Write short notes on:

1. Enumerate markers of chromosome abnormality on antenatal ultrasound. Briefly discuss their sonographic features.
2. Mention causes of inferior RIB notching. Discuss imaging features of two common causes.
3. HRCT in sarcoidosis.
4. Imaging and intervention in aortic dissection.
5. MRI of cardiac tumors.
6. Enumerate various types of transposition of great vessels. Describe imaging features of total anomalous pulmonary venous drainage.
7. Echo enhancing agents.
8. Imaging features of reflux nephropathy.
9. Discuss imaging of erectile dysfunction.
10. Embolization in management of acute hemorrhage.

Write short notes on:

1. Discuss imaging and intervention in bleeding due to portal hypertension.
2. Describe imaging of low intestinal obstruction in a neonate
3. MRI features of hepatic hemangioma. Briefly discuss role of radiology in treatment of hepatic haemangioma.
4. Imaging in dementia.
5. Enumerate causes of orbital masses. Discuss imaging features of two common causes in an adult.
6. Role of imaging and intervention in dural arteriovenous fistula.
7. Describe ossification of bones of elbow.
8. Describe imaging in sclerosing lesions of jaw.
9. Screening mammography – current status.
10. Imaging and associations of fibrous dysplasia.

Write short notes on:

1. Imaging of extra nodal presentations of non Hodgkin lymphomas.
2. CT & Endoscopic ultrasound staging of esophageal carcinoma.
3. Application of DMSA scintigraphy.
4. Clinical applications of tomosynthesis.
5. Volume ultrasound.
6. Scintigraphy evaluation of gastro-intestinal bleeding.
7. Interventional management of deep vein thrombosis.
8. Transvaginal scan in female infertility.
9. Contrast induced nephropathy.
10. Fusion imaging.

Write short notes on:

1. Radiation dose in various examinations using Multi Detector Computed Tomography (MDCT)
2. Briefly discuss imaging of presacral masses in children.
3. Imaging in 14 years old with hypertension.
4. Role of imaging in a new born with respiratory distress.
5. Developments in ultrasound transducer technology.
6. Computed radiography cassette.
7. Radiological features in cystic tumors of pancreas.
8. Ozone therapy for backache.
9. Mammography x-ray tube.
10. X-ray beam restrictors.

Write short Notes on:

1. Imaging in Non tubercular renal infections.
2. Ultrasonography in female infertility.
3. MR staging of Prostate Carcinoma.
4. Uterine artery embolisation
5. Non vascular Interventions in upper urinary tract.
6. HRCT in occupational lung diseases.
7. Imaging in pulmonary the thrombo-embolism.
8. Describe diagnostic features on chest radiograph which can help in evaluation congenital heart disease.
9. Imaging of Patent ductus Arteriosus
10. Assessment of correctness of positioning of various catheters and tubes as seen on chest radiographs.

Write short Notes on:

1. Radiological findings in Hyperparathyroidism.
2. Imaging findings in Plasma Cell Tumors.
3. Radiological features in Neurological Complications of AIDS.
4. Describe BIRAD classification.
5. Describe radiopharmaceuticals used in PET CT with their clinical applications.
6. Evaluation of skeletal dysplasias in utero.
7. Intra medullary neoplasm of spinal cord.
8. Radiological evaluation of suspected small bowel obstruction.
9. Imaging & Intervention in Aortic Dissection.
10. Radiological Investigations in neuroendocrine tumors of pancreas.

Write short Notes on:

1. Ultrasound Elastography in Breast lesions.
2. Doppler in Renal transplant.
3. Radionucleide scanning in a bony lesion.
4. Functional imaging of Brain.
5. Radio frequency ablation of hepatic neoplasm.
6. PACS in radiology.
7. Imaging in Rotator cuff lesions.
8. Cardiac CT.
9. Imaging in 9 year old girl presenting with right lower quadrant pain.
10. Genetic Screening.

Write short Notes on:

1. Methods of contrast administration for CT angiography.
2. Photoelectric effect and its application in diagnostic radiology.
3. Parameters affecting scatter radiation and methods to reduce it.
4. Planning considerations for installation of 500 mA X-ray machine.
5. Define basic units of radiation exposure. List recommended dose limits for radiation worker & general public.
6. Recent advances in ultrasound transducer technology.
7. MR contrast media in hepato biliary system.
8. Legal responsibilities and duties of radiologist in clinical practice.
9. Describe normal Anatomy of knee as seen on MRI.
10. Emergency drugs with doses that should be available in radiology department.

