X-RAY SAFETY REFRESHER EXAM 2014

DIRECTIONS: Please print this quiz and fill in the information requested. Mark the correct answer to each question, either scan and email the quiz to ehs@uh.edu or send it through campus mail to EHLS, Mail Code 1005. You may also fax the completed quiz to 713-743-8035. To receive credit for the course, the quiz must be on file with EHLS and a score of 80% or higher must be achieved. Good Luck!

Date: _________________________________

Name: _________________________________ (Please print or type)

Department: ____________________________

Phone: ___________________ People Soft ID # ______________________

Email: _________________________________ (Please print or type)

Principal Investigator: ____________________ (If applicable)

1. The objective of the University of Houston’s Radiation Safety Program is to

   Maintain regulatory compliance
   Establish good radiation safety work practices
   Maintain a safe working environment for radiation users and the public
   All of the above

2. All x-ray labs must be posted with “Caution x-ray radiation” signs.

   TRUE
   FALSE

3. Every person authorized to work with x-ray machines at the University is required to
familiarize themselves with the rules

Observe the rules for their protection and that of their co-workers

Promote safe work environment by following the safety and operating procedures

All of the above

4. Which of the following will go against the fundamental principles of radiation protection:

- tampering with the shielding material provided by the manufacturer
- maintaining a safe distance when working around the x-ray machine
- conducting a dry run to ensure familiarization with sample manipulation prior to actual experiment
- following the posted start-up, shut down and emergency procedures

5. A person completing a declaration of pregnancy:

- should declare the pregnancy in writing to the Radiation Safety Officer
- will be provided with special monitoring for the fetus upon declaration
- Must provide the estimated date of conception
- All of the above

6. It is necessary to ensure x-ray machines are secured from unauthorized use or removal.

   TRUE

   FALSE

7. The Maximum permissible dose in a single year to the eye is:

   75 mrems
   15 rems
   5 rems
   50 rems
8. What does the acronym ALARA stand for?

   As low as readily attainable
   As low as reasonably achievable
   As long as reasonable achievable
   As low as readily available

9. The hands and feet (extremities) can tolerate a higher dose of radiation than the blood forming organs

   TRUE
   FALSE

10. Principals of radiation protection include:

    Shielding
    Time
    Distance
    All of the above

11. Completion of the annual x-ray refresher training course is required of every authorized user of x-ray machines at the University of Houston.

    TRUE
    FALSE

12. Suspicion of over-exposure to radiation warrants timely investigation and reporting to state regulatory agency. If you suspect you are overexposed due to any reason, what should you do?

    Report to the Radiation Safety Officer immediately
    Inform your colleague and proceed with your assignment
    Report to the local police department for investigation
    Do nothing at all
13. All x-ray machine users must be specifically trained to operate the equipment by the X-ray Principal Investigator or laboratory supervisor.

TRUE

FALSE

14. The following are correct ways to handle your radiation badge (dosimeter) if assigned to you EXCEPT:

- always wear your badge when using x-ray machines
- share your badge with a friend who left theirs at home
- when not in use store away from the x-ray radiation
- Radiation badges must not leave the campus

15. Written standalone Operational and Safety Procedures must be developed and made available to authorized users for each x-ray machine.

TRUE

FALSE

16. The unit which indicates Photon radiation exposure is

- rad
- rem
- Roentgen
- Curie

17. The telephone extension for the Environmental Health and Life Safety is:

- 34380
- 34271
- 35858
- 33333
18. A radiation survey meter must be properly calibrated before using it to conduct radiation surveys of x-ray machines.

   TRUE

   FALSE

19. If X-ray machine is used, all of the followings are required to be posted on the door and/or in the lab except:

   Notice to Employee

   Emergency Contact

   Caution X-ray sign

   X-ray manual

20. One of the main causes of accidents is shutter failure

   TRUE

   FALSE