

# AMREF INTERNATIONAL UNIVERSITY SCHOOL OF MEDICAL SCIENCES DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES KENYA REGISTERED COMMUNITY HEALTH NURSING END OF SEMESTER EXAMINATIONS APRIL 2023

DNS 214: HIV/AIDS &STIs/RTIS DATE: FRIDAY 14<sup>TH</sup> APRIL 2023

TIME: 2 Hours Start: 1115 HOURS Finish: 1315 HOURS

### **INSTRUCTIONS**

- 1. This exam will be marked out of 70 Marks
- 2. ALL Questions are compulsory.
- 3. The Examination has Three Sections: Section I- Multiple Choice Questions, Section II: Short Answer Questions, Section III: Long Essay Questions
- 4. Answer all Questions in the ANSWER BOOKLET provided
- 5. Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

## SECTION I: MULTIPLE CHOICE QUESTIONS (20 MARKS)

- 1. The following are features of Stage 2 of World Health Organisation (WHO) Clinical staging of HIV/AIDS:
  - a) Hepatosplenomegaly, recurrent upper respiratory infections and herpes zoster
  - b) Extra-pulmonary TB, unexplained persistent fevers and oral candidiasis
  - c) Oral candidiasis, unexplained persistent diarrhea and herpes zoster
  - d) Persistent generalized lymphadenopathy, herpes zoster and Kaposi's sarcoma
- 2. The enzyme required for viral replication process in the HIV lifecycle is:
  - a) Protease
  - b) PolymeraseA
  - c) CCR5
  - d) Reverse Transcriptase
- 3. HIV disease stage in which lymphadenopathy is more common is:
  - a) Stage 1
  - b) Stage II
  - c) Stage III
  - d) Stage IV
- 4. The most common cancer in HIV/AIDS patients is:
  - a) Cervical cancer
  - b) Kaposi's sarcoma
  - c) Uterine cancer
  - d) Breast cancer
- 5. The immune cells with special receptors for attachment of HIV include:
  - a) Thelper cells
  - b) Monocytes
  - c) Macrophages
  - d) Dendritic cells
- 6. The following is true regarding individual diagnosed with AIDS:
  - a) They have a CD4 count of less than 200 cells/mm3
  - b) AIDS is an early manifestation of HIV infection
  - c) A person with AIDS can live for upto 10 years
  - d) They have a competent immune sustem

- 7. An opportunistic infection in the AIDS stage of HIV infection that affects the brain is:
  - a) Pneomocystis Jirovecii
  - b) Bacterial Meningitis
  - c) Cryptococcal Meningitis
  - d) Tuberculosis of the Meninges
- 8. The mechanism of action of protease inhibitors in HIV virus suppression in host cells include:
  - a) Inhibitors of the enzymes protease
  - b) Inhibits viral maturation after budding from host cell
  - c) Prevents the fusion of the HIV virus with the host cell
  - d) Prevent integration of Viral RNA to host DNA
- 9. Sexually Transmitted Infections (STIs) are most common in which age group:
  - a) Ages of 30 45 years
  - b) Ages of 25 30 years
  - c) Teenagers and young adult up to 24 years
  - d) Above 45 years
- 10. Gumma are typical clinical manifestation in:
  - a) Herpes Zooster Disease
  - b) Latent phase of HIV infection
  - c) Tertiary syphilis
  - d) Chlamydia
- 11. The following agent is NOT used for treatment of Chancroid:
  - a) Azithromycin 1gm stat PO as a single dose
  - b) Ceftriaxone 500mg IV single dose
  - c) Erythromycin 500mg four times a day 7 days
  - d) Ciprofloxacin 500mg twice a day PO 3 day
- 12. The causative agent of chancroid is:
  - a) Chlamydia trachomatis
  - b) Treponema pallidium
  - c) Hemophilius ducreyi
  - d) Ureaplasma urealyticum
- 13. The stage of syphyllis characterised by condylomata lata lesions is:
  - a) Pre pathogenesis stage
  - b) Primary stage
  - c) Secondary stage
  - d) Tertiary stage

- 14. The treatment of choice for trichomoniasis is:
  - a) I.V ceftriaxone 2gm STAT
  - b) P.O Metronidazole 2gm STAT
  - c) P.O doxycycline 200mg STAT
  - d) I.M penicillin G 2.4 MU STAT
- 15. The organism causing a frothy, profuse, greenish-yellow and foul smelling vaginal discharge is:
  - a) Neisseria gonorrhea
  - b) Chlamydia trachomatis
  - c) Gardnerella vaginalis
  - d) Trichomonas vaginalis
- 16. Indicate TRUE (T) or FALSE (F) for the statements below (½ Mark each)
  - a) In HIV infection; Memory loss, depression & other neurologic disorder is an AIDS defining feature
  - b) Pre-exposure prophylaxis is indicated for couples who report bursting of a condom during sexual intercourse
- 17. The viral STI commonly associated with cervical cancer is:
  - a) Herpes simplex type 2 (HSV-2)
  - b) Human immunodeficiency virus (HIV)
  - c) Human papilloma virus (HPV)
  - d) Cytomegallovirus
- 18. The treatment of choice for syphilis is:
  - a) 300mgs doxycycline given orally
  - b) IM single dose 2.4 MU Benzathine penicillin G
  - c) 2gm IM ceftriaxone for 5 days
  - d) 2gm metronidazole give orally
- 19. The drug of choice for candidiasis is :
  - a) Fluconazole
  - b) Amphotericin B
  - c) Metronidazole
  - d) Acyclovir

- 20. Post-exposure prophylaxis for HIV:
  - a) Should be given to anyone who is at risk of exposure to HIV virus
  - b) Should be offered to all children born of HIV infected mothers
  - c) Should be given for six months continuously
  - d) Should be offered within 72 hours of exposure

# **SECTION II: SHORT ANSWER QUESTIONS (30 MARKS)**

- State (4) ways in which Sexually Transmitted Infections (STIs) and HIV/AIDS interact. (4
  Marks)
- Explain (5) C's used in HIV testing services and linkage to treatment and prevention (5 Marks)
- 3. Describe (5) classes of Antiretroviral agents used in the management of HIV/AIDS, giving an example of a drug in each class. (5 Marks)
- 4. State six (6) risk factors for acquisition of sexually transmitted infections (6 Marks)
- 5. State five (5) complications of untreated sexually transmitted diseases (5 Marks)
- 6. Outline five (5) challenges encountered in the management of patients with sexually transmitted infections (5 Marks)

# SECTION III: LONG ANSWER QUESTION (20 MARKS)

- 1. Explain the challenges that the government and partners are experiencing in prevention and control of New HIV infection and STI infections. (10 Marks)
- 2. Explain any social health determinants that influence management, prevention and control of HIV and STI infections in Kenya. (10 Marks)