Q.P.CODE:124-NR

Dr. NTR University of Health Sciences::Vijayawada-520 008
M.D. DEGREE EXAMINATION – DECEMBER, 2017
RADIO DIAGNOSIS
Paper-I – Basic Sciences

Time : 3 Hours Max. Marks : 100

Note : Answer all questions
All questions carry equal marks

WRITE SHORT ESSAYS ON THE FOLLOWING

1. Ultrasound in breast diseases
2. Image production in MRI
3. CT generations - brief account
4. Describe the Angiographic Anatomy of Coronary arteries
5. Role of imaging in intestinal obstruction
6. Role of imaging in cerebrovascular disease
7. Computerized Radiography Versus Digital Radiography
8. Radiodiagnosis of Cardiac tumors
9. Principles and techniques of fusion imaging
10. Describe the factors that affect the X-Ray image quality

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124 –IA-Dr. NTR University of Health Sciences::AP::Vijayawada – 520 008
M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2017-RADIO DIAGNOSIS
Paper-I – Basic Sciences-Time: 3 Hrs-Max.Mrks : 100-Answer all questions-All questions carry equal marks

Write short essays on the following:
1..Write briefly about the Protective Barriers used to Control the Radiation Exposure Levels.
2..Write about GRID ratio, Intensifying screen
3..Cross sectional Anatomy of Parapharyngeal spaces
4..Write about Inversion recovery Pulse sequence and its clinical applications
5..Contrast media in Ultrasound
6..Explain the Procedures of MCUG and its clinical applications.
7..Magnetization Transfer in MR Imaging
8..Write briefly about causes of Renal artery stenosis and role of CT Angiography in its evaluation
9..Role of Ultrasound in Placental Anomalies.
10.Digital Subtraction Angiography (DSA).

Q.P.CODE:124-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA
M.D. DEGREE EXAMINATION – MAY, 2017-RADIO DIAGNOSIS-Paper-I – Basic Sciences
Time : 3 Hours-Max. Marks : 100-Answer all questions-All questions carry equal marks-Draw neat diagrams wherever necessary

Write short essays on the following:
1..Production of X-rays
2..Radiographic findings in mitral stenosis
3..Development of normal thyroid gland and imaging of congenital lesions of thyroid
4..Classification and imaging of Mullerian anomalies
5..Radiographic Quality and Image Quality Indicators
6..Sono elastography in liver disease
7..Imaging in opaque hemithorax
8..Oral contrast media for MRI
9..Neonatal intracranial hemorrhage
10.Draw a well labelled diagram of the Cranio-vertebral junction depicting the described normal lines and angles.

124-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA
M.D. DEGREE EXAMINATION – NOVEMBER, 2016-RADIO DIAGNOSIS-PAPER-I
Basic Sciences-Time : 3 Hours-Max. Marks : 100-Answer all questions-All questions carry equal marks
Draw neat diagrams wherever necessary

Write short essays on the following:
1..Anorectal anomalies
2. Development of aorta and its anomalies

3. Osteoporosis – Pathophysiology, causes and imaging features
4. Role of imaging in systemic hypertension
5. Principles and techniques of fusion imaging
6. Multiple sclerosis
7. Compare computerized radiography versus digital Radiography. Briefly mention their advantages and disadvantages.
8. MR angiography
9. Intravascular contrast media
10. Devices used to reduce scattered radiation.

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M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JULY, 2016-RADIO DIAGNOSIS

Paper-I – Basic Sciences-Tim: 3 Hrs-Max. Mrks : 100-Answer all questions-All questions carry equal marks

Write short essays on the following:

1..Describe physics of 3D and 4D ultrasound and its usefulness in clinical imaging.
2. Discuss cross sectional anatomy and imaging of retroperitoneal spaces and retroperitoneal diseases.
3. Describe about C.T. coronary angiography and discuss calcium scoring.
4. Write short notes on: a) Epiphysis b) TLD c) Digitizer d) Sonocontrast hysterography
5. Elastography principle and application.
6. Discuss embryology and ultrasound imaging in Gastroschisis and omphalocele.
7. Describe liver segments and discuss LIRADS.
8. M.R.I. of cerebral venography.
9. Write salters classification with examples.
10. Write short notes on:

a) Renal scintigraphy b) Magnification radiography c) Inkabone d) Rectilinear scanner

