

100 important one-liner points

✓ Contrast Media & General Radiology

1. Ideal contrast media must have low osmolality and high water solubility.
 2. Barium sulfate is contraindicated in suspected GI perforation.
 3. Non-ionic contrast agents are less likely to cause allergic reactions.
 4. Iodine-based contrast is commonly used for IV procedures.
 5. Contrast-induced nephropathy is a potential risk in renal-compromised patients.
 6. Enteric contrast agents are used for GI tract imaging.
 7. Barium is insoluble in water but radiopaque.
 8. Water-soluble contrast is preferred in suspected GI perforation.
 9. Iohexol and Iopamidol are low osmolality non-ionic agents.
 10. Air can be used as a negative contrast in double-contrast studies.
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✓ IVU, MCU & Retrograde Studies

11. Compression during IVU improves visualization of renal pelvis and calyces.
 12. Delayed images in IVU help in assessing ureteral obstruction.
 13. MCU is ideal to evaluate vesicoureteral reflux.
 14. Retrograde pyelography is useful when IV contrast is contraindicated.
 15. Foley catheter is commonly used in MCU.
 16. Contrast for MCU is injected via catheter during micturition.
 17. Oblique views are taken to visualize the ureters in IVU.
 18. IVU requires pre-procedure bowel preparation.
 19. Diuretic-enhanced IVU improves image clarity in non-functioning kidneys.
 20. Non-ionic contrast reduces risk in patients with contrast allergies.
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✓ Barium Studies

21. Barium swallow evaluates esophagus and upper GI tract.
 22. Barium meal includes stomach and duodenum imaging.
 23. Prone and erect positions are important during barium studies.
 24. Barium follow-through tracks contrast through small intestines.
 25. Enteroclysis gives detailed small bowel imaging using double contrast.
 26. Ba-enema is used for large bowel evaluation.
 27. Barium enema is contraindicated in suspected bowel perforation.
 28. Double contrast barium studies improve mucosal detail.
 29. Barium is excreted unchanged in feces.
 30. Barium studies require patient fasting.
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✓HSG & Reproductive Studies

31. HSG is done in proliferative phase of menstrual cycle.
 32. Water-soluble contrast is preferred for HSG.
 33. Bilateral spill of contrast in HSG indicates patent fallopian tubes.
 34. Cramping is common during HSG due to uterine distension.
 35. Recanalization of fallopian tubes is done under fluoroscopy.
 36. HSG assesses uterine cavity and tubal patency.
 37. Infection is a contraindication for HSG.
 38. Catheterization is essential for uterine cannulation.
 39. Oil-based contrast in HSG has a higher pregnancy rate post-procedure.
 40. Metallic cannula is used in traditional HSG.
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✓Cholangiography, Sialography & Other Contrast Studies

41. T-tube cholangiography checks for residual stones post cholecystectomy.
 42. Percutaneous transhepatic cholangiography is done under ultrasound guidance.
 43. Sialography is used to assess salivary gland ductal obstruction.
 44. Lemon juice is given before and after sialography to stimulate secretion.
 45. Sialography uses oil-based contrast.
 46. Bilateral dacryocystography helps diagnose nasolacrimal duct obstruction.
 47. Phlebography is contrast imaging of veins.
 48. Dacrocystography involves cannulation of the punctum.
 49. Venous access is usually through dorsal hand vein in phlebography.
 50. Water-soluble contrast is used for tear duct imaging.
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✓Interventional & Catheter Procedures

51. Catheters are named based on shape and purpose.
 52. Pigtail catheters are used in drainage procedures.
 53. Seldinger technique is standard for vascular catheterization.
 54. Femoral artery is a common access site in angiography.
 55. Embolization procedures use microcoils or particles.
 56. Stent placement is common in vascular interventions.
 57. Catheter size is measured in French units (1 Fr = 0.33 mm).
 58. Guide wires aid in catheter placement.
 59. Angioplasty balloons dilate narrowed arteries.
 60. Interventional radiology is both diagnostic and therapeutic.
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✓CT & MRI

61. CT uses X-rays while MRI uses magnetic fields.
62. CT is better for detecting bone fractures and acute bleeding.

63. MRI is superior for soft tissue contrast.
 64. Gadolinium is the contrast agent for MRI.
 65. MRI contrast is contraindicated in renal failure (risk of NSF).
 66. MRI is preferred in spinal cord evaluation.
 67. CT provides rapid imaging in trauma.
 68. MRI sequences include T1, T2, FLAIR, DWI.
 69. CT dose is higher than X-ray but provides 3D imaging.
 70. Open MRI scanners are better for claustrophobic patients.
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Mammography & Doppler

71. Mammography uses low-dose X-rays.
 72. Sono-elastography assesses tissue stiffness in breast lesions.
 73. Doppler assesses blood flow velocity.
 74. Color Doppler shows flow direction and velocity.
 75. Pulsed wave Doppler is used in obstetric imaging.
 76. BIRADS is a standardized reporting system in mammography.
 77. Digital mammography allows image post-processing.
 78. Triplex Doppler includes color, spectral and power Doppler.
 79. Fetal Doppler checks umbilical and uterine arteries.
 80. Mammography is done in two views – CC and MLO.
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PET, New Trends & Safety

81. PET uses radioactive tracers like FDG.
 82. PET-CT combines anatomical and metabolic imaging.
 83. PET is useful in cancer staging and recurrence.
 84. Radiotracers emit positrons for detection.
 85. PET has higher sensitivity than CT in tumor detection.
 86. RIS (Radiology Information System) manages patient imaging workflow.
 87. PACS stores, retrieves, and distributes digital images.
 88. Teleradiology enables remote reporting of images.
 89. Radiation protection includes time, distance, shielding.
 90. Lead aprons reduce radiation exposure in staff.
-

Miscellaneous Clinical Facts

91. Scout film is a preliminary X-ray taken before contrast procedures.
92. Erect position in barium studies helps demonstrate reflux.
93. IV cannulation is usually in antecubital vein for contrast studies.
94. Image intensifier improves fluoroscopic image brightness.
95. Radiopaque markers help localize GI perforations.
96. Air contrast outlines mucosal patterns.
97. Fluoroscopy offers dynamic real-time imaging.

98. Water enema is used to clear bowel before lower GI studies.
99. Patient consent is mandatory before interventional procedures.
- 100. *Emergency crash cart should be available during contrast administration.***
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Model Test Paper – Practice Set 1

Total Questions: 50

Time: 30 min.

Level: Advanced | Based on Radiological Procedures

Q1. Which contrast media is commonly used for IVU?

- A. Barium sulfate
 - B. Iohexol
 - C. Gastrografin
 - D. Iodine trichloride
-

Q2. Ideal time to perform HSG is during:

- A. Menstrual phase
 - B. Ovulatory phase
 - C. Secretory phase
 - D. Proliferative phase
-



Q3. Barium swallow is best for examining:

- A. Small bowel
 - B. Colon
 - C. Esophagus
 - D. Rectum
-

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Q4. Which imaging modality gives the best soft tissue contrast?

- A. CT
 - B. MRI
 - C. X-ray
 - D. Mammography
-

Q5. Common side effect of iodinated contrast is:

- A. Seizure
- B. Vomiting

- C. Bradycardia
 - D. Flushing
-

Q6. In IVU, compression is applied at:

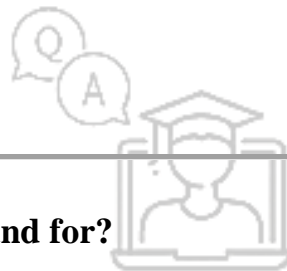
- A. Iliac crest
 - B. Ureteropelvic junction
 - C. Pelvic brim
 - D. Lower costal margin
-

Q7. MRI is contraindicated in:

- A. Dental filling
 - B. Cochlear implants
 - C. Hip prosthesis
 - D. Braces
-

Q8. What does PACS stand for?

