

Question Papers

Neck

1. Carcinoma larynx (2 times)
2. Imaging in hyper parathyroidism (2 times) – See Nuclear medicine
3. Parathyroid imaging
4. Anatomy of infrahyoid neck spaces and spread of infection (3 times)
5. Neck spaces anatomy and tumors and infections of neck spaces(3 times essay)
6. Parotid space anatomy
7. Parapharyngeal space and lesions
8. Masses of carotid space
9. Glomus tumors
10. Carotid body tumors
11. Cervical trauma
12. Mandible lesions (4 times)
13. JNA
14. Thyroid USG

Lung and CVS

1. Bronchopulmonary segments anatomy and discuss these segments in relation CT (3 times)
2. HRCT in diffuse lung disease
3. Alveolar proteinosis
4. Pulmonary sarcoid (4 times)
5. HRCT in ILD
6. Pneumoconiosis
7. Cystic diseases of lung
8. Congenital lung lesions
9. Tree in bud appearance
10. U/l hyperlucent lung
11. U/l opaque hemithorax chapman
12. Primary pulmonary hypertension
13. Sequestration (5times)
14. Pulmonary embolism (5 times)
15. Virtual bronchoscopy (2 times)
16. ABPA

17. Solitary pulmonary nodule (4 times)
18. Pulmonary vasculitis (2 times once as Wegener's)
19. Pulmonary infection in AIDS (2 times as pulmonary lesions in AIDS)
20. Eventration of diaphragm
21. ARDS (2 times)
22. Hilar mass
23. Pulmonary edema
24. Pan acinar emphysema
25. Pulmonary TB
26. Etiopathogenesis of lung malignancy
27. Fibrosing mediastinitis
28. Anterior mediastinal mass
29. Posterior mediastinal mass

CVS

1. Approach to cyanotic congenital heart disease (4 times, once as xray)
2. TAPVC and PAPVC (4 times)
3. Ebstein's anomaly (2 times)
4. TOF (2 times)
5. Extra cardiac left to right shunts
6. Aortic coarctation (3 times)
7. Development of heart ASD formation and diagnosis
8. Myocardial perfusion imaging
9. Aortic aneurysm interventions and imaging (3 times one time 35 marks)
10. Aortic dissection (6 times)
11. Stress perfusion cardiac MR
12. Aortitis, Takayasu
13. Constrictive pericarditis (2 times)
14. Paracardiac masses
15. Pulmonary venous hypertension
16. Mitral valve disease
17. Anatomy of diaphragm

Abdomen

1. Acute pancreatitis staging complications and advanced imaging techniques and interventions (9 times)
2. Vascular complications of pancreatitis

3. Periapillary carcinoma (2times)
4. Endocrine tumors of pancreas (3 times)
5. Cystic lesions of pancreas (5 times)
6. Solid tumors of pancreas (3 times)
7. MDCT in small bowel obstruction (2times)

8. Complications and management of biliary drainage
9. Obstructive jaundice radiology evaluation and intervention(6 times)
10. Choledochal cyst (2 times)
11. ERCP (2 times once as ERCP vs MRCP)

12. CEUS in hepatic lesions (2 times)
13. Anatomy of portal venous system and pathophysiology of EHPVO
14. Non invasive evaluation of portal HT
15. Budd chiari (4 times)
16. Malignant focal lesions of liver
17. Hepatic hemangioma
18. Hepatic tumours imaging and management
19. Elastography in liver diseases
20. MR Techniques for imaging liver
21. Imaging of donor in liver transplant
22. Segmental anatomy of liver and significance (2 times)
23. Segmental anatomy of liver and focal liver lesion in adult (4 times)
24. Portal HT and role of radiologist in management

25. Carcinoma rectum
26. Ischemic colitis (2 times)
27. Ultrasound in intussusception
28. Imaging of midgut volvulus
29. CT in small bowel ischemia (3 times)
30. Ischemic bowel disease
31. Right iliac fossa mass in 45 yr female patient (2 times same q)
32. Bowel lymphoma (5 times once as gastric lymphoma)
33. GIST (2 times)
34. IBD (3 times)
35. USG and CT in intestinal TB
36. CT enteroclysis
37. Ct enteroclysis vs MR enteroclysis
38. Imaging of small bowel and small bowel tumors
39. Virtual colonoscopy (3 times)
40. Virtual endoscopy

41. Pseudomyxoma peritoni
42. Peritoneal spaces with imaging of the subphrenic space
43. MDCT in abdomen (2 times)
44. Abdominal TB
45. Cause and radiology in hematemesis

