

Chapter 01: Terminology, Positioning, and Imaging Principles

Lampignano: Bontrager's Textbook of Radiographic Positioning and Related Anatomy, 9th Edition

MULTIPLE CHOICE

1. What type of tissue binds together and supports the various structures of the body?
- Epithelial
 - Connective
 - Muscular
 - Nervous

ANS: B REF: 3

2. The lowest level of structural organization in the human body is the _____ level.
- molecular
 - cellular
 - chemical
 - atomic

ANS: C REF: 3

3. What type of tissue covers internal and external surfaces of the body?
- Muscular
 - Connective
 - Nervous
 - Epithelial

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ANS: D REF: 3

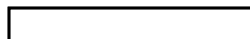
4. How many individual body systems comprise the human body?
- 22
 - 13
 - 10
 - 8

ANS: C REF: 3

5. How many separate bones are found in the adult human body?
- 181
 - 215
 - 206
 - 236

ANS: C REF: 4

6. Which system of the human body is responsible for the elimination of solid waste?
- Circulatory
 - Respiratory
 - Urinary
 - Digestive



ANS: D REF: 4

7. Which of the following systems of the human body includes all ductless glands of the body?
- Endocrine
 - Integumentary
 - Muscular
 - Glandular

ANS: A REF: 6

8. Which of the following body systems helps to regulate body temperature?
- Circulatory
 - Urinary
 - Endocrine
 - Nervous

ANS: A REF: 7

9. Which of the following bones is part of the axial skeleton?
- Radius
 - Hip bone
 - Clavicle
 - Sternum

ANS: D REF: 7

10. How many bones are there in the adult axial skeleton?
- 206
 - 80
 - 54
 - 126

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ANS: B REF: 7

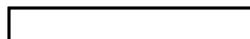
11. What is the name of the small oval-shaped bone found in tendons?
- Wormian
 - Tendinous
 - Irregular
 - Sesamoid

ANS: D REF: 8

12. Which of the following bones is classified as a long bone?
- Carpal bone
 - Scapula
 - Cranium
 - Humerus

ANS: D REF: 8

13. What is the name of the dense fibrous membrane that covers bone?
- Cancellous portion



- b. Periosteum
- c. Diploë
- d. Medullary portion

ANS: B REF: 9

14. Which of the following bones is classified as a short bone?
- a. Vertebrae
 - b. Phalanges (toes)
 - c. Scapulae
 - d. Carpal (wrist bones)

ANS: D REF: 9

15. Which of the following is a secondary growth center for endochondral ossification?
- a. Diaphysis
 - b. Epiphyses
 - c. Metaphysis
 - d. Articular cartilage

ANS: B REF: 10

16. Which aspect of the long bones is responsible for the production of red blood cells?
- a. Compact bone
 - b. Periosteum
 - c. Medullary cavity
 - d. Spongy or cancellous bone

ANS: D REF: 10 NURSINGTB.COM

17. Examples of “flat” bones are the:
- a. calvaria, ribs, scapulae, and sternum.
 - b. ribs, sternum, patella, and ilia of pelvis.
 - c. sternum, scapulae, ilia of pelvis, and base of cranium.
 - d. sternum and ilia of pelvis only.

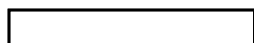
ANS: A REF: 9

18. What is the primary center for bone growth termed?
- a. Epiphyses
 - b. Diaphysis
 - c. Metaphysis
 - d. Epiphyseal plate

ANS: B REF: 10

19. Which of the following is NOT a functional classification of joints?
- a. Synarthrosis
 - b. Amphiarthrosis
 - c. Cartilaginous
 - d. Diarthrosis

ANS: C REF: 11



20. The structural term for a freely movable joint is:
- fibrous.
 - cartilaginous.
 - synovial.
 - gomphosis.

ANS: C REF: 11

21. Which of the following joints displays flexion and extension type of movement primarily?
- Pivot
 - Ellipsoidal
 - Saddle
 - Ginglymus

ANS: D REF: 13

22. Which of the following joints is NOT a synovial joint?
- Skull suture
 - Elbow joint
 - Hip joint
 - Proximal radioulnar joint

ANS: A REF: 12 |14

23. Which of the following is classified as a saddle (sellar) joint?
- Ankle joint
 - Temporomandibular joint
 - Knee joint
 - Intercarpal joint

ANS: A REF: 13

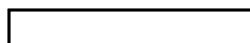
24. Which of the following is classified as a bicondylar joint?
- Shoulder joint
 - Temporomandibular joint
 - First and second cervical vertebra joint
 - Distal radioulnar joint

ANS: B REF: 14

25. An upright position with the arms abducted, palms forward, and head forward describes the _____ position.
- anteroposterior (AP)
 - decubitus
 - anatomic
 - oblique

ANS: C REF: 10

26. A representation of the patient's anatomic structures that can be obtained, viewed, manipulated, and stored digitally is the definition for:
- radiographic film.