Write short Notes on:

1. Discuss the role of MR in evaluation of pericardium and its pathologies.
2. Enumerate the causes of varicocele. Write US technique and US and color Doppler features in varicocele
3. Discuss indications, technique and complication of bronchial artery embolisation
4. How would you evaluate donor kidney for renal transplant. Discuss role of US & scintigraphy in various types of renal graft dysfunction.
5. Discuss in detail imaging features of thoracic lymphoma.
6. What are the causes of pulmonary venous hypertension? Describe plain x-ray findings in pulmonary venous hypertension.
7. Discuss pathophysiology and imaging features in respiratory distress in newborn.
8. Discuss the role of various imaging modalities in a suspected case of reno vascular hypertension.
9. Draw of neat line diagram of perinephric spaces including its relationship with other spaces. Write CT features of perinephric abscess and urinoma
10. Write in detail US features of placental evaluation.

Write short Notes on:

1. Describe CT features of liver trauma and discuss role of intervention in this.
2. Discuss the etiology, classification, imaging features and complication of choledochal cyst.
3. Discuss CT and MR features of neurological complications of AIDS.
4. Classify orbital lesions in relation to various orbital spaces. Discuss MR features in orbital pseudo tumors.
5. What are round cell tumors of bone? Discuss in detail differentiating imaging features in these.
6. Describe radiological features, complications and differential diagnosis of paget's disease.
7. Discuss the techniques, imaging features and limitations of sonographic evaluation of the rotator cuff
8. Enumerate CP angle tumors and discuss their differentiating features on CT and MRI.
9. Describe MR anatomy of pituitary gland. Discuss in detail MR techniques and features to diagnose pituitary adenomas.
10. Describe the technique and ultrasound features in acute appendicitis. Also describe ultrasound features of conditions mimicking acute appendicitis.

Write short Notes on:

1. Doppler artifacts and pitfalls.
2. Diffusion weighted MRI.
3. Color Doppler evaluation of erectile dysfunction.
4. Describe the normal anatomy of coronary arteries and discuss the role of MDCT in coronary artery diseases.
5. Sonography in solid breast masses
6. Role of chest radiography in emergency situations.
7. Discuss various techniques of elastography and their clinical applications.
8. Discuss various causes and imaging features in stricture of lower end of esophagus
9. Enumerate various causes of Para vertebral masses and their imaging features.
10. Principles and role of PET in clinical radiology.

Write short Notes on:

1. Define quality assurance. Discuss the organization of a quality assurance programme pertaining to radiology equipment.

2. Define the basic units of radiation exposure. Describe biological effects of radiation.

3. Principles and clinical applications of dual energy CT.

4. Discuss about mammography x-ray unit.

5. Classify idiosyncratic reactions resulting from contrast media administration. Describe the management of life threatening adverse reactions.

6. Define scatter radiation. Discuss briefly the parameters which influence scatter radiation and methods to reduce scatter radiation.

7. Discuss about various MR contrast media and their mechanism of action.

8. Composition of X-ray films. Discuss about different parameters which influence film contrast.

9. What is digital radiography? Discuss its advantages and disadvantages.

10. Define principles of radiation protection. Describe various parameters which can reduce patient radiation dose in radiography and fluoroscopy.

Write short notes on:

1. Role of chest radiograph & CT chest in AIDS.
2. Anterior mediastinal masses in children.
3. HRCT in pulmonary tuberculosis.
4 Radiological approach in acyanotic heart disease.
5 Total Anomalous Pulmonary Venous drainage.
6 MRI in Cardiac Imaging.
7 Radiological features of renal tuberculosis.
8 Classify adrenal tumours and role of CT & MRI in evaluating them.
9 Antenatal MRI.
10 Sonography of cystic ovarian masses.

Write short notes on:

1. Radiological features of gastric lymphoma
2. MR enteroclysis – teachnique and apllications
3. Colonic stictures – etiology and role of imaging in diagnosis of structures.
4 Doppler in hepatic cirrhosis.
5 Radiological features in diffuse axonal injury.
6 Imaging in unilateral exophthalmos.
7 Central pontine myelinolysis.
8 Osseous spectrum in neurofibromatosis.
9 Sero negative sopndyloarthropathy.
10 Differential diagnosis of radiological appearance of absorption of terminal phalanges.

Write short notes on:

1. Role of C.T. in epiploic appendagitis.
2. Occular blood flow in normal and Gelaucomatous eye on color Doppler imaging.
3. Vein of galen malformation.
4 Vertebroplasty in non-infective vertebral collapse.
5 Internal Hernias.
6 C.T. Colonography (Virtual coloncoscopy)
7 Radiological management of Bomb-Blast injury.
8 Sickle-cell disease – radiological appearances
9 Imaging of acute appendicitis.
10 Glutaric Aciduria Type I.

Write short notes on:

1. Doppler evaluation in male impotence.
2. CT-pelvimetry.
3. Maximum permissible radiation dose.
4 PNDT – Act.
5 CT & MRI anatomy of Adrenal glands and normal variants.
6 Flat panel digital radiography.
7 Conventional skull radiography.
8 Grid.
9 Azygos lobe.
10 Scimitar Syndrome