

**UNIVERSITY OF SWAZILAND  
FACULTY OF HEALTH SCIENCES  
FINAL EXAMINATION MAY 2017**

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

**COURSE CODE           HSC / GNS 113**

**THERE ARE 13 PAGES INCLUDING THE COVER PAGE.**

**TIME ALLOWED:        2 HOURS**

**TOTAL MARKS:         75**

**INSTRUCTIONS:**

1. Read questions carefully.
2. Answer all questions in the separate answer sheet provided.
3. On the answer sheet, CIRCLE only the letter that corresponds to your answer, cross for cancellation
4. Write clearly

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

**INSTRUCTION:** For each of the following questions / statements, select the most correct response and **CIRCLE** the letter that corresponds with the answer in your answer sheet e.g. 1. A

1. Which of the following is correct about self-concept?
  - A. It is not possible to change one's self-concept
  - B. Children below five (5) years of age do not have self-concept
  - C. Development of self concept is a life-long process
  - D. One's self concept is static
  
2. Which of the following best explains the term mental and social care? It is care that \_\_\_\_\_.
  - A. Enhances the holistic wellbeing of an individual
  - B. Addresses the mental and emotional needs of a human being
  - C. Addresses the spiritual and emotional needs of a man
  - D. Focuses on the needs of all the component of a man.
  
3. Which of the following factors often lead to non-adherence to antiretroviral therapy (ART) among people living with HIV?
  - A. High viral load
  - B. Pride
  - C. Forgetting
  - D. Infection by different strains of HIV
  
4. The component of a man that is best supported by administration of antiretroviral therapy (ART) is
  - A. Mental
  - B. Emotional
  - C. Physical
  - D. Emotional
  
5. How many CD<sub>4</sub> cells are there in every drop of blood in human being with a normal immune system?
  - A. 500 – 800 cells/mm<sup>3</sup>
  - B. 900- 1000 cells/mm<sup>3</sup>
  - C. 1000-1200 cells/mm<sup>3</sup>
  - D. 300 – 500 cells/mm<sup>3</sup>

6. The indicators of self-stigma that are likely to be seen in an individual living with HIV are all the following EXCEPT:
- A. Gradual social withdrawal
  - B. Excluding oneself from services or opportunities
  - C. Negative self perception
  - D. Balance between solitude and social interaction
7. The prevalence rate of HIV among the age group 15 – 49 years in Swaziland is
- A. 42%
  - B. 26%
  - C. 19%
  - D. 15%
8. The most common opportunistic infection in people living with HIV is
- A. Diabetes
  - B. Kaposi sarcoma
  - C. Candidiasis
  - D. Tuberculosis
9. Who among the following can be a victim of HIV-related secondary stigma?
- A. The person who infected another with HIV
  - B. The person living with HIV
  - C. The nurse who is also infected with HIV
  - D. The daughter of a business man who is living with HIV
10. The Swazi cultural practice that promotes delay in sexual debut among maidens is
- A. *Incwala*
  - B. *Lusekwane*/sacred shrub
  - C. *Umhlanga*/Reed dance
  - D. Payment of bride price / *Lobola*

11. Meningitis can best be prevented by which of the following ways?
- (i) Avoid crowds during the season of colds and viral infections
  - (ii) Treat ear infections promptly
  - (iii) Avoiding the use of tobacco
  - (iv) Eating fast foods
- A. ii & iii
  - B. iii & iv
  - C. i, ii, & iii
  - D. i, ii, iii, & iv
12. What do you understand by the term bestiality?
- A. Sexual intercourse with animals
  - B. Sexual intercourse with old people
  - C. Deriving sexual pleasure from being subjected to pain by self or another person.
  - D. Deriving sexual pleasure from observing others undress / making love
13. When was the first HIV positive person identified in Swaziland?
- A. 1993
  - B. 1986
  - C. 1989
  - D. 1992

**SCENARIO:** Mandla is a 21 year old university student who has been complaining of nausea and vomiting, body aches and a painful rash on the lower side of his chest for about 3 days. He has multiple sexual partners and says "I always use condoms but these things get torn." He has tested HIV positive at the Clinic but he is planning on repeating the test in another clinic. Questions 14-16 relate to this scenario.

