



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

Programme – Bachelor of Science in Medical Radiology & Imaging Technology

Course Name – Clinical Radiography Positioning Part 2

Course Code - BMRIT402

(Semester IV)

Time allotted : 1 Hrs.15 Min.

Full Marks : 60

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

Choose the correct alternative from the following :

- (1) Which of the following is not a cranial bone?

a) Vomer	b) Frontal
c) Ethmoid	d) Sphenoid
- (2) Which of the following paired bone is present in the skull?

a) Frontal	b) Parietal
c) Occipital	d) Sphenoid
- (3) To demonstrate positioning for Townes in AP projection the central ray is directed

a) 25-30 degree caudally	b) 30-45 degree caudally
c) 25-30 degree cranially	d) 25-30 degree cranially
- (4) To demonstrate position for Caldwell in PA projection the central ray is directed

a) 15 degree caudally	b) 25 degree caudally
c) 25 degree cranially	d) 30 degree cranially
- (5) Schuller projection view basically done for

a) EAM	b) Mastoid portion of temporal bone
c) Petrous portion	d) Mandible
- (6) Central ray for cranium Caldwell projection is

a) 15 degree cranially	b) 15 degree caudally
c) 30 degree caudally	d) 30 degree caudally
- (7) In orbit PA axial projection the central ray is at a

a) 0– 40 degree caudal	b) 15– 30 degree caudal
c) 20 – 25 degree caudal	d) 0 – 25 degree caudal

- (8) Parieto-orbital oblique projection also known as
- a) Judet projection
 - b) Lauenstein's projection
 - c) Waters projection
 - d) Rhese projection
- (9) In reverse towne (PA) projection the central ray is at a
- a) 30 degree cephalic
 - b) 30 degree cranially
 - c) Can give both (a) and (b) projections
 - d) 15 degree cephalic
- (10) In the AP axial projection (Towne's method) of the skull, with the central ray directed 300 caudal to the OML and passing midway between the external auditory meatus, which of the following is best demonstrated
- a) Frontal
 - b) Occipital bone
 - c) Sella turcica
 - d) Basal foramina
- (11) Which of the following skull positions will demonstrate the cranial base, sphenoid sinuses, atlas and odontoid process?
- a) AP axial
 - b) Towne's
 - c) Submentovertical
 - d) Lateral
- (12) The best projection to demonstrate the maxillary sinuses is the Method.
- a) Cardwell
 - b) Towne's
 - c) Water's
 - d) SMV
- (13) In order to demonstrate atlas and axis in AP projection, the patient is asked to
- a) Breathe normally
 - b) Close the mouth
 - c) Open the mouth
 - d) Move the head side-to-side
- (14) When the patient lies in lateral recumbent position, the cassette is placed behind the patient and the horizontal beam is used. This projection is termed as
- a) Lateral decubitus
 - b) Dorsal decubitus
 - c) Ventral decubitus
 - d) AP view
- (15) The maximum field of view which can be obtained with a specific radiographic system is generally limited by the:
- a) Focal spot size
 - b) Anode size.
 - c) Anode angle
 - d) Focal Length
- (16) Dental radiography consists of
- a) Intra-oral radiography
 - b) Extra-oral radiography
 - c) Both (1) and (2)
 - d) None of these
- (17) Cephalometry technique used in
- a) Orthodontic
 - b) Orthomatic
 - c) Implant treatment
 - d) All of these
- (18) IOPA
- a) Intraoral para Apex
 - b) Intraoral peri apical
 - c) Interoral para align
 - d) Interoral peri apical
- (19) The primary x-ray beam penetration (percent) through a patient can be increased by increasing the
- a) KV
 - b) MAS
 - c) Film-focus distance
 - d) Beam area.
- (20) We have-----types of paranasal sinuses

- a) 4
c) 3
- b) 2
d) None of these
- (21) Orthopantomogram is taken to rule out lesion in
a) Mandible
c) Facial bone
- b) Maxilla
d) Skull
- (22) SI unit of dose equivalent is
a) Roentgens
c) Rad
- b) Gray
d) Sievert
- (23) Plane divides the body into left and right
a) Coronal plane
c) Axial plane
- b) Sagittal plane
d) None of these
- (24) The negative electrode of an x-ray tube is always called the
a) filament
c) grid
- b) anode
d) cathode
- (25) The best projection to demonstrate the maxillary sinuses is the ____
a) Caldwell
c) Water's
- b) Towne's
d) SMV
- (26) The best projection to demonstrate the frontal sinuses is the ____
a) Caldwell
c) Water's
- b) Towne's
d) SMV
- (27) Covers the dentine of the root.
a) Enamel
c) Cementum
- b) Connective tissue
d) Hydroxyapatite
- (28) Which teeth are single rooted?
a) Canine
c) Molar
- b) Pre-molar
d) All of these
- (29) Intraoral films are
a) Single emulsion
c) Both can be used
- b) Double emulsion
d) None of these
- (30) Series of X-rays in acute abdomen needed are
a) Abdomen AP supine
c) Lateral decubitus
- b) Abdomen AP erect
d) All of these
- (31) Iliac crest is used as landmark in making a radiograph of
a) AP view of hip
c) Plain KUB
- b) Neck of femur
d) Plain abdomen
- (32) The function of the cone in skull radiography is
a) To limit the field of the radiation
c) To increase the life of the X-ray tube
- b) To reduce the exposure
d) All of these
- (33) Which of the following radiological examination would deliver the greatest entrance skin exposure
a) Chest
c) Abdomen
- b) Skull
d) Thoracic spine

