## UNIVERSITY OF ESWATINI FACULTY OF HEALTH SCIENCES DEPARTMENT OF GENERAL NURSING

## FINAL EXAMINATION, MARCH 2021

COUESE TITLE:

HIV PREVENTION,

INFECTION

AND

MANAGEMENT OF AIDS

COURSE CODE:

GNS/HSC 113

TIME ALLOCATED:

TWO (2) HOURS

MARKS ALLOCATED: 75

## **INSTRUCTIONS:**

- ANSWER ALL QUESTIONS ON THE SEPARATE ANSWER SHEET PROVIDED
- THE ANSWER SHEET IS ATTACHED AS THE LAST PAGE OF THIS QUESTION PAPER.
- DETACH THE ANSWER SHEET AND SUBMIT IT AT THE END OF THE EXAMINATION
- THERE ARE 16 PRINTED PAGES EXCLUDING COVER PAGE AND THE ANSWER SHEET

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** in your answer sheet the corresponding letter only. Each correct response carries 1 mark.

- 1. Which of the following are risk factors for HIV transmission?
  - A. Inconsistent use of the condom
  - B. Oral sex
  - C. Lesbianism
  - D. Mosquito bite
- 2. Someone who is celibate can be described as:
  - A. Someone who enjoys partners of both sexes
  - B. Some having no sex drive i.e. no desire for sexual activity even though physically normal
  - C. Someone who deliberately abstain from sexual activities
  - D. Someone who fantasizes about sex
- 3. The Human Immunodeficiency virus has the stem human because the virus affects
  - A. Living things
  - B. Animals
  - C. People
  - D. Animals and human beings
- 4. Most of your friends argue that "you can see a person living with HIV just at a glance". This argument is;
  - A. False
  - B. True
  - C. Debatable
  - D. Dependant on the expertise of the viewer

- 5. One of your friends argues that he/she is a carrier of the human immunodeficiency virus. This means that your friend
  - A. Cannot transmit the virus to his/her partner even if they engage in unprotected sexual intercourse
  - B. Can transmit the virus to his/her partner if they engage in unprotected sexual intercourse
  - C. Will not be interested in engaging in sexual intercourse
  - D. Will suddenly become celibate
- 6. You join a group of friends while attending an online session of the Black Wednesday Commemoration. This group is talking about opportunistic infections. Which of the following is the most common opportunistic infection?
  - A. Meningitis
  - B. Tuberculosis
  - C. Kaposi sarcoma
  - D. Candidiasis
- 7. Researchers have not been able to find the cure or vaccine for HIV since its discovery. Which of the following is a reason for this?
  - A. The infectious disease is only prevalent in Sub-Sahara Africa
  - B. Because its origins are not known
  - C. Because it helps reduce unemployment
  - D. Because the virus changes or mutates very fast
- 8. Which is the most affected region with HIV infection in the world?
  - A. Asia
  - B. Eastern Europe
  - C. Sub-Sahara Africa
  - D. The Americas

- 9. Studies have indicate that women are more vulnerable to HIV infection than men, one of the reasons for the gender disparity is
  - A. Women are ignorant of the disease process
  - B. Women are generally prone to infections than men
  - C. Women are more likely to be forced/coerced to engage in sex than men
  - D. Men have a natural immunity to HIV
- 10. HIV is defined as
  - A. The AIDS disease
  - B. Human Papilloma Virus
  - C. Human Immunodeficiency Virus
  - D. None of the above is correct
- 11. An individual's self-concept is made up of his/her
  - A. Self-image
  - B. Emotional self
  - C. Academic self
  - D. Personal expectations
- 12. The term 'window period' refers to the time between becoming infected with the virus and
  - A. The time when the virus can be traced in the blood
  - B. The first of HIV show up in the individual
  - C. The appearance of opportunistic infections
  - D. The appearance of Kaposi sarcoma
- 13. The following are classified under non-specific immunity EXCEPT
  - A. The skin
  - B. Inflammation
  - C. Lining of the windpipe
  - D. T-lymphocytes

