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

## FINAL EXAMINATION, DECEMBER 2015

**COURSE TITLE:** 

HIV PREVENTION, INFECTION AND MANAGEMENT

**OF AIDS** 

**COURSE CODE:** 

HSC 113 / GNS 113

TIME ALLOCATED:

TWO (2) HOURS

MARKS ALLOCATED: 75

THERE ARE TEN (10) PRINTED PAGES EXCLUDING COVER PAGE

## **INSTRUCTION:**

- ANSWER ALL QUESTIONS ON THE SEPARATE ANSWER SHEET PROVIDED
- INDICATE YOUR CHOSEN ANSWER/RESPONSE BY CIRCLING, CROSS TO CANCEL

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

For each of the following multiple choice questions select the most appropriate answer. Indicate your chosen answer/response by circling on the separate answer sheet provided; cross to cancel.

- 1. Which of the following methods is 100% effective in preventing HIV transmission?
  - A. By using latex condom
  - B. By using Lambskin condoms
  - C. Through abstinence
  - D. Using double protection
- 2. All of the following make women at risk of HIV infection EXCEPT:
  - A. Women infected at an older age
  - B. Biologic risk factors
  - C. Pregnancy conditions
  - D. Social status of women and gender inequalities
- 3. Drivers of HIV transmission include the following EXCEPT:
  - A. Multiple concurrent sexual partners
  - B. Intragenerational sex
  - C. Low rates of male circumcision
  - D. Low condom use
- 4. The following are the impact of HIV and AIDS EXCEPT
  - A. Increase of Orphans and vulnerable children as a result of AIDS
  - B. Increased under five mortality rates because of AIDS
  - C. Increased morbidity and mortality in women due to HIV and AIDS
  - D. Burden of care in AIDS affected households' falls on women and men
- 5. The following are the complications of syphilis EXCEPT
  - A. Infection of the unborn baby causing still births.
  - B. Deformity of the baby (flat nose)
  - C. Syphilitic baby.
  - D. Pelvic Inflammatory Diseases
- 6. Sexual intercourse with animals is known as-----
  - A. Zoophilia
  - B. Pedophilia
  - C. Coprophilia
  - D. Necrophilia

- 7. Sexual transmitted Infections (STI's) contribute to the spread of HIV because—
  - A. When you have an STI you automatically have HIV
  - B. The laceration from an STI allows the HIV to permeate
  - C. The laceration from an STI contains HIV
  - D. STI's are associated with people with AIDS
- 8. What kind of virus is HIV?
  - A. Coronavirus
  - B. Retrovirus
  - C. Rotavirus
  - D. Rhinovirus

Match the following HIV and AIDS related concepts in column A with their description in column B. NB: There is only one (1) answer in each question.

Concepts	<b>Description</b> .			
9. Virulence	A. The presence of HIV in the body is its example			
10. Homosexual	B. The state during which the person is still HIV negative but			
11. Viral load	can pass the virus to others.			
12. Bisexual	C. Sexual relationship between a man and a woman			
13. Window period	D. sexual relationship between people of the same sex			
14. Antibodies	E. An individual who is attracted to and has sexual relationship with a male or a female			
	F. Protein substances released by white blood cell to fight against antigens			
	G. Amount of HIV in the blood of an HIV infected person			
	H. Ability of the microorganism to invade the body			

**Scenario:** In a family of five consisting of a mother, father, two teenage boys and their 22 year old daughter. The daughter has a boyfriend who works for a courier company in South Africa, with who she occasionally have sexual intercourse., Health educating is offered to the family on the risk of HIV infection. (Question 15-20 relate to the situation above).

- 15. The following are suitable ways of reducing the risk of HIV infection among the teenage boys EXCEPT
  - A. Male Circumcision
  - B. Exercise
  - C. Condom Use
  - D. Abstinence

