

**RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES, (RGUHS), KARNATAKA,
M.D / D.M.R.D RADIODIAGNOSIS QUESTION PAPERS (2023-2003)**

M.D. - 7-July-2023 - PAPER – I

1. Discuss physical principles in 2D, Doppler and Colour Doppler Sonography. Add a note on ultrasound contrast agents.
2. Describe the anatomy and physiology of bone. What are the causes for osteoporosis? How do you investigate a case of osteoporosis?
3. Physical principles of Digital Radiography.
4. Role of imaging in internally deranged knee.
5. Role of PET CT in skeletal malignancy.
6. Write briefly on biological hazards of Radiation.
7. Write briefly anatomy of coronary circulation.
8. Principles and clinical applications of Diffusion Weighted Imaging(DWI).
9. Ultrasound image artifacts.
10. Scintigraphy evaluation of gastro-intestinal bleeding.

M.D. - 10-July-2023 - PAPER – II

11. Enumerate posterior mediastinal masses. How will you approach a case of posterior mediastinal mass?
12. Describe procedure and technique of double contrast barium meal. Discuss differentiating features of benign vs malignant gastric ulcers on barium studies.
13. Ulcerative colitis vs Crohn's.
14. Cholangiocarcinoma.
15. Enumerate congenital lesions of pancreas and discuss imaging features of the same.
16. Explain segmental anatomy of liver. Role of imaging in a case of liver transplant.
17. Role of imaging in splenic trauma.
18. Discuss in detail about radiological approach to adrenal mass lesion.
19. Imaging features of mesenteric carcinoid tumor.
20. Enumerate occupational lung diseases and discuss imaging in asbestosis.

M.D. - 12-July-2023 - PAPER – III

1. Describe the anatomy of male urethra. Write in detail about posterior urethral valve.
2. Enlist key features of PCPNDT ACT.
3. Write in detail about imaging features of ectopic pregnancy.
4. Imaging features of Tetralogy of Fallot.
5. Write short notes on amniocentesis and chorionic villous sampling.
6. Discuss the causes of renal transplant rejection and its imaging features.
7. Discuss cardiac views in fetal echocardiography and its clinical application.
8. Imaging features of Testicular tumors.
9. Imaging features of Ovarian torsion.
10. Imaging features of Wilms tumor.

M.D. - 14-July-2023 - PAPER – IV

1. Classify various orbital tumours. Describe radiological features of tumours affecting the eyeball (globe).
2. Patient presents with unilateral proptosis. Discuss the differential diagnosis and briefly describe the radiological features.
3. Classify spinal tumours. Discuss differential diagnosis radiological features of extradural spinal tumours.
4. Cerebral lymphoma.
5. Craniostenosis (Craniosynostosis).
6. Endovascular management of intracranial aneurysm.

7. Chordoma.
8. Post traumatic sequelae in brain.
9. Dural based lesion.
10. MRI in cerebral tuberculoma.

M.D. - 16-DEC-2023 - PAPER - I

1. MR contrast media.
2. Digital mammography.
3. Hirschsprung's Disease.
4. Sono-Elastography.
5. Filters used in Diagnostic Radiology.
6. Embryology and radiological anatomy of Pancreas.
7. ELORA.
8. NT Scan.
9. Personnel dosimetry.
10. MR fluoroscopy.

M.D. - 18-DEC-2023 - PAPER - II

1. Describe imaging features of gastrointestinal lymphoma.
2. Imaging features of hemangioma of liver.
3. MDCT in small bowel obstruction.
4. Imaging of Solitary Pulmonary Nodule.
5. Pulmonary Manifestations in Immunocompromised patients.
6. Discuss role of imaging in abdominal trauma.
7. Cystic neoplasms of pancreas.
8. Write short notes on:
 - a. Pulmonary sequestration
 - b. Imaging features in acute appendicitis
9. Enumerate the causes of lower GIT bleed and discuss the role of radiology in evaluation of lower GIT bleed.
10. Discuss the role of radiologist in management of Jaundice in an adult patient.

M.D. - 20-DEC-2023 - PAPER – III

1. Classify congenital anomalies of kidney. Describe imaging features of fusion anomalies of kidney
2. Describe the technique of amniocentesis. Mention the indications and complications of amniocentesis.
3. Describe the indications, contraindications, procedure and complications of Bronchial Artery Embolization.
4. How will you do lower Limb Venogram? Mention the radiological findings of lower Limb Venogram in various conditions.
5. Write short notes on:
 - a Testicular torsion
 - b. Doppler findings in Portal hypertension
 - c. Fetal death
 - d. Enlargement of left Atrium
6. Describe role of radiology in mitral valve disease
7. How will you investigate the case of Coarctation of Aorta?
8. Radiological evaluation of renal artery stenosis.
9. Radiological evaluation of Malignant Ovarian Mass.
10. Write short notes on:
 - a. Intussusception
 - b. Cholecystitis
 - c. Achalasia cardia

M.D. - 22-DEC-2023 - PAPER – IV

1. Classify the cystic lesion of the Jaw. Describe the imaging features of each type of Cystic Lesion with neat diagram.
2. Write briefly on Etiopathogenesis of proptosis. Classification, imaging modalities with radiological findings.
3. Pathophysiology of different types of hyperparathyroidism. Imaging findings of primary type of hyperparathyroidism.
4. Describe the brief anatomy of sell turcica. Enumerate various sellar and parasellar masses, imaging modalities. Discuss the imaging features of craniopharyngioma.
5. Virtual endoscopy.
6. Imaging of HIV manifestations of CNS.
7. Holoprosencephaly.
8. Classify tumor of the spinal canal and cord. How do you investigate?
9. MR myelogram.
10. Imaging in multiple sclerosis.

M.D. - 15-Nov-2022 - PAPER - I

1. Describe the development and embryology and kidney with imaging of congenital malformation of kidney.
2. Write briefly on radiographic techniques of optic foramen view and Schuller's view.
3. Enlist X-Ray interaction with matter and describe any two in detail.
4. Describe anatomy of lower limb veins. Describe various techniques and color Doppler findings in evaluation of deep venous thrombosis.
5. Discuss imaging appearances of spinal tuberculosis.
6. AERB guidelines with respect to radiology department construction.
7. Discus the differential diagnosis of expansile lesions of long bone.
8. Principles of MR spectroscopy and its clinical applications.
9. Personal dosimetry systems.
10. Digital Mammography.

M.D. - 17-Nov-2022 PAPER - II

1. Neuroendocrine tumours of pancreas and its imaging.
2. Imaging in dissecting aneurysm of aorta.
3. Describe the radiological anatomy of the mediastinum. Enumerate the mass lesions in the anterior mediastinum. Briefly mention the role of imaging modalities in their diagnosis.
4. Gossypiboma.
5. MRCP Vs ERCP.
6. Differential diagnosis of cystic lesions in the chest.
7. Prune belly syndrome.
8. Achalasia Cardia.
9. Imaging in female infertility.
10. Coronary CT angiography.

M.D. - 19-Nov-2022 PAPER - III

1. Discuss the role of imaging in diagnosis of Transplant Kidney Dysfunction.
2. Describe the development of heart and discuss the myocardial perfusion study.
3. Write short notes on:
 - a. Ballon Angioplasty
 - b. Gastroesophageal Reflux
 - c. Prune belly syndrome
 - d. Vertebral biopsy
4. Radiological features of fore gut duplication cysts.

5. Describe the radiological features of acute pancreatitis and its complications.
6. Discuss role of interventional radiologist in female infertility.
7. Describe the role of Doppler ultrasound in intrauterine growth retardation (IUGR).
8. Imaging features of Crohn's disease.
9. Transrectal ultrasound versus MRI of prostate gland.
10. Write short notes on:
 - a. MR Urography
 - b. PCPNDT ACT
 - c. Nuchal Translucency

M.D. - 21-Nov-2022 PAPER - IV

1. Imaging of petrous temporal bone.
2. Differential diagnosis of multiple osteolytic lesions of the skull and role of the imaging modalities.
3. Differential diagnosis of ring enhancing lesion of the brain, imaging modalities & radiological findings.
4. CT Versus MRI in Brain Tumors.
5. a. Enumerate the various Mucopolysaccharidoses
b. Radiological findings in Morquio syndrome
6. Arnold Chiari malformation.
7. Enumerate the cause of enlarged jugular foramina. Discuss the imaging, findings, role of interventional radiology in the management of Glomus jugulare tumors.
8. Define Spinal dysraphism, role of imaging.
9. Clinical applications of functional imaging of brain
10. Meningioma.

M.D. - 07-May-2022- PAPER - I

1. Describe anatomy of circle of wills and its variations.
2. Write briefly on radiographic technique of submentovertical view and skyline view.
3. Rotating anode x-ray tube, Construction and working principle.
4. Tissue elastography and its clinical applications.
5. Post processing techniques in MDCT and their utility.
6. Principles of diffusion weighted imaging and its clinical applications.
7. Advantages and disadvantages of CR and DR.
8. Measures to decrease radiation dose to patient.
9. Perthes disease.
10. Role of isotopes in bone imaging.

M.D. - 09-May-2022- PAPER - II

1. Plain radiography, USG and CT findings in acute pancreatitis.
2. Role of scintigraphy in gastro intestinal bleed.
3. Role of radiologist in intussusceptions.
4. Imaging of renal transplant patients.
5. Discuss the radiological features of neonatal respiratory distress syndrome.
6. Radiological differentiating features of ileocaecal Koch's and Crohn's disease.
7. HRCT findings in idiopathic pulmonary fibrosis.
8. Discuss the radiological evaluation of blunt injury abdomen.
9. Radiological evaluation of suspected pulmonary thromboembolism and role of interventions.
10. Aspergillosis.

M.D. - 11-May-2022- PAPER - III

1. Amnionicity and chorionicity in twin pregnancy. Enumerate the various complications that may occur in twin pregnancy. Describe the various radiological findings in twin transfusion syndrome.
2. Describe the embryology of Mullerian ductal anomalies. Describe the role of HSG, USG and MRI, Highlighting the advantages and limitations.
3. Ultrasound in a 35 years old female patient with right adnexal mass.
 - a. What are the causes?
 - b. Algorithmic approach and imaging features in those causes.
4. Describe the techniques of MRI arthrography. Enumerate its indications, advantages, and limitations.
5. Imaging in non-tubercular renal infections.
6. Discuss the role of imaging in uremia. Citing the specific role of limitations of conventional radiography, USG, CT, MRI and renal scintigraphy.
7. Neurogenic bladder.
8.
 - a. Doppler assessment of AV fistula of hemodialysis access.
 - b. Role of MDCT in cyanotic heart disease.
9. Discuss the pathophysiology of venous incompetence of lower extremity, common location of perforators? Discuss the techniques and imaging features in Doppler of lower extremity.
10. Eisenmenger syndrome? Enumerate the causes. Discuss the radiological features.

M.D. - 13-May-2022- PAPER - IV

1. MRI venography of brain principles and application.
2. Sella turcica anatomy, enumerate sellar and parasellar masses.
3. Diffuse axonal injury.
4. MR imaging features of intra medullary spinal tumors.
5. NCC vs Tuberculoma.
6. Imaging in Proptosis.
7. Juvenile Naso-pharyngeal angiofibroma.
8. HRCT temporal bone in middle ear pathologies.
9. Dentigerous cyst.
10. Arnold Chiari Malformation.

M.D. - 12-Nov-2021 - PAPER - I

1. Low Osmolar contrast media.
2. Digital Radiography.
3. Posterior urethral valve.
4. Tube rating.
5. Radiological anatomy of Osteo Meatal unit.
6. HSG.
7. Down's syndrome.
8. PC PNBT act.
9. Cystic Hygroma.
10. Air Gap Technique.

M.D. - 15-Nov-2021 - PAPER - II

1. Define HRCT. Describe its techniques and its role in diffuse lung diseases. Describe the diagnostic features of solitary pulmonary nodule.
2. Enumerate the causes of small bowel obstruction and role of Barium study in its diagnosis.
3. Idiopathic Hypertrophic Pyloric Stenosis.
4. Choledochal cyst.
5. Adrenal incidentaloma.
6. Imaging in splenic injury.

7. Pulmonary sequestration and its types. Discuss the CT findings.
8. Hirschprung disease - Barium enema findings.
9. Discuss the role of CT in the evaluation of acute pancreatitis.
10. Anterior mediastinal mass lesions.

M.D. - 17-Nov-2021 - PAPER - III

1. Discuss the role of radiologist in assessing a patient with vascular claudication pain.
2. Pericardial cyst.
3. Discuss imaging findings in a renal hypertension and its endovascular management.
4. Nephrocalcinosis.
5. Sonography features in down's syndrome.
6. Intravenous Urography (IVU) features in tuberculosis of the kidney.
7. Renal tubular acidosis.
8. Multicystic dysplastic kidney.
9. Radiological approach in acyanotic heart disease.
10. Radiographic features of mitral valvular disease.

M.D. - 29-July-2021 - PAPER - I

1. What is maximum permissible dose? Describe the methods of radiation protection to the patient and staff in Diagnostic radiology.
2. Discuss imaging anatomy of knee joint.
3. Write short notes on:
 - a. Electromagnetic Radiation.
 - b. Image Intensifier
 - c. Characteristic Curve of An X-ray Film
 - d. Rectification
4. What is Scintigraphy? Mention how thyroid scintigraphy is done.
5. Basic principles & applications of MDCT. How does it differ from conventional first-generation CT scanner?
6. Discuss the differential diagnosis and radiological features of seronegative spondyloarthropathies.
7. Write short notes on:
 - a. Piezoelectric effect
 - b. Carpal tunnel
 - c. Doppler Physics
 - d. Sialography
8. Discuss basic principles of MRI and write about MRI artifacts.
9. Describe the differential diagnosis and radiological features of a tumor at the lower end of femur in an 18-year-old individual.
10. MR Urography versus CT Urography.

M.D. - 31-July-2021 - PAPER - II

1. Enumerate anterior mediastinal masses. Role of imaging in anterior mediastinal masses.
2. Describe embryology of gut rotation and radiological features of malrotation of midgut.
3. MRCP Vs ERCP in biliary imaging.
4. Role of imaging in hepatic trauma.
5. Classify cystic neoplasms of pancreas and discuss role of imaging.
6. Discuss the imaging features of local splenic lesions and add a note on wandering spleen.
7. Imaging in adrenal pheochromocytoma.
8. Types of lung sequestration. Discuss imaging features in detail.
9. Imaging features of cirrhosis of liver and portal hypertension.
10. Imaging features of pseudomyxoma peritonei.

M.D. - 02-Aug-2021 PAPER - III

1. Doppler findings in Late Onset IUGR.
2. Role of MRI in Ovarian Tumours.
3. Megaureter.
4. Cardiac Rhabdomyomas.
5. Cystic Renal Tumours.
6. Endoscopic ultrasound.
7. Role of 3D ultrasound in infertility.
8. Imaging findings in chronic renal transplant complications.
9. BIRADS.
10. Pyeloureteritis Cystica.

M.D. - 04-Aug-2021 - PAPER - IV

1. Discuss of MRI with various paradigms. (FMRU)
2. Mention role of imaging in Leukodystrophies.
3. Imaging of Brachial plexus.
4. What are the causes of Proptosis? Discuss radiological approach to unilateral proptosis.
5. Mention differential diagnosis of extradural spinal masses with their imaging features.
6. Imaging features of Arterio-Venous Malformations (AVM) of brain. Add a note on interventional procedures available for AVM.
7. Write short notes on:
 - a. Baker's cyst
 - b. Adamantinoma
 - c. Parotid tumor
8. CT and MRI findings in various stages of cerebral infarct.
9. Discuss MRI features of Disc prolapse.
10. Discuss MR mammography versus digital mammography.

D.M.R.D. - 31-July-2021 - PAPER - II

1. Discuss the development of mid gut. Describe the imaging findings of mid gut malformation and mid gut volvulus on various imaging modalities.
2. Classify adrenal tumours and role of CT and MRI in evaluating them.
3. Radiological approach in cyanotic heart disease
4. Pathophysiology and imaging of mitral valve disease
5. MRI of cardiac tumours
6. Imaging in postoperative stomach
7. CT and endoscopic ultrasound staging of esophageal carcinoma
8. Imaging features of hepatocellular carcinoma and its interventional management
9. Colour doppler and CT features in portal hypertension
10. What is pancreatic divisum? Briefly discuss its embryologic basis and clinical significance. What are ERCP, MRCP and MDCT findings?

D.M.R.D. - 02-Aug-2021 - PAPER - III

1. Discuss in detail the role of CT and MRI in diagnosis of seizures disorder.
2. Write short notes on:
 - a. Ultrasound examination in last trimester of pregnancy
 - b. Mammogram
 - c. Vertebral biopsy
3. Radionuclide imaging of thyroid.
4. Functional MRI to brain.
5. Imaging features of prostatic carcinoma.