- A. Patient Archive and Communication System
 - B. Picture Archiving and Communication System
 - C. Peripheral Access for Contrast Study
 - D. Patient Admission and Clinical Storage
-



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Q9. Enteroclysis is mainly used to evaluate:

- A. Large bowel
 - B. Gallbladder
 - C. Small intestine
 - D. Colon
-

Q10. In Dacryocystography, contrast is injected into the:

- A. Lacrimal sac
 - B. Nasolacrimal duct
 - C. Eye globe
 - D. Orbit
-

Q11. Most preferred MRI contrast agent is:

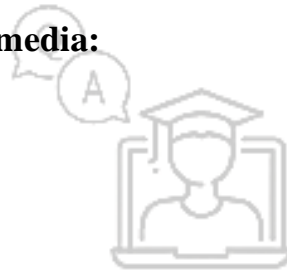
- A. Iodine
 - B. Gadolinium
 - C. Barium
 - D. Bismuth
-

Q12. Barium enema is contraindicated in:

- A. Hirschsprung disease
 - B. Chronic constipation
 - C. Suspected perforation
 - D. Diverticulosis
-

Q13. Non-ionic contrast media:

- A. Has high osmolality
- B. Is water insoluble
- C. Has fewer side effects
- D. Is used for MRI only



Q14. Foley catheter is used in:

- A. HSG
 - B. IVU
 - C. MCU
 - D. Dacryocystography
-

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Q15. Best imaging for intervertebral disc is:

- A. CT
 - B. MRI
 - C. PET
 - D. Ultrasound
-

Q16. Best method to visualize fallopian tube patency:

- A. Barium meal
- B. HSG

- C. MRI pelvis
 - D. CT abdomen
-

Q17. T-Tube cholangiography is usually done post:

- A. Liver transplant
 - B. Gallbladder biopsy
 - C. Cholecystectomy
 - D. ERCP
-

Q18. Barium is excreted via:

- A. Urine
 - B. Sweat
 - C. Feces
 - D. Breath
-

Q19. In Doppler ultrasound, red color indicates:

- A. Flow away from probe
 - B. No flow
 - C. Flow towards the probe
 - D. Arterial blockage
-

Q20. Which view is used in mammography?

- A. PA and Lateral
 - B. AP and Axial
 - C. Craniocaudal and MLO
 - D. Oblique and Tangential
-

Q21. MRI contrast is avoided in patients with:

- A. Diabetes
 - B. Renal failure
 - C. Asthma
 - D. Allergy to iodine
-

Q22. Main purpose of scout film in IVU:

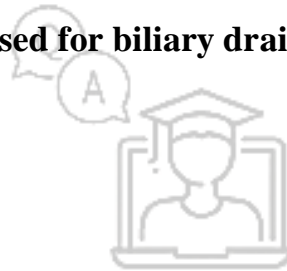
- A. Check bladder fullness
 - B. Localize kidneys
 - C. Visualize pathology
 - D. Plan exposure
-

Q23. Air used in contrast study is a:

- A. Positive contrast
 - B. Neutral contrast
 - C. Negative contrast
 - D. Delayed contrast
-

Q24. Which catheter is used for biliary drainage?

- A. Foley
 - B. Pigtail
 - C. Judkins
 - D. Malecot
-



Q25. BIRADS is associated with:

- A. CT brain
 - B. Breast imaging
 - C. IVU
 - D. Cardiac MRI
-

Q26. Primary use of retrograde pyelography:

- A. Assess urethral stricture
 - B. When IVU fails
 - C. Evaluate colon
 - D. Drain fluid
-

Q27. Lemon juice is given in:

- A. Ba Meal
- B. MCU

- C. Sialography
 - D. HSG
-

Q28. PET imaging uses:

- A. Magnetic field
 - B. Radio waves
 - C. X-rays
 - D. Positron-emitting tracers
-

Q29. Common site for angiographic puncture:

- A. Subclavian artery
 - B. Carotid artery
 - C. Femoral artery
 - D. Brachial artery
-

Q30. Recanalisation procedure is usually done in:

- A. Large intestine
 - B. Fallopian tubes
 - C. Pancreas
 - D. Esophagus
-

Q31. Judkins catheter is used in:

- A. Cerebral angiography
 - B. Coronary angiography
 - C. IVU
 - D. MCU
-

Q32. The main function of RIS is to:

- A. Capture MRI images
 - B. Store patient reports
 - C. Archive images
 - D. Manage workflow and patient data
-

Q33. For suspected GI perforation, preferred contrast:

- A. Barium
 - B. Gadolinium
 - C. Water-soluble iodine
 - D. Air
-

Q34. Scout film is taken before:

- A. HSG
 - B. IVU
 - C. Sialography
 - D. Angiography
-

Q35. Fluoroscopy provides:

- A. Static imaging
- B. Dynamic real-time imaging
- C. 3D reconstructions
- D. Nuclear scan



Q36. Pigtail catheter is commonly used in:

- A. Dialysis
 - B. Biliary drainage
 - C. Angioplasty
 - D. Urethral catheterization
-

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Q37. Radiation safety includes all EXCEPT:

- A. Shielding
 - B. Increased exposure
 - C. Distance
 - D. Reduced time
-

Q38. Seldinger technique is used in:

- A. IV injection
- B. Catheterization

- C. X-ray
 - D. CT
-

Q39. Common double contrast study:

- A. IVU
 - B. MCU
 - C. Barium enema
 - D. HSG
-

Q40. Image intensifier in fluoroscopy improves:

- A. Spatial resolution
 - B. Image brightness
 - C. Radiation dose
 - D. Time of exposure
-

Q41. In MRI, T2-weighted images highlight:

- A. Fat
 - B. Air
 - C. Water
 - D. Calcium
-



Q42. CT uses which radiation?

- A. Gamma
 - B. Alpha
 - C. X-rays
 - D. Beta
-

Q43. RIS helps in:

- A. Managing PACS
 - B. Workflow in radiology
 - C. Reconstructing CT
 - D. Positioning patients
-

Q44. PET scan is most useful in:

- A. GI obstruction
 - B. Ureteral stone
 - C. Tumor evaluation
 - D. Bone fracture
-

Q45. Lead apron protects against:

- A. MRI
 - B. X-ray
 - C. Ultrasound
 - D. Radio
-

Q46. What is full form of HSG?

- A. Hepato-splenic Graphy
 - B. Hysterosalpingography
 - C. Histo-saline Graphy
 - D. Hematosero Graphy
-



Q47. MRI image resolution is affected by:

- A. Field strength
 - B. kVp
 - C. Collimation
 - D. mAs
-

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Q48. Digital radiography benefits include:

- A. Less image storage
 - B. Faster imaging and processing
 - C. High radiation dose
 - D. No reproducibility
-

Q49. Normal adult kidney in IVU appears in:

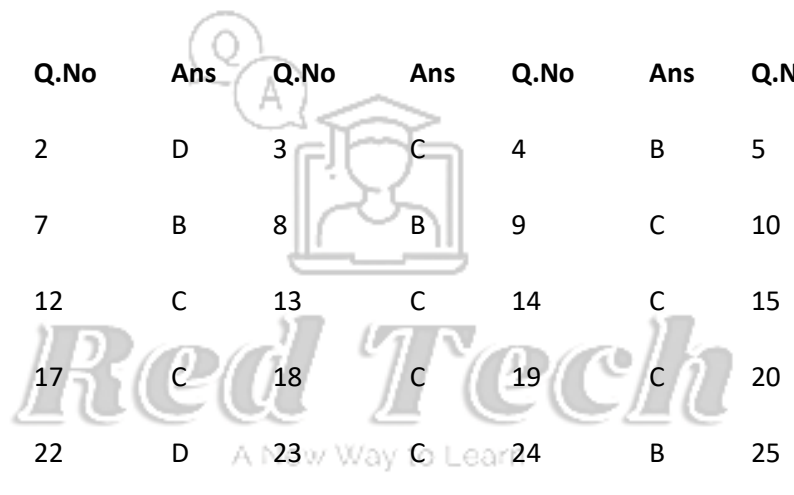
- A. 5 seconds
- B. 1 minute

- C. 3–5 minutes
D. 10 minutes
-

Q50. Scout film is useful for:

- A. Identifying motion
B. Position confirmation
C. Artifact evaluation
D. All of the above
-

Answer Key



Q.No	Ans	Q.No	Ans	Q.No	Ans	Q.No	Ans	Q.No	Ans
1	B	2	D	3	C	4	B	5	B
6	A	7	B	8	B	9	C	10	A
11	B	12	C	13	C	14	C	15	B
16	B	17	C	18	C	19	C	20	C
21	B	22	D	23	C	24	B	25	B
26	B	27	C	28	D	29	C	30	B
31	B	32	D	33	C	34	B	35	B
36	B	37	B	38	B	39	C	40	B
41	C	42	C	43	B	44	C	45	B
46	B	47	A	48	B	49	C	50	D

Model Test Paper – Practice Set 2

Total Questions: 50

Time: 30 min.

Level: Advanced | Focus: Radiological Procedures,
Imaging Techniques, and Interventions

Q1. The preferred contrast medium for a suspected perforated ulcer is:

- A. Barium sulfate
 - B. Gadolinium
 - C. Water-soluble iodine
 - D. Air
-

Q2. Which imaging study best demonstrates vesicoureteral reflux?

- A. Retrograde urethrogram
 - B. Intravenous urography
 - C. Micturating cystourethrogram
 - D. CT KUB
-

Q3. What is the typical dose of gadolinium contrast for MRI in adults?

- A. 0.1 mmol/kg
 - B. 1.0 mmol/kg
 - C. 5 ml total
 - D. 100 mg/kg
-

Q4. Which catheter type is best for percutaneous nephrostomy?

- A. Judkins
 - B. Foley
 - C. Pigtail
 - D. Central venous
-

Q5. Most common complication of hysterosalpingography is:

- A. Perforation
- B. Infection

- C. Hematuria
 - D. Pain
-

Q6. Barium meal follow-through studies are used to evaluate:

- A. Esophagus
 - B. Stomach
 - C. Small intestine
 - D. Colon
-

Q7. Which of the following is a contraindication for MRI?

- A. Cochlear implants
 - B. Dental fillings
 - C. Pregnancy
 - D. Tattoos
-

Q8. Lemon juice is used in sialography to:

- A. Dilate ducts
 - B. Clean oral cavity
 - C. Stimulate salivary secretion
 - D. Visualize sublingual gland
-

Q9. Which of the following is used to visualize the biliary tract post-surgery?

- A. IVU
 - B. MRCP
 - C. T-Tube cholangiography
 - D. HSG
-

Q10. In a double contrast barium enema, the second contrast used is:

- A. Gadolinium
 - B. Water
 - C. Air
 - D. Iodine
-

Q11. CT uses which of the following radiation types?

- A. Alpha rays
 - B. Gamma rays
 - C. X-rays
 - D. Beta rays
-

Q12. Which structure is best visualized with enteroclysis?

- A. Colon
 - B. Stomach
 - C. Jejunum
 - D. Duodenum
-

Q13. What is the function of PACS in radiology?

- A. Store paper reports
 - B. Manage hospital data
 - C. Archive and communicate digital images
 - D. Perform image acquisition
-

Q14. A scout film is taken before contrast studies to:

- A. Adjust contrast dose
 - B. Check equipment
 - C. Evaluate positioning and anatomy
 - D. Avoid radiation
-

Q15. Which Doppler technique evaluates direction and velocity of flow?

- A. Color Doppler
 - B. Power Doppler
 - C. Continuous wave
 - D. Triplex Doppler
-

Q16. In PET imaging, FDG is:

- A. A radioactive iodine isotope
- B. A glucose analog

- C. A metal-based agent
 - D. Used only for bone scans
-

Q17. Seldinger technique is used in:

- A. Radiotherapy
 - B. Catheter insertion
 - C. Nuclear medicine
 - D. ECG
-

Q18. MRI contrast is contraindicated in:

- A. Iron deficiency anemia
 - B. Pregnancy
 - C. Chronic kidney disease
 - D. Osteoporosis
-

Q19. Main indication for fallopian tube recanalisation:

- A. Ectopic pregnancy
 - B. Blocked tubes causing infertility
 - C. Endometriosis
 - D. Uterine cancer
-

Q20. Which barium study evaluates both small and large intestine?

- A. Barium swallow
 - B. Barium meal
 - C. Barium meal follow-through
 - D. None
-

Q21. Which instrument controls brightness in fluoroscopy?

- A. Grid
 - B. Image intensifier
 - C. Filter
 - D. AEC sensor
-

Q22. Phlebography is used for imaging:

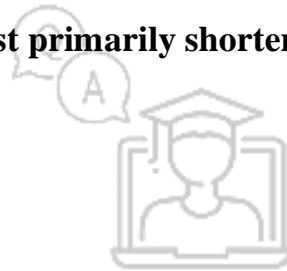
- A. Arteries
 - B. Lymphatics
 - C. Veins
 - D. Capillaries
-

Q23. Typical volume of IV contrast used in CT abdomen:

- A. 10 ml
 - B. 25 ml
 - C. 100 ml
 - D. 200 ml
-

Q24. Gadolinium contrast primarily shortens:

- A. T2 time
 - B. T1 time
 - C. Echo time
 - D. Repetition time
-



Q25. Lead aprons should be at least:

- A. 0.05 mm lead equivalent
 - B. 0.25 mm
 - C. 0.5 mm
 - D. 2 mm
-

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Q26. Which procedure is considered minimally invasive?

- A. Barium swallow
 - B. MRI brain
 - C. Interventional angioplasty
 - D. Sialography
-

Q27. The best imaging for acute intracranial bleed is:

- A. MRI T2
- B. CT without contrast

- C. X-ray skull
 - D. MRI FLAIR
-

Q28. Which test uses water-soluble contrast to outline ureters in retrograde fashion?

- A. IVU
 - B. RGU
 - C. Retrograde Pyelography
 - D. MCU
-

Q29. MRI T2-weighted images are ideal for:

- A. Fatty tissue
 - B. Air
 - C. Fluid-based pathology
 - D. Bone calcification
-



Q30. Sonoelastography assesses:

- A. Perfusion
 - B. Tissue stiffness
 - C. Vascular flow
 - D. Doppler shift
-

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Q31. MRCP stands for:

- A. Magnetic resonance cardiac perfusion
 - B. Magnetic resonance cholangiopancreatography
 - C. Magnetic renal contrast protocol
 - D. Magnetic radiation cancer profile
-

Q32. In IVU, nephrogram phase is seen after:

- A. 5 sec
- B. 30 sec
- C. 3 min
- D. 10 min

Q33. Primary advantage of non-ionic contrast media:

- A. Cost-effective
 - B. No renal effect
 - C. Reduced allergic reactions
 - D. Higher density
-

Q34. Dacrocystography is done using:

- A. IV injection
 - B. Oral contrast
 - C. Lacrimal duct cannulation
 - D. Subcutaneous injection
-

Q35. In BIRADS scoring, category 5 implies:

- A. Benign
 - B. Probably benign
 - C. Suspicious abnormality
 - D. Highly suggestive of malignancy
-

Q36. Interventional radiology includes:

- A. CT scanning
 - B. Barium enema
 - C. Angioplasty
 - D. Mammography
-

Q37. Typical indication for sialography:

- A. Stone
 - B. Infection
 - C. Fistula
 - D. All of the above
-

Q38. Radio-opacity of contrast agents depends on:

- A. Size of molecule
 - B. Atomic number
 - C. Water content
 - D. pH
-

Q39. Which modality uses no ionizing radiation?

- A. CT
 - B. MRI
 - C. PET
 - D. Mammography
-

Q40. First line study for suspected renal calculus:

- A. MRI
 - B. CT KUB
 - C. USG abdomen
 - D. IVU
-



Q41. Which catheter is used in coronary angiography?

- A. Pigtail
 - B. Judkins
 - C. Foley
 - D. Malecot
-

Q42. Best view to evaluate ureters in IVU:

- A. Supine
 - B. Oblique
 - C. Prone
 - D. Erect
-

Q43. Digital radiography enables:

- A. Image editing
- B. Longer exposure
- C. Manual archiving
- D. Non-repeatability

Q44. Teleradiology enables:

- A. Ultrasound guided biopsy
 - B. Remote reporting of images
 - C. Printing of hard films
 - D. Patient scheduling
-

Q45. PET is more sensitive than CT for:

- A. Bleeding
 - B. Inflammation
 - C. Tumor detection
 - D. Bone fracture
-

Q46. RIS in radiology stands for:

- A. Radiology Imaging Server
 - B. Radiology Information System
 - C. Regional Imaging Service
 - D. Radiographic Index Setup
-

Q47. Which sequence nulls CSF in MRI?

- A. T1
 - B. T2
 - C. FLAIR
 - D. GRE
-

Q48. Main risk of iodinated contrast:

- A. Constipation
 - B. Renal toxicity
 - C. Bradycardia
 - D. Radiation
-

Q49. In a CT scanner, detectors are arranged in:

- A. Fan beam
- B. Spiral
- C. Circular ring
- D. Linear tube

Q50. MRI safety requires screening for:

- A. Cardiac murmur
 - B. Allergies
 - C. Implants and devices
 - D. Age
-

Answer Key

Q.No Ans Q.No Ans Q.No Ans Q.No Ans Q.No Ans

1 C 2 C 3 A 4 C 5 B
 6 C 7 A 8 C 9 C 10 C
 11 C 12 C 13 C 14 C 15 A
 16 B 17 B 18 C 19 B 20 C
 21 B 22 C 23 C 24 B 25 C
 26 C 27 B 28 C 29 C 30 B
 31 B 32 B 33 C 34 C 35 D
 36 C 37 D 38 B 39 B 40 B
 41 B 42 B 43 A 44 B 45 C
 46 B 47 C 48 B 49 C 50 C

Model Test Paper – Practice Set 3

Total Questions: 50

Time: 30 mim.

Level: Advanced | Focus: Radiological Contrast, GI Imaging, Urography, CT/MRI/PET, Interventions

Q1. The full form of MCU is:

- A. Medical Cystourethral Urogram
 - B. Micturating Cystourethrogram
 - C. Manual Contrast Urogram
 - D. Magnetic Contrast Urography
-

Q2. The most suitable study for suspected vesicoureteric reflux is:

- A. IVU
 - B. CT KUB
 - C. MCU
 - D. RGU
-

Q3. In HSG, contrast should be injected during:

- A. Menstruation
 - B. Ovulation
 - C. Early proliferative phase
 - D. Secretory phase
-

Q4. Retrograde Pyelography is primarily indicated when:

- A. There is suspected bladder rupture
 - B. IVU is contraindicated
 - C. Urethral catheterization is needed
 - D. Kidney biopsy is planned
-

Q5. In Barium swallow, the esophagus is best visualized in:

- A. PA view
- B. RAO view

- C. Supine view
 - D. Prone view
-

Q6. Which catheter is best for biliary interventions?

- A. Foley catheter
 - B. Malecot catheter
 - C. Pigtail catheter
 - D. Judkins catheter
-

Q7. For small bowel obstruction, the best initial imaging study is:

- A. Barium enema
 - B. Plain abdominal X-ray
 - C. CT with contrast
 - D. MRI
-

Q8. In CT scanning, contrast delay timing helps in:

- A. Reducing radiation
 - B. Improving spatial resolution
 - C. Enhancing organ-specific vascularity
 - D. Faster scanning
-

Q9. Which is a non-vascular interventional procedure?

- A. Biliary drainage
 - B. Angioplasty
 - C. Embolization
 - D. Stent placement in femoral artery
-

Q10. In Enteroclysis, contrast is introduced via:

- A. Oral ingestion
 - B. NG tube to stomach
 - C. Tube into jejunum
 - D. Rectal enema
-

Q11. For a suspected urethral injury, the investigation of choice is:

- A. IVU
 - B. CT
 - C. RGU
 - D. MCU
-

Q12. In MRCP, the contrast between bile and pancreatic ducts is due to:

- A. Fat saturation
 - B. High T1 signal
 - C. T2-weighted sequences
 - D. Gadolinium injection
-

Q13. Which of the following is true about gadolinium?

- A. Used in CT
 - B. Causes high osmolality reactions
 - C. Contraindicated in renal failure
 - D. Absorbed in GI tract
-

Q14. A “beaded” appearance in fallopian tubes during HSG suggests:

- A. Hydrosalpinx
 - B. Tuberculosis
 - C. Ectopic pregnancy
 - D. Endometriosis
-

Q15. Double contrast technique uses:

- A. Two positive agents
 - B. One positive and one negative agent
 - C. Air and water
 - D. Iodine only
-

Q16. Which of the following best evaluates gallstones?

- A. Barium meal
- B. CT abdomen

- C. Ultrasound
 - D. MRI
-

Q17. MRU (MR urography) is preferred over IVU in:

- A. Pediatric patients
 - B. Renal tumors
 - C. Obstructive uropathy
 - D. All of the above
-

Q18. Judkins catheter is used in:

- A. Coronary angiography
 - B. HSG
 - C. Retrograde pyelography
 - D. TIPS procedure
-

Q19. Most sensitive investigation for early renal TB:

- A. Ultrasound
 - B. IVU
 - C. CT
 - D. MRI
-



Q20. In PET scan, uptake of FDG is proportional to:

- A. Oxygen content
 - B. Blood pH
 - C. Glucose metabolism
 - D. Fat deposition
-

Q21. Main advantage of digital subtraction angiography is:

- A. Better soft tissue detail
 - B. Visualization without contrast
 - C. Removing bony background
 - D. Increased scan speed
-

Q22. For suspected intestinal perforation, use:

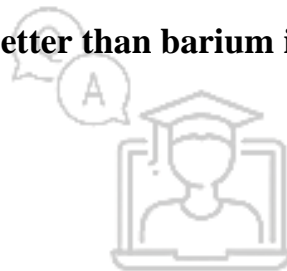
- A. Barium
 - B. Air
 - C. Gastrografin
 - D. Gadolinium
-

Q23. A scout film is not required before:

- A. IVU
 - B. Barium meal
 - C. Mammography
 - D. Barium enema
-

Q24. CT enteroclysis is better than barium in evaluating:

- A. Crohn's disease
 - B. Duodenal ulcer
 - C. Gastric outlet obstruction
 - D. Gallstones
-



Q25. Most common complication of sialography is:

- A. Stone formation
 - B. Fistula
 - C. Infection
 - D. Allergy
-

Red Tech
A New Way to Learn

Q26. Air used in contrast study is considered a:

- A. Positive contrast
 - B. Negative contrast
 - C. Neutral medium
 - D. Non-contrast agent
-

Q27. For pelvic imaging in female patients, which MRI plane is ideal?

- A. Sagittal
- B. Coronal

- C. Axial
 - D. Oblique
-

Q28. Hepatic metastases are best seen in:

- A. Non-contrast CT
 - B. USG
 - C. Contrast-enhanced CT
 - D. MRI without contrast
-

Q29. Indication for T-tube cholangiography includes:

- A. Assessing ureteric patency
 - B. Checking residual biliary stones post-cholecystectomy
 - C. Detecting renal mass
 - D. Evaluating pancreatic duct
-

Q30. Enteroclysis tube is introduced into:

- A. Duodenum
 - B. Jejunum
 - C. Colon
 - D. Rectum
-



Q31. CT colonography is also known as:

- A. Virtual colonoscopy
 - B. Digital endoscopy
 - C. CT sigmoidoscopy
 - D. Radiocolonoscopy
-

Q32. Preferred position for Barium enema:

- A. Supine
 - B. Erect
 - C. Left lateral
 - D. Right anterior oblique
-

Q33. Which imaging modality provides multiplanar views without repositioning the patient?

- A. CT
 - B. MRI
 - C. X-ray
 - D. Fluoroscopy
-

Q34. Radiographic contrast agents with high atomic numbers improve:

- A. Spatial resolution
 - B. Attenuation and visibility
 - C. Temporal resolution
 - D. Scanning speed
-

Q35. Best investigation for pancreatic duct visualization:

- A. IVU
 - B. T-tube cholangiography
 - C. MRCP
 - D. Barium meal
-

Q36. Subtraction technique is used in:

- A. MRI
 - B. CT
 - C. DSA
 - D. SPECT
-

Q37. Main source of radiation exposure in fluoroscopy is:

- A. Leakage radiation
 - B. Scattered radiation
 - C. Primary beam
 - D. External background
-

Q38. Most sensitive imaging for liver hemangioma:

- A. CT
 - B. MRI with contrast
 - C. USG
 - D. PET
-

Q39. Which catheter is used in selective coronary studies?