- (34) All views are taken with the patient prone except
- a) Cardwells view
 - b) PNS
 - c) Townes
 - d) optical canal
- (35) Select the incorrect option
- a) There are 7 tarsal bone
 - b) Patella is a sesamoid bone
 - c) Tibia is not the longest bone in the human body
 - d) there are 7 carpel bones
- (36) Identify the correct statements
- a) Standard silver halide films are blue sensitive films
 - b) Dental films is a single emulsion, non screen film
 - c) Film used in mammography is a single emulsion double screen film
 - d) Duplication film is a single emulsion film and exposed with ultraviolet light
- (37) All are true regarding a mammography tube except
- a) Aluminium filter is used
 - b) Molybdenum filter is used
 - c) Beryllium exit window is present
 - d) Rhodium Filter is used
- (38) Which of the following is wrong about mammography?
- a) It uses soft radiation
 - b) It has molybdenum filter
 - c) It requires higher Kvp
 - d) It is done to evaluate breast disease.
- (39) The target element commonly used in mammography ?
- a) Copper
 - b) Molybdenum
 - c) Tungsten
 - d) Aluminium
- (40) Film used in mammography is/are
- a) Single emulsion
 - b) Double emulsion
 - c) Triple emulsion
 - d) None of these
- (41) Compression in mammography.....the dose in to the breast tissue is
- a) Reduced
 - b) Increased
 - c) No charge
 - d) Initially increases then decreases
- (42) Molybdenum has an atomic number of
- a) 74
 - b) 42
 - c) 37
 - d) 89
- (43) Compression improves
- a) Spatial resolution
 - b) Contrast resolution
 - c) Reduce patient dose
 - d) All of these
- (44) Molybdenum is the most common filter material in mammographic systems. It is used because it produces?
- a) Characteristic radiation
 - b) Increased breast penetration
 - c) High absorption above the K-edge energy
 - d) High absorption below the K-edge energy
- (45) Correct exposure factor should be set on the X-ray machine
- a) After positioning of child
 - b) Before positoning of the child
 - c) During positioning of the child
 - d) None of these
- (46) Generators used in pediatric radiography should be
- a) High milliampere (800-1000 mA)
 - b) Low milliampere (50 mA)
 - c) Medium milliampere (300-500 mA)
 - d) In any ampere we can use

- (47) In neonates and young infants (<2 years) radiography should be done
- a) With grid
 - b) Without Grid
 - c) Grid used only in abdomen and pelvic examination
 - d) Grid used only in chest radiography
- (48) What is the grid ratio for general pediatric radiology
- a) 16:1
 - b) 12:1
 - c) 8:1
 - d) 4:1
- (49) Which type of film screen combination is used in pediatric radiography
- a) Rare earth fast screen film combination
 - b) Rare earth slow screen film combination
 - c) Conventional (Calcium tungstate) fast screen film combination
 - d) Conventional (calcium tungstate) slow screen film combination
- (50) What should be worn by technologist when entering the neonatal intensive care unit
- a) Should wear lead apron
 - b) Should wear gown
 - c) Should wear white apron
 - d) Should wear formal dress
- (51) Collimation reduces..... and improves
- a) Contrast resolution, patient dose
 - b) Patient dose, Contrast resolution
 - c) Resolution, contrast
 - d) SID, scattered radiation
- (52) X-ray are filtered out of human body by using
- a) Cadmium absorbers
 - b) Carbon absorbers
 - c) Copper absorbers
 - d) Aluminium absorbers
- (53) X-rays have
- a) Short wavelength
 - b) High frequency
 - c) Both (1) and (2)
 - d) Longest wavelength
- (54) To use mobile equipment in OT, it is advisable
- a) To enclose the tube head and image intensifier in a sterile linen/polythene cover
 - b) To keep some mobile equipment permanent in OT
 - c) Radiographer must wear like the theater staff required for sterilization
 - d) All of these
- (55) All the following statements regarding mobile radiographic equipments are true, except
- a) The exposure cord must permit the operator to stand at least 4 feet from the patient-ray tube and useful beam
 - b) Exposure switches must be the , "dead man type
 - c) Lead apron must be worn by radiographer during exposure
 - d) The radiographer must explain to the person present in the area about radiation effect
- (56) Which of the following does not help in reduction of the patient dose
- a) Grid
 - b) Collimator
 - c) Gonad shield
 - d) Reduce thickness of part
- (57) Projection used in mammography
- a) Mediolateral view
 - b) Craniocaudal view
 - c) Both (1) and (2)
 - d) None of these
- (58) Extended craniocaudal view is done to look for abnormalities in
- a) upper inner quadrant
 - b) Lower inner quadrant
 - c) Lower outer quadrant
 - d) Upper outer quadrant

(59) Magnification technique is adopted for better visualisation of

a) Macrocalcification

b) Microcalcification

c) Margins

d) Location

(60) Magnification view is obtained by

a) Increasing target object distance

b) Larger focal spot

c) Reducing target object distance

d) using grid