



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

SECOND TRIMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN NURSING, MEDICAL SOCIAL WORK, PARAMEDICAL
SCIENCES**

COURSE CODE: NCN 224, NMS 226, NPP323, NPP224

COURSE TITLE: HIV/AIDS/STI MANAGEMENT

DATE: Tuesday 9/4/2024

TIME: 11:30 am-2:30 pm

INSTRUCTIONS TO CANDIDATES

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

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NCG 214 HIV/AIDS&STI MANAGEMENT**SECTION I - (MULTIPLE CHOICE QUESTIONS) - 20 MARKS)**

Instructions: Answer all Questions; choose one best option that fits the stem statement.

1. The first recognized cases of AIDS occurred in the US in the year;
 - a) 1978
 - b) 1986
 - c) 1981
 - d) 1984

2. The correct statement about HIV 2 virus is:
 - a) Subtype A is found in North America.
 - b) Is more virulent than HIV 1
 - c) Less transmissible than HIV 1
 - d) Subtype B is found in Africa

3. One of the following is an indicator of AIDS
 - a) CD4 count lower than 200/ml
 - b) CD4 count less than 400/ml
 - c) CD4 count lower than 350/ml
 - d) Cd4 count lower than 100/ml

4. Definition of epidemiology:
 - a) Existing in the form of a widespread epidemic that affects people in many different countries
 - b) Study of origin & spread (cause & transmission) of a disease within a population
 - c) An outbreak of a disease that spreads more quickly and more extensively among a group of people
 - d) The number of cases existing at a particular time for a defined population

5. Definition of incidence:
 - a) Number of existing cases
 - b) Number of existing cases and new cases
 - c) Number of new cases
 - d) number of old ,new and existing cases

6. A vaccine for HIV/AIDS has not been found due to:
 - a) Human laxity
 - b) Ethical issues surrounding the vaccine
 - c) The virus mutates
 - d) The individuals immune system is compromised

7. In village A the number of HIV cases in January was 1500. In December the same year the number of cases were 2500. calculate the prevalence of HIV in village A in December
 - a) 2500
 - b) 1000

- c) 4000
 - d) 2000
8. In village A the number of HIV cases in January was 1500. In December the same year the number of cases were 2500. Calculate the incidence of HIV in village A in December
 - a) 2500
 - b) 4000
 - c) 2000
 - d) 1000
 9. The county in Kenya most affected by HIV is:
 - a) Wajir
 - b) Homabay
 - c) Bungoma
 - d) Kirinyaga
 10. The greatest risk of HIV transmission is associated with----- sex
 - a) Anal
 - b) Oral
 - c) vaginal
 - d) Heterosexual
 11. The impact of HIV/AIDS on an individual includes:
 - a) Reduced life expectancy
 - b) Discourage investors
 - c) Congestion in hospitals
 - d) Low farm produce
 12. Signs and symptoms of primary HIV infection include:
 - a) Herpes zoster
 - b) Flue like symptoms
 - c) Encephalopathy
 - d) Weight loss
 13. The core of the HIV virus encloses:
 - a) Glycoprotein 41
 - b) Glycoprotein 120
 - c) Matrix protein
 - d) Reverse transcriptase
 14. A tests used to monitor the progression of HIV/AIDS
 - a) Elisa test
 - b) Western blot test
 - c) Viral load test
 - d) P24 test
 15. Antiretroviral drugs:
 - a) Lowers the life expectancy

- b) Improves the nutrition status of an individual
 - c) Must be started immediately someone is diagnosed with HIV
 - d) Lowers public transmission of HIV
16. Promoting adherence to antiretroviral drugs include:
- a) Increasing pill burden
 - b) Start immediately ARVS once the patient is diagnosed
 - c) Educate the patient on side effects of the drug
 - d) Give ARVS before treating opportunistic infections
17. A drug regimen to illustrate HAART.
- a) Lamivudine+stavudine +Nevirapine
 - b) Nevirapine +indinavir +Abacavir
 - c) Lamivudine +Abacavir+Stavudine
 - d) indinavir+sanquinavir+ lamivudine
18. A positive HIV test can elicit the following reaction:
- a) positive living
 - b) partner notification
 - c) feelings of guilt
 - d) spending time with friends
19. Topics to be discussed in the post-test discussion after an HIV positive result include:
- a) How HIV is acquired
 - b) Myths and misconceptions about HIV
 - c) Procedure for testing
 - d) referral systems
20. The role of male circumcision in the prevention of HIV/AIDS :
- a) Lowers male to female transmission
 - b) Reduces vulnerability to STIS
 - c) Hardens the fore skin
 - d) Reduces viral load in the semen
21. Mother to child transmission of HIV/AIDS can be prevented by:
- a) Mixed feeding
 - b) Several vaginal examinations during labour
 - c) Primary HIV Prevention among women
 - d) Giving ARV prophylaxis during labour
22. HIV exposed infants:
- a) Will test HIV negative in the first one week
 - b) Should have an antibody test in the first one week
 - c) Should have routine immunizations and other immunizations
 - d) Should not be breastfed
23. If a person's HIV becomes resistant to the antiretroviral medicine they are taking:
- a) A higher dose of the same medicines will be more effective.
 - b) Those specific medicines should not be used again to treat the patient.
 - c) After waiting 1-3 months ,the same medicines could again be effective