- A. Foley
 - B. Judkins
 - C. Pigtail
 - D. Malecot
-

Q40. First line for evaluating adnexal masses:

- A. CT
 - B. MRI
 - C. Ultrasound
 - D. PET
-



Q41. 3D reconstruction is possible in:

- A. X-ray
 - B. MRI
 - C. CT
 - D. Both B and C
-

Red Tech
A New Way to Learn

Q42. In renal colic, the most accurate investigation is:

- A. IVU
 - B. USG
 - C. NCCT
 - D. MRI
-

Q43. Best test for dynamic study of swallowing:

- A. Barium swallow
- B. CT neck
- C. MRI neck
- D. PET

Q44. For vascular embolization, preferred agent is:

- A. Saline
 - B. Polyvinyl alcohol
 - C. Contrast
 - D. Gadolinium
-

Q45. Salivary duct dilation in sialography is called:

- A. Megaduct
 - B. Ballooning
 - C. Beading
 - D. Ductal varices
-

Q46. Hysterosalpingography is best done on:

- A. Day 1
 - B. Day 5–10
 - C. Day 14
 - D. Day 21
-

Q47. Air contrast is contraindicated in:

- A. Constipation
 - B. Diarrhea
 - C. Ulcerative colitis
 - D. IBS
-

Q48. Sialoliths are most commonly found in:

- A. Parotid
 - B. Sublingual
 - C. Submandibular
 - D. Buccal glands
-

Q49. MRI artifact due to metal is known as:

- A. Motion artifact
- B. Aliasing
- C. Susceptibility artifact
- D. Gibbs artifact

Q50. MRI contrast is mainly excreted by:

- A. Liver
 - B. Kidneys
 - C. Skin
 - D. Lungs
-

Answer Key

Q.No Ans Q.No Ans Q.No Ans Q.No Ans Q.No Ans

1	B	2	C	3	C	4	B	5	B
6	C	7	B	8	C	9	A	10	C
11	C	12	C	13	C	14	B	15	B
16	C	17	D	18	A	19	C	20	C
21	C	22	C	23	C	24	A	25	C
26	B	27	A	28	C	29	B	30	B
31	A	32	D	33	B	34	B	35	C
36	C	37	B	38	B	39	B	40	C
41	D	42	C	43	A	44	B	45	C
46	B	47	C	48	C	49	C	50	B

Model Test Paper – Practice Set 4

Total Questions: 50
Level: Advanced

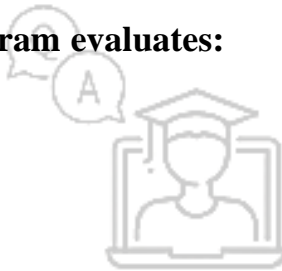
Time : 30 min.

Q1. Which of the following is a high osmolar contrast medium?

- A. Iohexol
- B. Iopromide
- C. Diatrizoate
- D. Iodixanol

Q2. Retrograde urethrogram evaluates:

- A. Ureter
- B. Bladder
- C. Urethra
- D. Prostate



Q3. In barium swallow, cricopharyngeal narrowing is seen at:

- A. C4
- B. C5
- C. C6
- D. C7

Red Tech
A New Way to Learn

Q4. Which contrast agent is used in PET?

- A. Gallium
- B. Fluorodeoxyglucose (FDG)
- C. Iodinated contrast
- D. Gadolinium

Q5. For renal angiography, preferred catheter is:

- A. Foley
- B. Pigtail

- C. Judkins
 - D. Cobra
-

Q6. HSG is usually avoided during menstruation due to:

- A. Contrast allergy
 - B. Infection risk
 - C. Pain
 - D. Discomfort
-

Q7. Barium enema is contraindicated in:

- A. Constipation
 - B. Polyp
 - C. Suspected perforation
 - D. Colitis
-

Q8. Which study best evaluates distal ureters and bladder?

- A. IVU
 - B. MCU
 - C. RGU
 - D. CT urography
-

Q9. The appearance of "string of beads" in imaging suggests:

- A. Gallstones
 - B. TB fallopian tubes
 - C. Crohn's disease
 - D. Stone in parotid duct
-

Q10. Which of the following contrast agents is most nephrotoxic?

- A. Gadolinium
 - B. Low-osmolar iodine
 - C. High-osmolar iodine
 - D. Barium
-

Q11. Which projection is preferred in barium enema for sigmoid colon?

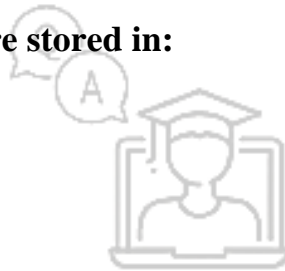
- A. PA
 - B. Left lateral
 - C. RAO
 - D. AP erect
-

Q12. Which catheter is commonly used for biliary drainage?

- A. Foley
 - B. Malecot
 - C. Pigtail
 - D. Hickman
-

Q13. In PACS, images are stored in:

- A. JPEG
 - B. PNG
 - C. DICOM
 - D. TIFF
-



Q14. First investigation for suspected acute stroke:

- A. MRI DWI
 - B. CT without contrast
 - C. CT angiography
 - D. MR angiography
-

Red Tech
A New Way to Learn

Q15. In MRCP, bile appears:

- A. Bright
 - B. Dark
 - C. Isointense
 - D. Invisible
-

Q16. Which sequence suppresses fat signal in MRI?

- A. T1
- B. T2

- C. STIR
 - D. GRE
-

Q17. Phlebography is used to detect:

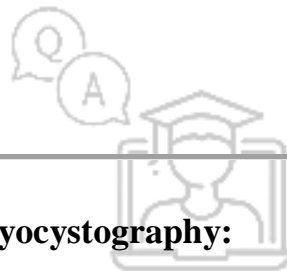
- A. Aneurysm
 - B. Embolism
 - C. Venous thrombosis
 - D. Arterial plaque
-

Q18. Which contrast agent is safe in suspected GI perforation?

- A. Barium sulfate
 - B. Gastrografin
 - C. Gadolinium
 - D. Air
-

Q19. Indication for Dacryocystography:

- A. Lacrimal duct obstruction
 - B. Orbital trauma
 - C. Nasal polyp
 - D. Sinusitis
-



Red Tech
A New Way to Learn

Q20. MR spectroscopy helps in:

- A. Anatomy
 - B. Biopsy guidance
 - C. Functional imaging
 - D. Metabolite analysis
-

Q21. What is the HU of water in CT?

- A. -1000
 - B. 0
 - C. +100
 - D. +1000
-

Q22. Radiation dose is highest in which modality?

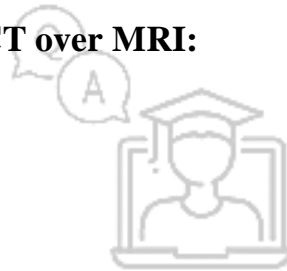
- A. MRI
 - B. Ultrasound
 - C. CT
 - D. Fluoroscopy
-

Q23. Which investigation does not require contrast?

- A. CT Angiography
 - B. IVU
 - C. X-ray Chest
 - D. MR Angiography
-

Q24. Key advantage of CT over MRI:

- A. Soft tissue imaging
 - B. No radiation
 - C. Faster acquisition
 - D. Better spatial resolution
-



Q25. A complete filling defect in RGU suggests:

- A. Bladder stone
 - B. Stricture
 - C. Infection
 - D. Diverticulum
-

Red Tech
A New Way to Learn

Q26. The best imaging for pituitary gland is:

- A. X-ray skull
 - B. CT head
 - C. MRI brain
 - D. PET scan
-

Q27. Submandibular duct is also called:

- A. Wharton's duct
- B. Stensen's duct

- C. Bartholin's duct
 - D. Nasolacrimal duct
-

Q28. In a sialogram, punctate opacities suggest:

- A. Tumor
 - B. Infection
 - C. Sjögren's syndrome
 - D. Trauma
-

Q29. In angiography, which artery is punctured usually?

- A. Ulnar
 - B. Femoral
 - C. Carotid
 - D. Brachial
-

Q30. The optimal imaging for bile duct stones is:

- A. CT
 - B. MRI
 - C. MRCP
 - D. PET
-



Q31. Seldinger technique is related to:

- A. Catheter insertion
 - B. Radiation protection
 - C. Biopsy
 - D. Teleradiology
-

Q32. Ureteric jet can be assessed by:

- A. CT
 - B. MRI
 - C. USG Doppler
 - D. X-ray KUB
-

Q33. Dose of IV gadolinium contrast:

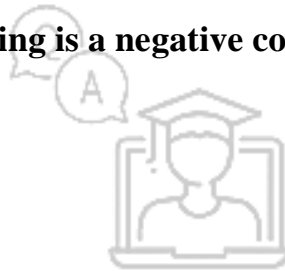
- A. 0.01 mmol/kg
 - B. 0.05 mmol/kg
 - C. 0.1 mmol/kg
 - D. 1.0 mmol/kg
-

Q34. Most common cause of contrast-induced nephropathy:

- A. High-osmolar iodine
 - B. Gadolinium
 - C. Air
 - D. Non-ionic agents
-

Q35. Which of the following is a negative contrast agent?