124-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – MAY, 2016-RADIO DIAGNOSIS-Paper-I – Basic Sciences

Time : 3 Hours-Max. Marks : 100-Answer all questions-All questions carry equal marks-Draw neat diagrams wherever necessary

Write short essays on the following:

1..Discuss principles of formation and retrieval image in the computed radiography system. How is computed radiography (CR) different from digital radiography (DR)
2..Describe the radiological anatomy of the retroperitoneum
3..Write short notes on: a) High frequency X-ray generators b) Dual source computed tomography
4..Enumerate various artifacts in conventional radiography and suggest measures to reduce them
5. Pathophysiology and the temporal evaluation of intracerebral bleed and its influence on imaging.
6. Describe the cross sectional anatomy of mediastinum with the help of labeled diagrams.
7. Classify contrast media reactions to water soluble iodinated contrast. Make a flow chart indicating management algorithm for case of contrast medium induced anaphylaxis.
8. Write short notes on: a) Colour Doppler artifacts b) Liver specific MRI contrast agents
9. Discuss the mechanism of X-ray production and interaction of X-rays with matter.
10. Discuss biological effects of radiation. Enumerate the measures for radiation protection in a diagnostic radiology department.

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M.D. DEGREE EXAMINATION – OCTOBER, 2015-RADIO DIAGNOSIS-PAPER-I

Basic Sciences-Time : 3 Hours-Max. Marks : 100-Answer all questions-All questions carry equal marks

Write Short Essays On The Following

1..Describe the physical principles of Ultrasonography and Colour Doppler.
2..Describe the imaging anatomy of shoulder joint.
3..Write short notes on:
a) Pitch in MDCT b) Tube shielding c) Characteristic radiation d) ALARA principle
e) Radiographic filters
4..What is rectification? Explain different types of rectification with the help of diagrams.
5..Explain the principles of latent image formation with the help of a diagram.
6..Describe layout of an ideal dark room.
7..Draw a labelled diagram. Explain the principle and construction of high tension transformer.
8..Write short notes on:
a) Low dose MDCT b) Elastography c) 10 (Ten) day rule d) Relationship between KVP and mAS
e) Non ionic dimmers
9..Draw a neat diagram of rotating anode X-ray tube and describe its various components.
10..Discuss the principles and uses of MR spectroscopy.

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MD. DEG.INTERNAL ASSESSMENT EXAMINATION-JUNE, 2015-RADIO DIAGNOSIS-PAPER-I

1..Explain in detail the Radiation protection followed in Radiography, ITV Fluoroscopy and CT scan rooms
2..What is Magnetization Transfer in MR imaging
3..Discuss Anatomy of neck spaces and role of imaging in neck space lesions.
4..Discuss quality assurance in Radiology
5..Features of an ideal Contrast Medium & the classification of contrast media used in Radiology department
6..Discuss anatomy of liver segments with the help of neat labeled diagrams
7..Describe technique of MR spectroscopy. Discuss its applications in various CNS pathologies.
8..What are the factors that affect the X-Ray image quality
9..Describe the venous Anatomy of lower limbs.
10. Describe the Angiographic Anatomy of Coronary arteries

124-NR-M.D. DEGREE EXAMINATION – APRIL, 2015-RADIO DIAGNOSIS-PAPER-I

1..Describe different Magnets and Coils in MRI. 2..Discuss the Cross sectional anatomy of Neck spaces.
3..DSA (Digital Subtraction Angiography).
4..Write short notes on: a) Diffuse Idiopathic Skeletal Hyperostosis (DISH)
b) Biological effects of radiation c) Radiological anatomy of Adrenals d) Digital tomosynthesis
5..BIRADS classification.
6..Uterine artery embolization.
7..Describe the radiological anatomy of esophagus. Discuss the investigations of esophagus.