- 16. The family collectively agrees that someone is NOT at risk of HIV transmission if:
  - A. He/she has multiple sexual partner
  - B. He/she is faithful to one sexual partner
  - C. He/she uses condoms correctly & consistently during sexual intercourse
  - D. He/she is always clean and has good nutrition
- 17. Which of the following is an ideal method of reducing the risk of HIV infection for the elder daughter and her boyfriend
  - A. Male circumcision for the male partner
  - B. Using condoms correctly & consistently
  - C. Abstinence
  - D. Being faithful to one another
- 18. All of the following are ways of reducing the risk of HIV infection EXCEPT:
  - A. Understand how HIV spreads
  - B. Avoid substance abuse
  - C. Having relationships with people of known HIV status
  - D. Be circumcised
- 19. Which of the following ways does not require partner involvement in HIV prevention
  - A. Get tested often and together
  - B. Correct and consistent use of a condom
  - C. Stay in a monogamous relationship
  - D. Avoid contact with other people's blood and other body fluids
- 20. The following instructions are correct about male condom use EXCEPT
  - A. Make sure condom is the right way around
  - B. You do not always need to put condom on when the penis is erect
  - C. Always use condom from start to finish
  - D. Consistently and correctly use condom during vaginal, oral or anal sex
- 21. Which combination of practices results in no risk of HIV infection:
  - A. Erotic massage, phone sex, body rubbing
  - B. Sexual fantasies, masturbation, kissing
  - C. Patting, oral sex, bathing together
  - D. Anal sex, hugging, abstinence
- 22. The following are recommendations for universal precautions in HIV and AIDS, EXCEPT:
  - A. use of protective barriers
  - B. selection of gloves for use while in contact with body fluids
  - C. disinfecting examination gloves for re-use
  - D. Change gloves from one person to another.

- 23. When applying universal precautions, the following are examples of low or non risky fluids EXCEPT:
  - A. Saliva
  - B. Urine
  - C. Knee joint fluid
  - D. Nasal secretions
- 24. A nurse is teaching a student who has just been initiated on ART about the antiretroviral drugs. The nurse recognizes that teaching has been successful when the client makes which statement?
  - A. "I will need to limit my travel to avoid meeting people with other infections".
  - B. "I will need to be on a high calorie diet to enhance the effect of the medication".
  - C. "I will still need to take precautions to prevent spreading the virus to others".
  - D. "I will not be able to continue working on my high stress job anymore".
- 25. Dumisa has been taught about the importance of taking his ARV's as prescribed. He is also on treatment for pulmonary tuberculosis. What could be the primary factor for non-adherence in Dumisa's case?
  - A. High cost of medication
  - B. Pill burden
  - C. Forgetfulness
  - D. Lack of supply
- 26. Poor absorption of nutrients in a person living with HIV may be due to:
  - A. Sores in the mouth
  - B. Opportunistic infections like diarrhoea and vomiting
  - C. Inability to supplement nutrients like minerals.
  - D. Loss of appetite

## Scenario:

Nelly, a 14 year old girl who was staying with her aunt, was raped on her way from school, around 2 pm, by a mentally unstable man known to have AIDS. The following morning, the aunt debated within herself whether to take Nelly to the clinic or not, given that many hours had already passed after the incident. After consultation with their neighbour, they eventually went to the clinic around 3pm where Nelly was tested for HIV and found to be HIV negative. They were given two types of tablets for Nelly to go and take at home. The Doctor told them that the tablets were ARV drugs for reducing the risk of HIV transmission. Though Nelly's aunt was not convinced about the necessity and effectiveness of the tablets for the said purpose, she ensured that her niece took the tablets as prescribed for the sake of completeness. Questions 27 to 36 refer to this scenario

State whether each of the statements (27 to 31) is True (T) or false (F) and write the corresponding letter only.

- 27. The testing kit which was used on Nelly at the clinic was highly likely to have expired, or used wrongly, leading to a false negative result.
- 28. Nelly was not supposed to be given any medication because she had tested negative
- 29. The doctor was too quick to give Nelly ARV drugs since ART is not an emergency
- 30. Nelly was supposed to be given 3 types of tablets as the basic regiment, not 2 types.
- 31. HIV counseling and testing was not necessary in this scenario, especially given that there was no time.
- 32. Based on your knowledge of management of people infected and affected with HIV, what could be the reason for the Doctor to give Nelly those tablets despite the time that has passed before visiting the clinic?
  - A. Nelly was eligible to HAART
  - B. So that Nelly and her aunt could psychologically feel treated, even though the tablets had no effect on HIV transmission
  - C. The tablets could still reduce the risk of HIV transmission despite the time that has passed.
  - D. The doctor could not just turn them away without treatment since they had already come to hospital

Assuming that the tablets were truly for preventing HIV transmission as the Doctor said, attempt questions 33 to 36.