6. Radiology of brachial plexopathy.
7. Discuss the concept of molecular imaging. What are various modalities used in Molecular imaging?
8. Role of MRI in pregnant patient with acute abdominal pain.
9. Role of diffusion weighted imaging in diagnosis of intracranial tumors.
10. Write short notes on:
 - a. Undescended testis
 - b. MR Tensor imaging
 - c. Breast calcifications

M.D. - 19-Nov-2020 - PAPER - I

1. Imaging in bone tumours.
2. Describe about basic interaction of x-rays with matter.
3. Rheumatoid arthritis.
4. Grid.
5. Thyroid scintigraphy.
6. Artifacts in ultrasound.
7. Retroperitoneum imaging anatomy.
8. MRI contrast agents.
9. Anatomy of Biliary tree and investigations for evaluation.
10. Management of adverse contrast media reactions.

M.D. - 21-Nov-2020 - PAPER - II

1. What are the causes of acute respiratory distress in a neonate and discuss their imaging features.
2. Discuss radiological anatomy of gastro-esophageal junction and radiological features of hiatus hernia
3. CT enteroclysis.
4. Discuss types of choledochal cysts and imaging features.
5. Write in detail about imaging features of acute necrotizing pancreatitis. Add a note on revised Atlanta classification of acute pancreatitis
6. Role of plain radiography in acute abdomen.
7. Discuss imaging findings in adrenal adenoma and adrenal carcinoma.
8. Transjugular intrahepatic portosystemic shunt.
9. Discuss anatomy of retroperitoneal spaces. Add a note on retroperitoneal fibrosis.
10. Imaging features of pulmonary hydatid disease.

M.D. - 23-Nov-2020 - PAPER - III

1. Describe the ultrasound, CT versus MR angiography of carotid vessels.
2. Enumerate congenital anomalies of IVC, role of imaging.
3. What are the causes of medially displaced ureters? Discuss various associations, IVU, CT and MRI findings in RPF.
4. Enumerate the causes of hematuria in a 50 yrs old male patient, role of imaging modalities in diagnosis and staging of renal cell carcinoma.
5. Imaging features of CNS lymphoma and its differential diagnosis.
6. Describe the penile circulation. What are the causes of male impotence and discuss the role of color Doppler imaging impotence.
7. Classify bone tumors. Role of Conventional X-Ray in bone tumors. Discuss briefly about the Osteogenic Sarcoma.
8. Discuss the role of scintigraphy in cardiac imaging with special emphasis on myocardial perfusion and viability.
9. Discuss Lymphangiography.
10. Discuss Ultrasound features of Testicular Malignancies.

M.D. - 25-Nov-2020 - PAPER - IV

1. Describe in brief spinal cord tumours and write about imaging findings.
2. Classify pituitary fossa tumours Discuss the role of imaging modalities in arriving at the diagnosis.
3. First trimester anomalies on transvaginal scanning
4. Fungal infection in the lung.
5. Mucocele of sinuses.
6. Syringomyelia.
7. Sono-Salpingography.
8. Medulloblastoma.
9. Imaging in spinal dysraphism.
10. Imaging features of Multiple Sclerosis.

D.M.R.D. - 19-Nov-2020 - PAPER - I

1. Discuss the biological effects of Radiation. Enumerate the measures for Radiation protection in a diagnostic radiology department.
2. Discuss the role of imaging modalities of Avascular Necrosis.
3. Role of ultrasound in first trimester bleeding.
4. Pulmonary Sarcoidosis
5. Circle of Willis.
6. Collimator.
7. Uterine artery embolization.
8. Describe the Radiological features of Ankylosing Spondylitis.
9. Hepatic scintigraphy.
10. Fetal MRI

D.M.R.D. - 21-Nov-2020 - PAPER - II

1. Briefly describe the etiopathology and imaging findings of ileocecal tuberculosis. Discuss the features that are useful to differentiate it from Crohn's disease.
2. Classify adrenal tumours and the role of CT and MRI in evaluating them
3. Doppler ultrasound versus MR angiography of carotid vessels
4. Imaging findings in tetralogy of Fallot.
5. Coronary imaging
6. Radiological features of gastric malignancies.
7. Causes of upper GI bleeding and the role of intervention.
8. Characteristic pathological features of gastrointestinal stromal tumours along with the imaging findings.
9. Role of imaging in obstructive jaundice.
10. Classification and imaging of neuroendocrine tumours of pancreas.

D.M.R.D. - 23-Nov-2020 - PAPER - III

1. Explain the radiological and imaging features of bladder.
2. Discuss the imaging features of cystic renal diseases.
3. Radiological and imaging features of renal tuberculosis.
4. Discuss the role of imaging in evaluation of renal transplant.
5. Imaging of male infertility.
6. Imaging of subarachnoid hemorrhage.
7. Role of ultrasound and Doppler in ectopic pregnancy.
8. Write short notes on:
 - a. Nuchal Translucency
 - b. Polycystic ovaries
9. Imaging of Posterior cranial fossa masses in pediatric age group.
10. Radiological features of inflammations of aorta.

M.D. - 14-Jul-2020 - PAPER - I

1. Sono elastography in liver diseases
2. Describe about CT coronary angiography and Calcium scoring
3. Describe different magnets and coils in MRI
4. Describe physics of 3D and 4D ultrasound and its usefulness in clinical imaging.
5. Write short notes on:
 - a. Gout
 - b. Time gain compensation in ultrasound
 - c. Acroosteolysis
 - d. MCUG
6. Describe the principles, construction and functionalities of individual components of image Intensifier.
7. Discuss imaging anatomy of the orbit.
8. Discuss the radiation protection and isotope department.
9. What is Looser's zone? Describe the radiological appearances of the condition in which it is seen ?
10. Describe:
 - a. Cone view of Sella turcica
 - b. Frog's view of both Hips.

M.D. - 16-Jul-2020 - PAPER - II

1. Choledochal cyst.
2. Describe radiological appearances of G.I. Tuberculosis.
3. Pheochromocytoma.
4. Sonographic features in portal hypertension.
5. MR enterography vs MR enteroclysis.
6. TACE
7. Describe the causes of lung collapse. Describe in brief the various conventional X-Ray and CT findings of various collapses.
8. Discuss in detail the radiological manifestations of AIDS in chest with respect to intrapulmonary changes.
9. Radiological evaluation of cavitary lung disease.
10. Write short notes on unilateral radiolucent lung.

M.D. - 18-Jul-2020 - PAPER - III

1. Describe the causes of plain radiographic features of left-right shunts.
2. Ebstein's anomaly
3. Briefly describe the imaging in aorto-arteritis
4. Classify cystic diseases of the kidney, Describe the radiological and imaging features in polycystic kidney.
5. Discuss the role of radiology and imaging in the evaluation of a female infertile patient.
6. Doppler decision making tool in the management of IUGR.
7. Torsion of testis.
8. Discuss briefly various radiological interventional procedures in urinary tract.
9. Importance of 11-14 weeks pregnancy scan. Describe various parameters evaluated.
10. Multiparametric MRI in prostate malignancy.

M.D. Degree - 20 -Jul-2020 - PAPER - IV

1. Discuss PET-CT principles and clinical uses.
2. What is BIRADS ? Discuss elastography principles and clinical uses in breast lesions.
3. Role of imaging in Platybasia and Basilar Invagination.
4. Role of MRI in spinal disorders.

5. CT perfusion in Acute Stroke.
6. Discuss role of MRI in evaluation of CNS manifestations of AIDS.
7. Discuss roles of MRS in tumors of CNS.
8. Discuss role of imaging in white matter diseases.
9. Role of MRI in evaluation of Temporomandibular Joint Disorders.
10. Classify orbital tumors and discuss radiological approach to investigate the case of suspected orbital tumor.

D.M.R.D. - 14-Jul-2020 - PAPER - I

1. Discuss the properties X-Rays. Enumerate common film artifacts.
2. Classify the bone tumors and describe the radiological features of osteosarcoma.
3. Duplex Ultrasonography.
4. Pulmonary Embolism.
5. Anode heel effect.
6. Paget's disease of the bone.
7. Discuss DR Vs CR.
8. Mammographic X-Ray Tube.
9. Imaging protocols in stroke.
10. ALARA.

D.M.R.D. - 16-Jul-2020 - PAPER - II

1. Enumerate the causes of acute abdomen and imaging features.
2. Describe the blood supply to the Heart. Discuss the role of imaging modalities in the diagnosis of myocardial infarction.
3. Chemical shift imaging.
4. Discuss the classification and imaging features of dissection of aorta.
5. Imaging of inflammatory bowel disease.
6. Pericardial imaging.
7. Virtual colonoscopy.
8. Imaging finding of Anorectal anomalies.
9. 1.5 vs 3.0 TESLA MRI.
10. AAST grading of splenic trauma.

D.M.R.D. - 18-Jul-2020 - PAPER - III

1. Basic radiographic views for PNS.
2. Extra skeletal complications of Rheumatoid arthritis.
3. Emphysematous Cholecystitis
4. Radiological anatomy of craniovertebral junction.
5. Autonephrectomy.
6. Swyer-james syndrome.
7. Esthesioneuroblastoma.
8. HSG vs Sonosalpingography.
9. CT findings in Appendicitis.
10. Pneumoconiosis.

M.D. - 12-Nov-2019 - PAPER - I

1. Newer ultrasound contrast agents.
2. Breast Tomosynthesis.
3. Osteopoikilosis.
4. CT Enteroclysis.
5. Radiological anatomy of dural venous sinuses.

6. Scatter Radiation.
7. Rickets.
8. MCU.
9. Radiation Hazards to radiation workers.
10. Extra intestinal manifestations of Ulcerative colitis.

M.D. - 14-Nov-2019 - PAPER - II

1. Discuss about etiology and imaging features of acute chest pain in elderly adult.
2. Neurenteric cyst.
3. Bronchopleural fistula.
4. CT Arterial Portography.
5. Sigmoid volvulus.
6. Imaging findings in Mesenteric Ischemia.
7. Doppler findings in Decompensated Portal hypertension.
8. Invertogram.
9. Role of MRI in Carcinoma lung.
10. Carcinoid tumours of appendix.

M.D. - 16-Nov-2019 - PAPER - III

1. Cardiac CT and its applications,
2. Imaging of Tetralogy of Fallot.
3. Write short notes on
 - a. Adenomyosis
 - b. Endometriosis
4. Interventional radiology in hepatobiliary system.
5. Role of 3D ultrasound in detection of fetal anomalies.
6. Role of radiology in Renal hypertension.
7. Imaging of renal anomalies.
8. Write short notes on:
 - a. Scrotal Doppler
 - b. Vesicoureteral Reflux
 - c. Doppler indices of IUGR
9. Describe principles of MR Urography and its applications.
10. Discuss role of Doppler in male infertility.

M.D. - 18-Nov-2019 - PAPER - IV

1. Classify and discuss the osteogenic tumours. Describe the radiological investigations to arrive at the diagnosis (osteoma, osteoid osteoma, osteoblastoma, osteosarcoma).
2. Discuss the differential diagnosis and imaging finding of posterior cranial fossa lesions in children.
3. Imaging in Neurofibromatosis.
4. Meningioma of brain - Imaging findings.
5. Imaging findings of retinoblastoma.
6. Pleomorphic adenoma of parotid gland.
7. Thyroid ophthalmopathy and its differential diagnosis.
8. Fungal sinusitis.
9. Imaging in odontogenic cyst.
10. Imaging in acute stroke.

D.M.R.D. - 12-Nov-2019 - PAPER - I

1. Anatomy of diaphragm and its normal variants.
2. Factors affecting contrast of a radiograph.
3. Basic principles of DSA and its applications.
4. Write short notes on:
 - a. Sequestration of lung
 - b. Towne's view of skull
 - c. Pleural calcification
 - d. half value layer
5. Write the properties of X rays and discuss the biological effect of radiation.
6. Describe the physical of Doppler and clinical applications in peripheral vascular disease.
7. Discuss briefly the CT Artefacts.
8. Digital radiography versus computed radiography.
9. Principles and applications of Multiple volumetric spiral CT.
10. Discuss the principles of MRCP and mention about MRCP versus ERCP.

D.M.R.D. - 14-Nov-2019 - PAPER - II

1. Plate atelectasis.
2. Differential diagnosis of RIF mass in 50-year-old patient.
3. Retroperitoneal spaces.
4. Extra lobar sequestration.
5. Abdominal cocoon.
6. Osteomyelitis sicca.
7. Grave's Disease.
8. Osteoblastoma of vertebra
9. Diastematomyelia.
10. PCOD imaging.

D.M.R.D. - 16-Nov-2019 - PAPER - III

1. Pleural nodules.
2. Ovarian hyperstimulation syndrome.
3. Pulmonary alveolar proteinosis.
4. Brain stem Gliomas.
5. Enumerate the differential diagnosis and discuss about unilateral hyperlucent lung
6. Radiological management of intussusception
7. Radiographic views of cranio-vertebral junction.
8. Retrosternal Goitre.
9. Ureteral Strictures.
10. Imaging of FESS complications.

M. D. MAY-2019, PAPER-I

1. What are bone changes in rickets and Scurvy? Describe them.
2. Classify the contrast media. Add a note on MR contrast media.
3. Write short notes on:
 - a. Technetium⁹⁹
 - b. Cyclotron
 - c. Xeroradiography
 - d. Carbon dioxide angiography
4. Describe Angiographic anatomy of coronary arteries.

5. Discuss anatomy of neck spaces and role of imaging in neck spaces.
6. Describe ultrasound and Doppler Artifacts.
7. Write short notes on:
 - a. Radiation monitoring devices
 - b. Mammography X-rays
8. Classify bone tumors and describe radiological features of Ewing's Sarcoma.
9. Describe the dark room setting.
10. Elastography principle and application.

M. D. MAY-2019, PAPER-II

1. Imaging of interstitial lung disease.
2. Write the algorithm for radiological evaluation of a suspected case of acute pulmonary embolism.
3. How to investigate the case of peptic ulcer and describe the radiological findings.
4. Discuss radiological features of Ulcerative Colitis and write the differences from Crohn's disease,
5. Radiological features of Bronchogenic carcinoma and role of MRI in it,
6. Describe the radiological features of Pseudocyst of Pancreas and its complications.
7. Describe the radiological and imaging features of hyperparathyroidism.
8. Enumerate benign focal lesions of liver. Describe their imaging features.
9. Radiological features of Sigmoid Diverticulitis.
10. Write short notes on
 - a. Pulmonary hydatid cyst
 - b. Splenic space occupying lesions.
 - c. Acute cholecystitis.
 - d. MR Fistulogram

M. D. MAY-2019, PAPER-III

1. Role of MRI in a woman of child bearing age presenting with acute pelvic pain.
2. Undescended Testis.
3. Striate nephrogram.
4. Left Axial myxoma.
5. Role of Doppler in acute renal transplant complications.
6. Primary Tuberculosis of intestine.
7. Neuroendocrine Tumours of pancreas.
8. Adrenal Incidentaloma.
9. Hepatic adenoma.
10. Uterine artery embolization

M. D. MAY-2019, PAPER-IV

1. Enumerate the causes of soft tissue calcification. Describe in detail the role of imaging in it.
2. Discuss the extraaxial lesions of brain. Role of MRI in diagnosis of extraaxial.
3. Neurotuberculosis
4. Imaging of hyperacute and acute brain infarct
5. Alobar holoprosencephaly
6. Imaging of skull in Acromegaly
7. Odontogenic keratocyst
8. Imaging in retinoblastoma
9. Staging and imaging features of juvenile nasopharyngeal angiofibroma
10. Enumerate infrahyoid neck spaces and imaging features of carotid body tumour.

D.M.R.D. - MAY-2019, PAPER-I

1. Physical principles and clinical application of MR Spectroscopy.
2. Imaging in pulmonary thromboembolism.
3. Malignant solitary pulmonary nodule.
4. Renal osteodystrophy.
5. Role of isotopes in skeletal lesions.
6. MRI in shoulder joint trauma.
7. Principles of Doppler ultrasound.
8. Mediastinal lymph nodes and lymphatic drainage of the lung.
9. Radiological anatomy of mediastinum.
10. PACS - Picture Archival and Communication System.

D.M.R.D. - MAY-2019, PAPER-II

1. Imaging findings in Ulcerative colitis.
2. Pancreatic phlegmon.
3. Rounded atelectasis.
4. Retroperitoneal fibrosis.
5. Adrenal imaging.
6. CT features of Intussusception.
7. Fetal echo.
8. Non-Immune Hydrops
9. Role of Ultrasound in paediatric chest conditions.
10. Physeal plate injury and findings in various modalities.