- 14. Primary HIV infection is characterized by
  - A. A brief flu-like illness
  - B. Prolonged fever
  - C. Elevated blood pressure
  - D. A generalised body rash
- 15. Which of the following sexually transmitted infections present with a discharge?
  - A. Syphilis
  - B. Chancroid
  - C. Gonorrhoea
  - D. Herpes
- 16. What does cunnilingus refers to?
  - A. Strictly a man having oral sex with a woman
  - B. A woman having oral sex with a woman or man
  - C. A man having oral sex with a man
  - D. A partner having oral sex with a woman
- 17. Inside the core of an HIV particle, are the following three enzymes required for replication EXCEPT:
  - A. Reverse transcriptase
  - B. Amylase
  - C. Integrase
  - D. Protease
- 18. What kind of virus is HIV?
  - A. Coronavirus
  - B. Retrovirus
  - C. Rotavirus
  - D. Rhinovirus

19.	Which of the following body fluids/acts can be a mode of HIV				
tı	ansmission?				
	A. Urine				
	B. Saliva				
	C. Human bite				
	D. Tears				
20.	In the history of HIV, 1986 marks the year when				
	A. The first HIV positive person died in Eswatini				
	B. The first case of HIV was recorded in the United States of America				
	C. Antiretroviral drugs were discovered				
	D. The first HIV positive person in Eswatini was identified				
21.	Which of the following diseases is both an opportunistic infection and				
а	sexually transmitted disease?				
	A. HIV				
	B. Candidiasis				
	C. Gonorrhoea				
	D. Syphilis				
22.	Viral replication leads to all of the following EXCEPT:				
-	A. Destruction of CD4 cells				
	B. Progressive decrease in the body's immune system				
	C. Boosted immune system				
	D. Susceptibility to opportunistic infections				
23.	HIV cannot be transmitted through				
	A. Prick/cuts with contaminated needles/sharps				
	B. Intimate deep kissing				
	C. Improper (or no) sterilization & disinfection				
	D. Exposure to broken skin or open wounds of an infected person.				

- 24. The first line of defence for preventing any infections is:
  - A. Using household disinfectants
  - B. Washing hands with soap and water
  - C. Using gloves
  - D. Soaking dirty items in Jik solution.
- 25. Non risky fluids include all of the following some of the following, EXCEPT:
  - A. Faeces
  - B. Urine
  - C. Amniotic fluid
  - D. Nasal secretions

**Scenario:** a friend of yours invites you to a party. You are unaware that she has organised for you a sex partner. When you get to the party, she introduces you to this guy. He looks like he is very interested in you. He offers to book a room for you in a hotel. You take 2 to three tots and you pass out. The following morning you find yourself in the hotel room alone. You realise that something might have happened to you at night because you private parts are wet. Answer the following questions based on this scenario:

- 26. What would be your initial step based on this discovery?
  - A. Immediately phone your friend to find out what happened at the party
  - B. Take a bath and thoroughly wash your private parts
  - C. Quickly dress up and rush to report the incidence to the police to report the incident.
  - D. Phone your parents about the event.

- 27. What services would you request at the clinic?
  - A. Ask the nurse to conduct a though examination for evidence that you were really penetrated at night.
  - B. Request for thorough cleaning of your private parts.
  - C. Ask for antibiotics to prevent possible STI's from the event
  - D. Request for HIV testing and ask for post exposure prophylaxis treatment.
- 28. High risk factors for getting HIV infection are the following; EXCEPT.
  - A. Swallowing semen
  - B. Using personal sex toys
  - C. Vaginal or anal sex using Vaseline as a lubricant
  - D. Contact with menstrual blood of a HIV + individual
- 29. Temlandvo has just turned 18 years. She is doing her first year at UNESWA. Her younger siblings ask her about University life and whether she has a boyfriend. Her response is that she intends waiting a while longer before having one. Among the following responses which would best describe her action related to HIV prevention?
  - A. She is delaying sexual debut
  - B. She is practicing secondary abstinence
  - C. She is not interested in males
  - D. She is allowing time for persuasion by her friends to have a boyfriend
- 30. Which among the following sexual related methods is not ideal for the prevention of HIV
  - A. Secondary abstinence
  - B. Condom use
  - C. Male circumcision
  - D. Prevention of mother to child transmission