- A. Barium
 - B. Iodine
 - C. CO₂
 - D. Gadolinium
-



Q36. PACS eliminates the need for:

- A. Radiographers
 - B. Film storage
 - C. Image acquisition
 - D. Clinical decision
-

Q37. MRI contraindicated in:

- A. Dental crown
 - B. Cochlear implant
 - C. Cardiac pacemaker (MR-safe)
 - D. Tattoo
-

Q38. CT abdomen is best for:

- A. Muscle strain
- B. Small bowel obstruction

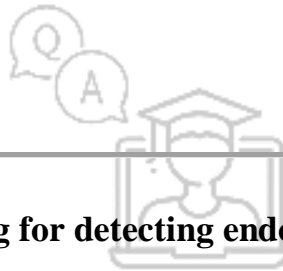
- C. Retinopathy
 - D. Cartilage defects
-

Q39. Which of the following is non-invasive?

- A. HSG
 - B. Biopsy
 - C. MRI
 - D. TIPS
-

Q40. In renal angiography, contrast is injected into:

- A. Aorta
 - B. Renal artery
 - C. Inferior vena cava
 - D. Ureter
-



Q41. Most useful imaging for detecting endometriosis:

- A. Ultrasound
 - B. MRI
 - C. CT
 - D. PET
-

Red Tech
A New Way to Learn

Q42. Digital subtraction angiography helps in:

- A. Liver biopsy
 - B. Measuring density
 - C. Vessel visualization
 - D. Barium studies
-

Q43. High-resolution CT is ideal for:

- A. Brain hemorrhage
 - B. Lung parenchyma
 - C. Bone fracture
 - D. Abdomen
-

Q44. In Interventional Radiology, embolization is used to:

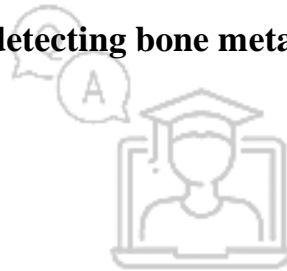
- A. Increase perfusion
 - B. Block blood flow
 - C. Visualize arteries
 - D. Dilate vessels
-

Q45. MIP stands for:

- A. Multi-input projection
 - B. Maximum intensity projection
 - C. Median image processing
 - D. Magnetic image plane
-

Q46. Ideal modality for detecting bone metastasis:

- A. CT
 - B. MRI
 - C. Bone scan
 - D. PET
-



Q47. Gadolinium works by:

- A. Absorbing X-rays
 - B. T1 shortening
 - C. Radioactivity
 - D. Negative enhancement
-

Red Tech
A New Way to Learn

Q48. Most radiosensitive organ:

- A. Liver
 - B. Lung
 - C. Gonads
 - D. Brain
-

Q49. Which imaging uses radiotracers?

- A. MRI
- B. PET

- C. CT
 - D. USG
-

Q50. Barium studies are not used for:

- A. Colon polyps
 - B. Perforation
 - C. Intussusception
 - D. Malrotation
-

Answer Key

Q.No Ans Q.No Ans Q.No Ans Q.No Ans Q.No Ans

1	C	2	C	3	C	4	B	5	D
6	B	7	C	8	B	9	C	10	C
11	C	12	C	13	C	14	B	15	A
16	C	17	C	18	B	19	A	20	D
21	B	22	C	23	C	24	C	25	B
26	C	27	A	28	C	29	B	30	C
31	A	32	C	33	C	34	A	35	C
36	B	37	B	38	B	39	C	40	B
41	B	42	C	43	B	44	B	45	B
46	C	47	B	48	C	49	B	50	B

Model Test paper – Practice Set 5

Total Questions: 50

Time : 30 min.

Level: Advanced | Format: MCQ | With Answer Key

Q1. In MR imaging, T1 shortening is caused by:

- A. Water
 - B. Fat
 - C. Air
 - D. CSF
-

Q2. Which modality is most sensitive for detecting liver metastasis?

- A. CT abdomen
 - B. Ultrasound
 - C. MRI with contrast
 - D. PET
-



Q3. Hysterosalpingography is not indicated in:

- A. Infertility
 - B. Tubal blockage
 - C. Menstrual abnormality
 - D. Suspected ectopic pregnancy
-

Red Tech
A New Way to Learn

Q4. Preferred route for nephrostomy catheter insertion:

- A. Transurethral
 - B. Percutaneous
 - C. Intravenous
 - D. Retrograde
-

Q5. MRCP is used to evaluate:

- A. Colon
- B. Renal artery

- C. Biliary and pancreatic duct
 - D. Small intestine
-

Q6. Most sensitive method for detecting GI tract leak:

- A. Barium study
 - B. Gastrografin study
 - C. CT scan
 - D. MRI abdomen
-

Q7. A contraindication for barium enema is:

- A. Ulcerative colitis
 - B. IBS
 - C. Constipation
 - D. Fistula
-

Q8. Which phase best visualizes hepatic veins in contrast CT?

- A. Non-contrast
 - B. Arterial
 - C. Portal venous
 - D. Delayed
-



Q9. For suspected renal artery stenosis, best imaging is:

- A. Doppler USG
 - B. Non-contrast CT
 - C. MR Angiography
 - D. IVU
-

Q10. Sialography is contraindicated in:

- A. Suspected stone
 - B. Active infection
 - C. Painful swelling
 - D. Tumor
-

Q11. In PET imaging, FDG uptake reflects:

- A. Oxygenation
 - B. Glycolytic activity
 - C. Perfusion
 - D. Enzyme metabolism
-

Q12. The contrast used in oral CT enterography is:

- A. Water
 - B. Barium
 - C. Gastrografin
 - D. Iodinated contrast
-

Q13. In MRI, fat appears:

- A. Bright on T1
- B. Dark on T1
- C. Bright on T2
- D. Dark on STIR



Q14. Common indication for CT cystography:

- A. Bladder cancer
 - B. Renal colic
 - C. Bladder rupture
 - D. UTI
-

Red Tech

A New Way to Learn

Q15. Contraindication for gadolinium:

- A. Pregnancy
 - B. Renal failure
 - C. Liver failure
 - D. Anemia
-

Q16. Common feature in T-tube cholangiography:

- A. Stone
- B. Cyst

- C. Stricture
 - D. All of the above
-

Q17. Which sequence is used to suppress CSF in MRI?

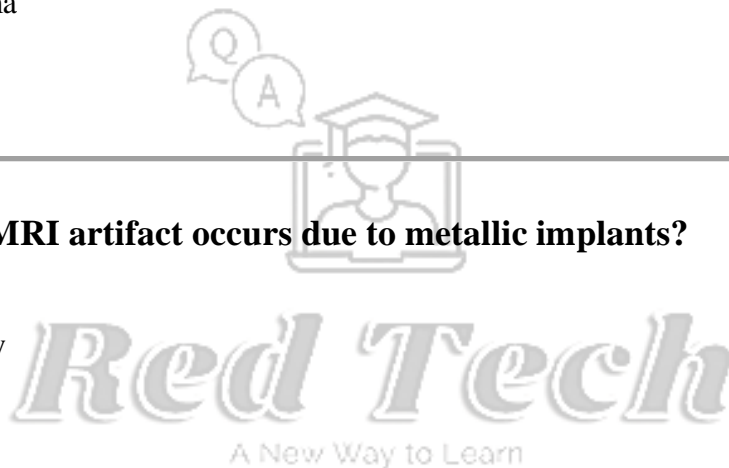
- A. FLAIR
 - B. STIR
 - C. GRE
 - D. T1
-

Q18. Which study shows mucosal pattern of colon best?

- A. Plain X-ray
 - B. Barium enema
 - C. CT
 - D. MRI
-

Q19. Which MRI artifact occurs due to metallic implants?

- A. Ghosting
 - B. Susceptibility
 - C. Ring artifact
 - D. Motion
-



Q20. Gold standard for pulmonary embolism diagnosis:

- A. MRI
 - B. Chest X-ray
 - C. CT pulmonary angiography
 - D. DSA
-

Q21. Which contrast medium can be used in bronchography?