D.M.R.D. - MAY-2019, PAPER-III

1. Classify cystic disease of kidneys and describe in detail radiology of adult polycystic kidney disease.
2. Enumerate various causes of supra-sellar masses. Describe the imaging features of craniopharyngioma.
3. Prune belly syndrome.
4. Meningioma.
5. Torsion testes.
6. Hysterosalpingography.
7. Ectopic pregnancy.
8. Micturating Cystourethrogram.
9. Interventional procedures in CNS.
10. Imaging in Male Infertility.

M.D. – NOVEMBER-2018, PAPER - I

1. Discuss newer imaging contrast media.
2. Discuss role of conventional radiology and newer imaging modalities.
3. Osteoid osteoma.
4. Digital Subtraction Angiography
5. Perthe's disease
6. Radiological anatomy of larynx
7. Radiographic grids, its types, and applications
8. Radiation protective devices and recent Atomic Energy Regulatory Board (AERB) guidelines
9. AERB guidelines for radiation safety
10. Sonohysterography

M.D. - NOVEMBER 2018, PAPER -II

1. Differential diagnosis of right iliac fossa pain in female and imaging features of ileo-caecal Koch's
2. Describe in detail radiological imaging of acute pancreatitis and its complication.
3. Intussusception
4. Congenital diaphragmatic hernia
5. Imaging of Biliary atresia
6. Virtual bronchoscopy
7. GIST - radiological findings and differential diagnosis
8. Barium swallow techniques. Imaging finding in Esophageal candidiasis
9. Diagnosis of pulmonary infarction
10. Imaging in adrenal neoplasms

M.D. - NOVEMBER 2018, PAPER -III

1. Classify the renal tumours. Discuss the radiological imaging and radiological management of renal cell carcinoma.
2. Discuss the types of aortic dissection and role of radiological imaging and radiological management of dissection.
3. Imaging in ectopic gestation.
4. Anterior and posterior urethral valves.
5. IVC filter.
6. Tetralogy of Fallot.
7. Transrectal ultrasound of prostate.
8. Hysterosalpingography.
9. Imaging in intrauterine fetal death.
10. Define fetal hydrops. Enumerate its causes and describe its sonographic findings.

M.D. - NOVEMBER 2018, PAPER -IV

1. Classify meningiomas. Discuss role of imaging.
2. Role of MR imaging in renal diseases
3. Acoustic neuroma
4. Sacrococcygeal teratoma
5. Osteopetrosis
6. Fistulogram
7. MR in soft tissue lesions
8. Ovarian cyst - interventional procedures
9. Radiological features in neurological complication of AIDS
10. Functional imaging of Brain

D.M.R.D. - NOVEMBER 2018, PAPER -I

1. Radiographic and CT findings in lung collapse
2. Imaging of temporal bone and internal auditory canal
3. Air gap technique
4. Segmental anatomy of liver and its importance
5. Perthe's disease
6. Salter Harris fractures
7. MRI in avascular necrosis of hip.
8. Photoelectric effect
9. Computed radiography and digital radiography
10. Imaging in central bronchogenic carcinoma

D.M.R.D. - NOVEMBER 2018, PAPER -II

1. Imaging features of acyanotic congenital heart disease.
2. Discuss the role of imaging in pancreatic tumours.
3. Pathology and imaging features of Budd Chiari syndrome.
4. Ultrasound and CT imaging of appendicitis
5. Radiological evaluation of malrotation of the intestine.
6. Ultrasonographic findings in abdominal tuberculosis.
7. Ultrasound and Doppler features of Deep Vein Thrombosis.
8. Enumerate and briefly write about the embolic agents.
9. CT angiography VS MR angiography.
10. CT guided biopsy lung lesions and its complications.

D.M.R.D.- NOVEMBER 2018, PAPER -III

1. Enumerate renal masses in children and Describe the imaging features of Wilm's tumour.
2. Role of colour doppler in carotid and vertebral arterial diseases.
3. Medullary sponge kidney.
4. Renal vein thrombosis.
5. Pyeloureteritis cystica.
6. Cerebral lymphoma.
7. Pituitary adenoma.
8. Cerebral herniation.
9. Enumerate the infrahyoid neck spaces and describe the imaging features of carotid body tumour.
10. Enumerate the common locations of ectopic pregnancy and discuss the sonographic findings of ectopic

M.D. - MAY 2018, PAPER - I

1. Explain about metabolic disorders of bone and how to arrive at diagnosis on plain radiograph.
2. Describe the principles of multidetector CT and the various reconstruction methods.
3. What is filtration? Explain in detail about different levels of filtration used in X ray.
4. Differential diagnosis of lesions of mandible.
5. Avascular necrosis.
6. Radiological features of skeletal tuberculosis.
7. Benign expansile lesion of long bone.
8. Giant cell tumours.
9. Classify idiosyncratic reactions resulting from contrast media administration. Describe the management of life-threatening adverse reactions.
10. Clinical applications and techniques of fat suppression in MRI.

M.D. - MAY 2018, PAPER - II

1. Discuss the causes of portal hypertension. Write in detail about the Sonographic & doppler evaluation of Cirrhosis and Portal hypertension.
2. Describe in detail the various types of adrenal masses. Explain the various imaging modalities with salient findings to differentiate the masses.
3. Imaging findings of ulcerative colitis
4. Oesophageal varices
5. Congenital lobar emphysema
6. Focal nodular hyperplasia - imaging with differential diagnosis
7. Imaging in pulmonary edema
8. Retroperitoneal fibrosis and its differential diagnosis
9. MRCP in obstructive jaundice
10. Role of MDCT in staging of carcinoma of lung

M.D. - MAY 2018, PAPER - III

1. Classify cardiomyopathy. Discuss in detail role of various modalities and salient imaging features in cardiomyopathy.
2. Describe pathology, role of imaging and radiological features in urinary tract trauma.
3. Write briefly on role of isotopes v/s MR imaging in myocardial ischemia
4. Imaging of a child with obstructive uropathy
5. How do you investigate a case of unilateral leg edema?
6. Embryological and imaging considerations in a case of cryptorchidism
7. How would you approach and counsel a pregnant woman with fetal cardiac defect?
8. What are the causes of emergency in 3rd trimester pregnancy? How will you investigate?
9. Coronary imaging
10. MRI of cardiac tumours

M.D. - MAY 2018, PAPER - IV.

1. Describe in detail the imaging findings and differential diagnosis of unilateral proptosis.
2. What are phakomatoses? Discuss the role of imaging of brain in it.
3. Intraosseous Hemangioma
4. Hydrocephalus
5. Esthesioneuroblastoma
6. Ameloblastoma mandible
7. Branchial cleft cyst - Ultrasound imaging
8. Subarachnoid hemorrhage
9. Role of imaging and intervention in Dural arteriovenous fistula
10. Imaging in laryngeal carcinoma

D.M.R.D.- MAY 2018, PAPER -I

1. Discuss about mammography X ray unit.
2. MR spectroscopy
3. Radionuclide scanning in a bony lesion
4. Biological effects of radiation and measures taken against its protection for radiation workers & patient.
5. Describe etiopathogenesis, causes and imaging features of lymphangitis carcinomatosa.
6. Describe normal anatomy of knee as seen on MRI.
7. Imaging in pulmonary thromboembolism
8. Radiological features of osteosarcoma
9. Describe Etiopathogenesis of osteomyelitis. Discuss role of imaging in chronic osteomyelitis.
10. Imaging and associations of fibrous dysplasia.

D.M.R.D. - MAY 2018, PAPER -II

1. Imaging finding of ileo-caecal tuberculosis. Describe the features that are useful to differentiate it from Crohn's disease.
2. Pheochromocytoma
3. Congenital anomalies of aortic arch and its major branches
4. Ebstein's anomaly
5. Cardiac CT.
6. Carcinoid tumours
7. Pathophysiology and imaging features in small bowel lymphoma
8. Choledochal cyst
9. Benign lesions of the liver
10. Radiological features in cystic tumours of pancreas

D.M.R.D. - MAY 2018, PAPER - III

1. How will you investigate a case of painless haematuria? What is the role of radiologist in its management?
2. Radiological diagnosis of congenital lesion of kidney
3. MRI in intramedullary neoplasms of spinal cord
4. Differential diagnosis of ring enhancing lesions in brain in an immune compromised patient
5. Describe the clinical features and MR imaging features of multiple sclerosis.
6. Role of sonography in IUGR
7. Antenatal evaluation of neural tube defects
8. PC PNDT Act
9. Imaging features of fungal sinusitis
10. Imaging in orbital trauma

M.D.- NOVEMBER 2017 - PAPER - I

1. Conventional fluoroscopy versus Digital fluoroscopy.
2. Discuss conventional mammography versus sonomammography.
3. CT guided biopsy.
4. Digital radiography.
5. Ewing's sarcoma.
6. Paramagnetic agents.
7. PACS (Picture Archiving Communication System).
8. Posterior urethral valve.
9. MRCP vs ERCP.
10. Ultrasound image artifacts.

M.D.- NOVEMBER 2017, PAPER - II

1. Role of CT and MRI in diagnosing and staging of carcinoma of lung.
2. Common causes of acute abdomen and imaging features of acute pancreatitis and acute pyelonephritis.
3. Kerley lines.
4. Pulmonary embolism with Imaging features.
5. Choledochal cyst.
6. Tracheo - esophageal fistula.
7. I C U – Radiography.
8. Gasless abdomen.
9. Imaging of posterior mediastinal masses
10. Imaging features in a case of intestinal perforation

M.D.- NOVEMBER 2017, PAPER - III

1. Pulmonary stenosis vs embolism - imaging modalities and features
2. Enumerate the causes of renal trauma and discuss the role of various imaging modalities in evaluating renal trauma.
3. Percutaneous interventional procedures
4. Role of ultrasound in 2nd trimester
5. MR-venography and arteriography
6. TB kidney
7. Neural-tube defects
8. Water soluble contrast
9. Cardiac CT
10. Total anomalous pulmonary venous drainage

M.D. - NOVEMBER 2017, PAPER - IV

1. Enumerate and discuss the imaging features of intraventricular masses in adults.
2. Describe the differential diagnosis in a patient presenting with unilateral proptosis
3. Sturge Weber's syndrome
4. Osteo meatal complex
5. Arachnoid cyst
6. MRI findings in intracerebral haemorrhage.
7. Imaging in facial nerve injury
8. Dandy Walker malformation
9. CT and MR findings in acute stroke
10. MRI in intramedullary neoplasms of spinal cord

D.M.R.D.- NOVEMBER 2017, PAPER - I

1. Radiological features of seronegative arthropathies
2. Methods used to improve radiographic film quality
3. Pulmonary mycetoma
4. Slip ring technology
5. Rickets
6. Congenital lobar emphysema
7. Aneurismal bone cyst
8. Bronchiectasis
9. Ultrasound image artifacts
10. Segmental anatomy of liver and its Importance

D.M.R.D. - NOVEMBER 2017, PAPER - II

1. Enumerate the causes of mechanical small bowel obstruction an adult. Describe the differentiating features of small and large bowel obstruction on plain radiography and the role of CT in small bowel obstruction.
2. What are the various causes of bilateral adrenal masses and describe the characteristic features on imaging in two such causes?
3. Pathogenesis, classification, and imaging of dissecting aneurysm of Aorta
4. Imaging in ischemic heart disease
5. Radiological approach in cyanotic heart disease
6. Role of radiology and imaging in intestinal ischemia
7. CT and endoscopic ultrasound staging of esophageal carcinoma
8. Discuss the etiology, classification imaging features and complication of choledochal cyst.
9. Ultrasonography features in cirrhosis of liver with portal hypertension
10. Describe CT features of liver trauma and discuss the role of intervention in this.

D.M.R.D. - NOVEMBER 2017, PAPER - III

1. Classify various orbital tumours. Describe radiological features of tumour affecting the eyeball (globe)
2. Discuss the imaging findings od renal neoplasms in pediatric age group.
3. Briefly discuss radionuclide imaging of urinary tract.
4. Discuss various HIV manifestations in Central Nervous System.
5. Role of sonography in bleeding in first trimester pregnancy.
6. Cystic lesions in infratentorial region.
7. Corpus callosal agenesis.
8. Epidermoid.
9. Enumerate markers of chromosomes abnormality on antenatal ultrasound and discuss their sonographic features.
10. Discuss the role of imaging in renal trauma.

M.D. - MAY 2017, PAPER - I, (REVISED SCHEME)

LONG ESSAY

1. Classify the tumors in and around knee joint? Describe imaging features of osteogenic sarcoma
2. Draw a diagram of Bronchopulmonary segments. Discuss the role of H.R.C.T in interstitial lung diseases.

SHORT ESSAY

3. Percutaneous Transhepatic cholangiogram
4. Atrial septal defect
5. Thalassemia
6. Achalasia cardia
7. Role of MRI in liver masses
8. Renal Doppler

M.D. - MAY 2017, PAPER -II, (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of imaging in a case of blunt abdominal trauma.
2. Describe the mechanism and causes of lung collapse. Discuss the imaging features of various pattern of lung collapse.

SHORT ESSAY

3. Write short note on syndromes with GIT polyposis.
4. Radiological assessment of Portal hypertension
5. Short note on Gastroesophageal reflux disease (GERD)
6. Imaging findings in pulmonary sarcoidosis
7. Imaging findings in Scimitar syndrome
8. Short note on Germ cell tumours of mediastinum

M.D. - MAY 2017, PAPER -III, (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of ultrasound and MRI in carcinoma of endometrium and carcinoma of cervix.
2. Enumerate the causes of thoracic aortic aneurysm and what is the role of plain radiograph, CT, Ultrasound, MRI in its diagnosis.

SHORT ESSAY

3. Renal angiomyolipoma
4. Urachal - masses
5. Varicocele
6. Vesico ureteral reflux
7. Vesicular mole
8. CT urography

M.D. - MAY 2017, PAPER -IV, (REVISED SCHEME)

LONG ESSAY

1. Classify spinal tumours and discuss in detail role of various imaging modalities. Describe salient imaging features in various intramedullary tumours.
2. Describe radiological anatomy of sub arachnoid space. Discuss the causes, role of imaging and intervention in subarachnoid bleed.

SHORT ESSAY

3. Describe blood brain barrier and its role in Neuroimaging.
4. Classify cystic lesions of mandible and briefly imaging features in odontogenic lesions.

5. How do you investigate a case of fungal sinusitis?
6. Radiological anatomy and importance of neck spaces
7. Describe anatomy of optic nerve and imaging approach at various levels.
8. What is the role of trans cranial Doppler in intracranial vascular disease?