8..Identification of Broncho Pulmonary Segments of Frontal and Lateral Chest Radiographs.
9..Classification of Skeletal dysplasia.
10.Write short notes on:
a) Isotopes in myocardial ischaemia b) Radiation protection c) Osteoid osteoma d) Fibrous dysplasia

124-NR-M.D. DEGREE EXAMINATION – OCTOBER, 2014-RADIO DIAGNOSIS-PAPER-I

1..Describe about the radiation protection and personnel monitors used in the radiation safety.
2..Describe the various types of skeletal Dysplasia with radiological and imaging features.
3..Cardiac CT angiogram.
4..Write short notes on: a) MRA b) Artifacts in radiography c) Towne's view d) HIDA scan
e) Role of ultrasound in rotator cuff tear
5..Perthes disease. 6..MRCP. 7..Imaging of spinal cord tumors.
8..Write about intravascular contrast media. 9..Principles of MDCT.
10.Write short notes on: a) GOUT b) Classify bone tumors
c) Pneumatic reduction of intussusception d) Acroosteolysis

124 –IA-M.D. DEG. Internal Assessment Examination – JUNE, 2014-RADIO DIAGNOSIS-PAPER-I

1..Describe the various interactions of X-ray photons with matter and their applications in Diagnostic Radiology.
2..Identification of Broncho Pulmonary segments of Frontal and Lateral chest radiographs.
3..Discuss principles and techniques of fusion imaging.
4..A 45 year old male patient presented with acute epigastric pain. Enumerate causes and discuss in detail imaging features of acute pancreatitis.
5..Describe the anatomy of paranasal sinuses.
6..What are methods of radiation prevention in nuclear medicine department?
7..Patho Physiology and the temporal evaluation of intra cerebral bleed and its influence on imaging.
8..Compare Computerized Radiography versus Digital Radiography. Briefly mention their advantages and disadvantages.
9.Newer advances in Ultrasonography and their basic Physical Principles.
10.Describe the Image Intensifier Fluoroscopy system and its applications in a Modern Radiology Department.

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124-NR-M.D. DEGREE EXAMINATION – APRIL, 2014-RADIO DIAGNOSIS-PAPER-I

1..Discuss the principle of acoustics applicable to ultrasound imaging. Describe in brief the construction of transducers used in real time ultrasound. Discuss in brief the various ultrasonography controls.
2..Discuss the CT anatomy of the temporal bone.
3..Write short notes on:
a) ALARA b) Compton effect c) Superior orbital fissure d) MR myelography e) HALF value layer
4..Enumerate factors affecting radiographic image quality. How will you improve radiographic image \ quality?
5..What are the properties of X-rays? Discuss the biological effects of radiation.
6..Classify intravenous contrast media. What are the advantages of newer generation of contrast media? Discuss their adverse reactions.
7. Discuss the cross sectional anatomy of neck spaces.
8..Write short notes on:
a) Focal spot of X-ray tube b) Co2 Angiography c) Anode Heel effect
d) High KV technique in chest X-ray e) Time Gain Compensation (TGC) and dynamic range in ultrasound
9..Discuss the imaging anatomy of the knee joint.
10.What is maximum permissible dose? Describe the methods of radiation protection to the patient and staff in diagnostic radiology.

