

## FLUOROSCOPY TEST

1. The major components of a fluoroscopy system consist of:
  - Computer System, Ring Detectors, and X-Ray Tube
  - An Image Intensifier, an X-Ray Tube, and Patient Table
  - Patient Support Table, a film receptor, and X-Ray Tube
2. In general, the operating parameters of a fluoroscopic system that minimize patient radiation exposure are:
  - High kVp and Low mA
  - High kVp and High mA
  - Low kVp and High mA
3. During a fluoroscopic procedure with a fixed X-Ray target to image intensifier distance, such as a C-arm in surgery suites, as the distance between the patient to the image intensifier increases, patient exposure rate:
  - Decreases
  - Remains the same
  - Increases
4. The greatest dose rate to the patient in fluoroscopy occurs at the following point of contact:
  - At the organ level that is being studied
  - The skin where the x-ray beam first contacts the patient
  - The skin where the x-ray beam leaves the patient
5. For routine fluoroscopy, the dose rate from the fluoroscopy procedure is typically \_\_\_ to the skin of the patient where the beam enters the patient:
  - 20 to 50 cGy per minute
  - 0.2 to 0.5 cGy per minute
  - 2 to 5 cGy per minute
6. What is the cumulative radiation dose to the skin of a patient where skin injury is possible:
  - 200 Rads
  - 2000 Rads
  - 20 Rads
7. Regulatory bodies, such as the FDA and the State of Alaska Radiologic Health Department set the maximum skin entrance dose rate of \_\_\_ for normal fluoroscopy mode procedures using Automatic Brightness Control

Systems to:

01 R/min

1 R/min

10 R/min

8. The dominant influence(s) on the skin dose of a patient is (are):

Tissue thickness and field dimension

Patient's medical condition

Quality of the image reviewed by the radiologist

9. Using the magnification mode during fluoroscopic procedures will \_\_\_\_\_ the patient's exposure rate

Decrease

Have no change on

Increase

10. The dose limit for occupation personnel is

500 mrem (5 mSv) maximum annually and an average of 100 mrem per year

1000 mrem (10 mSv) maximum annually and an average of 200 mrem per year

5000 mrem (50 mSv) maximum annually and an average of 1000 mrem per year

11. To minimize radiation dose to the patient, the physician performing the fluoroscopy procedure should

Increase image intensifier distance from the patient

Minimized the exposed area by reducing field size by collimation

Decrease kVp used for the exam:

12. X-rays are a form of:

Radioactive particles

Electromagnetic radiation

Non-Ionizing Radiation

13. The ration of light photon at the output phosphor of the image intensifier compared to the number or x-rays striking the input phosphor is called the flux gain and typically is:

30

300

3000

14. The primary source of scatter radiation to the operator during fluoroscopy procedures is the:

The Image intensifier

The patient table

The patient

15. The intensity of the scatter radiation at 1 meter from the patient

is approximately equal to:

10% of the useful beam's intensity

1% of the useful beam's intensity

0.1% of the useful beam's intensity

**Please sign here to attest that you have viewed the 10 hour fluoroscopy training CDs:**

Signature:

Printed Name:

Date Signed: