



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

Programme – Bachelor of Science in Medical Radiology & Imaging Technology

Course Name – Modern Radiological & Imaging Techniques including Patient Care

Course Code - BMRIT403

(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) The site for injection in peripheral venography is

a) Palm	b) Median cubital vein
c) Popliteal vein	d) Dorsum of foot
- (2) In upper limb venography, butterfly needle is inserted in

a) Median cubital vein	b) Cephalic vein
c) Basilic vein	d) Axillary vein
- (3) The maximum width of normal portal vein is

a) 1 cm	b) 3 cm
c) 2 cm	d) 4 cm
- (4) Contrast media used for ventriculography

a) Ionic	b) Non ionic
c) Oil-based	d) Barium
- (5) In infants, contrast injection for ventriculography is through

a) Posterior fontanelle	b) Anterior Fontanelle
c) Lateral fontanelle	d) Cervical spine
- (6) Iohexol comes in the category of

a) Non ionic monomer	b) Non-ionic dimer
c) Ionic monomer	d) Ionic dimer
- (7) Catheter used for coronary arteriography are

a) Judkins coronary artery catheter	b) Amplatz coronary artery catheter
c) Both (1) and (2)	d) None of these

- (8) Regarding plain film before arthrography which of the following is true
- a) Plain film in AP must be taken before arthrography
 - b) Plain film is optional, but ultrasonography should be done
 - c) plain film in different views should be taken
 - d) None of these
- (9) In 1835 the earliest discovery of pathogen causing disease of silkworm is:
- a) Bacteria
 - b) Fungus
 - c) Algae
 - d) Virus
- (10) To safest and convenient site of the injection of the contrast media in myelography is
- a) Cervical route
 - b) Epidural space
 - c) Subarachnoid space between 1st and 2nd lumbar vertebrae
 - d) Subarachnoid space between 3rd and 4th lumbar vertebrae
- (11) The choice of the contrast media in myelography is
- a) Oily contrast media
 - b) Gas
 - c) Ionic contrast media
 - d) Non-ionic water soluble contrast media
- (12) Which of the following is not the emergency drug
- a) Adrenaline
 - b) Atropine
 - c) Buscopan
 - d) Amphetamine
- (13) Adrenaline is given by which route
- a) IV only
 - b) SC only
 - c) Orally
 - d) SC,IM,IV
- (14) Atropine causes
- a) Bradycardia
 - b) Tachycardia
 - c) Hypertension
 - d) None of these
- (15) ALL of the following are true about atropine except
- a) Pre-anaesthetic medicine
 - b) Lessen the degree of A-V block
 - c) Overcome the severe carotid sinus reflex
 - d) Decrease the heart rate
- (16) Lignocaine is used as
- a) Antiarrhythmics
 - b) Anaesthetics
 - c) Both (1) and (2)
 - d) None of these
- (17) Drugs used in anaphylactic reaction are all except
- a) Adrenaline
 - b) Hydrocortisone
 - c) Antihistaminic
 - d) Atenolol
- (18) 1st step in CPR is
- a) Circulation maintenance
 - b) Airways clearance
 - c) Breathing management
 - d) BP monitoring
- (19) Monomer of the iodinated contrast media contains how many atoms of iodine
- a) 1 atom
 - b) 2 atoms
 - c) 3 atoms
 - d) 4 atoms
- (20) Which of the following is HOCM ?
- a) Diatrizoate
 - b) Iohexol
 - c) Iopamidol
 - d) All of these
- (21) Acid fast bacteria are

- a) Neisseria
c) Mycobacteria
- (22) " Schuller projection " basically done for -
a) Petrous portion
c) Mandible
- (23) Towards the mid line of the body means -
a) Medial
c) Distal
- (24) Increases in the angle of joint means -
a) Flexion
c) Abduction
- (25) Movement of the sole of the foot towards the median plane means -
a) Eversion
c) Depression
- (26) Which view is needed to see the joint space and compare the anatomy of the knee ?
a) Knee AP
c) Both Knee AP weight bearing
- (27) False statement about treatment of cardiac arrest is
a) CPR should be done
c) Continous cardiac monitoring
- (28) A patient has a decreased heart rate and low blood pressure. Which is wrong ?
a) The effect is caused by vagal stimulation
c) Treatment option includes atropine
- (29) Myelography can be done
a) Spinal cisternal route
c) Both
- (30) The adult dose of the buscopan used in GIT is
a) 20 mgm/IV
c) 20 mgm/S/C
- (31) Most common complication of myelography is
a) Hallucination
c) Headache
- (32) Which one of the following contrast media is used in myelography?
a) Isohexol
c) Prohance
- (33) Which of the following is contraindicated in myelography?
a) Local sepsis
c) Iodine sensitivity
- (34) Catheterisation used for are arteries
a) Brachial artery
c) Femoral artery
- b) Staphylococci
d) All of these
- b) Mastoid portion of temporal bone
d) EAM
- b) Lateral
d) Proximal
- b) Extension
d) Adduction
- b) Inversion
d) None of these
- b) Knee Lateral
d) None of these
- b) Clear the airways constantly
d) Intubation is not required
- b) Treatment options include Beta blockers
d) Treatment option include the head low positions.
- b) Spinal lumbar route
d) None of these
- b) 40 mgm/IV
d) None of these
- b) Nausea
d) Sub-dural injection of contrast medium
- b) Urografin
d) Gadobutrol
- b) Clotting disorder
d) All of these
- b) Axillary artery
d) All of these