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124-NR-M.D. DEGREE EXAMINATION – OCTOBER, 2013-RADIO DIAGNOSIS-PAPER-I

1..Describe the anatomy of Gastro-oesophageal junction and imaging of hiatus hernia.
2..What is characteristic curve? Explain its importance in radiography image formation.
3..What health effects do ionizing radiations cause? Describe the principles and methods of radiation protection.
4..Classify and elaborate the different types of contrast used in Magnetic Resonance Imaging. (MRI)
5..What are the indications of lower limb angiography and how would you perform the procedure?
6..Discuss the differential diagnosis and radiological features of Seronegative Spondyloarthropathies.
7..Describe the anatomic location and drainage of thoracic lymph nodes and describe in brief the patterns of lymph node involvement in various pulmonary and extra-pulmonary diseases.
8. List the different types of X ray tubes used in radiography machine and explain their operations with neat diagram.
9. Explain the indications and procedure of Micturating Cystourethrogram.
10.Discuss the patho-physiology of various kinds of pulmonary collapse and their imaging evaluation

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M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013-RADIO DIAGNOSIS-PAPER-I

1..Describe the basic principles and clinical applications of MDCT. How does it defer from conventional 1st generation CT?
2. Enumerate the various hazards of radiation and detail various methods for radiation protection with mention of recommended permissible dose limits
3. Discuss the radiological features of Osteoarthritis
4. Describe basic principles of CT scan and discuss various generations of CT scans
5. Discuss deductive echocardiography and various echocardiographic views
6. Discuss the various adverse reactions to contrast media and their management
7. Describe the recent developments in X ray film processing
8. What are the different methods of reduction of radiation exposure
9. Draw and label the radiological anatomy of mediastinum. Discuss in detail radiological examination of posterior mediastinum lesions.
10. Write short notes on: a) Maximum permissible dose b) Bronchopulmonary segments
c) MRI Artifacts d) PACS in radiology e) Flat panel detector

124-NR-M.D. DEGREE EXAMINATION – APRIL, 2013-RADIO DIAGNOSIS-PAPER-I

1..Discuss the principles, construction and functionalities of individual components of an image intensifier.

Briefly describe the fluoroscopic imaging unit assembly.
2. Discuss the principles and applications of Multislice volumetric spiral CT.
3. Discuss the imaging anatomy of the shoulder joint
4. Write short note on: a) High KV techniques in chest X-ray b) Fetal circulation c) Peizo electric effect
d) Iohexol e) Thermionic emission
5. Describe in detail the structure and principle of intensifying screen. Discuss the newer phosphor technology.
6. Discuss in detail digital subtraction angiography.
7. Write short note on: a) Craniovertebral junction b) Carpal tunnel view c) Rectification
d) Air gap technique e) Sialography
8. Discuss in detail the construction of a grid and explain how it helps in improving the radiographic quality.
9. Discuss the imaging anatomy of the orbit. 10.Discuss the basic principles of MRI

124-NR-M.D. DEGREE EXAMINATION – APRIL, 2012-RADIO DIAGNOSIS-PAPER-I

1..Enumerate the anatomical variants and congenital anomalies of the aorta, with a brief account of the imaging features.
2. Explain in detail the radiation protection followed in x-ray, Fluoroscopy and CT scan room.
3. Describe the various types of X-ray grids and their effect on image quality.
4. Describe the side effects of iodinated I.V contrast. How would you treat anaphylaxis?
5. What are the indications of Small bowel enema and how would you perform the procedure?
6. Describe the radiological features of Ankylosing Spondylitis.
7. Draw a labelled diagram of bronchopulmonary segments on a chest PA and lateral radiograph.
8. What are the factors influencing radiograph quality? Discuss the ways to improve the quality of a radiograph.
9. Plain X-ray findings in primary pulmonary tuberculosis.
10.Describe the types and imaging approach in Tracheo-esophageal fistula in an infant.

124-NR-M.D. DEG. EXAMINATION – OCTOBER/NOV., 2011-RADIO DIAGNOSIS-PAPER-I

1. Describe the radiological anatomy of rotator cuff muscles. Role of ultrasound in rotator cuff pathology.
2. Explain in detail radioactive decay.
3. Write short notes on -a) Interatrial septal defect plain x-ray findings. b) Soft tissue calcifications.
c) Pathology of rheumatoid arthritis. d) Achondroplasia e) Gardner's syndrome
4. Discuss the radiological features of osteoarthritis.
5. What is scintigraphy? Mention how thyroid scintigraphy done? 6. Describe the anatomy of mediastinum
7. Explain in detail of performing double contrast barium enema.
8. Write short notes on: a) Carpal tunnel syndrome b) Mammographic X-ray tube
c) Pulmonary findings in sarcoidosis. d) Atom. e) Properties of X-ray.
9. Write briefly about ascending urethogram. 10. Explain in detail how X-rays interacts with matter.