D.M.R.D. - MAY 2017, PAPER -I, (REVISED SCHEME)

LONG ESSAY

1. Enumerate the seronegative arthropathies and discuss in detail the radiological features of RA.
2. Describe the principles of computed radiography (CR) and digital radiography (DR) and discuss various types of Computed Radiography Artefacts with

SHORT ESSAY

3. Ultrasound transducer
4. X-ray grids
5. Solitary Pulmonary nodule
6. Anatomy of the retroperitoneum
7. Gout and pseudo gout
8. Rectifiers

D.M.R.D. - MAY 2017, PAPER -II, (REVISED SCHEME)

LONG ESSAY

1. Discuss in detail the imaging features of pancreatitis
2. Describe the development of interatrial septum and radiological features of atrial septal defects

SHORT ESSAY

3. Gastric volvulus
4. Tumours of the heart
5. Diverticular disease of colon
6. Pericardial effusion
7. Cholecystitis
8. Double aortic arch

D.M.R.D.- MAY 2017, PAPER -III, (REVISED SCHEME)

LONG ESSAY

1. Classify bladder tumours. Describe the imaging features of bladder carcinoma
2. Describe imaging features of Chiari malformations

SHORT ESSAY

3. Pelviureteric junction obstruction
4. Retinoblastoma
5. Placenta accreta
6. Hysterosalpingography
7. Craniopharyngioma
8. Adult polycystic kidney disease

M.D. - NOVEMBER 2016, PAPER -I, (REVISED SCHEME)

LONG ESSAY

1. What is scattered radiation? Discuss hazards of radiation and measures to prevent scattered radiation.
2. Discuss imaging finding of various Sino nasal disorders

SHORT ESSAY

3. Dry film processor
4. Radiography of temporomandibular joint with applications
5. Tetralogy of Fallot
6. Endoscopic ultrasonography
7. Coils used in MRI
8. Tuberculosis of urinary bladder

M.D. - NOVEMBER 2016, PAPER -II, (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of imaging in upper GI obstruction in pediatric age group.
2. Imaging findings in the chest of immunocompromised patient

SHORT ESSAY

3. Write differentials of posterior mediastinal masses.
4. Write short note on adrenal neuroblastoma
5. Short note on focal nodular hyperplasia of liver
6. Imaging findings in adenomyomatosis of the gall bladder
7. Role of PET scan in hepato-biliary diseases
8. Short note on Anorectal malformation

M.D. - NOVEMBER 2016, PAPER -III, (REVISED SCHEME)

LONG ESSAY

1. Discuss the different types of shadowing encountered on a pathological chest radiograph. Discuss the differential diagnosis of a coin shadow in the lung with role of various imaging modalities.
2. Describe pathophysiology and imaging in pituitary neoplasms

SHORT ESSAY

3. Calcifications on mammogram
4. Hysterosalpingography
5. MRCP
6. Ultrasonography in foetal growth
7. MR in knee injury
8. Tubercular meningitis – its imaging

M.D. - NOVEMBER 2016, PAPER -IV, (REVISED SCHEME)

LONG ESSAY

1. Neuroimaging in AIDS
2. Discuss the role of imaging in infections and infestations of the adult brain.

SHORT ESSAY

3. Chordoma
4. Hypoxic ischemic encephalopathy
5. Migration anomalies of the brain
6. Glomus jugulare
7. Lemon sign and banana sign, its significance
8. Optic nerve meningioma

D.M.R.D – NOVEMBER 2016, PAPER – I (REVISED SCHEME)

LONG ESSAY

1. What are the different interactions of x rays with matter? Describe in detail two of them with their application in radiography
2. Describe sequence of changes seen in acute and chronic osteomyelitis as seen on plain radiograph. Discuss role of isotopes, ultrasound CT and MRI in its diagnosis

SHORT ESSAY

3. Transducer
4. Diaphragmatic hernia
5. Enchondroma
6. Bronchogenic cyst
7. Chest radiographic signs of pulmonary edema
8. Radiographic changes in scurvy

D.M.R.D – NOVEMBER 2016, PAPER – II (REVISED SCHEME)

LONG ESSAY

1. Describe the causes, clinical presentation and imaging features of Hepatic veno-occlusive diseases. Discuss the role of interventional radiologist.
2. Classify congenital heart diseases. Discuss in detail anomalous pulmonary venous drainage.

SHORT ESSAY

3. Acute cholecystitis – imaging modalities and merits
4. Oesophageal motility disorders
5. Role of MRI in cardiomyopathy
6. Dissecting aneurysm of Aorta – imaging features and intervention
7. Causes and imaging features of ischemic bowel
8. Imaging and interventions in pseudocyst of the pancreas

D.M.R.D – NOVEMBER 2016, PAPER – III (REVISED SCHEME)

LONG ESSAY

1. What is phakomatosis? Name the various conditions considered in this group and discuss the radiological features of Neurofibromatosis.
2. Discuss the role of radiology and imaging in diagnosing malignant and benign ovarian tumours.

SHORT ESSAY

3. Empty Sella.
4. Pseudo tumours of orbit
5. Renal vein thrombosis
6. Sturge weber syndrome
7. Pelviureteric junction obstruction
8. Pheochromocytoma

M.D. - JUNE 2016, PAPER -I, (REVISED SCHEME)

LONG ESSAY

1. Write in detail radiographic techniques of the following:
 - a) Temporo-mandibular Joint
 - b) Scaphoid view
 - c) Skyline view of patella
 - d) Towne's view
2. Describe calcium metabolism and the radiological changes in hyperparathyroidism.

SHORT ESSAY

3. Paramagnetic contrast media
4. Embryology and radiological anatomy of pancreas
5. Personal Dosimetry Systems
6. Ankylosing spondylitis
7. Renal rickets
8. Computed Radiography and its principles

M.D. - JUNE 2016, PAPER -II, (REVISED SCHEME)

LONG ESSAY

1. Discuss radiological anatomy of the mediastinum and role of CT & MRI in carcinoma of oesophagus
2. Discuss common causes of pediatric acute abdomen & imaging features of mesenteric lymphadenitis & intussusception

SHORT ESSAY

3. Mendelson's syndrome
4. Collapse pattern of lung
5. Necrotizing enterocolitis (N E C)
6. Intestinal Polyposis
7. Mesenteric cyst
8. Bronchopulmonary segments

M.D. - JUNE 2016, PAPER -III, (REVISED SCHEME)

LONG ESSAY

1. Discuss the pre-procedural work-up of a patient posted for peripheral angioplasty. Describe the procedure of a peripheral angioplasty.
2. Discuss the grades of renal injury and radiological investigations and imaging appearances in a case of renal trauma.

SHORT ESSAY

3. MRI features of endometrial carcinoma
4. Role of sonography in renal transplant
5. Medullary sponge kidney
6. Sonography features of placenta previa
7. Infantile polycystic disease of kidneys
8. Ultrasound findings in polycystic ovaries

M.D. - JULY 2016, PAPER -IV, (REVISED SCHEME)

LONG ESSAY

1. Discuss the differential diagnosis and imaging features of infratentorial tumours in Paediatric age group.
2. Classify the common types of spinal dysraphism and discuss their imaging features.

SHORT ESSAY

3. Intramedullary tumours of the spinal cord
4. Orbital pseudotumour
5. Carotid-cavernous fistula
6. Esthesioneuroblastoma
7. Mucocele of the paranasal sinuses
8. Craniosynostosis.

D.M.R.D - JUNE 2016, PAPER – I (REVISED SCHEME)

LONG ESSAY

1. Describe the principle of Multi Detector computerized Tomography (M.D.C.T)
2. Describe C.T Anatomy of Mediastinum. Describe C.T. Features of Thymoma.

SHORT ESSAY

3. Radiological Features of Carcinoma of Bronchus.
4. Radiography of Paranasal sinuses.
5. Computed Radiography- Principles, Advantages, Disadvantages.
6. Factors Contributing MRI contrast.
7. Principle of Doppler Imaging.
8. Osteosarcoma.

D.M.R.D - JULY 2016, PAPER – II (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of radiologist in diagnosis and management of a patient with vascular claudicating pain.
2. Discuss the role of imaging in paediatric abdominal mass.

SHORT ESSAY

3. CT Imaging of hepatocellular carcinoma
4. Imaging of hemangioma of liver
5. Gastrointestinal manifestations of AIDS
6. Imaging in cholecystitis
7. Imaging in hepatic trauma
8. Imaging in Cardiogenic Vs Non-Cardiogenic pulmonary edema

D.M.R.D - JULY 2016, PAPER – III (REVISED SCHEME)

LONG ESSAY

1. Discuss the imaging and angiography features spinal vascular malformations.
2. Discuss the role of radiology in diagnosing urothelial tumours.

SHORT ESSAY

3. Schizencephaly
4. Cystic lesions in infratentorial region
5. Corpus callosal agenesis
6. Nephrocalcinosis
7. Fallopian tube recanalization
8. Doppler findings in IUGR

M.D. - OCTOBER 2015, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Discuss the Basic principle of Computed Radiography (CR) system and describe various types of Computed Radiography Artefacts with methods to rectify them.
2. Enumerate the causes for periosteal reaction. Discuss the imaging appearances on various modalities of osteomyelitis.

SHORT ESSAY

3. Sickle cell anaemia
4. Radiological Features of hyperparathyroidism
5. Achondroplasia
6. Line-focus principle
7. Image Intensifier
8. Rotating Anode and its uses and disadvantages

M.D. - OCTOBER 2015, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. A 40-year-old female presents with PV bleeding. Discuss the role of various Imaging modalities in arriving at diagnosis.
2. Discuss the role of MRI in hepatobiliary disease

SHORT ESSAY

3. Transrectal ultrasonography of anorectal fistulas
4. PTC (Percutaneous Transhepatic Cholangiography)
5. Holoprosencephaly
6. Congenital dislocation of hip joint
7. Cystic hygroma
8. Pulmonary arterio - venous malformation

M.D. - OCTOBER 2015, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of CT and MRI in evaluating the ring enhancing lesions of the brain.
2. Classify spinal tumours. How will you localize an intra spinal mass on myelography. Discuss the differential diagnosis and imaging features of extradural spinal tumour.

SHORT ESSAY

3. Metachromatic leukodystrophy
4. Epidermoid
5. Fungal sinusitis
6. Tuberous sclerosis
7. Cholesteatoma
8. Medulloblastoma

M.D. - APRIL/ MAY 2015, PAPER – I, (REVISED SCHEME)

LONG ESSAY

1. Discuss the basics principle of Magnetic Resonance Imaging.
2. What are the causes of hip pain in early childhood? Discuss the Imaging findings In congenital dislocation of hip/ Development al dysplasia of hip.

SHORT ESSAY

3. Segmental anatomy of liver and Its importance
4. Computed Radiography versus Digital Radiography
5. PACS
6. CT scan detectors
7. Radionuclide scan in evaluation of a skeletal lesion
8. Degenerative disc disease

M.D. - MAY 2015, PAPER – II, (REVISED SCHEME)

LONG ESSAY

1. Classify adrenal lesions. Discuss various imaging modalities in diagnosing adrenal lesions including CT and MRI.
2. Describe the technical aspects of HRCT of the lung. Describe the CT imaging features of collagen vascular diseases in lung.

SHORT ESSAY

3. Write short note on MDCT proto col of evaluation of liver.
4. Ultrasound and Doppler sonography in portal hypertension
5. Barium findings in coeliac disease
6. Write short note on Ventilation-per fusion studies by Radionuclide scanning.
7. Different shadows in radiographs of ICU patients
8. CT severity index of acute pancreatitis

M.D. - MAY 2015, PAPER – III, (REVISED SCHEME)

LONG ESSAY

1. Discuss the appearances of malignant breast lesion with the help of different imaging modalities .
2. What are the causes of deep vein thrombosis? Discuss merits and demerits of various imaging modalities used in evaluation of DVT.

SHORT ESSAY

3. Bronchial artery embolization
4. Retroperitoneal fibrosis
5. Imaging in aortic dissection
6. Xanthogranulomatous pyelonephritis
7. Doppler findings in mid Superficial Femoral Artery (SFA) occlusion with reformation of distal SFA
8. Left atrial myxoma

M.D. - MAY 2015, PAPER – IV, (REVISED SCHEME)

LONG ESSAY

1. Classify and enumerate different supratentorial tumours in adults. Describe In detail the imaging features of Glial tumours.
2. Enumerate the causes of non-traumatic intra axial hemorrhage. Describe in detail their CT & MRI imaging features.

SHORT ESSAY

3. ADEM
4. Neurocysticercosis
5. Cholesteatoma
6. CNS sarcoidosis
7. Herpes simplex encephalitis
8. Sinonasal anatomic variants

M.D. - OCTOBER/NOVEMBER 2014, PAPER - I, (REVISED SCHEME)

LONG ESSAY

1. Classify bone tumors. Discuss the radiological diagnosis of primary malignant bone tumors.
2. Enumerate the factors affecting the radiographic quality. How will you improve the radiographic quality?

SHORT ESSAY

3. Image Intensifier
4. Imaging anatomy of the orbit
5. Tissue Harmonic Imaging
6. Aneurysmal bone cyst
7. Renal osteodystrophy
8. Piezo electric effect

M.D. - OCTOBER/NOVEMBER 2014, PAPER - II, (REVISED SCHEME)

LONG ESSAY

1. Mention the causes of pulmonary embolism and discuss the role of Imaging in pulmonary embolism
2. Spinal tumours and their diagnosis

SHORT ESSAY

3. Neurocysticercosis
4. Ultrasound In renal trauma
5. CT virtual colonography
6. Plain radiography in acute abdomen
7. Imaging in Dysphagia
8. Imaging in Injury to shoulder joint

M.D. - OCTOBER/NOVEMBER 2014, PAPER - III, (REVISED SCHEME)

LONG ESSAY

1. How will you investigate a case of painless hematuria. What is the role of the radiologist in the management
2. What is pulmonary hypertension? Describe the etiology and plain radiographic features of same.

SHORT ESSAY

3. Role of sonography in renal transplant
4. Renal vein thrombosis etiology and radiological features
5. Renal angioplasty
6. Fallot's tetralogy
7. Doppler evaluation of peripheral arteriovenous fistula
8. Angiography findings in Takayasu's arteritis

M.D. - OCTOBER/NOVEMBER 2014, PAPER - IV, (REVISED SCHEME)

LONG ESSAY

1. Classification of intracranial tumours, role of MRI & MRS in glioma, brain abscess & radiation Necrosis
2. Describe basal skull tumours, Imaging features of any two conditions

SHORT ESSAY

3. Basal ganglia calcification
4. Dentigerous cyst
5. Vitreous hemorrhage
6. Raised intracranial pressure
7. Lissencephaly
8. Cystic hygroma

D.M.R.D. - OCTOBER/NOVEMBER 2014, PAPER-I, (REVISED SCHEME)

LONG ESSAY

1. Classify bone tumours. Discuss the radiological approach in diagnosing bone tumours. Discuss in detail various types of osteosarcomas.
2. Describe in detail the structure and principle of Image Intensifier.

SHORT ESSAY

3. Line Focus Principle
4. Imaging manifestations of AIDS in the chest

5. Pulmonary sarcoidosis
6. Process of X-ray Generation
7. MRI artefacts
8. Hyperparathyroidism.

D.M.R.D. - OCTOBER/NOVEMBER 2014, PAPER-II, (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of imaging in hepatic tumours in adults.
2. Plain radiography in evaluation of acute abdomen

SHORT ESSAY

3. Write short note on diverticular disease of colon.
4. Briefly describe role of imaging in retroperitoneal fibrosis.
5. Write short notes on Ebstein's anomaly.
6. Write short note on total anomalous pulmonary venous drainage.
7. Imaging in cystic lesions of the liver
8. Write short note on Fistula-in-ano.

D.M.R.D. - OCTOBER/NOVEMBER 2014, PAPER-III, (REVISED SCHEME)

LONG ESSAY

1. Enumerate the complications of renal transplant surgery. Describe the imaging approach in diagnosing them.
2. Discuss the differential diagnosis of unilateral proptosis and briefly describe the radiological features.

SHORT ESSAY

3. Normal pressure hydrocephalus
4. Imaging features of venous infarct
5. Bare-orbit
6. Polycystic ovaries
7. Sonography findings in ovarian carcinoma
8. Renal angiomyolipoma

M.D. – MAY 2014, PAPER – I (REVISED SCHEME)

LONG ESSAY

1. What is maximum permissible dose? Describe the methods of radiation protection to the patient and staff in diagnostic radiology.
2. Discuss the radiological anatomy of bronchopulmonary segments.

SHORT ESSAY

3. Autotransformer
4. Chondrosarcoma
5. Basic principles of spin echo sequences.
6. MRI in intervertebral disc prolapse
7. Cystic adenomatoid malformations
8. Compton Effect

M.D. - MAY 2014, PAPER – II, (REVISED SCHEME)

LONG ESSAY

1. Classify mediastinal masses and discuss the imaging findings of anterior mediastinal masses.
2. Discuss the role of imaging in hepatic tumours in adults.

SHORT ESSAY

3. Imaging findings of inflammatory/ fatty masses in abdomen
4. Imaging of focal lesions of spleen
5. Imaging of Meckel's diverticulum
6. Role of Angiography in lower G.I tract bleeding
7. Imaging in intussusceptions
8. Imaging in cystic adenomatoid malformations

M.D. - MAY 2014, PAPER – III, (REVISED SCHEME)

LONG ESSAY

1. Discuss colour duplex ultrasound evaluation of atherosclerotic stenotic lesions of carotid arteries and briefly discuss endovascular treatment in carotid stenosis.
2. Discuss the imaging findings in adrenal adenoma and adrenal carcinoma.

SHORT ESSAY

3. Aortoarteritis
4. Ebstein's anomaly
5. Percutaneous nephrostomy
6. Medullary sponge kidney
7. Placenta previa

M.D. - MAY 2014, PAPER – IV, (REVISED SCHEME)

LONG ESSAY

1. Describe the imaging anatomy of craniovertebral junction. Discuss the role of imaging in craniovertebral junction pathologies.
2. Discuss the imaging anatomy of the Sinonasal region. Describe the role of imaging in planning endoscopic sinus surgery.

SHORT ESSAY

3. Multiple sclerosis
4. Venous Infarct
5. Juvenile angiofibroma
6. Gliomatosis Cerebri
7. Cholesteatoma
8. CNS Lymphoma

D.M.R.D – MAY 2014, PAPER – I (REVISED SCHEME)

LONG ESSAY

1. Describe the radiological and Imaging features of Osteosarcoma.
2. Describe the principles of H.R.C.T. of Chest. Describe the clinical applications and H.R.C.T. chest findings in Interstitial Lung diseases.

