



*(University of Choice)*

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

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS  
2019/2020 ACADEMIC YEAR**

**FIRST YEAR FIRST SEMESTER EXAMINATIONS**

**FOR THE DEGREE  
OF  
BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES  
SPECIAL AND SUPPLEMENTARY EXAMINATIONS**

**COURSE CODE: BML 117**

**COURSE TITLE: HIV/AIDS AND STI EDUCATION**

**DATE: -----**

**TIME: -----**

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**INSTRUCTIONS TO CANDIDATES**

Answer ALL questions

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over. ►

**SECTION I - ( MULTIPLE CHOICE QUESTIONS) - 20 MARKS)**

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

1. Genital herpes are caused by the herpes simplex viruses:
  - a. HSV-1 and HSV-2.
  - b. HIV, HSV-1 and HSV-2.
  - c. HTLV1.
  - d. HPV, HSV-1 and HSV-2.
2. Lymphadenopathy refers to:
  - a. Cancer of the lymph nodes.
  - b. Swollen or enlarged lymph nodes.
  - c. Shrunken lymph nodes.
  - d. Infected lymph nodes.
3. Syphilis is a complex systemic sexually transmitted infection caused by:
  - a. A virus.
  - b. The spirochete.
  - c. A fungus.
  - d. A helminth.
4. Which of the following is a mode of transmission of HIV?
  - a. Saliva.
  - b. Urine.
  - c. Blood.
  - d. Tears.
5. Which of these is a health problem that can be caused by STDs in women?
  - a. Pelvic inflammatory disease (PID)
  - b. Ectopic pregnancy
  - c. Higher risk for cervical cancer
  - d. All of the above
6. Which is the most common STD caused by bacteria?
  - a. Gonorrhea
  - b. Syphilis
  - c. Chlamydia
  - d. Genital warts
7. Which of these is NOT a type of STDs?
  - a. Chancroid
  - b. Scabies
  - c. Molluscum contagiosum
  - d. HTLV
8. To lower your risk of getting an STD:
  - 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

9. The p24 molecule is a component of which part of the HIV.
  - a. Core
  - b. Envelope
  - c. Reverse transcriptase
  - d. Fusion domain
10. The highest proportion of infected HIV persons is in which of the following age groups?
  - a. 10-14 years
  - b. 15-24 years
  - c. 25-34 years
  - d. 35-44 years
11. As of 2009 the rate of HIV-diagnoses in the United States is increasing only in which risk group?
  - a. Injection drug users
  - b. Men who have sex with men
  - c. Heterosexuals
  - d. Health care workers
12. The highest risk of acquiring HIV infection is to the:
  - a. Women in vaginal intercourse
  - b. The receptive partner in anal intercourse
  - c. The male partner in vaginal intercourse
  - d. The male partner in oral intercourse
13. The most sensitive test for detection of the HIV currently commonly used is:
  - a. Elisa for p24 antigen
  - b. Polymerase chain reaction (PCR)
  - c. Virus culture
  - d. Elisa for p17 antigen
14. The single most important factor in confronting the HIV-epidemic in a country is:
  - a. Availability of anti-retroviral drugs
  - b. Political commitment from the top levels of government
  - c. A low prevalence of injection drug users
  - d. Incarceration of sex workers
15. The biggest single barrier to control of HIV globally is:
  - a. Availability of treatment
  - b. Stigmatizing attitudes
  - c. Inadequate supply of condoms
  - d. The limited number of methadone clinics
16. A small proportion of individuals can resist infection by HIV because they lack the:
  - a. CCR 5 receptor
  - b. CXCR 4 receptor
  - c. The fusion domain
  - d. The GP41 receptor
17. Protease inhibitors block:
  - a. Entry of HIV
  - b. Transcription of HIV RNA to HIV DNA

- c. Integration of HIV DNA into the host DNA
  - d. Packaging of the progeny HIV
18. The following is NOT associated with primary infection by HIV
- a. High viral load
  - b. lowered CD4 cells count
  - c. High CD4 cells count
  - d. fatigue
19. The highest risk of transmission from an HIV-infected mother to her infant occurs:
- a. In utero
  - b. During the birth process
  - c. Through breast feeding
  - d. Equal risk at each stage
20. Mutation of HIV is responsible for:
- a. Drug resistance
  - b. Escape from the immune system
  - c. Increased replication potential
  - d. All of the above

### **SECTION B: SHORT ANSWER QUESTIONS – 40 Marks**

1. Describe the HIV prevention programmes that are currently being used in Kenya (4 marks)
2. Outline the modes and determinants of HIV transmission (4 marks)
3. Describe the structure of HIV aids virus (4mks)
4. Outline the symptoms associated with congenital STI infections (4mks)
5. Describe high risk behaviours associated with HIV transmission (4 mks)
6. Describe social cultural barriers to behaviour change in HIV transmission prevention (4 marks)
7. state the legal and ethical issues involved in management of HIV infections (4 marks)
8. Outline the general syndromes of with STIs (4mks)
9. Explain the verbal and non verbal skills employed when taking history of STIs patients (4mks)
10. Describe the syndromic approach to HIV diagnosis (4mks)

### **SECTION C: LONG ESSAY QUESTIONS - 40 Marks**

1. Using the ART target sites discuss the groups of HIV treatment regimes citing appropriate examples (20marks)
2. Discuss the pathophysiology of Sexually Transmitted I infections associated with genital ulcers (20marks)
3. Explain the stages of HIV infection (20 mks)