46. Anatomy of gastrointestinal junction
47. USG in acute abdomen
48. Radiology of appendix

Breast

1. BIRADS
2. Tomosynthesis breast
3. MR mamography 2 times
4. Malignant breast lesions (2 times)
5. Recent advances in mammography
6. Advances in breast imaging essay
7. Benign lesions in breasts
8. Sonomammography
9. Breast lesions mimicking malignancy

MSK

1. Avascular necrosis (4 times, once as hip specifically)
2. Perthe's disease (6 times)
3. Rotator Cuff tears (4 times)
4. Labral tear
5. Osteolytic tumors of spine
6. Spine trauma
7. Low back pain
8. Spine TB
9. Single vertebral collapse
10. Rheumatoid arthritis
11. Ankylosing spondylitis
12. Pathophysiology of renal osteodystrophy
13. Advances in bone marrow disorders
14. Ewings sarcoma (3 times)
15. Expansile lesions of upper tibia (2 times)
16. Chondrosarcoma
17. Osteoid osteoma

18. Fibrous dysplasia
19. Multiple myeloma

20. DD for periosteal reaction (2 times)

21. Anatomy of knee, cross sectional and MR of internal derangement of knee (5 times)
22. Epiphyseal plate imaging
23. Melorrrhosis
24. Paget' s (2 times)
25. Skeletal changes in leukemia
26. CVJ anatomy and imaging features of common pathologies
27. MR arthrogram

CNS

1. Alzheimer's disease advances

2. Imaging in cerebral ischemia
3. Imaging in acute stroke
4. DWI In CNS 3 times twice as in stroke
5. CT perfusion acute stroke
6. Circle of willis

7. MR neurography
8. Caroticocavernous fistula imaging and intervention (3 times)
9. Anatomy of venous system of brain with carotid cavernous fistula
10. Cavernous sinus – anatomy pathologies and two interventions in vascular pathologies

11. Multiple sclerosis (3 times)
12. Craniopharyngeoma (2 times)
13. Infratentorial neoplasm in child (3 times)
14. Primary CNS lymphoma
15. Meningiomas
16. CP angle mass lesion essay (2 times)
17. Ependymoma

18. NPH
19. Circle of willis and causes of SAH and role of imaging (2 times)
20. MTS and temporal lobe epilepsy (2 times)
21. CNS manifestations of neurocutaneous syndromes essay
22. White matter disease of brain
23. Arnold chiari

24. Spinal cord neoplasms
25. Anatomy of sella turcica and suprasellar masses
26. Functional imaging of brain (2 times)
27. CNS manifestations in AIDS

GU

1. Imaging in acute scrotum and torsion (10 times)
2. Xanthogranulomatous pyelonephritis (4 times)
3. Renal and GU trauma (3 times)
4. Renal artery stenosis and interventions
5. Renal transplant complications (3 times)
6. AML (2 times)
7. Hematuria in 50 yrs essay and interventions (4 times)
8. GUTB essay (2 times)
9. b/l enlarged kidneys
10. Nephrocalcinosis
11. Cystic diseases of kidney
12. Hypernephroma
13. Retroperitoneal space anatomy and mass lesions (5 times)
14. RP fibrosis (5 times)
15. Ca prostate
16. MR of prostate
17. Anatomy of prostate and role of imaging (3 times once as USG prostate)
18. Doppler in erectile dysfunction and penile Doppler (2 times)
19. Ureterocele (2 times)
20. Pheochromocytoma (2 times)
21. Testicular neoplasms (2 times)
22. Neurogenic bladder
23. Anatomy and techniques in evaluation of male urethra
24. UB tumors

Gynae

1. Endometriosis
2. Imaging in female infertility
3. Uterine fibroid and complication
4. USG in post menopausal bleeding
5. Endometrial Ca
6. Imaging in suspected ectopic pregnancy (3 times)
7. Solid ovarian tumors

8. Cystic lesions of ovary (2 times)
9. PCOS (2 times)
10. MRI in female genital tract lesions
11. Fallopian tube recanalization
12. Pelvic congestion syndrome

Pediatrics

1. Dose reduction in pediatric CT
2. Solid abdominal mass neonate
3. Pediatric renal tumors, Wilm's tumor (3 times)
4. Renal and adrenal masses in neonate enumerate and how will you proceed to diagnose them 2 times (once as neuroblastoma)
5. Biliary atresia
6. Anorectal malformations (2 times)
7. Hyaline membrane disease neonate (3 times)
8. LCH (2 times)
9. ARPKD (2 times)
10. Ultrasound evaluation of IUGR (6 times)
11. Infantile hypertrophic pyloric stenosis
12. Imaging approach child with repeated vomiting (2 times)
13. Pelvic mass in children (2 times)
14. Neonatal jaundice
15. Xray and USG in CDH
16. TEF
17. PUJ
18. VUR (2 times)
19. Necrotizing enterocolitis
20. Pediatric sonography
21. Neurosonography in infants and neonates
22. Neonatal jaundice
23. 8 yr old child with limp
24. Pediatric epilepsy (2 times)
25. Pediatric HIE and periventricular leukomalacia