SHORT ESSAY

3. Intensifying screen.
4. X Ray Cassette.
5. Mesothelioma.
6. Multiple Myeloma.
7. Bronchogenic Cyst.
8. Fibrous Dysplasia.

D.M.R.D – MAY 2014, PAPER –II (REVISED SCHEME)

LONG ESSAY

1. Mention the segmental anatomy of liver. Discuss imaging In focal liver lesions.
2. Discuss imaging in pericardial diseases.

SHORT ESSAY

3. CT severity index.
4. Gerbode's defect.
5. Pseudoaneurysm.
6. Internal fistula.
7. Adrenal venography.
8. Oesophageal varices

D.M.R.D – MAY 2014, PAPER –III (REVISED SCHEME)

LONG ESSAY

1. Describe the MRI features of traumatic lesion of meniscus and ligaments of knee Joint. Enumerate Neuroectodermal dysplasias.
2. Describe Imaging findings in any two of them.

SHORT ESSAY

3. Doppler in Renal Artery Stenosis.
4. Nephrocalcinosis.
5. Testicular Torsion.
6. Placenta Previa.
7. Malignant Ovarian Tumours.
8. Meningioma.

D.M.R.D – MAY 2014, PAPER – I (OLD SCHEME)

LONG ESSAY

1. Describe in detail the various components of an X-ray tube with a diagram. What are X-rays? How are they produced? What are the properties and uses of X-rays?
2. Role of imaging in the diagnosis of various types of Bronchogenic Carcinoma

SHORT ESSAY

3. Axial view of the skull
4. Osteogenic sarcoma
5. Radiological anatomy of shoulder
6. Scattered radiation
7. Doppler ultrasound principle
8. Ankylosing spondylitis

D.M.R.D – MAY 2014, PAPER – II (OLD SCHEME)

LONG ESSAY

1. Evaluation of Obstructive Jaundice by various imaging methods
2. Imaging methods of Cyanotic Congenital Heart Diseases

SHORT ESSAY

3. Pheochromocytoma
4. Portal hypertension - Doppler imaging
5. Gas shadows in acute abdomen
6. Pericardial effusion - Imaging
7. Oesophageal diverticulae.
8. Colonic polyposis syndromes

D.M.R.D – MAY 2014, PAPER – III (OLD SCHEME)

LONG ESSAY

1. Describe the radiological anatomy of Pituitary Fossa and the imaging features of various pituitary lesions.
2. Classify the renal tumours. Discuss the various imaging methods in evaluation of renal cell carcinoma.

SHORT ESSAY

3. Acoustic neuroma
4. Ophthalmic ultrasound
5. BI-RADS
6. Torsion of testis
7. Placental imaging - ultrasound
8. Mullerian duct anomalies

M.D.- MAY 2013, (REVISED SCHEME) PAPER - I

LONG ESSAY

1. Discuss the imaging features of skeletal tuberculosis.
2. Discuss the physical principles involved in 2D Doppler, colour Doppler and Ultrasound contrast agents in vascular imaging

SHORT ESSAY

3. Radiological features of Hypothyroidism
4. Myositis ossificans
5. Salter Harris fractures
6. Slipped capital femoral epiphysis
7. Principles of PET
8. MRI artefacts

M.D. - MAY 2013, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Role of imaging in bronchogenic carcinoma
2. Discuss imaging in blunt abdominal trauma

SHORT ESSAY

3. Acromegaly
4. IUGR (intrauterine growth retardation)
5. Pheochromocytoma
6. Mitral stenosis
7. Deep vein thrombosis
8. Renal tuberculosis

M.D. - MAY 2013, PAPER - III, (REVISED SCHEME)

LONG ESSAY

1. Imaging of testicular and extra testicular tumors of scrotum with role of Doppler in testicular tumors
2. A person working in mining industry has developed cough and wheeze. Discuss the differential diagnosis and HRCT findings of the same.

SHORT ESSAY

3. Torsion Vs Epididymitis.
4. Interventional radiology in renal artery stenosis.
5. Interventional radiology of intracranial aneurysms.
6. Left atrial myxoma and its differential diagnosis.
7. Differential diagnosis of double bubble in fetus.
8. Imaging in TAO.

M.D. - MAY 2013, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. The role of MRI in intracranial gliomas
2. Discuss briefly about renal tumours and imaging findings

SHORT ESSAY

3. CT coronary angiography
4. Multiple sclerosis
5. Role of PET - CT in metastases
6. Retinoblastoma - role of imaging
7. HRCT of petrous bone
8. Ultrasound of anal sphincter

D.M.R.D. - MAY 2013, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Discuss Vitamin D metabolism and describe the radiological features of rickets and osteomalacia.
2. Describe in detail the different Magnets and Coils in MRI. Discuss the hazards related to the MRI hardware and safety procedure to be followed to prevent accidents.

SHORT ESSAY

3. X-ray beam filters.
4. Radiological features in Rheumatoid arthritis.
5. Solitary pulmonary nodule.
6. Discuss the radiological features of pulmonary tuberculosis,
7. Computed Radiography (CR) artifacts.
8. Principles of Colour Doppler Imaging.

D.M.R.D. - MAY 2013, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Describe embryology of gut rotation & fixation. Discuss the differential diagnosis of a neonate with bilious vomiting.
2. How as a Radiologist do you approach a suspected case of congenital heart disease? Discuss in detail various cyanotic congenital heart diseases.

SHORT ESSAY

3. Barium enema technique and findings in malignant colonic lesions.
4. Write short notes on pharmaco-radiology in the Gastrointestinal tract.
5. Ultrasound imaging features of acute pancreatitis.
6. Role of ultrasonography in evaluation of jaundice.
7. Imaging in a case of portal hypertension.
8. Imaging in splenic trauma.

D.M.R.D. - MAY 2013, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Describe Anatomy of Prostate. Describe role of Imaging of Prostatic lesions.
2. Describe normal mammographic anatomy, Describe Abnormal signs on mammography.

SHORT ESSAY

3. Wim's Tumour.
4. Neurocysticercosis.
5. Hydrops fetalis.
6. Astrocytoma.
7. Cerebral Infarcts.
8. Retinoblastoma.

M.D. - NOVEMBER 2012, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Describe in detail the different Magnets and Coils in MRI. Discuss the hazards related to the MRI hardware and safety procedure to be followed to prevent accidents.
2. Discuss the cross-sectional anatomy of neck spaces.

SHORT ESSAY

3. Spinal tuberculosis.
4. Causes and differential diagnosis of absorption of tips of terminal phalanges
5. Osteoid osteoma.
6. Diffuse sclerosing bone dysplasias.
7. Radiation Protection.
8. Principles of Multidetector CT scan (MDCT).

M.D. - NOVEMBER 2012, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of an interventional radiologist in hepatic and biliary disease.
2. Briefly mention the causes of respiratory distress in newborn. Discuss their imaging findings in detail.

SHORT ESSAY

3. Write short note on Mediastinal lines & stripes.
4. Briefly write about CT imaging features GIST.
5. Short note on MRCP
6. CT bronchoscopy and its utility
7. Bronchial artery embolisation
8. Short note on Primary sclerosing cholangitis

M.D. - NOVEMBER 2012, PAPER – III (REVISED SCHEME)

LONG ESSAY

1. Enumerate the common causes of pulmonary embolism. Discuss the role of plain X-ray, isotope scan, C.T. & angiogram in evaluating the pulmonary embolism.
2. Classify cystic diseases of the kidney. Describe the imaging features in polycystic kidney.

SHORT ESSAY

3. Pyeloureteritis cystica.
4. Ultrasound features of acute painful testis.
5. Imaging of intrauterine fetal death
6. Ultrasound and CT features of Ovarian dermoid
7. Sonography in renal transplant
8. Sonological soft markers in trisomy 21 fetus

M.D. - NOVEMBER 2012, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Discuss the imaging of sellar and parasellar masses.
2. Describe in detail imaging in Cranio -cerebral trauma.

SHORT ESSAY

3. Normal pressure hydrocephalus
4. Schizencephaly
5. Arnold Chiari malformation
6. Fungal sinusitis
7. Acoustic schwannoma
8. Retinoblastoma.

D.M.R.D. - NOVEMBER 2012, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. What are the different interactions of x rays with matter? Describe in detail two of them with their application in radiography
2. Describe sequence of changes seen in acute and chronic osteomyelitis as seen on plain radiograph. Discuss role of isotopes, ultrasound, CT and MRI in its diagnosis

SHORT ESSAY

3. Transducer
4. Diaphragmatic hernia
5. Enchondroma
6. Bronchogenic cyst
7. Chest radiographic signs of pulmonary edema
8. Radiographic changes in scurvy

D.M.R.D. - NOVEMBER 2012, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Discuss the technique of barium meal examination. Describe radiological and imaging features of benign and malignant gastric pathologies
2. Describe the imaging features of acute pancreatitis and its complication. What is the role of radiologist in treatment of these complications?

SHORT ESSAY

3. Imaging features of small bowel lymphoma
4. Discuss briefly role of ultrasound and Doppler in peripheral arterial disease evaluation
5. Image guided coeliac plexus block.
6. Imaging of Congenital hypertrophic pyloric stenosis.
7. Imaging findings in coarctation of aorta.
8. Imaging features of liver metastasis.

D.M.R.D. - NOVEMBER 2012, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Explain the role of Radiology and Radio isotopes in the diagnosis of renal hypertension
2. What is phakomatoses? Which are the different conditions in this group? Explain the imaging features in Neurofibromatosis type II

SHORT ESSAY

3. Sinonasal polyposis
4. Nephrocalcinosis
5. Nuchal translucency
6. Medulloblastoma
7. Renal ectopia
8. Endometriosis

D.M.R.D. - NOVEMBER 2012, PAPER - I (OLD SCHEME)

LONG ESSAY

1. What is maximum permissible dose? Describe the methods of radiation protection to the patients and to the staff in the diagnostic radiology department
2. Describe indications and contraindications of intravenous urogram. Discuss the contrast media used for the same

SHORT ESSAY

3. Hysterosalpingography
4. Prune belly syndrome
5. Intrauterine fetal death
6. Papillary necrosis
7. Neuroblastoma
8. Endometriosis

D.M.R.D. - NOVEMBER 2012, PAPER - II (OLD SCHEME)

LONG ESSAY

1. What are the causes of intestinal obstruction? Discuss the radiological and imaging differential diagnosis of intestinal obstruction.
2. What are the causes of pulmonary thrombo-embolism? How do you investigate a case of pulmonary thromboembolism?

SHORT ESSAY

3. Radionuclide thyroid scan
4. Portal venous hypertension
5. Anorectal anomalies
6. Leather bottle stomach
7. Solitary pulmonary nodule
8. Acute pancreatitis

D.M.R.D. - NOVEMBER 2012, PAPER - III (OLD SCHEME)

LONG ESSAY

1. Describe the Anatomy of the pituitary Gland & briefly discuss the differential diagnosis of pituitary masses.
2. Briefly discuss the differential diagnosis and imaging appearances of various soft tissue tumors.

SHORT ESSAY

3. Sclerotic lesions of bone
4. Acoustic neuroma
5. Skeletal metastases
6. Hydrocephalus
7. Hyperparathyroidism
8. Orbital masses

M.D. - MAY 2012, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Write the differential diagnosis and their imaging findings of a lytic lesion in the proximal end of Humerus in an immature skeleton.
2. Describe briefly the IITV system and its application in modern medicine.

SHORT ESSAY

3. Imaging anatomy of gastro esophageal junction.
4. MR anatomy of hippocampus.
5. Pathophysiology of COPD.
6. Classification of contrasts used in Radiology.
7. Radiation dose in pediatrics.
8. Radiography of PNS.

M.D. - MAY- 2012, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of imaging and interventional radiology in patients with hematuria.
2. Discuss the pathogenesis and imaging findings in Gastrointestinal tuberculosis.

SHORT ESSAY

3. Pulmonary manifestations in AIDS
4. MRCP
5. Sonosalpingography
6. Imaging in Proptosis
7. Standard Echocardiographic views
8. Anomaly scan in first trimester.

M.D. - MAY 2012, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. A 45 year old male comes hematemesis, Discuss the role of imaging and interventional procedures
2. Write in brief the classification of bone tumour & imaging in malignant bone tumours

SHORT ESSAY

3. Neurotuberculosis
4. Vesico-ureteric reflux
5. MRI of wrist
6. Imperforate anus
7. Bronchogenic cyst
8. Ultrasonography of thyroid

M.D. - MAY 2012, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. CVJN anomalies, role of CT and MRI in evaluation
2. Neck masses, role of CT & MRI in evaluation of cystic hygroma and thyroid carcinoma

SHORT ESSAY

3. Normal intracranial calcification
4. Retinal detachment
5. Soft tissue injury role of MRI
6. Congenital Anomalies of middle ear
7. Craniostenosis
8. Chordoma

D.M.R.D. - MAY 2012, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Discuss the imaging appearances in a case of spinal tuberculosis.
2. Describe the Modern X-ray tube with help of a diagram. How are X-rays produced from an X- ray tube

SHORT ESSAY

3. Lymphangitis carcinomatosa
4. Scimitar syndrome
5. Artifacts in Computed Radiography (CR)system
6. Gradient echo imaging
7. Ankylosing spondylitis
8. Renal rickets

D.M.R.D. - MAY 2012, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of Imaging in a case of blunt abdominal trauma.
2. Discuss the role of a radiologist in a 40 yr old male patient presenting to the Emergency Medicine Department with acute abdominal pain in the right hypochondrium & epigastrium.

SHORT ESSAY

3. Normal and abnormal extrinsic impressions on esophagogram.
4. Discuss briefly anomalies of aortic arch and its major branches.
5. Ultrasound in evaluation of bowel diseases
6. Classification and imaging in aortic dissection
7. Imaging in focal nodular hyperplasia of liver.
8. Radiography in cardiomegaly and individual chamber enlargement.

D.M.R.D. - MAY 2012, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Describe in detail the Imaging features of Wilms tumour and its staging
2. Imaging features of meningioma and hemangioblastoma

SHORT ESSAY

3. Prune belly syndrome
4. Dentigerous cyst
5. Corpus callosal agenesis
6. Spinal stenosis
7. Acute pyelonephritis
8. Endometriosis

M.D. - NOVEMBER 2011, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Describe in details the methods used for radiation protection in diagnostic modalities
2. Discuss the role of Doppler ultrasonography in the evaluation of lesions of the peripheral arterial system

SHORT ESSAY

3. Imaging of petrous bone
4. MR spectroscopy
5. Coarctation of aorta
6. Facet joint arthropathy
7. Photoelectric effect
8. Contrast media in ultra sound imaging.

M.D. - NOVEMBER 2011, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Classify pancreatic neoplasms. Discuss role of imaging
2. Enumerate mediastinal lesions, other than heart and their imaging findings

SHORT ESSAY

1. Cholecystitis
2. Hydatid cyst in lung
3. Reduction of intussusception in department of radiodiagnosis
4. Duplication cyst
5. Carcinoid
6. Ileo caecal tuberculosis.

M.D. - NOVEMBER 2011, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Classification of congenital heart diseases, imaging features of tetralogy of Fallot & Ebstein's anomaly
2. Role of colour Doppler, C T scan & M R I in carcinoma cervix

SHORT ESSAY

3. P D A
4. Intra vascular stents
5. M R I of prostate
6. 3D ultrasound
7. Testicular torsion
8. D M S A clinical application

M.D. - NOVEMBER 2011, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Classification of spinal cord tumours, imaging features of syringomyelia & ependymoma
2. Discuss triangles of neck, imaging features of carotid body tumour and lymph nodal mass

SHORT ESSAY

1. Tuberculoma
2. Foreign body eye
3. Parasitic calcification in soft tissue
4. Congenital anomalies of middle ear
5. Craniostenosis
6. Choroid plexus cyst.

D.M.R.D. - NOVEMBER 2011, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. What are the causes of acute respiratory distress in new born? Discuss plain radiography findings in them
2. What are the imaging findings in multiple myeloma? How can we distinguish myelomatosis from metastases.