- (35) The lead equivalent thickness of the glass viewing window of the control panel is
- a) 2.0 mm
 - b) 1.5 mm
 - c) 3.0 mm
 - d) 1.0 mm
- (36) Cardinal principal of radiation protection
- a) Time
 - b) Distance
 - c) Shielding
 - d) All of these
- (37) Disadvantage of lead apron is
- a) It does not cover arms
 - b) It has much weight
 - c) It does not cover thyroid
 - d) All of these
- (38) The unit of the absorbed dose is
- a) Roentgen
 - b) Rad
 - c) Sievert
 - d) Gray
- (39) What happens when arterial pressure decreases?
- a) Decreased arterial pressure
 - b) Increased arterial pressure
 - c) Increased cardiac output
 - d) Decreased cardiac output
- (40) Aorta has
- a) 2 parts
 - b) 3 parts
 - c) 4 parts
 - d) 8 parts
- (41) Which of the following is .refers to the imaging of vessels after the injection of contrast media?
- a) Contrast procedure
 - b) angiography
 - c) intervenal
 - d) conventional fluoroscopy
- (42) The density of opacified vessels in the image may contain artefacts which are dependant on the anatomical details which underlie and overlap the blood vessels within the patient.
- a) subtraction
 - b) mask
 - c) angiography
 - d) angioplasty
- (43) BAV Stands for
- a) Balloon aortic valvulopl
 - b) Balloon aortic venography
 - c) Blood aortic valvuloplasty
 - d) B/L aortic valvuloplasty
- (44) ERCP is a procedure that enables your physician to examine the
- a) pancreatic
 - b) Bile Duct
 - c) CBD
 - d) Both a&B
- (45) PTFE stands for
- a) Polytetrafluoroethylene
 - b) Poly tera fluorine
 - c) Poly tera fluorine ethelene
 - d) Poly tera fluorine enzyme
- (46) Lengths of guide wire measured in
- a) cm
 - b) meter
 - c) inch
 - d) ft
- (47) DSA is a
- a) Contrast procedure
 - b) routine procedure
 - c) Intervental procedure
 - d) A&C

- (48) Aneurysms is a
- | | |
|--------------------------------|----------------------------------|
| a) Normal Anatomical structure | b) abnormal anatomical structure |
| c) pathology of blood vesseles | d) Both A&c |
- (49) Percutaneous transhepatic biliary interventions are indicated in patients with obstructive jaundice due to tumour compression or invasion in the....., benign congenital or acquired biliary stenoses, or complications after liver transplantation.
- | | |
|-------------------|------------------------|
| a) Biliary system | b) Reproductive system |
| c) urinary system | d) Excretory system |
- (50) The biological effects of radiation in interventional procedure on an organ or tissue depend not only on the level of absorbed dose but also on theof the radiation.
- | | |
|-------------|------------------|
| a) quantity | b) quality |
| c) Both A&B | d) none of these |
- (51) Which of the following tip of catheter consider as a atraumatic ?
- | | |
|------------|------------------|
| a) Beveled | b) Rounded |
| c) Angled | d) none of these |
- (52) Dose-area product provides a practical indication of overall patient exposure relevant to the assessment ofrisk.
- | | |
|---------------|------------------|
| a) Stochastic | b) Deerministic |
| c) Genetic | d) none of these |
- (53) Pulsed radiofrequency fields are an emerging technology used in the medicine for the treatment of
- | | |
|------------------------------------|------------------------|
| a) Tumors | b) Cardiac arrhythmias |
| c) Chronic and post-operative pain | d) All of the above |
- (54) Ioxaglate is a
- | | |
|--------------------|--------------------|
| a) ionic dimer | b) ionic monomer |
| c) non ionic dimer | d) non ionic dimer |
- (55) Typically,iodine atoms are delivered with each benzene ring of a contrast medium.
- | | |
|---------|----------|
| a) two | b) three |
| c) four | d) six |
- (56) Angiography image in DSA procedure is acquired through subtraction process
- | | |
|--------------------|-------------------|
| a) PIXEL TO PIXEL | b) PIXEL TO VOXEL |
| c) MATRIX TO PIXEL | d) ALL OF THESE |
- (57) Digital subtraction angiography use to deliver the contrast media to the site of interest.
- | | |
|---------------|-----------|
| a) catheter | b) STENT |
| c) GUIDE WIRE | d) NEEDLE |
- (58) Iodine was discovered by French chemist Bernard Courtois in
- | | |
|---------|---------|
| a) 1811 | b) 1890 |
| c) 1789 | d) 1976 |
- (59) form itself must be comprehensive and cover all issues of importance, including major and common complications, based on an explanation given to the patient and his/her relatives/friends, in their own language
- | | |
|----------------|-----------------|
| a) Requisition | b) consent |
| c) Report | d) Preccription |

(60) Iofendylate contrast media isbased.

a) water

b) oil

c) Barium

d) all of these