Molecular Medicine Research Institute

ami HTX Practical Examination

X-ray Practical Operations Quiz

All Users must pass with a score of 80% (20/25)

Score: _____

Name: _____

Date: _____

1. The X-ray operation on ami HTX can be performed with the chamber door open
   a) True
   b) False

2. To initiate the X-ray function on the ami HTX, the following is required.
   a) Radioisotopes
   b) X-ray key
   c) Ami HTX starts X-ray default
   d) None of the above

3. Why is it essential to ensure the door interlock is functional?
   a) Animals do not escape
   b) to shield light
   c) to ensure no X ray leakage

4. Operator safety training is required prior to use of X-ray operation on ami HTX
   a) True
   b) False

5. Federal Radiation Safety Standard requires that the radiation emitted from a cabinet x-ray system not exceed an exposure of
   a) Less than 0.5 mR
   b) 100 mR
   c) 5 mR

6. What should be your first response if you detect the interlock door open during X ray operation?
   a) Continue imaging
   b) Try to close the door
   c) Use emergency stop
   d) Unplug the machine

7. Do you need to wear a dosimeter while operating X-ray on ami HTX?
   a) Not required
   b) Mandatory to wear a dosimeter
   c) Optional

8. Portable survey meter is required to survey the area surrounding machine
   a) True
   b) False

9. Users must mandatorily wear leaded glasses and thyroid collars while operating X rays on ami HTX system?
   a) True
   b) False

10. The X-ray images can be captured on Ami HTX at following intensities
    a) High
    b) Low
    c) Only high
    d) both High and low

11. The power switch to the ami HTX is located in the front of the unit
    a) True
    b) False

12. The ami HTX is a _____ radiography machine
    a) Diffraction X-ray
    b) Cabinet X-ray
    c) Electron Microscopy
    d) Field X-ray

13. The green button on the lower front of the ami HTX is the start button
    a) True
    b) False

14. The red button on the lower front of the ami HTX is the
    a) Start button
    b) Emergency stop button
    c) Open door button
    d) None of the above

15. During imaging, X-rays are generated by the ami HTX for
    a) 1 min
    b) 5 sec
    c) 10-15 sec
    d) None of the above

16. Every user is issued their own X-ray key
    a) True
    b) False

17. The ami HTX is shielded by _____ to prevent leakage of X-rays
    a) plastic
    b) lead
    c) steel
    d) aluminum

18. No unauthorized personnel may defeat or override any safety feature on the X-ray generator or shielding
    a) True
    b) False

19. Entering the data collection settings, the date and sample information on the computer serves as X-ray use logs
    a) True
    b) False

20. X-ray images are collected using the _____ acquisition mode
    a) Fluorescence
    b) Luminescence
    c) X-ray
    d) None of the above

21. Fluorescence, Luminescence and X-ray images can be collected simultaneously
    a) True
    b) False

22. In order to start data collection and save your image into your folder
    a) Turn on the computer
    b) Press the green button on the front of the Ami HTX
    c) Click acquire in the imaging software
    d) None of the above

23. The Spectral ami HTX User manual is available
    a) in the imaging room
    b) on the MMRI intranet
    c) all of the above

24. All users are required to sign into the log sheet before starting
    a) True
    b) False

25. Flammable or potentially explosive materials are not allowed in the ami HTX imager.
    a) True
    b) False