SHORT ESSAY

3. Diffuse idiopathic skeletal hyperostosis
4. MR spectroscopy
5. Radiological features of pleural effusion
6. Ultrasound contrast agents
7. Allergic bronchopulmonary aspergillosis
8. Plain radiography findings in Hurlers syndrome

D.M.R.D. - NOVEMBER 2011, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. What are the causes of aortic aneurysm? Discuss the role of X-ray. CT, Ultrasound, MRI and angiography in evaluating aortic aneurysms
2. Radiological features of gastric and duodenal ulcer

SHORT ESSAY

3. Constrictive pericarditis
4. Ebstein's anomaly
5. Epiploic appendagitis
6. Role of isotopes in myocardial ischemia
7. Benign cystic lesions of liver
8. Annular pancreas

D.M.R.D. - NOVEMBER 2011, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Classify brain tumours. Describe C S F pathway and draw a diagram.
2. Enumerate different imaging technique for detection of breast tumours, write about mammography

SHORT ESSAY

3. Tuberculosis of urinary tract
4. Role of ultrasound in infant brain
5. Phakomatosis
6. IUD (Intra Uterine Foetal Death)
7. P N S water's view
8. Dental panoramic view

D.M.R.D. - NOVEMBER 2011, PAPER - I (OLD SCHEME)

LONG ESSAY

1. Enumerate the principles on which a CT scan machine works. What is Multidetector CT.
2. How do you evaluate a case of Male infertility? Explain in detail the various imaging modalities used

SHORT ESSAY

3. Placenta previa
4. Pelviureteric junction obstruction
5. Segmental anatomy of liver
6. Targeted imaging for fetal anomalies
7. Classification of renal mass
8. Digital Radiography

D.M.R.D. - NOVEMBER 2011, PAPER - II (OLD SCHEME)

LONG ESSAY

1. Radiological evaluation of obstructive jaundice
2. Describe Mediastinal Anatomy and the disease processes in each area

SHORT ESSAY

3. Radiological evaluation and treatment of Hemoptysis
4. Multiple endocrine Neoplasia syndromes. Brief comment on Radiological evaluation
5. Radiological evaluation of Mesenteric Ischemia
6. Choledochal cysts - types and Radiological appearances
7. Classification of Pancreatitis in relation to prognosis
8. CT Enteroclysis

D.M.R.D. - NOVEMBER 2011, PAPER - III (OLD SCHEME)

LONG ESSAY

1. Discuss the radiological features of pulmonary tuberculosis
2. Discuss the role of radiology in pancreatic tumors

SHORT ESSAY

3. Hiatus hernia
4. Sialography
5. Budd Chiari syndrome
6. Subphrenic abscess
7. Role of C T in splenic trauma
8. Left atrial myxoma

M.D. - MAY 2011, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Production of X Rays and its properties
2. Classification of bone tumours. Imaging features of chondrosarcoma and bony metastases

SHORT ESSAY

3. Gallium imaging
4. Cathode
5. TB joint
6. Color Doppler
7. Madelung deformity
8. Film artifacts

M.D. -MAY 2011, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Causes of GI bleed and various modalities in evaluation to confirm the diagnosis
2. Common causes of acute abdomen young female, imaging features of twisted ovarian mass and pelvic kidney

SHORT ESSAY

3. Silhouettes sign
4. Calcification on chest skiagram
5. Malrotation of bowel
6. Hypotonic duodenography
7. Venous sampling
8. HRCT of lung

M.D. - MAY 2011, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Describe the development anomalies of aorta & imaging features of Dissecting aneurysm of aorta
2. Calcification in KUB skiagram and various modalities of used in evaluation

SHORT ESSAY

3. Pentalogy of Fallot
4. Seldinger's technique
5. Renal vein thrombosis
6. Nuchal translucency
7. Testicular trauma
8. Tissue harmonic imaging

M.D. - MAY 2011, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Anatomy of base of Skull and discuss role of imaging in tumors involving base of skull
2. Anatomy of cavernous sinus and imaging in carotid-cavernous fistula

SHORT ESSAY

3. Heterotopias
4. Thyroglossal cyst
5. Lytic lesions in mandible and its differential diagnosis
6. Adenoma of pituitary
7. CNS lymphoma
8. Role of imaging in lesions in parapharyngeal space

D.M.R.D. - MAY 2011, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Describe the factors affecting the Radiographic Image quality with respect to conventional radiography.
2. Describe Anatomy of Broncho-pulmonary segments. Describe Radiological Features of Broncho pulmonary sequestration.

SHORT ESSAY

3. Radiography of Scaphoid.
4. Osteoclastoma.
5. Thalassemia.
6. Potts spine.
7. Adult Respiratory distress syndrome.
8. Biological Radiation Hazards.

D.M.R.D. - MAY 2011, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Describe the radiological and imaging features of gastric carcinoma
2. Describe role of imaging in obstructive jaundice. Describe the interventional procedures used in obstructive jaundice

SHORT ESSAY

3. Ulcerative colitis
4. Pneumoperitoneum
5. Acute appendicitis
6. Cushing's syndrome
7. Ventricular septal defect
8. Therapeutic embolisation

D.M.R.D. - MAY 2011, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. What are the causes of proptosis? How do you investigate a case of proptosis?
2. Discuss modern imaging in post fossa lesions of skull.

SHORT ESSAY

3. Stafne cyst.
4. Torus palatinus.
5. Bosniak's classification of renal diseases.
6. Placenta accreta.
7. Wilm's tumor.
8. Fossa of Rosenmuller.

M.D. - OCTOBER 2010, PAPER – I (REVISED SCHEME)

LONG ESSAY

1. Explain principle of CT, write in detail about generations of CT and note on latest advances in CT
2. Discuss the Radiological features of osteogenic sarcoma

SHORT ESSAY

3. Draw a neat diagram of X Ray tube
4. Draw a diagram of ultrasound transducer, mention the different types of probes
5. Skyline view
6. Osgood Schlatter's disease
7. Anatomy of knee joint
8. Scintigraphy of thyroid disorders

M.D. - OCTOBER 2010, PAPER – II (REVISED SCHEME)

LONG ESSAY

1. Mention the differential diagnosis of focal liver lesion with a note on imaging of hepatocellular carcinoma
2. Radiographic features of congenital Heart disease

SHORT ESSAY

3. Virtual colonoscopy
4. Atypical pleural effusions
5. Differential diagnosis of SPN (Salutary Pulmonary Nodule)
6. Posterior urethral valves
7. Bosniak's classifications of renal cysts
8. I U G R

M.D. – OCTOBER 2010, PAPER – III (REVISED SCHEME)

LONG ESSAY

1. Discuss the radiological features of neurofibromatosis.
2. Discuss the role of MRI in bone marrow diseases.

SHORT ESSAY

3. Juvenile Rheumatoid Arthritis
4. Ultrasound in shoulder pathology
5. CT Enteroclysis
6. Emphysematous pyelonephritis
7. Fungal infections in brain.
8. Imaging in torsion testis.

M.D. – OCTOBER 2010, PAPER – IV (REVISED SCHEME)

LONG ESSAY

1. Discuss various congenital lesions of brain and role of imaging in these conditions.
2. Discuss the role of radioisotopes in renal imaging

SHORT ESSAY

3. Doppler in renal hypertension
4. Sterilization techniques used to sterilise instruments / devices in the department of
5. MDCT in cardiac imaging
6. MR mammography
7. ILD and HRCT.
8. Gastro intestinal stromal tumour (GIST)

D.M.R.D. - OCTOBER 2010, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Describe development of Diaphragm and discuss imaging of various pathologies of Diaphragm.
2. What is ALARA principle? Discuss various biological hazards of radiation.

SHORT ESSAY

3. Piezo-electricity.
4. Skyline view.
5. Codman's tumor.
6. Geiger muller counter.
7. Pulmonary lobule.
8. Film Artefacts.

D.M.R.D. - OCTOBER 2010, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Describe anatomy of lower limb veins. Describe colour Doppler ultrasound findings in deep vein thrombosis
2. Describe imaging findings in dissecting aneurysm of aorta

SHORT ESSAY

3. CT findings in renal injury
4. Acute pancreatitis
5. Neuroblastoma
6. Mitral stenosis
7. Percutaneous transluminal angioplasty
8. Carcinoma colon

D.M.R.D. - OCTOBER 2010, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Describe the role of Radiology and Imaging in the diagnosis of a case of Renal Lump in Adult.
2. Enumerate the paediatric brain tumours. Describe radiological & Imaging Features of Craniopharyngioma.

SHORT ESSAY

3. Testicular Cancer.
4. Ectopic pregnancy.
5. Leiomyoma.
6. Mucocele.
7. Orbital Pseudotumor.
8. MRI in soft Tissue Tumors.

M.D. – MAY 2010, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Describe in detail the construction of an X-ray tube. What are the advances in X-ray tube technology?
2. Discuss the pathology and radiological features of rheumatoid arthritis

SHORT ESSAY

3. Automatic film processor
4. Characteristic curve of film
5. Towne's view
6. Congenital Dislocation of Hip
7. Fibrous dysplasia
8. Osteochondritis Desiccans.

M.D. – MAY 2010, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Discuss the aetiology, pathogenesis and imaging findings of acute pancreatitis
2. Discuss the role of imaging and interventional radiology in blunt injury to the chest

SHORT ESSAY

3. Virtual bronchoscopy
4. Empyema thoracis
5. Radiology in oesophageal varices
6. Pneumocystis carinii pneumonia
7. Ultrasonography in acute abdomen
8. Lymphangitis Carcinomatosa.

M.D. – MAY 2010, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. A 15 year old boy presented with acute pain in the Rt testis. What are the possible causes and discuss the role of imaging in the management of such a patient
2. Discuss the pathophysiology and radiological features of pulmonary edema

SHORT ESSAY

1. Interventional radiology in critical limb ischaemia
2. Imaging in DVT
3. Testicular tumours
4. Hydrops foetalis
5. Fetal MRI
6. Constrictive pericarditis

M.D. – MAY 2010, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of imaging and interventional radiology in acute stroke
2. Describe the anatomy of the sella and discuss the role of imaging in pituitary tumours

SHORT ESSAY

1. Carotid body tumour
2. Schizencephaly
3. Lymphangioma of neck
4. Osmotic demyelination syndrome
5. Adamantinoma of jaw
6. Glioblastoma multiforme

D.M.R.D. - MAY 2010, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. What is GRID? Discuss factors affecting radiographic film quality.
2. What is Growth plate? Discuss imaging of Growth plate disorders & Salter-Harris classification of fractures.

SHORT ESSAY

3. Tesla.
4. Abscess.
5. Optic strut.
6. T.L.D Badge.
7. Slip-ring technology.
8. Solitary pulmonary nodule.

D.M.R.D. - MAY 2010, PAPER -II (REVISED SCHEME)

LONG ESSAY

1. Discuss imaging in malrotation of the gut. Add brief note on development of gut.
2. Discuss imaging of adrenal masses.

SHORT ESSAY

3. Fallot's tetralogy.
4. Constrictive pericarditis.
5. Hydatidosis of abdomen.
6. Pneumoperitoneum.
7. Histiocytoma.
8. Focal splenic lesions.

D.M.R.D. - MAY 2010, PAPER -III (REVISED SCHEME)

LONG ESSAY

1. Discuss etiopathogenesis and imaging in Renal hypertension.
2. Discuss imaging of skull vault lesions.

SHORT ESSAY

3. Testicular microlithiasis.
4. Placental localization.
5. HSG.
6. Fungal sinusitis.
7. Myopic orbit.
8. Calcinosis cutis.

D.M.R.D. - MAY 2010, PAPER - I (OLD SCHEME)

LONG ESSAY

1. First Trimester obstetric ultrasonography
2. Tuberculosis of the Genitourinary system

SHORT ESSAY

3. Radiological anatomy of the Petrous Temporal bone
4. Ectopic pregnancy imaging
5. Medullary sponge kidney
6. Anatomy of external carotid artery
7. Gestational Trophoblastic disease imaging features
8. Radiology of Genitourinary calculi.

D.M.R.D. - MAY 2010, PAPER - II (OLD SCHEME)

LONG ESSAY

1. Imaging of the Salivary glands
2. Imaging of inflammatory bowel disease

SHORT ESSAY

3. Evaluation of Fatty Liver
4. Radiological features Cholangiocarcinoma
5. Radiological classification for Acute Pancreatitis
6. Radiological features of Mitral valvular disease
7. Differential diagnosis of lesions in apex of lung
8. Differential diagnosis of anterior mediastinal masses

D.M.R.D. - MAY 2010, PAPER - III (OLD SCHEME)

LONG ESSAY

1. Imaging of Spinal dysraphism
2. Imaging of internal derangements of the knee joint

SHORT ESSAY

3. Carpal tunnel syndrome - Imaging
4. Differential diagnosis of cystic lesions of neck based on imaging features
5. Paediatric posterior fossa brain neoplasms Imaging characteristics
6. Intervertebral disc pathology imaging features
7. Imaging of muscular injury
8. Neurogenic tumours imaging features

M.D. - OCTOBER 2009, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Discuss the construction and function of image intensifier. How has it helped improve image quality and prevent exposure to radiation to patients and radiographers?
2. Discuss the causes of generalized increase in bone density. How will you proceed to investigate a 65 years old male patient with generalized increase in bone density and arrive at a provisional diagnosis?

SHORT ESSAY

3. Stationary grid
4. TLD badge
5. Physics of Doppler
6. Gout
7. Osteogenesis imperfecta
8. Juvenile rheumatoid arthritis.

M.D. - OCTOBER 2009, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Radiographic evaluation of congenital heart disease
2. MDCT of coronary arteries

SHORT ESSAY

3. Technique and complications of femoral puncture
4. Venography versus Doppler in evaluation of lower limb venous system
5. Percutaneous biliary drainage with stenting
6. Radiological evaluation of renal tuberculosis
7. Sonological evaluation of scrotal lesions and varicocele
8. Evaluation of Ovarian masses.

M.D. - OCTOBER 2009, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. What are the causes of dysphagia? Discuss the radiological approach to an elderly patient presented with dysphagia
2. Classify the tumours of the lung. Discuss the radiological features of bronchogenic carcinoma

SHORT ESSAY

3. Choledochal cyst
4. Cystic neoplasms of pancreas
5. Haemangioma of liver
6. Congenital lobar emphysema
7. Pneumocystis carinii pneumonia
8. Rheumatoid lung

M.D. - OCTOBER 2009, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Pediatric brain tumours-radiological findings
2. Intracranial hemorrhage- radiological evaluation

SHORT ESSAY

3. Thyroid malignancies - radiological Evaluation
4. Retroorbital masses - radiological findings
5. Salivary gland masses-radiological findings
6. Sonography in breast masses

7. Meningiomas - radiological evaluation
8. Soft tissue sarcomas - radiological evaluation

M.D. - MAY 2009, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Radiological anatomy of neck nodes and spaces
2. Film processing

SHORT ESSAY

3. Chondrosarcomas - radiological features
4. Contrast media reactions and treatment
5. High frequency x-ray generators
6. Harmonic imaging and ultrasound contrast
7. Generations of CT scanners
8. Functional MRI

M.D. - MAY 2009, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Emphysema-radiological classification and diagnosis
2. Intestinal malignancies- radiological evaluation

SHORT ESSAY

3. Congenital pancreatic lesions- radiological diagnosis
4. Pheochromocytoma-radiological evaluation
5. Biliary strictures-radiological diagnosis and intervention
6. Splenic infarcts and abscesses-radiological evaluation
7. Classification of Liver trauma-radiological evaluation
8. Cholesterosis of the gallbladder (adenomyomatosis) -various types and radiological evaluation

M.D. - MAY 2009, PAPER - III, (REVISED SCHEME)

LONG ESSAY

1. Dissection of aorta-radiological evaluation
2. Congenital renal anomalies-radiological findings

SHORT ESSAY

3. MR Angiography
4. Renal artery stenosis evaluation and treatment
5. Venography versus Doppler in evaluation of upper limb venous systems
6. Mediastinal lymphadenopathy classification and radiological evaluation
7. Testicular torsion-radiological findings
8. Fallopian tube-radiological abnormalities

M.D. - MAY 2009, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Craniovertebral junction - radiological evaluation
2. Gliomas - radiological findings

SHORT ESSAY

3. Fungal infections in paranasal sinuses- radiological evaluation
4. Retinal detachment and choroidal lesions-radiological evaluation
5. Temporomandibular Joint Radiological Evaluation
6. Mammography in breast malignancies

7. Meningitis - role of radiology
8. MRI of tongue

D.M.R.D. - MAY 2009, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. What are radiation hazards? Describe briefly measures to protect the staff from radiations
2. Describe the radiological features of
 - a) Pulmonary infarction
 - b) Diffuse bilateral reticular nodular lung lesions

SHORT ESSAY

3. Bronchopulmonary segments
4. Acromegaly
5. Osteoclastoma
6. Discuss the role of CT-Scan in head trauma
7. Towne's view
8. Bone scintigraphy

D.M.R.D. - MAY 2009, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of imaging in acute abdomen
2. Describe routine conventional angiography technique & the complications associated with it.