14. Which of the following is one of the drivers of HIV that Mandla present with?
- A. Being a university student
  - B. Male gender
  - C. Multiple sexual partners
  - D. Tearing condoms
15. The most common causes of condom tearing is
- A. User errors
  - B. Product failure
  - C. Manufacturer's fault
  - D. Low quality of product

16. The nausea that Mandla is complaining of can best be handled by:
- A. Maintaining a sitting position
  - B. Eating salty foods
  - C. Eating dry toast or cracker
  - D. Increasing fluid intake
17. Which of the following is correct about infant feeding
- A. All HIV positive women are encouraged to breastfeed their babies for at least 2 years whether the babies are infected or not
  - B. Breast milk can transmit HIV
  - C. All HIV positive mothers are encouraged feed their babies with formula milk only
  - D. B and C
18. Which of the following statements is **NOT** correct about the drivers of HIV transmission?
- A. High condom consistent and correct use due to positive attitude about safer sex
  - B. Sexually transmitted infections (STIs)
  - C. Multiple concurrent sexual partners- cross generational sex
  - D. Poor underpowered women leading to prostitution and commercial sex for survival
19. Which of the following is an element of adherence to ART?
- A. Refusing to be advised when and how to take ART
  - B. Taking ART because you have been advised to do so.
  - C. Taking ART out of the understanding of the need and importance of doing so.
  - D. Taking ART you want.
20. According to the stages of Kubler Ross, the willingness to repeat the HIV test in another facility shows that Mandla is at which stage of the grieving process?
- A. Denial
  - B. Bargaining
  - C. Depression
  - D. Anger
21. With the advent of HIV and AIDS rare family structures are becoming common in Swaziland. These include:
- A. Parent headed families
  - B. Single parent families
  - C. Child headed families
  - D. Guardian headed families

22. A 40 year old HIV infected male, CD<sub>4</sub> 200 cells/mm<sup>3</sup> complains of severe headache accompanied by extreme sensitivity to light, stiff neck and vomiting since two (2) days ago. Which of the following is the likely diagnosis for this client?
- A. Headache
  - B. Meningitis
  - C. Eye problems
  - D. Neck pain

**SCENARIO:** A first year female UNISWA student, by the name Zodwa is diagnosed HIV positive. She visited a Dentist because she had a sore tooth, the Dentist got to know that she was HIV positive and instructed that she should be attended to last. She had a one-year old daughter accidentally they discovered that Zodwa was HIV positive and they no longer wanted to touch her child and started gossiping about Zodwa. Questions 23 – 24 refer to this scenario.

23. The behaviour exhibited by the Dentist towards Zodwa is reflective of:

- A. External stigma
- B. Internal stigma
- C. Discrimination
- D. Secondary stigma

24. What is Zodwa's baby experiencing from Zodwa's relatives?

- A. External stigma
- B. Internal stigma
- C. Discrimination
- D. Secondary stigma

25. The effectiveness of ART is measured by:

- A. A rise in red blood cell count
- B. A rise in HIV antibodies in the blood
- C. An increase in opportunistic infections
- D. A fall in the viral load

26. In Swaziland, under the test and start approach, the decision to initiate a client on antiretroviral therapy (ART) is based upon:
- A. The CD4 cell count
  - B. The intensity of the clients' clinical symptoms
  - C. Eagerness of the client
  - D. A positive HIV test
27. The primary goals of ART includes all of the following EXCEPT:
- A. Prolongation of life and improvement in the quality of life
  - B. Achieve greatest possible reduction in viral load for as long as possible.
  - C. Elimination of HIV entirely from the body.
  - D. Reduce intensity of stigma and discrimination against people living with HIV
28. All of the following contribute to poor adherence to ART, EXCEPT:
- A. Lack of knowledge
  - B. Drug abuse
  - C. Prostitution
  - D. Younger age
29. HIV is a (an) \_\_\_\_\_
- A. Rotavirus
  - B. Retrovirus
  - C. Arbovirus
  - D. Papilloma virus
30. The development of antibodies to an HIV antigen after the window period is termed:
- A. Primary infection
  - B. Plasma conversion
  - C. Viral set point
  - D. Seroconversion
31. Is there a difference between HIV and AIDS?
- A. Yes, HIV is the virus that causes AIDS
  - B. No, HIV and AIDS are the same thing
  - C. Yes, AIDS is the virus that causes HIV
  - D. B only

