

Test Bank for Radiography Essentials for Limited Practice 6th Long

Chapter 02: Introduction to Radiographic Equipment

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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 PTS: 1

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 PTS: 1

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 PTS: 1

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 PTS: 1

5. Tissues with greater density, 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 PTS: 1

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

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

ANS: B PTS: 1

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 PTS: 1

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 PTS: 1

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 PTS: 1

10. Which of the following are common computed radiography (CR) sizes used for general examinations?
- 1. 13×13 cm
 - 2. 24×30 cm
 - 3. 35×43 cm
- a. 1 and 2 only
 - b. 1 and 3 only
 - c. 2 and 3 only
 - d. 1, 2, and 3

ANS: C PTS: 1

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 PTS: 1

12. Computed radiography (CR) is sometimes called a(n) _____ system.
- a. “filmless”
 - b. “cassetteless”
 - c. “imageless”
 - d. “radiationless”

ANS: A PTS: 1

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 PTS: 1

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

ANS: D PTS: 1

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 PTS: 1

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 PTS: 1

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 PTS: 1

18. The principal source of scatter radiation comes from the
- a. x-ray tube.

- b. collimator.
- c. patient.
- d. control booth.

ANS: C PTS: 1

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 PTS: 1

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 coworkers.

ANS: D PTS: 1

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 PTS: 1

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 PTS: 1

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. CR reader.
- d. microprocessor.

ANS: C PTS: 1

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 PTS: 1

25. The squared area of the x-ray beam that strikes the patient and the table is called the
- a. radiation field.
 - b. light field.
 - c. port.
 - d. image receptor.

ANS: A PTS: 1

26. One of the functions of the tube housing is to
- a. warm the tube.
 - b. absorb scattered x-rays.
 - c. balance the tube.
 - d. allow adjustment of the central ray.

ANS: B PTS: 1

27. The latest x-ray imaging technology is called
- a. computed radiography (CR).
 - b. digital radiography (DR).
 - c. fusion imaging (FS).
 - d. film processing (FP).

ANS: B PTS: 1