National AIDS Control Organization Ministry of Health & Family Welfare **Laboratory Services Division**

INDUCTION TRAINING PROGRAM FOR LAB TECHNICIANS APPOINTED TO VCTC, PPTCT AND ICTC CENTRES PRE AND POST TRAINING EVALUATION

MARK THE CORRECT ANSWER. MORE THANONE ANSWER MAY BE CORRECT FOR A QUESTION

- 1. Which of the following tests may be used for detection of HIV antibodies? Tick the right answer Rapid tests
- **ELISA**
- Western Blot
- All of the above
- 2. The recommended storage temperature of most of the HIV diagnostic kits is
 - (i) $0^{\circ}C$
 - 2-8° C (ii)
 - -30°C (iii)
 - -70°C (iv)
- 3. Differentiation HIV –1 and HIV 2 infection is possible by
 - (i) All ELISA kits used for antibody detection
 - (ii) All rapid/ simple tests used for antibody detection
 - Some rapid/ simple tests used for antibody detection (iii)
 - (iv) None of the above
- 4. Following are the various tests conducted for monitoring the progress of HIV infection in a patient on ART. Tick the right answer.
- CD4 test
- HIV Viral load
- Liver function tests
- All of the above
- None of the above
- 5. Infant diagnosis in a child less than 18 months is best done by :
 - HIV ELISA
 - HIV Rapid card tests
 - Western Blot
 - HIV DNA PCR

6.Describe what you understand by the term "window period" in HIV infection

- 7. Which of the following is/are components of the lab quality system? Tick against the right choice
- Equipment maintenance
- Purchasing and Inventory control
- Lab documents and records
- Trouble shooting and corrective action
- Biosafety
- All of the above
- 8. Specimen collection, Specimen transport and Specimen quality constitute one of the following phases of the lab workflow:
- Pre analytical
- Analytical
- Post analytical
- None of the above
- 9. The main target of the HIV virus in the human body is the:
- Red blood cell
- CD4 lymphocyte
- Platelets
- Macrophages
- 10.One of the following is not the known route of transmission of HIV infection:
 - Sexual contact with an HIV positive individual
 - Transmission through blood infected with HIV
 - Mother to child transmission when mother is HIV positive
 - Casual community contact with a HIV positive individual
- 11. Laboratory monitoring of CD4 cells in HIV infected individuals is important for:
- Estimating Immune status of the individual and staging HIV disease
- Monitoring progression of HIV disease
- Monitoring response to anti-retroviral therapy
- To make decisions about starting treatment for opportunistic infections
- All of the above
- None of the above
- 12.One of the following is false with respect to inventory management:
 - Check and rotate stock periodically at regular intervals
 - The new stock must be placed in front of the older stock.
 - Careful forecasting of reagents and consumables is necessary
 - Maintain proper inventory records
- 13. In the NACO testing strategy for diagnosis of HIV infection in an individual
 - (i) If a specimen is reactive in the first rapid test it should be confirmed as positive in two additional rapid tests based on a different principle before determining the true status of the sample
 - (ii) If a specimen is reactive in one rapid or ELISA test, you can issue a positive report to the patient
 - (iii) A specimen non-reactive in the first rapid / ELISA test is to be re-tested by an additional two rapid tests before issuing a negative report.
 - (iv) Two rapid tests are enough to decide the positive status of an individual.

- 14. The diluent used for making serial dilution of Reactive serum for preparing controls
 - (i) Normal saline
 - (ii) Phosphate buffered saline at pH7.2
 - (iii) Serum negative for HIV, HBV, HCV
 - (iv) Distilled water.
- 15. Post exposure prophylaxis (PEP) in HIV is to be given to the exposed person in case:
- Source patient is at high risk of HIV
- Exposure is on non-intact skin
- HIV status of source patient is unknown
- All of the above
- None of the above
- 16. Standard work precautions are applicable in case of :
- All lab personnel handling any blood and body fluid samples
- Only samples known to be infected with HIV/ Hepatitis B/Hepatitis C
- Only laboratory personnel who are not vaccinated against Hep B
- Only laboratory personnel who have cuts/ bruises/non intact skin.
- 17. One of the following is false with respect to Sharps Safety:
- Whenever possible avoid the use of sharps
- A contaminated needle or sharp is to be recapped with a two handed method prior to disposal
- Do not place sharps or needles in office waste containers
- Use phlebotomy equipment with built in safety features
- Do not touch broken glass with hands
- 18. One of the following is false with respect to the HIV testing and reporting process:
 - Testing must follow informed voluntary written consent from the patient
 - Testing must be accompanied by pre and post test counseling
 - Testing must be done as per the NACO HIV testing strategies and guidelines
 - HIV test results may be conveyed on phone or by fax .
- 19. The blood specimen is rejected for HIV testing and another requested if the following occur:
 - The blood is hemolyzed
 - If the sample vial is leaking and visibly contaminated
 - The specimen is improperly labeled
 - All of the above
- 20. One of the following is not done after contaminated needlestick injury
 - Pricked finger put into the mouth and sucked
 - Allow site to bleed and wash with plenty of soap and running water
 - Report the injury immediately to the lab management and the hospital infection control committee
 - Consult with local senior management regarding possible treatment and follow-up