124-N.R-M.D. DEG. EXAM – APRIL, 2011-RADIO DIAGNOSIS-Paper-I

1. Describe the anatomy of thyroid. Mention the imaging investigation available to evaluate the thyroid pathology.
2. Discuss the radiation protection in isotope department.
3. Write short notes on: a) Pleural calcifications b) Cardiomyopathy c) Ultrasound appearances of fibroid
d) Asphyxiatins thoracic dysplasia e) Constrictive Pericarditis.
4. Explain in detail basic principles of Digital Subtraction Angiography.
5. How esophagogram done? Mention their clinical applications.
6. Describe the radiological anatomy of vertebra.
7. Explain in detail conventional and modified intravenous urogram.
8. Write short notes on: a) Technitium 99 ^{m} b) Maximum permissible dose c) Image intensifier
d) Electromagnetic radiation e) Characteristic curve of an x-ray film
9. Mention difference between digital radiography and computed radiography.
10.Write briefly about gut rotation.

124-N.R-M.D. DEG. EXAMINATION – OCT/NOV, 2010-RADIO DIAGNOSIS-PAPER-I

1. Describe the modern X ray tube and properties of X rays that are made use in Medical radiology.
2. Describe Radiological anatomy of the duodenum and radiological appearances in different pathological conditions of duodenum.
3. Write short notes on: a) Turner's Syndrome b) Haemophilia
4. Describe the differential diagnosis and radiological features of a tumour at the lower end of the femur in an 18 year old individual.
5. How do you classify pulmonary hypertension? Describe briefly the radiological features of acute and chronic pulmonary venous hypertension.
6. Write short notes on: a) Tumoral calcinosis b) Causes of Rib notching
7. Write short notes on: a) Myositis ossificans progressive b) Craniostenosis
8. Write short notes on: a) Meig's Syndrome b) Polycystic Kidney
9. Discuss in short the radiological findings of carcinoma stomach.
10. Classify bone tumours and radiological features of Ewing's Sarcoma.

124-NR.M.D. DEGREE EXAMINATION – APRIL, 2010-RADIO DIAGNOSIS-PAPER-I

1. Describe the Anatomy of peritoneal spaces and imaging features of pseudo pancreatic cyst.
2. Discuss the radiological features of mitral valvular disease.
3. Write short notes on: a) Imaging in aortic dissection b) Congenital heart diseases – plain x-ray findings
c) Imaging features of eosinophilic granuloma d) Spiculated masses of mammography
e) Imaging in renal hypertension.
4. Intensifying screens. 5. Role of scintigraphy in skeletal neoplasms.
6. Segmental anatomy of liver and its importance. 7. Short notes on hirschsprungs disease.
8. Write short notes on: a) Carpan tunnel syndrome b) Heel effect c) Bone densitometry
d) Mosaic perfusion in HRCT e) Mesenteric ischemia
9. Factors affecting scatter radiation and methods for reducing the scatter radiation.
10.Congenital uterine abnormalities.

124-NR-M.D. DEGREE EXAMINATION – NOVEMBER, 2009-RADIO DIAGNOSIS-PAPER-I

1. Describe the renal vascular anatomy and its congenital abnormalities.
2. Imaging of DISH. (Diffuse idiopathic skeletal hyperostosis).
3. Write short notes on: a) Isotopes in myocardial ischemia b) Imaging of cardiac pace makers
c) BIRADS classification d) Retroperitoneal fibrosis e) Pulmonary hypertension
4. Basic principles of DSA. 5. Imaging of spondylolisthesis.
6. Anatomy of diaphragm and its normal variants 7. Hepatobiliary scintigraphy.
8. Write short notes on: a) Imaging anatomy of prostate b) Half value layer c) Computed radiography
d) Hypersensitivity pneumonitis e) IVC obstruction
9. Biological effects of radiation. 10.Uterine artery embolisation.