- 31. Telwandle wishes to know how a condom is used. You tell her that sometimes it is not 100%. There are times when it is an error of the condom user. What error of condom use could not possibly result from condom users?
  - A. Using condoms incorrectly such as applying vaseline
  - B. Condoms breaking due to use of sharp objects
  - C. Condoms slipping during intercourse
  - D. Failure of quality checks during manufacturing
- 32. You can talk about sex to other people in order to assist them prevent being infected with HIV. The following are some of the attributes you will need to have EXCEPT:
  - A. Do not raise issues of sex and safer sex before someone does
  - B. Be aware of your attitudes and beliefs about sexuality
  - C. Have available information you can share about sexuality you can give away
  - D. Normalise the person's problems by letting him/her realize that he/she is not alone
- 33. Which amongst the following HIV prevention methods are behavioural?
  - A. Male circumcision, condom use
  - B. Delay sexual debut, screening blood before transfusion
  - C. Abstinence, prevention of mother to child transmission
  - D. Abstinence, Delaying sexual debut
- 34. Which of the following describes the acronym ART in the context of HIV management?
  - A. Antiretroviral treatment
  - B. Antiretroviral therapy
  - C. Antiretroviral drugs
  - D. Retroviral therapy

35		Ntombi is a 24-year old university student who is living with HIV and			
	is (	on ART. She finds it difficult to take the treatment because her friends			
	are	e always around. Which of the following are the consequences of poor			
		herence to ART?			
		(i). Incomplete viral suppression			
		(ii). Continued destruction of the immune system			
		(iii). Slower disease (HIV) progression			
		(iv). Emergence of resistant viral strains			
	A.	i only			
	В.	i & ii only			
	C.	i, ii & iv			
	D.	i, ii, iii, & iv			
36		Which of the following is a reason why adherence counselling is a			
	rec	quirement for antiretroviral therapy (ART) initiation?			
	A.	ART is a life-long commitment			
	В.	Counselling seldom improve client readiness and willingness for ART			
		initiation			
	C.	ART requires clinical monitoring			
	D.	. ART is a holistic treatment for HIV			
37	•	Antiretroviral drugs act by:			
	A.	Suppressing viral replication			
	В.	Generating more CD 4 cells			
	C.	Killing the virus directly or indirectly			
	D.	All of the above			
38	١.	The goal of palliative care is to			
	A.	Mainly support the client who has been diagnosed with HIV			
	В.	Treating and curing the client's ailments			
	C.	Attend to the medical needs of the client			
	D.	Promote alleviation of pain and suffering			

- 39. Which of the following is an eligibility criteria for initiation of ART in Eswatini?
  - A. Comprehensive knowledge of HIV
  - B. The number of years living with HIV
  - C. Positive HIV status and willingness
  - D. The amount of CD4 cells in the blood
- 40. Takhona tested HIV positive at the clinic today. The nurse advised her to initiate antiretroviral therapy. Which of the following may be a benefit of ART for Takhona?
  - (i). Improved quality of life
  - (ii). Continued destruction of the immune system
  - (iii). Reduction in stigma and discrimination
  - (iv). Emergence of resistant viral strains
  - A. i only
  - B. i & ii only
  - C. i & iii
  - D. i, ii, iii, & iv
- 41. Which of the following is an effect of poor nutrition on HIV?
  - A. Poor response to antiretroviral therapy
  - B. Slower disease progression
  - C. Increased ability to recover from opportunistic infections
  - D. Poor absorption of nutrients