- 33. Which of the following is correct about these tablets
  - (i) They are a lifelong treatment
  - (ii) They are supposed to be taken only for about a months
  - (iii) They are the same type of tablets as those given to people with confirmed HIV
  - (iv) They will not have any side effects on Nelly
  - A. ii & iv
  - B. i & iii
  - C. ii & iii
  - D. ii, iii & iv
- 34. Which of the following tests were performed on Nelly before starting the tablets?
  - A. No tests were done because it was necessary, and also too late.
  - B. CD4 Cell count
  - C. Liver function tests
  - D. Viral load

- 35. Which of the following best describe the way Nelly and her aunt handled the treatment?
  - A. They were adherent to the treatment
  - B. They were compliant to the treatment
  - C. They were forced to take the medication
  - D. A & B
- 36. Given this whole scenario, which of the following statements are true?
  - (i) Nelly will definitely contract HIV, given the condition of the rapist
  - (ii) Nelly will definitely not contract HIV, given the treatment that she got from the clinic
  - (iii) Nelly is highly likely to develop resistance to ARV drugs since she got only 2 types of ARV drugs instead of 3 types
  - (iv) Nelly has a chance of contracting or not contracting the virus
  - A. ii only
  - B. i & iii
  - C. iii & iv
  - D. iv only
- 37. According to Swaziland cultural practises the following cultural practices are dangerous in accelerating the spread of HIV EXCEPT: .
  - A. Multiple concurrent sexual partners
  - B. Wife inheritance
  - C. Thigh sex
  - D. unsafe sexual intercourse in a polygamous family
- 38. This traditional method of transmitting educational information has excellent coverage, even though it has not been scientifically proven.
  - A. Slogans/poems
  - B. songs
  - C. story telling in family settings
  - D. A and B
- 39. The traditional ceremony of umhlanga and lusekwane help youth to delay sexual activities because of fear of......
  - A. Their parents
  - B. Being ridiculed
  - C. Their chief
  - D. Unable to participate.

- 40. Nono is a 25 year old mother who is HIV positive, she delivered a healthy baby boy two days ago. Her in-laws are from a remote drought stricken village. Her mother in-law want her to breast feed the baby but Nono is at conflict because she wants to bottle-feed her baby. Given this situation, which method of feeding is recommended for the baby?
  - A. Artificial feeding for 2 years
  - B. Exclusive breastfeeding for six months
  - C. Cup feeding the breast milk
  - D. Cow's milk and additional food
- 41. Some family members and friends of persons who are HIV positive choose to withdraw (isolate themselves), because they \_\_\_\_\_
  - (i) fear death
  - (ii) feel helplessness
  - (iii) fear getting (contracting) HIV
  - (iv) feel ashamed and pressured from stigma
  - A. ii & iv
  - B. ii, iii, & iv
  - C. i, & iv
  - D. i, ii, iii &iv
- 42. People suffering from HIV/AIDS worry about confidentiality. Deciding who and when to disclose is not easy. They might wonder:
  - (i) Should I just keep this to myself?
  - (ii) How do I get help without everyone finding out my status?
  - (iii) How do I tell my loved ones?
  - (iv) What can I do to assure a safe home, work, and social life?
  - A. ii & iv
  - B. ii, iii, & iv
  - C. i, & iv
  - D. i, ii, iii & iv
- 43. Many events may trigger suicidal thoughts among people living with HIV/AIDS. What could be some of the thoughts?
  - (i) Learning about their positive HIV status
  - (ii) Being stigmatised and discriminated
  - (iii) Fear of disclosing to family and friends
  - (iv) Starting antiretroviral therapy
  - A. i, ii, iii, & iv
  - B. ii, iii, & iv
  - C. i, & iv
  - D. i, only

