correct about HIV testing and counselling?

- (i). It always has the pre-and post counselling sessions
- (ii). Counsellors do not need any counselling when testing them for HIV
- (iii). HIV negative clients do not need any post test counselling
- (iv). Pre-test counselling can be given to a group of people all at once

- A. i & iv
- B. i only
- C. ii, & iv
- D. i, ii, iii & iv

52. Which of the following is correct about HIV testing and counselling in Swaziland?

- A. Every pregnant woman should be test for HIV whether they like or not
- B. Every sick person must be tested for HIV first before being treated, whether they like or not.
- C. Every person has the right to agree or refuse an HIV test.
- D. A. and B.

53. Mr X. got infected with HIV last year (2015) from engaging in high risky sexual activity. How long after infection with HIV is Mr X. mostly likely show symptoms?

- A. 2- 3 years
- B. 5 – 10 years
- C. 2 – 5 years
- D. 3 weeks to 3 months

54. Regarding the consent for HIV testing _____.

- A. The consent must always be written
- B. There is no need for consent when testing babies
- C. The consent is obtained after the pre-testing counselling
- D. B and C

Zafina has been suffering from persistent coughing for a long time. When she went to the clinic she was screened for TB and found to be positive. She was advised to take an HIV test. She agreed to take the test and the results were negative. Nurse Banda advised Zafina to come back after a certain period to take another test. After the defined period she returned to the clinic for a follow-up test. Nurse Banda, is very busy this morning and is expecting the rest of the day to be just as busy. She asked the receptionist to file the HIV reports. While organising the reports, the receptionist recognizes Zafina's name and notices that Zafina is HIV positive. On her way out, Zaphina passes by the reception and notices that some of the workers are looking at

her and whispering. However, when she arrived home she disclosed to her partner (Babe Ngwenya) who decided to go for a test during a bus rank campaign. Babe Ngwenya was also tested twice. Both his test results were negative for HIV. Questions 55 to 64 refers to this scenario

55. Which of the following is correct about Zafina's disclosure of her status to her husband?

- i. It may lead to stigmatisation and discrimination
- ii. It give her a better chance to access treatment
- iii. She did not have the legal right not to disclose her status
- iv. The disclosure will directly boost her CD cell count

- A. i & ii
- B. iii only
- C. i, & iii
- D. ii, iii & iv

56. What could be the benefit of counselling to this couple?

- A. Reduce internal stigma
- B. Reduce the duration of the grieving process
- C. Alleviate Zafina's coughing
- D. A & B

57. The nurse must have advised Zafina to come back after a period of _____

- A. 4 weeks
- B. 6 weeks
- C. 8 weeks
- D. 12 weeks

58. Mr Ngwenya was offered _____

- A. Client initiated HIV testing and counseling
- B. Provider initiated HIV Testing and Counseling
- C. Bereavement counseling
- D. All the above

59. Pre-test information for both Zafina and Babe Ngwenya included all of the following EXCEPT _____
- A. Benefits of HIV testing
 - B. Meaning of HIV test results
 - C. Confidentiality of testing and results
 - D. HIV risk assessment
60. Which of the following would be correct advice for the couple in the post-test counselling session?
- (i). To use condoms always when they have sex
 - (ii). Not to have a child anymore
 - (iii). To go for HIV tests at least every 3 to 6 months
 - (iv). To reduce the intake of fats
- A. i & iv
 - B. i only
 - C. ii, & iv
 - D. i, ii, iii & iv

Based on the scenario above State whether each of the following statements (61-64) are true (T) or false (F), and write the corresponding letter only.

61. Based on the given facts Zafina and Babe Ngwenya are both eligible to HAART, according the ART guidelines in Swaziland.
62. Zafina has been living with HIV for more than a year.
63. Babe Ngwenya was more likely to be asymptomatic.
64. The receptionist overlooked the principle of informed consent by sharing the results with other health workers.

State whether each of the following statements (65-75) are true (T) or false (F), and write the corresponding letter only.

65. Risk reduction plan is discussed for both HIV negative and positive individuals.

66. Counseling is partnership between client and health provider who takes responsibility of clients' actions.
67. Universal precautions involves treating all blood as if it contains disease causing organisms.
68. The correct way to put on a male condom is to place it at the tip of the penis leaving no space and then rolling it to the base of the penis.
69. If someone is HIV+ there is no need to worry about re-infection.
70. Persons Living with HIV are more at risk of infections because of their low immunity to diseases hence the importance of universal precautions to protect them from similar infections.
71. Internal stigma refers to when one is treated in a disgraceful way for being constantly interacting with someone with particular label.
72. Most people who test HIV positive react in a similar way.
73. Umcwasho reduces the number of new HIV infections.
74. Individuals who remain faithful to their partners do not realise the importance of using condoms.
75. There is no risk of HIV transmission if the man withdraws his penis before ejaculation during sexual intercourse.