32. Viral load refers to:
- New viruses in the blood stream
  - Virus equal to the CD4
  - Amount of the virus in the blood
  - Virus that does not show in blood
33. Which of the following is a mode of HIV transmission?
- Mosquito bite
  - Dog bite
  - Human bite
  - Tears
34. Which of the following is **NOT** a risk for HIV transmission?
- Sexual contact
  - Sharing needles
  - Shaking hands
  - Abstinence
- i, ii & iv
  - ii & iii
  - iii & iv
  - ii, iii, & iv
35. Stage 1 of Syphilis infection is characterized by
- A painless sore on the genitals
  - Moist warty patches on genitalia
  - Bone softening
  - Rash on the palms of hands and soles of feet
36. The complications of gonorrhoea include \_\_\_\_\_
- Cervical cancer in women
  - Fertility in men
  - Ectopic/tubal pregnancy
  - Vaginal discharge
37. The traits of people with a negative self- concept are all the following EXCEPT?
- They express feelings of worthlessness
  - They have poor interpersonal communication skills
  - They exhibit high resistance to physical and psychological imbalances.
  - Their quest for acceptance leads them to risky sexual behaviours.

38. What do you understand by the term voyeurism?
- A. Deriving sexual pleasure from being subjected to pain by self or another person.
  - B. Deriving sexual pleasure from inflicting pain on another person.
  - C. Deriving sexual pleasure from observing others undress or having sex.
  - D. Sexual pleasure gained by rubbing one's genitals on another person
39. All the following are risks for HIV transmission EXCEPT:
- A. Protected sex with an HIV negative individual
  - B. Unprotected sex with an HIV infected person
  - C. Unprotected sex with a prostitute
  - D. French kissing
40. Which of the following is the function of the HIV enzyme integrase?
- A. Helps HIV to attach to the CD4 cell
  - B. Cleaves the long strands of protein into functional individual proteins
  - C. Integrates viral DNA into the human DNA
  - D. Integrates viral DNA into the nucleus of the CD4 cell
41. 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
42. Which of the following sexually transmitted infections (STIs) is not curable?
- A. Gonorrhea
  - B. Syphilis
  - C. Herpes
  - D. Chancroid
43. Which of the following best explains the term pandemic?
- A. The number of new cases of a disease occurring in a defined population during a specified period of time
  - B. The constant occurrence of an infectious agent in a given geographical area
  - C. An outbreak of an infectious disease that affects a large number of people in a wide geographical area
  - D. The outbreak of an infectious disease that affects a large number of people in a limited geographical area.

44. Which of the following statements is correct about the female condom?
- A. It requires the man to insert it on an erect penis
  - B. It should be inserted immediately before sexual intercourse
  - C. It is made up of polyurethane
  - D. It can be torn more easily when compared to the male condom
45. Lambskin condoms had the following main disadvantage:
- A. The manufacturers were not producing the condoms in large enough quantities
  - B. They offered protection against pregnancy only
  - C. Most men were allergic to them
  - D. They had a very low uptake
46. Who among the following people does not need post-test counseling after an HIV test?
- A. Nurses and doctors
  - B. People who work in the HIV field
  - C. People who test HIV negative
  - D. None of the above
47. In general, HIV test results are reported as:
- A. Positive or negative
  - B. Positive, negative or determinate
  - C. Positive, negative or discordant
  - D. Positive, negative or inconclusive
48. The following are all low risk behaviours to contracting HIV EXCEPT;
- A. Oral sex on man using a condom
  - B. Thigh sex on a woman
  - C. Oral – anal sex with latex condom
  - D. Oral sex on a woman with latex condom
49. The administration of ARV drugs to an individual for preventive purposes following exposure to HIV is called:
- A. Prevention of Mother-to-Child transmission
  - B. Antiretroviral therapy
  - C. Post-exposure prophylaxis
  - D. Preventive therapy