- 44. As a counselor to persons suffering from HIV and AIDS what should you do?
  - (i) Offer support
  - (ii) Listen without giving advice
  - (iii) Respect your client's choices / decisions
  - (iv) Offer to be an advocate
  - A. i, ii, iii, & iv
  - B. ii, iii, & iv
  - C. i, & iv
  - D. ii, only
- 45. Counselling involves all of the following EXCEPT;
  - A. Taking responsibility of client's actions
  - B. Respect for the client
  - C. Asking questions
  - D. Listening
- 46. The focus of Provider Initiated HIV Testing and Counselling is mainly all of the following EXCEPT;
  - A. discussion about the need for HIV testing
  - B. Little time spent with those who are HIV negative
  - C. To routinely recommend HIV testing for anyone coming for services
  - D. Risk reduction
- 47. All of the following contribute to poor adherence to ART, EXCEPT;
  - A. Lack of knowledge
  - B. Drug abuse
  - C. Prostitution
  - D. Younger age
- 48. 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

Situation: Bongmusa is a 36 year old man who has tested HIV positive with a CD4 count of 350cells/mm<sup>3</sup>. He has been advised to take Antiretroviral Therapy (ART). After three counselling sessions he finally decided to start ART. However, he is keeping his status and treatment a secret. Bongmusa who was less interested in religion has suddenly become committed to God's work. Questions 49-53 relates to this situation.

49,	In	Swaziland	effective A	<b>IRT</b>	comprised of	
-----	----	-----------	-------------	------------	--------------	--

- (i) Nucleoside Reverse Transcriptase Inhibitors (NRTIs), Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs), and Integrase Inhibitors.
- (ii) Nucleoside Reverse Transcriptase Inhibitors (NRTIs), Fusion Inhibitors, and Integrase Inhibitors.
- (iii)Nucleoside Reverse Transcriptase Inhibitors (NRTIs), Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs), and Protease Inhibitors.
- (iv)Nucleoside Reverse Transcriptase Inhibitors (NRTIs) and Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs).
- A. i & iii
- B. i&ii
- C. iii only
- D. iv only
- 50. Since Bongmusa is on ART you would expect his CD4 count to ------
  - A. Increase
  - B. Decrease
  - C. Be unstable
  - D. Remain the same
- 51. Should Bongmusa fail to adhere to ART, his viral load will ------
  - A. Decrease
  - B. Increase
  - C. Be unstable
  - D. Remain the same
- 52. In order for Bongmusa to adhere to ART, he needs all of the following EXCEPT;
  - (i) To take six pills per day
  - (ii) Support group
  - (iii) Friend
  - (iv) A family
  - A. ii only
  - B. i & iii
  - C. iv & ii
  - D. i only

- 53. Bongmusa 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. i & ii
  - B. iii & iv
  - C. iv only
  - D. i only

Instructions: State if each of the following statements is TRUE (T) or FALSE (F), by circling T or F in your answer sheet e.g. 13. T

- 54. A person with HIV who has an undetectable viral load can pass HIV to someone else
- 55. Birth control methods other than condoms reduce the risk of HIV infection
- 56. The skin and mucous membranes act as mechanical barriers to invading microorganism
- 57. Delaying sexual debut is not one of the HIV preventive strategies
- 58. Universal precautions are applicable to people living with HIV.
- 59. A majority of the signs and symptoms of AIDS resemble those of other health problems.
- 60. Abstinence, masturbation and always using a condom are 100% safe with regards to HIV transmission.
- 61. The HIV RNA replicates in the nucleus of the host cell.
- 62. HIV is a virus, and AIDS is a disease.
- 63. The goal of palliative care is to alleviate pain and suffering.
- 64. Pill count is the most reliable method of measuring a client's adherence to antiretroviral therapy.
- 65. Stigma can promote HIV transmission.
- 66. As a counselor, questions you may ask when probing for suicide threats could be "are you thinking about hurting yourself?" or "do you have a plan to hurt yourself?"
- 67. Stigma destroys traditional values.
- 68. Gossiping about somebody's positive HIV status is a sign of stigma.
- 69. The Swazi culture doesn't empower women to negotiate sexual practice with their husband and partner.
- 70. The difference between HIV and AIDS is that AIDS damages the body's immune system, making it increasingly difficult for the body to fight off other diseases.
- 71. Signify Economic empowerment of girls will increase the spread of HIV.
- 72. Counselling is a one way communication process
- 73. During pre-test counselling for Provider Initiated HIV testing and counselling the personal risk assessment of the client is carried out
- 74. On-going counselling is provided immediately after an HIV test is performed
- 75. The Rapid HIV antibody test for adults and children above 18 months refers to checking the presence of the virus in the body