

Chapter 2: Introduction to Radiographic Equipment Test Bank

MULTIPLE CHOICE

1. X-rays that leave the x-ray tube exit via the:
 - a. tube housing.
 - b. tube port.
 - c. patient.
 - d. image receptor system.

ANS: B

REF: Page 13

2. The portion of the x-ray room that is protected from scatter radiation and is safe during exposures is called the:
 - a. transformer.
 - b. grid cabinet.
 - c. control booth.
 - d. tube stand.

ANS: C

REF: Page 20

3. An invisible line in the center of the x-ray beam and perpendicular to the long axis of the x-ray tube is called the:
 - a. radiation field.
 - b. primary x-ray beam.
 - c. x-ray tube.
 - d. central ray.

ANS: D

REF: Page 13

4. An IR that has been exposed to a body part but has not yet been processed has an unseen image called the:
 - a. latent image.
 - b. visible image.
 - c. remnant radiation.
 - d. radiation field.

ANS: A

REF: Page 13

5. Tissues with greater mass, such as bone, will absorb _____ radiation, as compared with less dense tissues, such as fat.
 - a. more
 - b. less
 - c. equal amounts of
 - d. no

ANS: A

REF: Page 13

6. The absorption of x-rays by matter is called:
 - a. scatter.

- b. attenuation.
- c. fog.
- d. remnant radiation.

ANS: B REF: Page 13

7. Which of the following statements regarding scatter radiation is true?
- a. Scatter radiation is another term for remnant radiation.
 - b. Scatter radiation is created within the tube with the primary beam.
 - c. Scatter radiation has less energy than the primary beam.
 - d. Scatter radiation travels in one direction and is easy to control.

ANS: C REF: Page 13

8. The varying intensity of radiation that exits on the opposite side of the patient and reaches the IR is called _____ radiation.
- a. scatter
 - b. fog
 - c. remnant
 - d. primary

ANS: C REF: Page 13

9. The image receptor (IR) usually consists of the:
- a. x-ray tube and the tube stand.
 - b. cassette and phosphor imaging plate.
 - c. control console and the transformer.
 - d. tube locks and the detent.

ANS: B REF: Page 14

10. Which of the following are common computed radiography sizes used for general examinations?
- 1. 5 × 5 in.
 - 2. 10 × 12 in.
 - 3. 14 × 17 in.
 - a. 1 and 2 only
 - b. 1 and 3 only
 - c. 2 and 3 only
 - d. 1, 2, and 3

ANS: C REF: Page 14

11. The radiation that exits the x-ray tube and travels in-air to the patient is called:
- a. primary.
 - b. remnant.
 - c. scatter.
 - d. latent.

ANS: A REF: Page 13

12. Computed radiography (CR) is sometimes called a(n) _____ system.

- a. “filmless”
- b. “cassetteless”
- c. “imageless”
- d. “radiationless”

ANS: A

REF: Page 14

13. Where is the image originally obtained and stored in computed radiography (CR)?
- a. On a film
 - b. In a phosphor material
 - c. On a laser disk
 - d. In a microprocessor

ANS: B

REF: Page 14

14. Computed radiography (CR) eliminates the need for:
- a. proper positioning.
 - b. proper collimation.
 - c. cassettes.
 - d. darkrooms.

ANS: D

REF: Page 14

15. A mechanism that tends to stop a moving part in a specific location is called a:
- a. collimator.
 - b. control console.
 - c. transformer.
 - d. detent.

ANS: D

REF: Page 17

16. The boxlike device attached under the tube housing that allows the limited operator to vary the size of the radiation field is called a:
- a. collimator.
 - b. transformer.
 - c. detent.
 - d. tube port.

ANS: A

REF: Page 17

17. A device to protect the IR from being fogged by scatter radiation is called a:
- a. collimator.
 - b. detent.
 - c. grid or Bucky.
 - d. cassette.

ANS: C

REF: Page 19

18. The principal source of scatter radiation is the:
- a. x-ray tube.
 - b. collimator.
 - c. patient.
 - d. control booth.

ANS: C

REF: Page 22

19. A tilting table will allow the head end to be lowered at least 15 degrees into the _____ position.
- a. Trendelenburg
 - b. Sims
 - c. Fowler
 - d. supine

ANS: A

REF: Page 18

20. The principal purpose of doing a “safety check” before making an exposure is to:
- a. ensure a quality radiographic image.
 - b. prevent radiation hazard to yourself.
 - c. protect the patient from unnecessary exposure.
 - d. prevent accidental exposure of co-workers.

ANS: D

REF: Page 22

21. The primary radiation that enters the patient and then leaves it, traveling in all directions is called:
- a. primary.
 - b. scattered.
 - c. latent.
 - d. remnant.

ANS: B

REF: Page 13

22. Unwanted image exposure that is caused by scatter radiation is called:
- a. primary radiation.
 - b. remnant radiation.
 - c. attenuation.
 - d. scatter radiation fog.

ANS: D

REF: Page 13

23. After an x-ray is taken and the image is stored in the computed radiography plate, it has to be processed in the:
- a. darkroom.
 - b. PC computer.
 - c. image reader device.
 - d. microprocessor.

ANS: C

REF: Page 15

24. The most frequent adverse incident that can happen to a patient in the radiology department is:
- a. nausea.
 - b. falling.
 - c. back pain.
 - d. pinching fingers in the Bucky.

ANS: B

REF: Page 19