SHORT ESSAY

3. Pheochromocytoma
4. Hepatoblastoma
5. Plain radiograph findings in mitral valvular disease
6. Interventional procedures for Inferior vena cava (IVC)
7. Imaging in portal hypertension
8. Enteroclysis (Small Bowel enema)

D.M.R.D. - MAY 2009, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Classify intracranial trauma. Describe the, C T and M R I findings in head injuries
2. Enumerate the causes if pelvic mass. Discuss the role of imaging in the diagnosis and the management of pelvic mass in female

SHORT ESSAY

3. Craniopharyngioma
4. MRI features of von Hippel Landau disease
5. Mammographic features in breast tumours
6. Sonographic appearances in first trimester pregnancy
7. Nephrocalcinosis
8. Nephroblastoma

M.D. - OCTOBER 2008, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. What are the various methods of radiation protection to the patient and operator?
2. Describe calcium metabolism. Discuss the radiological features of hyperparathyroidism

SHORT ESSAY

3. MR angiography
4. Scatter radiation
5. Adverse reaction to contrast media

6. Aneurysmal bone cyst
7. Rickets
8. Ankylosing spondylitis

M.D. - OCTOBER 2008, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Enumerate the causes of acute respiratory distress in newborn. Briefly describe their radiological findings
2. Enumerate the causes of portal hypertension. Discuss the role of imaging and interventional radiology in its management

SHORT ESSAY

3. Acute pancreatitis
4. Pheochromocytoma
5. Enteroclysis
6. Gastrointestinal manifestations of systemic sclerosis
7. Cholangiocarcinoma
8. Solitary pulmonary nodule

M.D. - OCTOBER 2008, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Discuss the radiological and imaging techniques in a fifty year male with haematuria
2. What is the role of imaging in 1st trimester of pregnancy? A patient at 10 weeks of amenorrhoea has reported with bleeding P/V. What are the possible causes and how will you evaluate the patient?

SHORT ESSAY

3. Interventional radiology in obstructive jaundice
4. Radiological features in mitral valve disease
5. Soft markers of chromosomal anomalies on ultrasonography
6. Lung manifestations in lymphoma
7. Coronary CT angiography
8. Acute epididymo-orchitis

M.D. - OCTOBER 2008, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. What are the causes of subarachnoid haemorrhage? Discuss the radiological approach in a suspected case of subarachnoid haemorrhage
2. Classify spinal tumours? Discuss differential diagnosis and radiological features of extradural spinal tumours

SHORT ESSAY

3. Cerebral edema
4. Pituitary adenoma
5. Laryngeal tumours
6. Epidermoid
7. Thyroid ophthalmopathy
8. Role of CT in CVA

M.D. - APRIL 2008, PAPER – I, (REVISED SCHEME)

LONG ESSAY

1. Enumerate the factors affecting the radiographic quality. How will you improve the radiographic quality?
2. Discuss the radiological factors of gout and pseudogout

SHORT ESSAY

3. Fluorosis
4. Down's syndrome
5. MR Spectroscopy
6. Cine cardiac CT
7. Power Doppler
8. Bronchial artery embolisation

M.D. - APRIL 2008, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Discuss the pulmonary complications of AIDS
2. Enumerate the causes of mass in the epigastrium. How will you proceed to radiologically evaluate a case of mass in the epigastrium?

SHORT ESSAY

3. CT Colonoscopy
4. Imaging in hepatocellular carcinoma
5. Imaging in haemangioma of liver
6. Miliary tuberculosis
7. H.R.C.T of lung
8. Congenital cystic adenomatoid malformation of lung

M.D. - APRIL 2008, PAPER - III (REVISED SCHEME)

1. Discuss the pathology and imaging features in testicular tumours
2. Discuss the pathology and imaging features of pulmonary thromboembolism

SHORT ESSAY

3. Interventional radiology in subarachnoid haemorrhage
4. Imaging in endometriosis
5. Imaging in endometrial carcinoma
6. Renal Doppler
7. Tetralogy of Fallot
8. Takayasu arteritis

M.D. - APRIL 2008, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. What are the applications and advantages of MR spectroscopy in the evaluation of various intracranial lesion?
2. What are the causes of unilateral proptosis? Discuss the role of imaging in the evaluation of unilateral proptosis

SHORT ESSAY

3. MR venogram
4. Dacrocystography
5. Lymphangioma of neck
6. Perfusion weighted MR imaging in CNS
7. Subdural haematoma
8. Congenital malformations of inner ear

D.M.R.D. - APRIL 2008, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Describe skeletal tuberculosis and imaging features
2. Elaborate the recent advances in ultrasound technology with an emphasis on the principles involved and their applications

SHORT ESSAY

3. Describe radiological features of congenital dislocation of hip joint
4. Discuss causes of haemoptysis and describe the appearance of bronchiectasis on HRCT
5. Describe the hazards of radiation in a human being
6. Discuss in brief masses in anterior mediastinum
7. Discuss various radiographic techniques for patella
8. Discuss sclerore bony dysplasia

D.M.R.D. - APRIL 2008, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Write an essay on pancreatitis. Mention in detail the imaging features of complications of pancreatitis
2. A 20 years female patient presented with a mass in the right iliac Fossa. Discuss the differential diagnosis.

SHORT ESSAY

3. Intussusception
4. Colour Doppler sonography in deep vein thrombosis (DVT)
5. Role of plain radiograph in congenital heart disease
6. Trans Jugular intrahepatic Porto systemic shunt (TIPS)
7. Interventional procedures in gastro intestinal bleed
8. Achalasia cardia.

D.M.R.D. - APRIL 2008, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. DISCUSS the value of ultrasound, C T end angiogram m the diagnosis of tumours and tumor like lesions of kidney in children
2. What are the causes of Sub Arachnoid Haemorrhage (SAH)? Discuss the radiological approach in a suspected SAH

SHORT ESSAY

3. Twin pregnancy
4. Soft tissue calcification
5. Cranial sonography
6. Endometriosis
7. Digital angiography of the brain
8. Transplant kidney evaluation

M.D. - SEPTEMBER 2007, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Describe the various types of skeletal Dysplasia with radiological and imaging features
2. Discuss about the radiation protection and personnel monitors used in the radiation safety

SHORT ESSAY

3. Aneurysmal bone cyst
4. MRCP
5. Cardiac CT angiogram

6. Hepatobiliary scintigraphy
7. Computerized Radiography
8. Perthes disease

M.D. - SEPTEMBER 2007, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Classify lung tumours and describe the various Radiological and imaging features of Carcinoma Lung
2. Discuss the causes of acute upper abdominal pain and role of various imaging modalities

SHORT ESSAY

3. Congenital Lobar Emphysema
4. Pseudo Pancreatic Cyst
5. Hepato cellular carcinoma
6. Neuroblastoma
7. Hypertrophic Pyloric Stenosis
8. Chronic inflammatory bowel disease

M.D. - SEPTEMBER 2007, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Classify congenital heart disease. Discuss the radiological features in conditions with left right shunt
2. Hemoptysis – etiology, radiological features and role of interventional in its management

SHORT ESSAY

3. Tracheo-oesophageal developmental anomalies
4. Role of Doppler in male infertility
5. Etiology and imaging evaluation of deep vein thrombosis
6. Transrectal ultrasound prostate
7. Benign tumors of kidney
8. Digital subtraction angiography.

M.D. - SEPTEMBER 2007, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Discuss in detail the various radiological & imaging features of lesions in the posterior cranial fossa
2. Discuss the role of modern radiological and imaging modalities in breast tumours

SHORT ESSAY

3. Soft tissue calcifications
4. Multinodular Goiter
5. Orbital phlebogram
6. Third Ventricular tumours
7. Basilar invagination
8. Spinal dysraphism

D.M.R.D. - SEPTEMBER 2007, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Describe the construction of digital fluoroscopy. What are the advantages of digital fluoroscopy over conventional fluoroscopy?
2. Classify the bone tumors. Describe in detail about tumors from cartilage.

SHORT ESSAY

3. Radiation biology
4. Radiological anatomy of craniovertebral junction
5. Bone scan

6. Transducer
7. Interstitial lung disease
8. Hounsfield units (HU)

D.M.R.D. - SEPTEMBER 2007, PAPER - II (REVISED SCHEME)

LONG essay

1. Discuss the value of modern imaging modalities in acute abdomen in children.
2. Describe the angiographic features of Aortoarteritis and discuss the role of intervention radiology in the management of Aortoarteritis.

SHORT ESSAY

3. Chron's disease
4. Hepatocellular carcinoma
5. Embolisation in renal cell carcinoma
6. Small bowel lymphoma
7. Hepato-biliary scintigraphy
8. Pheochromocytoma

D.M.R.D. - SEPTEMBER 2007, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Discuss the tumors of the kidney. Mention the merits of each radiological investigation.
2. Describe the normal anatomy of cerebellopontine (CP) angle. Mention the tumors in CP angle and the role of imaging.

SHORT ESSAY

3. Ultra sound of testicular tumors
4. Posterior urethral valve
5. Mandibular cyst
6. Role of ultrasound for detection of congenital anomalies in fetus
7. Polycystic ovaries
8. Soft tissue haemangioma

M.D.- APRIL / MAY 2007, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Discuss in detail the construction of a grid and explain how it improves the radiography quality.
2. Benign cartilaginous bone tumours.

SHORT ESSAY

3. Achondroplasia
4. Radiation protection in diagnostic radiology
5. Radio nuclides in transplanted kidneys
6. Scattered radiation
7. Digital subtraction angiography
8. Solitary dense vertebra

M.D. – 2006, APRIL / MAY 2007, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Discuss the anatomy of posterior mediastinum and describe radiological and imaging features of lesions involving the posterior mediastinum.
2. Discuss the role of radiology in the diagnosis and management of patient presenting with obstructive jaundice.

SHORT ESSAY

3. Radioisotope imaging of hepatobiliary disease
4. Gastro-esophageal junction with particular reference to hiatal hernia
5. MRCP
6. Role of radiology and imaging in intestinal ischemia
7. Coal worker's pneumoconiosis
8. Cushing's syndrome

M.D. - APRIL / MAY 2007, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Classify congenital anomalies of the Kidney and explain the radiological and imaging features of Ectopic kidney and Renal agenesis
2. Describe the anatomy of the Thoracic aorta and discuss the radiological and imaging features of Aortic lesions in the chest

SHORT ESSAY

3. IUGR
4. Ovarian masses
5. Renal trauma
6. Torsion of the testis
7. Hepatic artery embolization
8. Inferior vena cavogram

M.D. - APRIL / MAY 2007 / SEPTEMBER 2006, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Discuss anatomy of CP angle. Describe imaging features of various space-occupying lesions in this region.
2. Classify orbital tumors. Describe radiological features of tumours affecting the globe (eyeball).

SHORT ESSAY

3. Cystic lesions in infratentorial region
4. HIV manifestations in CNS
5. Evaluation of tinnitus
6. Glomus tumours
7. PNS masses
8. Soft tissue calcification

M.D. - APRIL / MAY 2007, PAPER - I (OLD SCHEME)

LONG ESSAY

1. What is an image intensifier? Explain with a diagram its construction and application in radiology.
2. Enumerate the complications of renal transplant surgery. Describe the imaging approach in diagnosing them.

SHORT ESSAY

3. Rare earth screens
4. Ectopic pregnancy
5. Functional MRI
6. Biophysical profile
7. Von-Hippel Lindau syndrome
8. As low as reasonably achievable (ALARA)

M.D. - APRIL / MAY 2007, PAPER - II (OLD SCHEME)

LONG ESSAY

1. What are the causes of dysphagia? Discuss the radiological and imaging approach to an elderly patient presenting with dysphagia.
2. Discuss differential diagnosis of an incidentally discovered thyroid nodular swelling. Describe different modes of investigations you will adopt to arrive at a provisional diagnosis.

SHORT ESSAY

3. Thoracic complications of general surgery
4. Rheumatoid lung disease
5. Pulmonary sequestration
6. Triple phase CT of Liver
7. Hiatus hernia
8. Pulmonary metastases

M.D. - APRIL / MAY 2007 - SEPTEMBER 2006 (OS), PAPER - III (OLD SCHEME)

LONG ESSAY

1. Describe the anatomy of sellar and parasellar area. Discuss the imaging features of craniopharyngioma along with its differential diagnosis
2. Classify bone tumors. Discuss the radiological diagnosis of primary malignant bone tumors.

SHORT ESSAY

3. Marfan's syndrome
4. HIV manifestations in CNS
5. Differential diagnosis of expansile lesions of mandible
6. Vascular calcification
7. Imaging of Cranio-vertebral junction anomalies
8. Interventions in musculoskeletal system

M.D. - APRIL / MAY 2007, PAPER - IV (OLD SCHEME)

LONG ESSAY

1. Investigation and management of a patient with intermittent claudication.
2. What are common causes of pulmonary embolism? Discuss the role of plain radiographs, isotope scan, CT angiogram and catheter angiogram.

SHORT ESSAY

3. Noninvasive coronary evaluation
4. Ultrasound contrast media
5. Principle of MDCT and its advantages.
6. Digital radiography
7. Permanent embolic agents
8. Dissecting aortic aneurysm

D.M.R.D.- APRIL / MAY 2007, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Radiological features of renal osteodystrophy
2. Radiological and imaging evaluation of bronchogenic carcinoma

SHORT ESSAY

3. Sarcoidosis
4. Virtual bronchoscopy
5. Congenital dislocation of hip

6. Skeletal scintigraphy
7. Radiological anatomy around the knee joint
8. Adverse effects of radiation

D.M.R.D.- APRIL / MAY 2007, PAPER - II (REVISED SCHEME)

1. Discuss the differential diagnosis of right iliac fossa mass.
2. Imaging evaluation of Obstructive Jaundice. Briefly discuss the role of Interventional Radiology.

SHORT ESSAY

3. Neuroblastoma
4. Enteroclysis
5. MRCP vs. ERCP
6. Contrast induced nephrotoxicity
7. Aortic aneurysm
8. Angiography in bleeding per vaginum

D.M.R.D.- APRIL / MAY 2007, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Evaluation of renal masses.
2. Antenatal ultrasound detection of abnormalities of skull and brain.

SHORT ESSAY

3. Captopril Scintigraphy in Renovascular hypertension
4. Acute Scrotum
5. Imaging of uterine myoma and role of interventional radiology in its management
6. Neurofibromatosis
7. Cystic lesions of the jaw
8. MR urography

M.D.- SEPTEMBER 2006, PAPER-I (REVISED SCHEME)

LONG ESSAY

1. Name the various interactions of x-ray photons with matter. Describe any two.
2. Skeletal and extraskeletal manifestations of rheumatoid arthritis.

SHORT ESSAY

3. Psoriatic arthritis
4. Marfan's syndrome
5. MRI of knee
6. 3D rendering technique
7. MR angiography - principles and techniques
8. Lung perfusion scan

M.D.- SEPTEMBER 2006, APRIL / MAY 2007, PAPER - II (REVISED SCHEME)

LONG ESSAY

1. Discuss the anatomy of posterior mediastinum and describe radiological and imaging features of lesions involving the posterior mediastinum.
2. Discuss the role of radiology in the diagnosis and management of patient presenting with obstructive jaundice.

SHORT ESSAY

3. Radioisotope imaging of hepatobiliary disease
4. Gastro-oesophageal junction with particular reference to hiatal hernia
5. MRCP

6. Role of radiology and imaging in intestinal ischemia
7. Coal worker's pneumoconiosis
8. Cushing's syndrome

M.D.- SEPTEMBER 2006, PAPER - III (REVISED SCHEME)

LONG ESSAY

1. Classify congenital heart disease. Discuss the radiological features in conditions with left right shunt
2. Hemoptysis - etiology, radiological features and role of interventional in its management

SHORT ESSAY

3. Tracheo-oesophageal developmental anomalies
4. Role of Doppler in male infertility
5. Etiology and imaging evaluation of deep vein thrombosis
6. Transrectal ultrasound prostate
7. Benign tumors of kidney
8. Digital subtraction angiography

M.D.- SEPTEMBER 2006 /APRIL / MAY 2007, PAPER - IV (REVISED SCHEME)

LONG ESSAY

1. Discuss anatomy of CP angle. Describe imaging features of various space-occupying lesions in this region.
2. Classify orbital tumors. Describe radiological features of tumors /including the globe (eyeball).

SHORT ESSAY

3. Cystic lesions in infratentorial region
4. HIV Manifestations in CNS
5. Evaluation of tinnitus
6. Glomus tumours
7. PNS masses
8. Soft tissue calcification

M.D.- SEPTEMBER / APRIL 2006, PAPER-I (OLD SCHEME)

LONG ESSAY

1. Classify ovarian tumors. Discuss the role of radiology and imaging in diagnosing malignant and benign ovarian tumors.
2. Describe ionization and scintillation. Describe the scintillation detector in detail and explain how it helps in imaging organs in modern imaging techniques.