- A. Iohexol
 - B. Barium
 - C. Lipiodol
 - D. Gastrografin
-

Q22. MRI detects bone marrow edema in:

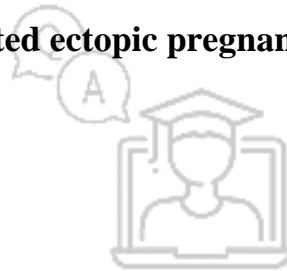
- A. T1
 - B. T2
 - C. STIR
 - D. GRE
-

Q23. Which position is preferred during HSG?

- A. Left lateral
 - B. RAO
 - C. Lithotomy
 - D. Prone
-

Q24. Best test for suspected ectopic pregnancy rupture:

- A. IVU
 - B. USG
 - C. CT
 - D. MRI
-



Q25. Radiation exposure is maximum in:

- A. CT abdomen
 - B. Chest X-ray
 - C. IVU
 - D. PET
-

Q26. MRI contrast agents are excreted primarily via:

- A. Liver
 - B. Bile
 - C. Kidneys
 - D. Skin
-

Q27. Which radiological procedure uses room air as contrast?

- A. Double contrast barium enema
- B. IVU

- C. CT chest
 - D. CT head
-

Q28. Most accurate imaging for internal hernia:

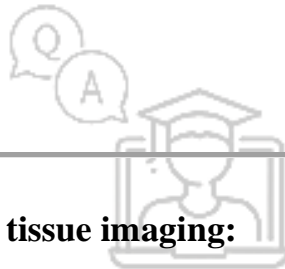
- A. Plain X-ray
 - B. Barium meal follow through
 - C. CT abdomen
 - D. MRI
-

Q29. For pediatric urinary tract anomalies, investigation of choice is:

- A. IVU
 - B. CT
 - C. MCU
 - D. MRI
-

Q30. Most useful for soft tissue imaging:

- A. CT
 - B. MRI
 - C. Ultrasound
 - D. X-ray
-



Red Tech
A New Way to Learn

Q31. Which of the following is a negative contrast agent?

- A. Iodine
 - B. Gadolinium
 - C. CO₂
 - D. Barium
-

Q32. In CT, the air appears as:

- A. Black
 - B. White
 - C. Gray
 - D. Bright
-

Q33. CT scan uses:

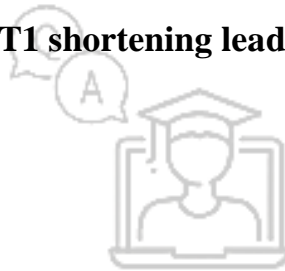
- A. Magnetic field
 - B. Ionizing radiation
 - C. Ultrasound
 - D. Non-ionizing radiation
-

Q34. MR urography visualizes:

- A. Collecting system
 - B. Renal cortex
 - C. Pelvis
 - D. Urethra
-

Q35. Gadolinium causes T1 shortening leading to:

- A. Dark signal
- B. Bright signal
- C. No signal
- D. Flow void



Q36. Enteroclysis is best for:

- A. Colon
 - B. Stomach
 - C. Small bowel
 - D. Liver
-

Red Tech
A New Way to Learn

Q37. High-resolution CT is preferred in:

- A. Liver cyst
 - B. Lung parenchyma
 - C. Kidney
 - D. Brain
-

Q38. Which artifact is common in CT?

- A. Susceptibility
- B. Beam hardening

- C. Aliasing
 - D. Magic angle
-

Q39. DSA helps in:

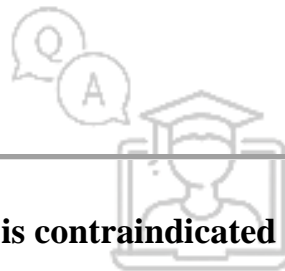
- A. Tumor biopsy
 - B. Biliary stenting
 - C. Vascular flow visualization
 - D. PET scan
-

Q40. An iodinated contrast allergy is managed with:

- A. Stop scan
 - B. Antihistamines
 - C. Steroids premedication
 - D. All of the above
-

Q41. Renal angiography is contraindicated in:

- A. Renal artery stenosis
 - B. Hypertension
 - C. Renal failure
 - D. Trauma
-



Red Tech
A New Way to Learn

Q42. MRCP requires:

- A. Contrast injection
 - B. ERCP
 - C. Heavily T2-weighted images
 - D. Fat-suppressed T1
-

Q43. Seldinger technique uses:

- A. Trocar
 - B. Guidewire
 - C. Foley catheter
 - D. Gadolinium
-

Q44. Barium follow through is complete in:

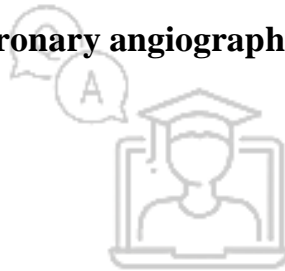
- A. 30 min
 - B. 60 min
 - C. 90–120 min
 - D. 5 min
-

Q45. Which is used for detecting colonic polyps?

- A. Barium enema
 - B. Colonoscopy
 - C. CT colonography
 - D. All of the above
-

Q46. Catheter used in coronary angiography:

- A. Judkins
 - B. Pigtail
 - C. Foley
 - D. Malecot
-



Q47. For real-time imaging in interventional radiology:

- A. X-ray
 - B. CT
 - C. MRI
 - D. Fluoroscopy
-

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Q48. “Apple core” lesion in barium study suggests:

- A. Ulcer
 - B. Colonic cancer
 - C. TB
 - D. Polyp
-

Q49. Most radiosensitive stage of cell cycle:

- A. G1
- B. S

- C. G2-M
D. G0
-

Q50. Fistulogram is done to evaluate:

- A. Cyst
B. Stricture
C. Sinus tract
D. Lymph node
-

Answer Key

Q.No Ans Q.No Ans Q.No Ans Q.No Ans Q.No Ans

- | | | | | | | | | | |
|----|---|----|---|----|---|----|---|----|---|
| 1 | B | 2 | C | 3 | D | 4 | B | 5 | C |
| 6 | B | 7 | A | 8 | C | 9 | C | 10 | B |
| 11 | B | 12 | A | 13 | A | 14 | C | 15 | B |
| 16 | D | 17 | A | 18 | B | 19 | B | 20 | C |
| 21 | C | 22 | C | 23 | C | 24 | B | 25 | A |
| 26 | C | 27 | A | 28 | C | 29 | C | 30 | B |
| 31 | C | 32 | A | 33 | B | 34 | A | 35 | B |
| 36 | C | 37 | B | 38 | B | 39 | C | 40 | D |
| 41 | C | 42 | C | 43 | B | 44 | C | 45 | D |
| 46 | A | 47 | D | 48 | B | 49 | C | 50 | C |
-

Model Test Paper – Practice Set 6 (Hard Level)

Total Questions: 50
Level: Very Hard

Time : 30min.

Q1. Which MRI sequence is most sensitive for detecting acute ischemic stroke?

- A. T1-weighted
- B. FLAIR
- C. DWI
- D. GRE

Q2. The “string sign” on a barium study is classically seen in:

- A. Crohn’s disease
- B. Ulcerative colitis
- C. Intussusception
- D. Hirschsprung’s disease

Q3. What is the gold standard for evaluating biliary obstruction?

- A. MRCP
- B. CT
- C. ERCP
- D. USG

Q4. In CT perfusion imaging, cerebral blood volume is measured in:

- A. mL/100g
- B. HU/sec
- C. g/mL
- D. mEq/L

Q5. The most accurate imaging modality to detect AV malformation is:

- A. Color Doppler
- B. CT angiography

- C. MR angiography
 - D. DSA
-

Q6. Which sequence eliminates fat and fluid signals in MRI?

- A. STIR
 - B. T2
 - C. FLAIR
 - D. T1
-

Q7. Which of the following conditions contraindicates the use of iodinated contrast?

- A. Hyperthyroidism
 - B. Pregnancy
 - C. Renal failure
 - D. All of the above
-

Q8. The “double bubble sign” in neonates is indicative of:

- A. Pyloric stenosis
 - B. Duodenal atresia
 - C. Hirschsprung’s disease
 - D. Intussusception
-

Q9. Which vessel is commonly punctured in DSA?

- A. Radial artery
 - B. Subclavian artery
 - C. Femoral artery
 - D. Carotid artery
-

Q10. The risk of NSF (Nephrogenic Systemic Fibrosis) is highest with:

- A. Macrocytic gadolinium
- B. Linear gadolinium
- C. Non-contrast MRI
- D. CT scan



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Q11. Which modality provides maximum spatial resolution?