- 42. Examples of formal support groups for HIV/AIDS can include
  - A. University of Eswatini, South African Nazarene University, Eswatini Ministry of Health
  - B. Lobamba Healthcare Network, Swaziland National Broadcast Network, Mbabane Health Clinic
  - C. Eswatini Ministry of Health, Manzini Government Hospital, Peace Corps
  - D. Women Together, Swaziland AIDS Support Organization, Swaziland National Network for people Living with HIV/AIDS
- 43. All of the following contribute to poor adherence to ART, EXCEPT;
  - A. Lack of knowledge
  - B. Drug abuse
  - C. Prostitution
  - D. Younger age
- 44. Which of the following statements is FALSE about antiretroviral therapy (ART):
  - A. ART increases survival rate.
  - B. ART reduces HIV-transmission.
  - C. ART is a cure for AIDS.
  - D. ART reduces hospitalization.
- 45. Factors contributing to drug failure in ART are:
  - (i). Sub-optimal ARV regimen (combination).
  - (ii). Sub-optimal drug levels.
  - (iii). Poor adherence to therapy.
  - (iv). Re-infection with new HIV strains
  - A. ii & iii
  - B. i & iii
  - C. iii & iv
  - D. i,ii, iii, & iv

**Instructions:** Match the following food stuff in column A with the most appropriate type of nutrient in column B, which it contains.

Column A-Food		Column B – Type of nutrient
stuff	•	
46.	Honey	A. Micronutrients
47.	Ochre A	B. Macronutrients
48.	Beans	

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

Colu	mn A: Stage	Column B: Explanation of stage
of gr	rieving	
49.	Bargaining	A. Individual feels overwhelmingly lonely and
50.	Anger	withdraws from interpersonal interaction
51.	Denial	B. Individual is annoyed with the diagnosis and may
52.	Acceptance	infect everyone he comes across
53.	Depression	C. Individual comes to terms with the diagnosis and
		looks positively towards the future
		D. Individual negotiates with a superior being to be
		granted more days to live
		E. Individual acts as though nothing has happened
		and may refuse to believe / understand that he or
		she has tested positive

- 54. The challenges of palliative care include:
  - (i). Other family members may be infected
  - (ii). Increases the chances of gossip, stigma and discrimination from neighbors.
  - (iii). Caregivers may be exhausted from attending to the sick.
  - (iv). Family may not be supported by relatives.
  - A. i, iii & iv
  - B. i & ii
  - C. iii & iv.
  - D. i, ii, iii & iv
- 55. 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
- 56. Which of the traditional practices below is more likely to prevent the spread of HIV In Eswatini?
  - A. Umhlanga
  - B. Lusekwane
  - C. Umcwasho
  - D. Bunganwa
- 57. Which of the following cultural practices best help girls to reduce the risk of early involvement in sexual activities?
  - A. The reed dance
  - B. The wearing of umcwasho
  - C. The cutting of Lusekwane
  - D. The joining of age regiments

- 58. Which cultural practice (s) has / have the potential of preventing HIV contraction among boys?
  - i. Socialization by the cattle kraal / esangweni
  - ii. Pay allegiance to the Chief / kuhlehla
  - iii. Regimentation / kubutseka
  - iv. Cutting the shrub / lusekwane
  - A. i & ii
  - B. i, iii & iv
  - C. i, ii, iii
  - D. i & iv

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) tells 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 59-62 refers to the scenario:

- 59. The approach to HTC used in the above case study is referred to as:
  - A. Opt-out Approach
  - B. Opt-In approach
  - C. Provider Initiated Approach
  - D. Client Initiated Approach
- 60. Who of these boys is likely to be in the window period?
  - A. Mandla
  - B. Sipho
  - C. Musa
  - D. Both Mandla and Musa

- 61. What advice is the nurse likely to give to the client 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.

**Instruction:** State whether each of the following statements is true (T) or false (F), and circle the corresponding letter only, **T** or **F**, on your answer sheet.

- 62. 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
- 63. Adherence to ART can be enhanced by early diagnosis and treatment of opportunistic infections.
- 64. Condoms act as a barrier in the prevention of mother to child transmission of HIV.
- 65. All people who suffer from Tuberculosis should be initiated on antiretroviral therapy.
- 66. A person who has an undetectable viral load can pass HIV to someone else.
- 67. ART failure rate increases sharply as individual's adherence rate increases.
- 68. One of the roles of fats in the body is to provide energy when carbohydrates are not available.
- 69. ART failure rate increases sharply as individual's adherence rate increases.

- 70. One of the roles of fats in the body is to provide energy when carbohydrates are not available.
- 71. Enforcement of cultural structure will mitigate the impact of orphans.
- 72. Culture is used to implement the national response of the epidemic
- 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 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