- d) Adding one or more medicine to the regimen will increase its effectiveness
24. HIV is a lenti virus. Which statement best describes a lenti virus:
- a) Long time between infection and showing of signs and symptoms
 - b) Uses special enzyme to convert single strand RNA to single strand DNA
 - c) Has no cure
 - d) Evades the hosts immune system
25. Stage 11 of HIV infection is characterized by:
- a) Persistent generalized lymphadenopathy
 - b) Acute febrile illness
 - c) HIV wasting syndrome
 - d) Herpes zoster
26. HIV/AIDS test used to diagnose exposed infants is:
- a) Viral load test
 - b) Rapid antibody test
 - c) P24 antigen
 - d) Western blot
27. The commonest side effect of protease inhibitors is
- a) Hematotoxicity
 - b) Hepatotoxicity
 - c) Lipodystrophy
 - d) pancreatitis
28. The following vaccine is contraindicated in children with symptomatic HIV infection.
- a) BCG vaccine
 - b) Pentavalent vaccine
 - c) Measles vaccine
 - d) Oral polio vaccine
29. The HIV glycoprotein that necessitates the fusion and entry of the HIV virus is:
- a) Glycoprotein CCR5
 - b) Glycoprotein CXCR4
 - c) Glycoprotein 120
 - d) Glycoprotein 41
30. Before coming to the hospital for consultation an HIV patient sees white patches in the mouth cavity and on the tongue using his mirror. The above condition is:
- a) Herpes zoster
 - b) Oral hairy leukoplakia
 - c) Oral thrush
 - d) Tb
31. Monica is on ARVS and notices a small painful vesicles on the left side of the face just up to the eye region starting from the upper lip of the mouth. The above condition is:
- a) Herpes simplex
 - b) Herpes zoster

- c) Gingivitis
 - d) Kaposi's sarcoma
32. Clotrimazole pessaries can be used in the treatment of:
- a) Trichomoniasis
 - b) Chlamydia
 - c) Candidiasis
 - d) Herpes simplex
32. A microscopy revealed a mobile flagellated organism and leukocytes on a wet film. Green yellow discharge with vulvovaginal irritation. The above condition describes:
- a) Candidiasis
 - b) Trichomoniasis
 - c) Bacterial vaginosis
 - d) Gonorrhoea
33. A positive whiff's test is an indication of:
- a) Syphilis
 - b) Chlamydia
 - c) Bacterial vaginosis
 - d) Genital warts
34. Primary syphilis is characterized by appearance of:
- a) Genital chancre
 - b) Rash on palms and soles
 - c) Aortic insufficiency
 - d) Arthralgia
35. The following is not a sign of gonorrhoea:
- a) Burning sensation on urination
 - b) Urethral discharge
 - c) Meatal excoriation
 - d) Genital ulcer
36. Lymphogranuloma venereum is caused by following.
- a) Treponema pallidum
 - b) C. trachomatis
 - c) Human papilloma virus
 - d) Herpes simplex virus 2
37. A clinical features of stage IV in pediatric HIV
- a) Oral candidiasis (thrush) after 2 months
 - b) Pulmonary tuberculosis (TB) or lymph node TB
 - c) Recurrent severe bacterial meningitis
 - d) Severe, recurrent bacterial pneumonia
38. Ophthalmia neonatorum is caused by:
- a) Syphilis