- A. PET
 - B. MRI
 - C. CT
 - D. Digital radiography
-

Q12. Which MRI parameter determines tissue contrast most?

- A. Echo time
 - B. TR/TE ratio
 - C. T2 weighting
 - D. T1 weighting
-

Q13. In angiographic imaging, bolus timing is critical for:

- A. Vessel diameter
 - B. Tumor enhancement
 - C. Venous return
 - D. Arterial phase capture
-

Q14. What is the correct positioning for sialography of the parotid gland?

- A. AP erect
 - B. Lateral oblique
 - C. Supine
 - D. Prone
-

Q15. For CTPA (CT Pulmonary Angiography), contrast is injected at:

- A. 1 mL/sec
 - B. 2 mL/sec
 - C. 3–4 mL/sec
 - D. 5–6 mL/sec
-

Q16. The term “apple core lesion” is associated with:

- A. Lymphoma
 - B. Carcinoma colon
 - C. Intussusception
 - D. Tuberculosis
-

Q17. Ideal timing for performing HSG in menstrual cycle is:

- A. Day 1–5
 - B. Day 6–10
 - C. Day 12–14
 - D. Day 20–25
-

Q18. “Dense nephrogram” seen in CT suggests:

- A. Renal artery stenosis
 - B. Acute tubular necrosis
 - C. Renal infarct
 - D. Hydronephrosis
-

Q19. Best modality for dynamic evaluation of swallowing:

- A. Barium swallow
 - B. Cine MRI
 - C. CT
 - D. Fluoroscopy
-

Q20. The most MRI-compatible catheter type:

- A. Steel
 - B. Copper
 - C. Titanium
 - D. Carbon fiber
-

Q21. In digital radiography, image contrast depends on:

- A. Bit depth
- B. kVp
- C. mAs
- D. SID

Q22. Maximum dose of iodine contrast in adults (non-ionic):

- A. 0.5 mL/kg
 - B. 1.0 mL/kg
 - C. 2.0 mL/kg
 - D. 3.0 mL/kg
-

Q23. 3D volume rendering is done using:

- A. Pixel summation
 - B. Back projection
 - C. Voxel data
 - D. Intensity map
-

Q24. High signal intensity in DWI with low ADC value suggests:

- A. Cyst
 - B. Edema
 - C. Infarct
 - D. Tumor
-

Q25. Optimal scan delay for CT hepatic arterial phase:

- A. 10 sec
 - B. 20 sec
 - C. 30 sec
 - D. 45 sec
-

Q26. Contrast reaction of Type I (immediate) is mediated by:

- A. IgA
 - B. IgE
 - C. IgG
 - D. T-cells
-

Q27. In PET scan, FDG uptake is proportional to:

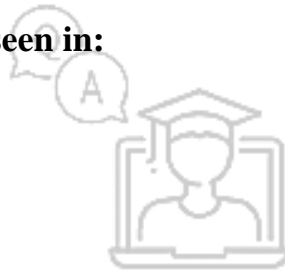
- A. Metabolism
 - B. Perfusion
 - C. Vascularity
 - D. Tissue elasticity
-

Q28. Which test is best for detecting a vesicovaginal fistula?

- A. MCU
 - B. IVU
 - C. CT urography
 - D. Cystogram
-

Q29. Central dot sign is seen in:

- A. Caroli's disease
- B. Polycystic kidney
- C. Cholangiocarcinoma
- D. Biliary atresia



Q30. Which test evaluates renal function & structure together?

- A. DTPA
 - B. IVU
 - C. MCU
 - D. MR urography
-

Q31. Which contrast agent is ideal for suspected tracheo-esophageal fistula in neonates?

- A. Barium sulfate
 - B. Gastrografin
 - C. Iohexol
 - D. Air
-

Q32. CT enteroclysis requires:

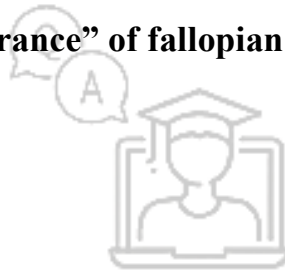
- A. IV contrast only
 - B. Oral contrast only
 - C. Enteral contrast via nasojunal tube
 - D. None of the above
-

Q33. MRI artifact due to motion is best reduced by:

- A. T2-weighted sequence
 - B. Gradient echo
 - C. Breath-hold sequence
 - D. Long TR
-

Q34. The “beaded appearance” of fallopian tubes on HSG is seen in:

- A. Endometriosis
 - B. TB
 - C. PID
 - D. Fungal infection
-



Q35. In IVU, nephrogram phase appears at:

- A. 15 sec
 - B. 1 min
 - C. 5 min
 - D. 10 min
-

Q36. What is the minimum slice thickness in high-resolution CT chest?

- A. 1 mm
 - B. 2.5 mm
 - C. 5 mm
 - D. 10 mm
-

Q37. Which catheter is best suited for biliary drainage?

- A. Foley
- B. Malecot
- C. Pigtail
- D. Judkins

Q38. Barium follow through helps diagnose:

- A. GERD
 - B. Celiac disease
 - C. Colon cancer
 - D. Appendicitis
-

Q39. Which MR sequence highlights CSF as hyperintense?

- A. T1
 - B. T2
 - C. STIR
 - D. GRE
-

Q40. In renal trauma, first investigation is:

- A. MRI
 - B. DSA
 - C. USG
 - D. CT scan
-

Q41. Common catheter used for uterine artery embolization:

- A. Cobra
 - B. Simmons
 - C. Pigtail
 - D. Judkins
-

Q42. Digital fluoroscopy offers all EXCEPT:

- A. Dose reduction
 - B. Pulsed exposure
 - C. No radiation
 - D. Real-time imaging
-

Q43. Primary advantage of dual-energy CT:

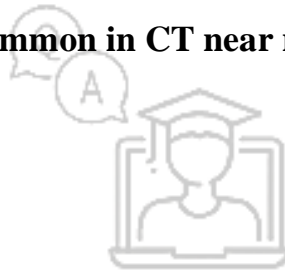
- A. Reduces time
 - B. Detects metals
 - C. Material differentiation
 - D. Thicker slices
-

Q44. Preferred contrast for CT angiography in renal failure patients:

- A. Iodinated
 - B. CO₂
 - C. Gadolinium
 - D. None
-

Q45. Which artifact is common in CT near metallic implants?

- A. Ring artifact
 - B. Beam hardening
 - C. Magic angle
 - D. Motion
-



Q46. High T2 signal with low T1 and restricted diffusion indicates:

- A. Cyst
 - B. Necrotic tumor
 - C. Abscess
 - D. Edema
-

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Q47. What is the dose of FDG in adult PET imaging (approximate)?

- A. 2–5 MBq
 - B. 10–15 MBq
 - C. 185–370 MBq
 - D. 1 GBq
-

Q48. Contraindication to barium studies includes:

- A. Diverticulosis
- B. Colon cancer

- C. Suspected perforation
 - D. Malrotation
-

Q49. The MRI-safe pacemaker is labeled as:

- A. MR-safe
 - B. MR-compatible
 - C. MR-conditional
 - D. Non-MR
-

Q50. Triple phase CT is best used in evaluating:

- A. Renal artery stenosis
 - B. Hepatic lesions
 - C. Intestinal ischemia
 - D. Lung metastases
-

Answer Key

Q.No Ans Q.No Ans Q.No Ans Q.No Ans Q.No Ans

- | | | | | | | | | | |
|----|---|----|---|----|---|----|---|----|---|
| 1 | C | 2 | A | 3 | C | 4 | A | 5 | D |
| 6 | A | 7 | D | 8 | B | 9 | C | 10 | B |
| 11 | C | 12 | B | 13 | D | 14 | B | 15 | C |
| 16 | B | 17 | B | 18 | B | 19 | D | 20 | C |
| 21 | A | 22 | B | 23 | C | 24 | C | 25 | B |
| 26 | B | 27 | A | 28 | D | 29 | A | 30 | D |
| 31 | C | 32 | C | 33 | C | 34 | B | 35 | B |
| 36 | A | 37 | C | 38 | B | 39 | B | 40 | D |
| 41 | A | 42 | C | 43 | C | 44 | B | 45 | B |
| 46 | C | 47 | C | 48 | C | 49 | C | 50 | B |
-