50. The mental needs of an HIV infected person include

- A. Nutrition
- B. Information on HIV
- C. Antiretroviral therapy
- D. Rest and relaxation

51. Failure to adhere to ART results in \_\_\_\_\_ in viral load.

- A. Decrease
- B. Unstable
- C. Stagnant
- D. Increase

52. Which food components should be included in every meal?

- A. Carbohydrates
- B. Proteins
- C. Fruits
- D. Vegetables

**SCENARIO:** Zweli is a 37 year old man who is living with HIV and is on ART. He works night shift at his workplace as a security guard in Mbabane. He exercises daily to keep fit and eats a balanced diet. He presented to the clinic because of a cough that has lasted for 3 weeks. After assessment, Zweli was diagnosed with pulmonary tuberculosis (TB) and was started on treatment for TB. The following questions (53-56) relate to this scenario.

53. Which of the following risk factors to TB does Zweli present with?

- A. He is an elderly person
- B. He has a compromised immune system
- C. He exercises daily
- D. He has lack of sleep which weakened the immune system

54. Which of the following is true about Zweli?

- (i). He had a high CD4 count
  - (ii). He had high viral load
  - (iii). He had complete viral suppression
  - (iv). His work conditions put him at risk for TB infection
- A. ii only
  - B. i & ii
  - C. i,ii & iii
  - D. ii, iii

55. Which of the following are likely to be the challenges for Zweli in terms of adherence to ART?

- (i). High pill burden
  - (ii). Side effects
  - (iii). Lack of stigma
  - (iv). Work commitments
- A. i, & iii
  - B. ii & i
  - C. ii, i, & iv
  - D. i, ii, iii, & iv

56. Zweli is now depressed and prefers spending time alone. His friends visited him to assure him that TB can be cured and gave him more information about TB. Which component of man did Zweli's friends attend to?

- (i) Physical
  - (ii) Emotional
  - (iii) Mental
  - (iv) Spiritual
- A. i & ii
  - B. ii & iii
  - C. iii & iv
  - D. i & iv

**INSTRUCTION:** State whether each of the following statements is true (T) or false (F) and **CIRCLE** only the corresponding letter on your answer sheet. Each correct response carries 1 mark

57. Zweli should be advised to stop the ARVs so that the TB drugs can work well.

59. New infections increase viral load resulting in increased CD4 count

60. Female condom requires immediate withdrawal after sex

61. Retrovirus refers to the fact that HIV replicates itself

62. Medical male circumcision decreases the risk of contracting HIV infection by 60%

63. The first cases of AIDS were reported in 1986 in the United States of America

64. The window period usually lasts between 2 and 10 years

65. It is not known when HIV came into existence

66. Sweet and sugary foods are recommended in palliative care because they promote faster healing for a client with a mouth sores.

67. Age regiments are instrumental in promoting chastity values.

68. It is proper for the counselor to take responsibility of the client's actions during a counseling session.

69. Disclosure of HIV status promotes adherence to ART.

70. Whenever you buy packages food (e.g. milk) make sure that you check the expiry date.

**INSTRUCTIONS:** Match statements in column A with concepts in column B. There is only one (1) response to each statement e.g. 1. D

| Column A - statement  | Column B - concepts                       |
|---|---|
| 71. Infections that spread from one person to the other, mostly through unprotected intercourse | A. Palliative                             |
| 72. Watchdogs or generals of the immune system.   | B.HIV                                     |
| 73. Care that focuses on relieving pain   | C. Males                                  |
| 74. The people that faces greater risk of contracting HIV                                       | D. Sexually transmitted infections (STIs) |
| 75.This illness which is in itself a sexually transmitted infection                             | E. Females                                |
|   | F.CD4 cells                               |