- b. radiography.
- c. radiographic image.
- d. radiographic examination.

ANS: C REF: 16

27. The vertical plane that divides the body into equal right and left halves describes the _____ plane.
- a. coronal
 - b. median or midsagittal
 - c. longitudinal
 - d. horizontal

ANS: B REF: 17

28. A longitudinal plane that divides the body into equal anterior and posterior parts is the _____ plane.
- a. midcoronal
 - b. midsagittal
 - c. horizontal
 - d. oblique

ANS: A REF: 17

29. Which of the following terms describes the sole of the foot?
- a. Palmar
 - b. Dorsum
 - c. Volar
 - d. Plantar

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ANS: D REF: 18

30. Which term describes the back or posterior aspect of the hand?
- a. Dorsum pedis
 - b. Dorsum manus
 - c. Palmar
 - d. Volar

ANS: B REF: 18

31. A position in which the head is lower than the feet is:
- a. Trendelenburg.
 - b. lithotomy.
 - c. Fowler.
 - d. recumbent.

ANS: A REF: 20

32. Which term describes lying down in any position?
- a. Horizontal
 - b. Fowler
 - c. Recumbent
 - d. Anatomic



ANS: C REF: 20

33. A recumbent oblique position in which the patient is lying on the left anterior surface with it rotated toward the image receptor is termed:
- right posterior oblique.
 - left posterior oblique.
 - Sims' position.
 - Fowler position.

ANS: C REF: 21

34. A patient is lying on her back facing the x-ray tube. The right side of her body is turned 20° toward the image receptor. What is this radiographic position?
- LPO (left posterior oblique)
 - RPO (right posterior oblique)
 - RAO (right anterior oblique)
 - LAO (left anterior oblique)

ANS: B REF: 21

35. A patient is erect with the left side directly against the image receptor. The central ray (CR) enters the right side of the body. What is this radiographic position?
- Right lateral
 - Left lateral decubitus
 - Left lateral
 - Dorsal decubitus

ANS: C REF: 21 NURSINGTB.COM

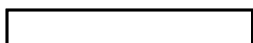
36. A patient is lying on her back. The x-ray tube is horizontally directed with the CR entering the right side of the body. The image receptor is adjacent to the left side of the body. What is the radiographic position?
- Left lateral decubitus
 - Left lateral
 - Right lateral decubitus
 - Dorsal decubitus

ANS: D REF: 22

37. A patient is erect facing the image receptor. The left side of the body is turned 45° toward the image receptor. The CR enters the posterior aspect of the body and exits the anterior. What is this radiographic position?
- LAO
 - LPO
 - Left lateral
 - Posteroanterior (PA)

ANS: A REF: 21

38. What type of projection is created with the CR directed along or parallel to the long axis of a structure or anatomic part?
- Axial



- b. Tangential
- c. Lordotic
- d. Transthoracic

ANS: A REF: 23

39. A projection in which the CR skims a body part to project it in profile is termed:
- a. tangential.
 - b. lordotic.
 - c. axial.
 - d. decubitus.

ANS: A REF: 23

40. What is the general term for a position in which the long axis of the body is angled in relationship to the image receptor rather than the central ray (e.g., special chest projection)?
- a. Axial
 - b. Trendelenburg
 - c. Decubitus
 - d. Lordotic

ANS: D REF: 23

41. The opposite term for supination is:
- a. protraction.
 - b. adduction.
 - c. pronation.
 - d. retraction.

ANS: C REF: 28

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42. Which of the following positions is often used to insert a rectal enema tip before a barium enema study?
- a. Fowler
 - b. Modified Sims'
 - c. Lithotomy
 - d. Trendelenburg

ANS: B REF: 20

43. A dorsoplantar projection would be a radiographic study of:
- a. any anatomic region.
 - b. the hand.
 - c. the foot.
 - d. the skull.

ANS: C REF: 24

44. Moving the foot and toes downward is:
- a. eversion.
 - b. inversion.
 - c. dorsiflexion.
 - d. plantar flexion.