SHORT ESSAY

3. Horse-shoe kidney
4. Role of ultra sound exam in 1st trimester bleeding
5. MR angiography – principles & techniques
6. Amniocentesis
7. Ectopic ureter
8. MDCT principles

M.D.- SEPTEMBER 2006, PAPER-II (OLD SCHEME)

LONG ESSAY

1. Describe briefly the pathology, role of imaging and radiological feature in gastro intestinal tract lymphomas.
2. Describe the anatomy of adrenal glands. Discuss the radiological and imaging techniques in the diagnosis of lesions of the adrenal glands.

SHORT ESSAY

3. Thymic tumors
4. Enteroclysis. Briefly describe radiological features of malignant tumors of small bowel
5. CT features of acute pancreatitis
6. CT angiography in pulmonary thromboembolism
7. Nuclear medicine in hepatobiliary system
8. GI manifestations in AIDS

M.D.- SEPTEMBER 2006 /APRIL/MAY 2007, PAPER-III (OLD SCHEME)

LONG ESSAY

1. Describe the anatomy of sellar and parasellar area. Discuss the imaging features of craniopharyngioma along with its differential diagnosis
2. Classify bone tumors. Discuss the radiological diagnosis of primary malignant bone tumors.

SHORT ESSAY

3. Marfan's syndrome
4. HIV manifestations in CNS
5. Differential diagnosis of expansile lesions of mandible
6. Vascular calcification
7. Imaging of Cranio-vertebral junction anomalies
8. Interventions in musculoskeletal system

M.D.- SEPTEMBER 2006, PAPER-IV (OLD SCHEME)

LONG ESSAY

1. Radiological and imaging evaluation of Aortic Aneurysm and Dissection.
2. Discuss evaluation of stenosis of internal carotid artery by various imaging modalities including their merits and demerits. Briefly discuss role of interventional radiology in its management.

SHORT ESSAY

3. MRI in congenital heart diseases
4. Radio-isotopes in cardiac imaging
5. Causes and radiological feature of left atrial enlargement
6. Diffusion and perfusion MRI
7. Pulmonary hypertension
8. PACS and teleradiology

M.D.- APRIL 2006, PAPER - I (REVISED SCHEME)

LONG ESSAY

1. Describe the various interactions of x-ray photons with matter. Describe any two.
2. Skeletal and extraskeletal manifestations of RA (rheumatoid arthritis)

SHORT ESSAY

3. Psoriatic arthritis
4. Marfan's syndrome
5. MRI of knee
6. 3D rendering techniques
7. MR angiography - principles & techniques
8. lung perfusion scan

M.D.- APRIL 2006, PAPER-II, (REVISED SCHEME)

LONG ESSAY

1. Discuss the pulmonary manifestations in immunocompromised patients.
2. Radiology and imaging of acute pancreatitis.

SHORT ESSAY

3. Briefly discuss the differentiating features of intra and extra lobar sequestration of lung
4. USG and color Doppler evaluation of cirrhosis of liver with portal hypertension
5. Biliary interventions
6. Splenic SOL
7. Etiology and radiological features of mechanism small bowel obstruction
8. Pheochromocytoma

M.D.- APRIL 2006, PAPER-III, (REVISED SCHEME)

LONG ESSAY

1. Enumerate causes of hematuria. Discuss the imaging approach to hematuria
2. What are the common causes of pulmonary thrombo-embolism? Discuss the role of plain radiography, isotope scan and CT angiogram in the evaluation of PTE

SHORT ESSAY

3. Transvaginal ultrasound
4. Role of ultrasound and CT in renal transplantation
5. Fallopian tube recanalisation
6. Undescended testis- radiological and imaging evaluation
7. CT and MR in gynaecological malignancies
8. Renal angiomyolipoma

M.D.- APRIL 2006, PAPER-IV, (REVISED SCHEME)

LONG ESSAY

1. Describe the anatomy of pituitary gland. Discuss the radiological and imaging features of lesions involving the pituitary gland.
2. Discuss the causes and imaging features in a case of acute paraplegia.

SHORT ESSAY

3. MR spectroscopy
4. Neurocysticercosis
5. Suprasellar lesions
6. Solitary collapsed vertebra
7. CT and MR features of intracranial hematoma
8. Mandibular lesions - imaging approach

M.D.- APRIL / SEPTEMBER 2006, PAPER-I (OLD SCHEME)

LONG ESSAY

1. Classify ovarian tumors. Discuss the role of radiology and imaging in diagnosing malignant and benign ovarian tumors.
2. Describe ionization and scintillation. Describe the scintillation detector in detail and explain how it helps in imaging organs in modern imaging techniques.

SHORT ESSAY

3. Horse-shoe kidney
4. Role of ultra sound exam in 1st trimester bleeding

5. MR angiography – principles & techniques
6. Amniocentesis
7. Ectopic ureter
8. MDCT principles

M.D.- APRIL 2006, PAPER-II (OLD SCHEME)

LONG ESSAY

1. Discuss about the pulmonary manifestations in immunocompromised patients.
2. Discuss the role of radiology and imaging in a case of blunt abdominal trauma.

SHORT ESSAY

3. Hemobilia
4. Double contrast study of colon
5. Radiology of appendicitis
6. Pulmonary manifestations of Aspergillosis
7. Imaging of hepatocellular carcinoma
8. Complications of pancreatitis and role of interventional radiology in their management

M.D.- APRIL 2006, PAPER-III (OLD SCHEME)

LONG ESSAY

1. Discuss differential diagnosis and imaging features of infratentorial tumours in children.
2. Discuss the differential diagnosis and radiological features of pulsating exophthalmos. Briefly discuss the role of interventional radiology in pulsating exophthalmos.

SHORT ESSAY

3. Neurocysticercosis
4. Expansile lytic lesions of bone
5. Cartilaginous tumors of bone
6. Extradural spinal lesions
7. Soft tissue calcification
8. Demyelinating diseases

M.D.- APRIL 2006, PAPER-IV (OLD SCHEME)

LONG ESSAY

1. What are the causes of deep vein thrombosis? Discuss merits and demerits of various imaging modalities used in evaluation of DVT.
2. Discuss the radiological evaluation and management of Aortoarteritis.

SHORT ESSAY

3. DSA vs. MRA in peripheral vascular diseases
4. Radioisotopes in cardiac imaging
5. Pathological anatomy of Tetralogy of Fallot and its radiological features
6. PET-CT in oncology
7. Gadolinium DTPA
8. 3D Angiography

M.D., SEPTEMBER-2005, PAPER-I (REVISED SCHEME)

LONG ESSAY

1. Describe the radiological anatomy of knee joint and discuss magnetic resonance, imaging in pathological conditions of knee joint.
2. Draw the basic structure of a transducer. Enumerate the merits and demerits of various transducers. Discuss the principle of color doppler flow imaging

SHORT ESSAY

3. Cine radiography.
4. Perthes disease.
5. Periosteal reactions in children
6. M. R. bone marrow imaging
7. Multiple myeloma
8. Uraemic osteodystrophy

M.D. - SEPTEMBER-2005, PAPER-II, (REVISED SCHEME)

LONG ESSAY

1. Discuss the role of plain x-ray and imaging in a adult male with acute abdomen.
2. Discuss the value of M.R. cholangiography in children and young adults with biliary diseases.

SHORT ESSAY

3. SARS (severe acute respiratory syndrome)
4. Wandering spleen
5. Broncho-alveolar carcinoma
6. Virtual colonoscope
7. Ventilation perfusion radionuclide lung scan.
8. Double contrast study of upper G.I. tract.

M.D. - SEPTEMBER-2005, PAPER-III, (REVISED SCHEME)

LONG ESSAY

1. How will you evaluate a patient suspected for reno vascular hypertension and discuss the role of interventional radiology in the management.
2. Describe about the various embolization materials used in the interventional procedures, their indications and contraindications.

SHORT ESSAY

3. Contrast peripheral venography versus colour Doppler sonography.
4. Radionuclide imaging in prostatic cancer.
5. Antenatal ultrasound diagnosis of potter's syndrome.
6. Myocardial perfusion scanning.
7. Vascular rings
8. Lymphangiography in testicular tumours.

M.D. - SEPTEMBER-2005, PAPER-IV, (REVISED SCHEME)

LONG ESSAY

1. Describe the role of imaging of posterior cranial fossa lesions in children.
2. Describe in detail about the radiological and imaging characteristics of neurocutaneous syndromes

SHORT ESSAY

3. Spinal angiography
4. Scinti-mammography
5. Syringomyelia
6. Acoustic neuroma
7. Orbital meningioma
8. Radiological and C.T. manifestations of gorler's syndrome.

M.D. - SEPTEMBER 2005, PAPER - I (OLD SCHEME)

LONG ESSAY

1. Describe the anatomy of the CSF pathways with the help of diagram discuss the production and circulation of the CSF.
2. Describe the construction of a full-wave rectified rotating anode x-ray tube with the help of diagrams separately for the x-ray tube and the rectifier circuit.

SHORT ESSAY

3. Discuss the radiological and imaging features of crossed renal ectopia
4. Describe the radiological investigations in the diagnosis of posterior urethral valves.
5. Discuss the imaging features of tuberculosis of urinary tract.
6. Discuss the Imaging features of 'renal-cell-carcinoma'
7. Describe the sonographic criteria for the staging of the placental maturity.
8. Discuss the sonographic features of 'ectopic pregnancy'

M.D. - SEPTEMBER 2005, PAPER - II (OLD SCHEME)

LONG ESSAY

1. Describe the anatomy of the gastro-oesophageal junction and imaging of hiatus hernia.
2. Describe the anatomy of the Diaphragm. Discuss the role of radiology and imaging in diagnosis of various Diaphragmatic lesions.

SHORT ESSAY

3. Write short note on MR-cholangiography.
4. Briefly describe the imaging of adrenals.
5. Write note on radiodiagnosis of hyperparathyroidism.
6. Describe role of imaging and diagnosis of pulmonary emboli.
7. Provide protocol for imaging and mention their features of hepato-biliary and pancreatic emergencies.
8. Briefly describe pulmonary plethora and its distinctive features.

D.M.R.D - SEPTEMBER-2005, PAPER-I, (REVISED SCHEME)

LONG ESSAY

1. What are scattered radiations? Describe the measures to prevent
2. What are the various compartments of mediastinum? Describe radiological features of common lesions occupying in different compartments, briefly,

SHORT ESSAY

3. Perthe's disease.
4. Doppler effect.
5. Role of ultrasound in infant hip,
6. Water soluble contrast media.
7. Pulmonary sarcoidosis.
8. Intensifying screens.

D.M.R.D - SEPTEMBER-2005, PAPER-II, (REVISED SCHEME)

LONG ESSAY

1. How would you proceed radiologically to evaluate a patient presenting with jaundice with the various modalities available?
2. Describe the technique of femoral angiography? What are the complications one foresees before, during and after the angiography?

SHORT ESSAY

3. Atresia of oesophagus.
4. Aneurysms of thoracic aorta

5. Lymphangiography.
6. Mitral stenosis.
7. Cushing's syndrome.
8. Sonographic appearance of cystic lesions in liver,

D.M.R.D - SEPTEMBER-2005, PAPER-III, (REVISED SCHEME)

LONG ESSAY

1. How will you Investigate a case of renal hypertension?
2. Describe the imaging techniques available for investigation of a case of subarachnoid haemorrhage.

SHORT ESSAY

3. Unilateral proptosis.
4. Role of ultrasound in torsion of testis.
5. Craniostenosis
6. Investigate a pregnant lady in second trimester to evaluate foetal well-being.
7. Renal papillary necrosis.
8. Role of doppler in ovarian masses.

M.D. - APRIL 2005, PAPER - I (OLD SCHEME)

LONG ESSAY

1. Discuss the role of colour doppler in pregnancy.
2. Describe the advantages and clinical applications of dynamic CT.

SHORT ESSAY

3. How will you investigate a case of painless haematuria.
4. Write note on imaging of prostate.
5. Sonographic evaluation of IUGR.
6. Briefly describe the image intensifier.
7. Ultrasonographic evaluation of a case of perimenopausal bleeding.
8. Briefly describe the ultrasound artefacts.

M.D. - APRIL 2005, PAPER - II (OLD SCHEME)

LONG ESSAY

1. Discuss the radiological differential diagnosis of respiratory distress in adults.
2. Discuss the role of radiology and imaging in the diagnosis of Portal hypertension.

SHORT ESSAY

3. Discuss the role of radiology and imaging in the diagnosis of chronic pancreatitis.
4. Discuss the role of scintigraphy in the diagnosis of focal liver lesions.
5. Discuss the role of imaging in the diagnosis of Pheochromocytoma.
6. Discuss the radiological features of various types of diaphragmatic hernia.
7. Discuss the radiological features of Pituitary dwarfism.
8. Discuss the role of radiology and imaging in Superior mediastinal syndrome.

M.D. - APRIL 2005, PAPER - IV (OLD SCHEME)

LONG ESSAY

1. Discuss about the discovery of X-rays and evolution in diagnostic modalities till today.
2. Discuss interventional procedures of occlusive vascular diseases.

SHORT ESSAY

3. Write note on interventional CT guided procedures.
4. Write note on CT artifacts.

5. Briefly describe neurosonography.
6. Write note on isosymmetric techniques.
7. Discuss imaging of the gastro-intestinal tract in the immunocompromised host.
8. Write a note on chronic villus sampling.

D.M.R.D - 2004, PAPER-I, (REVISED SCHEME)

LONG ESSAY

1. Describe the production of X-Rays. Mention the properties of X-Rays.
2. Write an essay on the radiological features of bronchogenic carcinoma. Add a note on the extra pulmonary manifestations of Bronchogenic carcinoma.

SHORT ESSAY

3. Multiple myeloma.
4. Radiological anatomy of shoulder.
5. Acute respiratory distress syndrome (ARDS).
6. T1 T2 relaxation times.
7. Multislice computed tomography.
8. Radiation protection methods for pregnant lady in the department.

D.M.R.D - 2004, PAPER-II, (REVISED SCHEME)

LONG ESSAY

1. Discuss techniques of abdominal aortography. What are the features of abdominal aortic aneurysm?
2. Describe imaging techniques used for the diagnosis of liver masses.

SHORT ESSAY

3. Describe appearances of gastric ulcer on barium meal.
4. Discuss role of ultrasonography in blunt abdominal injury.
5. Describe features of ulcerative colitis on barium enema study.
6. Discuss radiological features of mitral stenosis.
7. Discuss radiological features of congenital causes of obstruction in Gastro intestinal tract.
8. Discuss small bowel enema.

D.M.R.D - 2004, PAPER-III, (REVISED SCHEME)

LONG ESSAY

1. Discuss the value of scrotal ultrasound.
2. Discuss the various causes of calcification on a plain X-ray skull.

SHORT ESSAY

3. Hypernephroma.
4. Cystic diseases of kidney.
5. Nephro calcinosis.
6. ESCWL.
7. Percutaneous nephrostomy.
8. Pheochromocytoma.

M.D. – 2003, PAPER - I (OLD SCHEME)

LONG ESSAY

1. Write in detail the physiology of Micturition. Discuss the role of Imaging in Neurogenic Bladder.
2. Write in detail the basic principles of the presently used conventional computed tomography unit. What are the recent advances.

SHORT ESSAY

3. Posterior urethral valves

4. Automatic Film Processor
5. Ectopic Pregnancy at sonography.
6. Sonography in Ovarian Tumors.
7. Role of Imaging in Chronic Renal Failure.
8. Inversion Recovery Sequence.

M.D. – 2003, PAPER - II (OLD SCHEME)

LONG ESSAY

1. Describe briefly the anatomy of "Mediastinum". Classify mediastinal masses. Describe the imaging techniques and differential diagnosis of mediastinal masses.
2. Discuss the differential diagnosis of "Mass" in Right Iliac Fossa". How will you investigate such a case to arrive at correct diagnosis?

SHORT ESSAY

3. Budd-Chiari Syndrome
4. Upper Gastro-Intestinal Bleeding
5. Adrenal Tumours
6. Pulmonary Disease in "AIDS".
7. Liver Trauma
8. Carcinoma head of Pancreas

M.D. – 2003, PAPER - III (OLD SCHEME)

LONG ESSAY

1. Discuss the causes of calcification on a plain X ray skull. Write about localisation of penial gland.
2. Discuss the causes of short stature and write the radiological findings.

SHORT ESSAY

3. Tuberculosis of spine
4. Osteosarcoma
5. Macro adenomas of Pituitary
6. Hyperparathyroidism
7. Disc herniations
8. C.P. angle tumours.