



MURANG'A UNIVERSITY COLLEGE
(A constituent college of Jomo Kenyatta University of Agriculture and Technology)

UNIVERSITY EXAMINATIONS 2015/2016

SUPPLEMENTARY/ SPECIAL EXAMINATIONS

SZL :2111 HIV/AIDS

Date: 1st July 2016

TIME: 2HOURS

INSTRUCTIONS

ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 Marks)

- a) Differentiate between the following terms
- i. Endemic and Epidemic
 - ii. Co infection and Opportunistic infection
 - iii. HIV prevalence and Virulence (6marks)
- b) Define innate immunity and discuss three mechanisms in which our body protects itself against invasion of pathogenic organisms. (4 marks)
- c) State five ways in which FGM(female genital mutilation) leads to conditions that favour HIV survival. (5 marks).
- d))Briefly explain FIVE factors that contribute to unfaithfulness, hence increasing the risk of HIV infection (5 marks)
- e) Name three classes of Anti Retro-viral drugs (ARVs) (3 marks)
- f)) Outline three principals that form the government policy on HIV testing. (3 marks)
- g) Briefly discuss TWO myths surrounding sexuality among the youth and how each may contribute to the spread of HIV/ AIDS (4 marks)

QUESTION TWO

- . Describe the four stages of HIV infection including the symptoms observed
question three (20 marks)

QUESTION THREE

Describe the strategies that the Kenyan government has adopted to fight the spread of HIV/AIDS (20 marks)

QUESTION FOUR

- Discuss how the following contribute to the management of HIV/AIDS in our community
- Living positively with the virus (10 marks)
 - Behaviour change (10 marks)

MARKING SCHEME

QUESTION 1

a) I) Endemic- constant presence of a disease or an agent of a disease in a community or region.

Epidemic- an acute outbreak of a disease on a community or region in excess of the normal expectancy

II) co infection- being infected with 2 or more strains.

Opportunistic infections—these are infections that take advantage of the weakened immune system

III) HIV prevalence- the percentage of population infected with HIV .

Virulence- describes the degree of pathogenicity of an organism'.

QUESTION b)

- Innate immunity is present at birth and provides non specific immunity to any foreign invader. It prevents the invader from entry into the body.
- Physical barriers include the skin, cilia, mucus, wax, coughing , sneezing , vomiting
- Biochemical factors- acidic gastric juices, lytic enzymes in sweat tears, breast milk,
- Blood factors, - interferons, complements, fibrinogen,
- Genetic control- inherited ability to resist disease and to be affected hence carriers of disease
- Cellular factors- White blood cells, , monocytes, macrophages,

QUESTION c)

- An abnormal anatomy with anatomical distortion
- Partial closure of the vagina
- Incomplete healing brought about by infections
- Scar formation may be excessive
- Urinary tract infections
- Inflammation of the genital area

- Chronic urinary retention

d)

- Unmotivated partner,
- Financial irresponsibility,
- When the partner has not recovered from a past relationship,
- Emotional damage from childhood,
- When the partner is emotionally unavailable(5 marks)

e)

- Non Nucleoside Analogue Reverse Transcriptase Inhibitors
- Nucleoside Analogue Reverse Transcriptase Inhibitors
- Protease Inhibitor (3 marks)

h) Virginitiy myth- if one is still a virgin at 25 , one does not enjoy sex
 Have sex early to know if you are functioning well
 The more one engages in sex the healthier they become
 Sex with condoms is not real sex. (4 marks)

QUESTION 2

The 4 stages of HIV infection include:

- Primary HIV infection,

stage where one obtains the virus and consists of the window period: infection lasts for 3wks accompanied by a flu. The virus cannot be detected. The virus can be transmitted
 sero conversion: body develops antibodies, may experience, flu like illness, fever , fatigue, sore throat, joint pains, ;

- Clinical asymptomatic infections,

There may be no major symptoms , test shows positive results, large amounts of T-helper cells die at this stage. Can last for 5-15 years. ; initial infection symptoms may then surface such as sore throat, swollen glands, fever, brain swelling and infection hence headaches ,amnesia, personality changes.

- Symptomatic HIV infection,

immune system loses to the HIV as lymph nodes and tissues are damaged, HIV virus mutates and becomes more pathogenic, the body not able to replace damaged T-helper cells, immune system weak , opportunistic diseases take advantage of the weak immune system.; symptoms include diarrhea, chronic fever, weight loss, sores in the mouth, dermatitis, eczema, lymphadenopathy, lethargy.

- Progression of HIV to AIDS

most advanced stage of HIV infection, CD4 cell count is below 200CD4 cell /ml, HIV develops to one or more opportunistic infections or cancer. Symptoms: wasting of the body, persistent swelling of the lymph glands, damage to the brain and nervous system, coughs, loss of vision, coma , death. (20 marks)

QUESTION 3

Public educational campaigns

HIV/AIDS seminars and workshops
Mainstreamed HIV/AIDS lessons in formal education system.
Destigmatization campaigns
Free distribution of condoms.
Provision of treatment to HIV/AIDS patients
Provision of VCT centers
Discouragement of detrimental socio-cultural practices
Gender advocacy
Poverty eradication

QUESTION 4

- Accepting ones HIV status and possible ways of delaying the onset of AIDS
it involves accepting the HIV status cannot be changed, refusing to be a victim and focusing on what one can do best, seeking support, exercising regularly, seeking prompt treatment for any illness, seeking advice when planning to have a baby, paying attention to nutrition, managing stress keeping busy, taking enough rest, thinking and acting positively, embracing ones spirituality, accepting responsibility by using condoms preventing infection and reinfection hence avoid a lifestyle which can expose others to infection, avoid unsafe sex exposure to other infections, avoiding use of unprescribed drugs, living in isolation, consumption of alcohol and drugs, avoid pregnancies
there should be support given to the PLWA by the community, keep confidentiality, provision of material support, psychological and social support, sensitisation on health and nutritional needs.
- Behaviour change- avoiding high risk behaviour and situations that increase the spread of HIV
drug and substance abuse, pre and extra marital sex, early and forced marriages, early sexual encounters, homosexuality and lesbianism, emulating negative role models, rape incest, group sex, peer pressure, sugar daddies /mummies. Risk free behaviours such as chastity, proper use of leisure, proper courtship and marriage, setting and emulating a good role model, encouraging peer counseling and education.

(20 marks)