

Name _____

Directions: Please read each question carefully before answering. Give as complete an answer as possible. Show your work where necessary to earn partial credit.
Good luck!

(12 pts.) 1. A friend comes to you and confides that he/she may have engaged in a high risk behavior that might have exposed him/her to HIV.

(6 pts.) A. He/she asks you if he/she should be tested for HIV and wonders why it would be important to be tested. What are two reasons that you give your friend for why he/she should be tested for HIV?

(6 pts.) B. After testing HIV-, your friend comes to you and says that he/she is confused because the health care worker told him/her to come back to be tested again in 6 months. He/she asks you why he/she needs to be tested in 6 months if he/she tested HIV-. What explanation do you give him/her?

(6 pts.) 2. Why are some health clinics using the Rapid Test as opposed to the ELISA for determining one's HIV status?

- (4 pts.) 3. The standard treatment for someone with HIV/AIDS is HAART. What does HAART stand for?
- (6 pts.) 4. The blood banks are using the Viral Load test to screen the blood supply for HIV. Does this make the blood supply 100% safe from HIV? Why or why not?
- (16 pts.) 5. Anti-retrovirals are used to treat people with HIV/AIDS.
- (4 pts.) A. What is the criteria that is being used to determine if one should begin anti-retroviral therapy?
- (4 pts.) B. Why is anti-retroviral therapy not being administered as soon as one is diagnosed as being HIV+ and healthy (in the asymptomatic stage)?
- (4 pts.) C. Describe how the first anti-AIDS drug, AZT, is designed to be effective. Be specific.
- (4 pts.) D. Describe how the newest drug, Fuseon, is designed to be effective. Be specific.

(6 pts.) 6. Your younger sister comes to you with questions about HIV/AIDS. She tells you that she intends on having sex with her new boyfriend and says that she plans on taking birth control pills. She wonders if this will protect her from HIV/AIDS. What do you say to her? Explain.

(8 pts.) 7. Why does HIV mutate so rapidly, **and** what is the consequence of this rapid mutation?

(6 pts.) 8. Needle exchange programs are legal in a number of different states around the country. Describe how a needle exchange program can be effective at reducing the spread of HIV.

(12 pts.) 9. Peter Duesberg has been the main proponent for the idea that HIV is not the cause of AIDS.

(4 pts.) A. What explanation does Thabo Mbeki, President of South Africa, give for doubting whether HIV is the cause of AIDS?

- (4 pts.) B. What does President Mbeki and Duesberg propose as the cause of AIDS?
- (4 pts.) C. What has been the consequence of Mbeki's AIDS policy?
- (8 pts.) 10. The movie "And The Band Played On", chronicled the early history of the AIDS pandemic in the U.S. Describe two pieces of evidence gathered by the CDC that indicated that the disease was caused by an infectious agent as opposed to other causes. (Before HIV was actually discovered)
- (10 pts.) 11. Describe two major factors that determine if an infectious agent (virus) will jump from its host species to a new species to cause disease, **and** what is believed to be the original host species for HIV-1?

(10 pts.) 12. Describe several (three or more) cultural and economic factors that are driving the AIDS pandemic in Sub-Saharan Africa.

(6 pts.) 13. What is the social cost of the AIDS pandemic in Sub-Saharan Africa?

(8 pts.) 14. Uganda has been a model country in dealing with HIV/AIDS. What actions have President Museveni taken to help control the spread of the disease in his country?

(8 pts.) 15. Brazil has taken a different approach from Uganda in dealing with HIV/AIDS. What is this different approach, **and** what has made this approach possible given that Brazil is a developing country?

(14 pts.) 16. Suppose that by the year 2010, a vaccine for AIDS was developed in the United States by one of the large drug companies. Suppose that this vaccine is a combination of a traditional vaccine and the newer experimental vaccines being experimented on now.

(8 pts.) A. How are these vaccines specifically designed to be effective?

(6 pts.) B. Suppose this new vaccine is designed to prevent HIV-1, Clade B, the subtype of HIV prevalent in the United States. Would giving this vaccine to people in Africa be effective in preventing HIV/AIDS? Why or why not?