Nuclear imaging

1. Radio nucleotides in renal conditions (4 times)
2. Isotope imaging of parathyroid (6 times)

3. Isotopes in PUJ evaluations (3 times)
4. Radioisotope scans in MI (3 times)
5. Current trends in nuclear cardiology
6. Nuclear medicine pulmonary thromboembolism
7. Nuclear medicine in renovascular hypertension (2 times)
8. Scintigraphy in bone and joint disease
9. PET CT
10. Scintigraphy in thyroid

Special:

1. Role of imaging in Forensic medicine
2. Nanoparticle based CT
3. Adverse reactions to contrast media and how to prevent
4. Contrast induced nephropathy and how to prevent it (4 times)
5. PET CT in lymphoma
6. Evidence based medicine
7. Hospital waste management
8. Clinical applications of perfusion CT
9. Extracranial applications of DWI
10. Blunt abdominal trauma essay (2 times)
11. Imaging in spinal trauma
12. Proptosis causes, unilateral and bilateral and optic nerve lesions (3 times)
13. Intraocular lesions and imaging
14. Doppler in peripheral arterial diseases (2 times)
15. Imaging in Peripheral arterial disease (2 times)
16. Protocol for imaging in acute limb trauma
17. Imaging techniques and intervention in DVT 3 times
18. Nephrogenic systemic fibrosis
19. US in ophthalmic lesions

Physics

Radiograph and Mammo

1. Cardinal principles of radiation protection
2. Radiation reduction in children during fluoroscopy and generally during fluoroscopy (7 times)
3. Radiation protection methods in conventional radiography
4. Radiation dose reduction in intervention radiology

5. Methods to control scatter radiation in diagnostic radiology dept (2 times)
6. Scatter radiation and harmful effects
7. Properties of xrays
8. Types of xray tubes and factors affecting tube life, xray tube design and operation(5 times)(Conventional xray tube, Rotating anode xray tube)
9. K edge filters
10. Grids (2 times)
11. Radiography screens
12. Intensifying screens (2 times)
13. Types and construction of xray films
14. Medical xray processing chemicals
15. Focal spot and resolution
16. Film artifacts (2 times)
17. Principles and advantages of digital radiography and direct digital radiography (6 times)
18. PACS and RIS (4 times)
19. Flat panel detectors
20. 3D rotations angiography
21. Image intensifier (2 times)
22. Mammography (4 times) twice as tube
23. Tomosynthesis
24. Thermoluminescent dosimeter
25. Non-ionic contrast media
26. Miniature chest radiography unit
27. AERB

CT

1. Non-coronary applications of DECT (2 times)
2. Principle and techniques of DECT (3 times)
3. Factors affecting dose of CT
4. CT perfusion
5. Reduction in MDCT advantage s of MDCT over conventional (3times)
6. Principle techniques an advantages of MDCT and suggest radiation dose
7. Recent advances in spiral CT

MRI

1. Clinical applications of fat suppressed MRI
2. MR contrast media (2 times)
3. Black Blood imaging
4. MR elastography
5. Parallel imaging techniques
6. MRCP (2 times)
7. MR perfusion
8. Diffusion tensor imaging
9. DWI (2 times)

10. Echo planar imaging clinical applications
11. Principles and applications of BOLD imaging
12. MR sequences in liver
13. MR artifacts
14. Surface coils
15. Gradients in MRI
16. MR techniques and sequences of marrow imaging

USG

1. Ultrasound contrast media (6 times)
2. Molecular imaging
3. Elastography (4 times)
4. Quantitative information from Doppler spectral analyses
5. Tissue harmonic imaging (5 times)
6. Advances in USG (2 times)
7. Ultrasound image artifacts
8. MR spectroscopy (4 times once as in brain)

Intervention

1. Embolizing materials
2. RF ablations principles and applications (4 times, once as non oncogenic applications)
3. Ablative therapies – physical principles
4. Interventions in MSK
5. Hemobilia and interventions 2 times
6. PTBD
7. Biliary stenting
8. TIPS
9. Acute GI bleed evaluation and interventions (4 times both as upper and lower)
10. PCN
11. Interventions in hepatic tumors
12. Uterine artery embolization (3 times)
13. Hemoptysis and management (2 times)
14. HIFU 3 times
15. Denervation in hypertension (Reno vascular HT imaging and intervention)(3 times)
16. Causes of solitary vertebral collapse and role of intervention in solitary vertebral collapse and Vertebroplasty (2 times)
17. Renal interventions
18. Therapeutic intervention in vascular lesions