

**2019**

# **Paper I**

- 1. Describe the principles of multidetector CT and its application in radiodiagnosis.**
- 2. Describe the anatomy of biliary system with the help of neat and labelled diagram. Enumerate the various congenital anomalies of biliary system and discuss the role of various imaging modalities in a case of obstructive jaundice.**
- 3. Solve any five questions out of six.**
  - a)MRI contrast media.**
  - b)Artifacts in color doppler.**
  - c)Construction of the xray tube.**
  - d)Virtual bronchoscopy.**
  - e)Anode heel effect.**
  - f)Seldinger technique of arterial puncture.**

# **Paper II**

- 1. Describe the role of interventional radiology in a 25 year old patient with uncontrolled hypertension.**
- 2. Describe CT anatomy of paranasal sinuses along with variant anatomy and the role of imaging in malignant lesions of the maxilla.**
- 3. Solve any five questions out of six.**
  - a)Pleomorphic adenoma of the parotid gland.**
  - b)Functional MRI.**
  - c)Role of imaging in post partial hemorrhage.**
  - d)Vertebroplasty.**
  - e)Role of color doppler in DVT.**
  - f)Bronchial artery embolization in massive hemoptysis.**

# Paper III

**1. What is placenta accreta? What are the types? Which imaging modalities would be used in its diagnosis? Briefly describe imaging features of each modality.**

**2. What are the causes of subarachnoid hemorrhage. Discuss the radiological approaches in a suspected case of SAH.**

**3. Solve any five questions out of six.**

**a) Vesico ureteric reflux.**

**b) Spinal tumors.**

**c) Linitis plastica.**

**d) Renal rickets.**

**e) Pulmonary edema.**

**f) Retrograde urethrography.**

# Paper IV

**1. Describe the role of interventional radiology in a 25 year old with uncontrolled hypertension.**

**2. Describe CT anatomy of paranasal sinuses along with variant anatomy and role of imaging in malignant lesions of the maxilla.**

**3. Solve any five questions out of six.**

**a) Pleomorphic adenoma of the parotid gland.**

**b) Functional MRI.**

**c) Role of imaging in postpartal hemorrhage.**

**d) Vertebroplasty.**

**e) Role of color doppler in DVT.**

**f) Bronchial artery embolization in massive hemoptysis.**

**2020**

## **Paper I**

- 1. Discuss radiation hazards and its protection.**
- 2. Describe radiological anatomy of venous system of lower limbs. Discuss the principles of various imaging modalities used to evaluate it. Also discuss role of colour doppler in endovenous thermal ablation of varicose venous disease.**
- 3. Solve any five questions of six –**
  - a) Contrast induced nephropathy.**
  - b) Xray-films.**
  - c) Picture archiving communication system(PACS).**
  - d) CT artifacts.**
  - e) Seldinger needle technique.**
  - f) Magnetic resonance cholangiopancreaticography(MRCP)**

# **Paper II**

- 1. Discuss pathophysiology and imaging of pulmonary arterial hypertension.**
- 2. Discuss role of HRCT in evaluation of interstitial lung disease.**
- 3. Solve any five questions out of six.**
  - a) Ulcerative colitis.**
  - b) Imaging and intervention in intussusception.**
  - c) CT coronary angiography.**
  - d) Neuroendocrine tumors of pancreas.**
  - e) Tracheo-esophageal fistula.**
  - f) Tetralogy of fallot.**

# **Paper III**

- 1. Describe in detail imaging evaluation of case of suspected renal tumor.**
- 2. Discuss the role of imaging in the evaluation of seizure disorder in pediatric age group,**
- 3. Solve any five questions out of six –**
  - a) Imaging evaluation of female infertility.**
  - b) Renal rickets.**
  - c) Extramedullary hematopoiesis.**
  - d) Hyperparathyroidism.**
  - e) Role of 3D ultrasound imaging in obstetric and gynecology.**
  - f) Imaging in multiple sclerosis.**

# **PAPER IV**

- 1. Legal responsibility and duties of radiologist in clinical practice.**
- 2. Discuss the advantage of MR over CT in cerebral infarct and role of intervention in the same.**
- 3. Solve any five questions out of six.**
  - a) Imaging of infertility.**
  - b) Breast MRI.**
  - c) Elastography.**
  - d) Contrast induced nephropathy.**
  - e) Ultrasound in chest disease.**
  - f) Power doppler.**

# 2021

## Paper I

- 1. Describe ultrasound physics, properties and production of ultrasound in brief. Discuss lower limb venous anatomy with diagram.**
- 2. Describe CT Anatomy of pharynx and larynx. Discuss how to investigate a case of dysphagia.**
- 3. Solve any five questions out of six.**
  - a) Autotransformer.**
  - b) Protection in Radiography.**
  - c) Grids in radiology.**
  - d) Virtual bronchoscopy.**
  - e) Cardiac CT.**
  - f) X-ray tube.**



# **Paper II**

**1. Twenty five years old male patient presenting with hypertension. Discuss the following:**

**a) Differential diagnosis.**

**b) Approach to imaging.**

**c) Radiologist's role in management of patient.**

**2. Write in detail about pulmonary angiography.**

**3. Solve any five questions out of six-**

**a) Radiology of intussusception.**

**b) HRCT findings in idiopathic pulmonary fibrosis.**

**c) Sonography in obstructive jaundice.**

**d) Technique and usefulness of MR lymphangiography.**

**e) Myocardial perfusion studies in nuclear medicine.**

# **Paper III**

**1) Classify various congenital anomalies of the spine. Discuss occult spinal dysraphism in detail.**

**2) Describe imaging spectrum in hepatocellular carcinoma. Discuss role of interventional radiology in management of HCC.**

**3) Solve any five questions out of six:**

**a) Osteopetrosis.**

**b) Cerebral AV malformations.**

**c) Battered baby syndrome.**

**d) Hyperparathyroidism.**

**e) Suprasellar masses.**

**f) Toxic megacolon.**

# **Paper IV**

- 1. Discuss imaging of cerebral aneurysms and CNS vascular malformations. Discuss role of interventional radiology in their management.**
- 2. Discuss the advances in imaging and management of ischemic stroke.**
- 3. Solve any five questions out of six.**
  - a) Hepatobiliary contrast agents.**
  - b) Dual source CT.**
  - c) Clinical application of ultrasound elastography.**
  - d) Imaging of breast implant.**
  - e) PET in evaluation of lymphoma.**
  - f) MR enteroclysis.**