124-NR-M.D. DEGREE EXAMINATION – APRIL/MAY, 2009-RADIO DIAGNOSIS-PAPER-I

1. Discuss pathophysiology and radiological features of renal calculi.
2. Radiological anatomy of duodenum. Discuss the investigations.
3. Write short notes on: a) Pathology of abscess b) Pleural calcification c) Sequestration of lung d) Tetralogy of fallot e) Multicystic dysplastic kidney
4. Describe thyroid tumor and role of radionuclide scanning.
5. Describe CT contrast media. Mention its application and adverse reactions.
6. Describe radiographic film. 7. Briefly describe the dark room setting.
8. Write short notes on: a) Towne's view of skull b) Aorta c) Radio nuclei d) Tenday rule e) Tomographic imaging 9. Describe radiological anatomy of kidney.
10. Write in brief indicating the technique of barium follow through.

124-NR-M.D. DEG. EXAMINATION-RADIODIAGNOSIS- NOVEMBER, 2008-Paper-I

1. Discuss the metabolism of vitamin D and skeletal changes in deficiency of Vitamin D.
2. Discuss the radiological anatomy of esophagus. Discuss the functional disturbances of the esophagus.
3. Write short notes on:=a) Pathology of ameobic abscess in liver b) Pericardial calcification c) Congenital lobar emphysema d) Ventricular septal defects e) Multicystic kidney
4. Discuss about radionucleides and role of radio isotopes in investigation of thyroid diseases.
5. Describe the physics of Doppler & clinical applications in peripheral vascular diseases.
6. X-ray photon interaction with matter. Discuss any two. 7. Factors affecting contrast of a radiograph.
8. Write short notes on:=a) Towne's view b) Grid c) PACS in Radiology d) Mammography tube e) Radiological anatomy of Sella
9. Describe segmental anatomy of liver. 10. Write in brief about intravascular contrast media.

124-NR-M.D. DEGREE EXAMINATION – JUNE, 2008-RADIO DIAGNOSIS-Paper-I

1. Enumerate the constituents of developer and fixer. Explain how the radiographic image is formed on a film.
2. Describe the factors affecting image quality. 3. MR spectroscopy.
4. Discuss briefly the CT artifacts. 5. Discuss DR Vs CR.
6. Pulmonary circulation – physiology with applied anatomy. 7. Oral contrast agents.
8. Write short notes on: a) Physiology of fetal circulation b) Non-ionic contrast media
9. Write short notes on: a) Grids b) Ultrasound transducers
10. Write short notes on: a) Circle of Willis b) Segmental and applied anatomy of liver

124-NR-MAY/JUNE, 2007

1. Describe the radiological anatomy of sellaturcica. Mention the imaging features of sellar pathology.
2. Discuss the radiological features of rheumatoid arthritis.
3. Write short notes=a) Mitral valvular disease plain x-ray findings. b) Acute pulmonary embolism – isotope findings c) Cardiac failure – plain x-ray findings d) Calcifications in breast e) Pathology of TB kidney
4. Explain in detail x-ray interaction with matter. 5. How bone isotope scan done. Mention their clinical applications.
6. Describe the anatomy of retroperitoneum. Mention their importance in clinical practice.
7. Explain in detail techniques of performing small bowel enema. Mention indications and contraindications for small bowel enema.
8. Write short notes on: a) Rotator cuff muscles b) Anode c) Macroradiography d) HRCT findings in idiopathic Pulmonary Fibrosis e) Sonographic findings in acute deep vein thrombosis
9. Explain in detail the radiation protection followed in x-ray, Fluroscopy and CT Scan room.
10. Write briefly about hysterosalpinsogram.

NOVEMBER-2006- (N.R.)