- b) Gonorrhea
 - c) Chlamydia
 - d) Herpes simplex
39. The common sexually transmitted pathogens that are associated with inguinal bubo include the following except;
- a) lymphogranuloma venereum
 - b) Chancroid
 - c) Granuloma inguinale
 - d) Chlamydia
40. STIs are most common in which age group?
- a) Teens and young adults up to age 24
 - b) People ages 30 to 40
 - c) People 60 and older
 - d) All of the above
41. As long as a person has no symptoms of an STI, he or she:
- a) Cannot pass on an STI
 - b) Doesn't have an STI
 - c) Cannot take medication
 - d) Can still infect others with an STI
42. Axel Tulip has a thin, clear discharge coming from his penis and mild discomfort when he urinates. He is most likely suffering from _____ and should be treated with-----
- a) gonorrhea, penicillin
 - b) gonorrhea, tetracycline
 - c) chlamydia, penicillin
 - d) chlamydia, tetracycline
43. Which major organ can be affected by untreated syphilis?
- a) heart
 - b) brain
 - c) liver
 - d) A and B
44. Which of these is a health problem that can be caused by STIs in women?
- a) Pelvic inflammatory disease
 - b) Ectopic pregnancy
 - c) Higher risk for cervical cancer
 - d) All of the above
45. One symptom of genital herpes is:
- a) Thick discharge
 - b) Painful blisters in the genital area
 - c) Inguinal buboes
 - d) Visible chancre

46. The cytomegalovirus (CMV) can be spread by sexual contact and also by:
- a) Kissing
 - b) Sharing an office with an infected person
 - c) Mosquito bite
 - d) Sharing clothes
47. To lower your risk of getting an STI:
- a) Use a male condom
 - b) Don't have multiple sex partners
 - c) As a young person, delay having sexual relations as long as possible
 - d) All of the above
48. Chlamydia is more prevalent:
- a) In higher socioeconomic groups
 - b) In men
 - c) Among university students
 - d) A and c
49. Any woman with recurrent genital warts should have a Pap test at least:
- a) Once each month
 - b) Once every six months
 - c) Once each year
 - d) Two times in a five year period
50. Herpes can be cured through topical application or ingestion of:
- a) Acyclovir
 - b) Podophyllin
 - c) Ceftriaxone
 - d) None of the above
51. People who contract genital herpes have an increased risk of:
- a) Becoming infected with HIV
 - b) Developing meningitis
 - c) Breast cancer
 - d) A and b
52. It is possible to transmit HIV:
- a) By sneezing onto another person
 - b) During childbirth
 - c) By having social contact with another person
 - d) Through shaking hands
53. The term "seropositive" is given to a person:
- a) When he or she develops full-blown AIDS
 - b) When he or she tests positive for HIV
 - c) At the time the first opportunistic infection is diagnosed
 - d) When the T4 helper cell count drops below 500

54. Research reports that people typically develop _____ within two to eight weeks after HIV infection.
- a) The first visible symptoms of AIDS
 - b) Swollen lymph nodes
 - c) Antibodies in the blood
 - d) Opportunistic infections
55. Lymphadenopathy is another term for which stage of HIV?
- a) The final stage
 - b) Asymptomatic carrier stage
 - c) The third stage of the syndrome
 - d) Initial infection
56. In the treatment of AIDS, AZT:
- a) Manufactures T-helper cells
 - b) Stops the virus from multiplying
 - c) Treats the symptoms of Pneumocystis carinii
 - d) Destroys T-helper cells
57. The term "chancre" is given to:
- a) The sores symptomatic of herpes
 - b) The sore symptomatic of syphilis
 - c) The growths symptomatic of genital warts
 - d) All of the above
58. This STD may lead to heart disease or insanity.
- a) Gonorrhea
 - b) Chlamydia
 - c) Herpes
 - d) Syphilis
59. An STD for which there is an approved, effective vaccine is:
- a) Herpes
 - b) Hepatitis B
 - c) Monilia
 - d) Chlamydia
60. All of the following help to prevent vaginitis except:
- a) Wearing cotton underpants
 - b) Wearing loose fitting clothes
 - c) Reducing sugar intake
 - d) Using feminine hygiene deodorant sprays

1. Draw a graph illustrating the natural progression of the HIV virus showing the relationship between HIV RNA and CD4 cells. (5marks)
2. Explain three differences between HIV and sexually transmitted infections. (3marks)
4. Explain four effects of sexually transmitted infections in the society (4 marks)
6. Discuss four factors that increase mother to child transmission of HIV (8marks)

SECTION C: LONG ESSAY QUESTIONS - 40

2. Comprehensive (wholistic) care is key in management of HIV/AIDS patients.
 - a) Define the comprehensive care concept(2 marks)
 - b) Explain the elements of care under the comprehensive care concept (18 marks)