

MULTIPLE CHOICE

1. The Radiography Practice Standards are written and maintained by the:
 - a. American Registry of Radiologic Technologists.
 - b. American Medical Association.
 - c. American Society of Radiologic Technologists.
 - d. Joint Commission on Education in Radiologic Technology.

ANS: C

2. The Standards of Ethics for radiographers was written and is maintained by the:
 - a. American Registry of Radiologic Technologists.
 - b. American Medical Association.
 - c. American Society of Radiologic Technologists.
 - d. Joint Commission on Education in Radiologic Technology.

ANS: A

3. Radiographic images of the hands, wrist, feet, and toes are routinely displayed with the digits:
 - a. positioned toward the ceiling.
 - b. positioned toward the floor.
 - c. horizontal and pointed to the left.
 - d. horizontal and pointed to the right.

ANS: A

4. How often should the radiographic tabletop be cleaned?
 - a. Only when visibly soiled
 - b. Weekly
 - c. Daily
 - d. After every procedure/patient

ANS: D

5. The easiest and most convenient method of preventing the spread of microorganisms is:
 - a. wearing PPE.
 - b. following cough etiquette protocols.
 - c. handwashing.
 - d. proper handling of sharps.

ANS: C

6. All are apparent abnormalities that could affect the radiographic result and should be recorded by the radiographer in the clinical history, *except*:
 - a. tattoos with ferrous pigments.
 - b. freckles and moles.
 - c. swelling or masses.
 - d. surface scars.

ANS: B

7. Involuntary motion can be caused by which of the following?
 1. Peristalsis
 2. Spasm
 3. Breathing
 - a. 1 and 2
 - b. 1 and 3
 - c. 2 and 3
 - d. 1, 2, and 3

ANS: A

8. Nervousness, discomfort, and fear are causes of:
 - a. voluntary motion.
 - b. involuntary motion.
 - c. imaging procedure failure.
 - d. image artifacts.

ANS: A

9. Radiographers can control voluntary motion by:
 - a. using a high kVp.
 - b. increasing the length of exposure time.
 - c. performing the examination in the recumbent position.
 - d. giving clear instruction to the patient.

ANS: D

10. Which type of accessory equipment reduces the amount of scatter and off-focus radiation that reaches the image receptor?
- Compensating filter
 - Grid
 - Sandbag
 - Sponge

ANS: B

11. Information that must be included on all radiographic images includes all of the following *except*:
- right or left side marker.
 - patient's name or ID number.
 - radiographer's name.
 - date of exam.

ANS: C

12. The metric conversion of 40 inches is _____ cm.
- 16
 - 18
 - 90
 - 102

ANS: D

13. The simplest and most common shape of compensating filter is the:
- wedge.
 - trough.
 - double-wedge.
 - Boomerang.

ANS: A

14. All are guidelines for gonad shielding, *except*:
- the gonads lie in the primary beam.
 - shielding is used when it will not compromise the exam objective.
 - patients with reasonable reproductive potential should be shielded.
 - gonad shields are only needed for pediatric patients.

ANS: D

15. What is the most common image receptor general position?
- Diagonal
 - Crosswise
 - Lengthwise
 - Vertical

ANS: C

16. The central or principle beam of x-rays is termed the:
- center beam (CB).
 - image beam (IB).
 - central ray (CR).
 - image receptor (IR).

ANS: C

17. The general goal for central ray placement is:
- parallel with the structure of interest.
 - perpendicular to the structure of interest.
 - angled along the long axis of the part of interest.
 - angled against the long axis of the part of interest.

ANS: B

18. What term is defined as the distance from the anode focal spot inside the x-ray tube to the image receptor?
- Collimation
 - Source-to-image receptor distance (SID)
 - Central ray (CR)
 - Image receptor (IR)

ANS: B

19. All of the following are affected by the SID used for a radiographic image, *except*:
- spatial resolution.
 - magnification of the anatomy in the image.
 - patient dose.
 - contrast resolution.

ANS: D

20. The image receptor used in computed radiography IRs is a:
- tethered solid-state digital detector.
 - wireless flat-panel detector.
 - cassette with film.
 - photostimulable storage phosphor imaging plate.

ANS: D

21. Blood and body fluid recommendations are issued by the:
- CDC.
 - ASRT.
 - ARRT.
 - JCAHO.

ANS: A

22. Each radiology department must write age-specific competencies to meet the standards of the:
- CDC.
 - ASRT.
 - ARRT.
 - JCAHO.

ANS: D

23. Gonad shielding is required when the gonads lie within ____ cm of the primary x-ray field.
- 3
 - 5
 - 6
 - 8

ANS: B

24. Which of the following radiographic examinations would give a male patient the highest gonad dose?
- Limb
 - Skull
 - Pelvis
 - Lumbar spine

ANS: C

25. Which of the following radiographic examinations would give a female patient the highest gonad dose?
- Limb
 - Skull
 - Pelvis
 - Lumbar spine

ANS: D

26. Which of the following is affected when imaging patients who are obese?
- Image quality
 - Ability to transfer safely
 - Ability to find positioning landmarks
- 1 and 2 only
 - 1 and 3 only
 - 2 and 3 only
 - 1, 2, and 3

ANS: D

27. A fundamental responsibility of radiographers is to ensure that each radiation exposure upholds the ALARA concept. ALARA stands for:
- as low as reasonably achievable.
 - as long as radiograph is acceptable.
 - acceptable limits allowed for radiographic attempts.
 - attempts to lessen all radiographic allowances.

ANS: A

28. The source of radiation in an x-ray tube (the anode) shall not be closer than ____ inches from the patient.
- 12
 - 15
 - 10
 - 18

ANS: A

29. A physician who is board certified to read or interpret, x-ray examinations is a:
- hospitalist.
 - radiographer.
 - radiologist.
 - surgeon.

ANS: C

30. Which term refers to restriction of the exposure field?

- a. Collimation
- b. Filter
- c. Shuttering
- d. Central ray (CR)

ANS: A

31. Which side marker would be placed on the image receptor on the edge of the collimated field for a radiographic image of a patient with an injured right hand?

- a. The left (L) marker on the left side of the patient's right hand
- b. The right (R) marker on the right side of the patient's left hand
- c. The left (L) marker on either side of the patient's hand
- d. The right (R) marker on either side of the patient's hand

ANS: D

MULTIPLE RESPONSE

1. Radiographers who obtain additional education, clinical practice, and certification to provide advanced clinical imaging procedures are designated as which two of the following titles? (*Select all that apply.*)

- a. Radiologist deputies (RD)
- b. Radiologist assistants (RA)
- c. Radiology practitioner assistants (RPA)
- d. Advanced radiography practitioners (ARP)

ANS: B, C

2. Which two are the most common pre-exposure breathing instructions for radiographic procedures? (*Select all that apply.*)

- a. Rapid, shallow breaths
- b. Slow, deep breaths
- c. At the end of inspiration
- d. At the end of expiration

ANS: C, D

3. Collimation of the x-ray beam prompts which two of the following? (*Select all that apply.*)

- a. A decrease in radiographic contrast
- b. An increase in radiographic contrast
- c. A decrease of scatter radiation
- d. An increase of scatter radiation

ANS: B, C

4. An increase in SID will result in which two of the following? (*Select all that apply.*)

- a. Decreased magnification
- b. Increased magnification
- c. Increased spatial resolution
- d. Decreased spatial resolution

ANS: A, C