

Emory University School of Medicine  
Radiation Safety Exam for Medical Imaging Students

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Instructions: Select the best answer based on your review of "Radiation Safety Training for Medical Imaging Students."  
Turn in this exam and a completed Personnel History Form to your supervisor.

1. Which of the following is not a type of radiation?
  - a) Alpha particles
  - b) Beta particles
  - c) Omega particles
  - d) Gamma rays
2. What is the whole body dose limit for radiologic technologists?
  - a) 1000 millirem per year
  - b) 5000 millirem per year
  - c) 15000 millirem per year
  - d) There is no limit for RTs
3. Which of the following orientations for dosimeters is correct?
  - a) The body badge underneath the lead apron, the collar badge underneath the thyroid shield
  - b) The body badge underneath the lead apron, the collar badge unshielded near the head
  - c) Both body and collar badges clipped to the outside of the lead apron
  - d) Badges? We don't need no stinking badges!
4. Which of the following statements is true?
  - a) Any amount of radiation, no matter how small, is dangerous to a fetus
  - b) Patients must have pregnancy tests prior to routine radiographs
  - c) Large acute doses of radiation can be harmful to a fetus
  - d) The Radiation Safety Officer does not need to be informed of a fetal exposure
5. Which of the following situations would produce the highest risk of skin injury?
  - a) Wide gap between patient and I.I., separator cone removed, continuous mode
  - b) Wide gap between patient and I.I., separator cone in place, pulse mode
  - c) Narrow gap between patient and I.I., separator cone removed, continuous mode
  - d) Narrow gap between patient and I.I., separator cone in place, pulse mode
6. Why are many fluoroscopic injuries misdiagnosed?
  - a) Physicians are often unaware of how to minimize dose
  - b) Patients are not informed of risks
  - c) Long latency period of radiation effects
  - d) All of the above
7. Generally, in what order would you expect to see the following clinical skin effects following radiation injury?
  - a) Epilation, desquamation, erythema, ulceration
  - b) Erythema, epilation, desquamation, ulceration
  - c) Desquamation, erythema, ulceration, epilation
  - d) Erythema, desquamation, epilation, ulceration
8. What information should be in a patient's chart regarding a particular fluoroscopy procedure?
  - a) Beam on-time
  - b) Projection
  - c) kVp and mA settings
  - d) All of the above
9. All patients are equally sensitive to the effects of ionizing radiation.
  - a) True
  - b) False
10. How is a radiologic technologist's dose determined?
  - a) By combining the readings from the collar and body badges
  - b) By using only the collar badge; shielded radiation readings are not used
  - c) By leaving the badges in the radiography suite
  - d) By the Radiation Safety Officer, using an ionization chamber