1. Discuss the pathophysiology and radiological features of renal osteodystrophy.
2. Describe the radiological anatomy of esophagus. Discuss the investigations of esophagus
3. Write short notes on: a) Pathology of hydatid cyst b) Cardiac calcification c) Congenital cystic adenomatoid malformations d) Development of heart e) Horse shoe kidney
4. Role of nuclide Scanning in thyroid and their importance in clinical practice
5. Describe the Ultrasound Contrast Media. Mention the physical principles and clinical applications of Ultrasound Contrast Media.
6. Mention the physical properties of X-ray. Add a note on anode and cathode
7. Write briefly how you will set up a Radiology Department.
8. Write notes on; a) Cone view of sella turcica b) Sternum c) atom d) Tenday rule e) Pantonography
9. Describe the radiological anatomy of liver and mention the liver segments
10. Write brief indications and techniques of double contrast barium enema

MAY/JUNE-2006. (N.R.)

1. How will you investigate a patient with Haematuria? Describe the radiological features.=10
2. Describe the radiological anatomy of retroperitoneal space=10m
3. Write short notes on: 10m; a) Development of Kidney b) Pathology of Meningioma c) Bronchopulmonary segments d) Congenital Mega colon e) Normal skull lateral view
4. Role of nuclear scanning in bones and their diagnostic importance in clinical practice=10m
5. Classify contrast media. Add a note on MR Contrast Media.=10m
6. Working principle of image Intensifier (ITTV) and clinical application of Image intensifier=10m
7. Write briefly about the diagnostic X-ray protection to the radiation worker and patient given in your department=10
8. Write notes on: 10m; a) Optic foramen view b) Typical lumbar vertebra c) Radiation monitoring devices d) Frog's view of both hips e) Mammography X-rays
9. Describe the radiological anatomy of stomach and how will you investigate carcinoma stomach=10m
10. Write in brief indications and techniques of small bowel enema (Enterolysis)=10m

APR/MAY, 2005. (N.R.)

1. Draw and label diagram of modern image intensifier. Discuss the functions of each part, and mention advantages
2. Describe with diagram the anatomical relations of kidney. Give a brief notes on various angiographic studies of renal mass lesion.
3. Write notes : Tc'99 b) Cyclotron c) Xeroradiography d) Air myelography e) Fixer and Developer
4. Describe the circulation of CSF and discuss the radiological and imagiological signs of raised intracranial tension
5. Write in brief radiological anatomy of pancreas and discuss various Roentgen studies investigating a pancreatic mass lesion.
6. Discuss in short the radiological findings of carcinoma stomach
7. Write short notes on: a) Non ionic water soluble contrast media b) Factors affecting quality of radiologic image c) Dimer X d) Collimation e) Blow out technique
8. What are the condition which produce periostitis? Describe the radiological and imagiological features
9. Describe the radiological and imagiological features of bone tuberculosis
10. Classify bone tumours and radiological features of Ewing's sarcoma

SEPT./OCT.2004. (N.R.)

1. Discuss the pathophysiology and radiological and imagiological features of primary hyper nephroma
2. Draw and label the radiological anatomy of mediastinum. Discuss the investigations of posterior mediastinum.
3. Write notes on: a) Pathology of chronic pyelonephritis b) Normal intracranial calcification c) Sequestration lung d) Congenital block vertebrae e) Development of brain
4. Write about nuclide scanning of liver and spleen and their diagnostic importance in clinical practice
5. Describe various contrast media used in diagnostic radiology & physical principles involved in them (any=2)

6. State inverse square law as applied to X-ray beam and how does it apply to diagnostic X-rays
7. Write short essay on protection against Ionising radiation
8. Write: a) Lordotic view b) Odontoid process c) T.L.D d) Age estimation by X-ray e) Dental X-rays
9. Describe the radiological anatomy of larynx and how will you investigate laryngeal mass
10.Write in brief indications and techniques of myelography

MARCH/APRIL, 2004. (N.R.)

1. How will you plan the Radiology department as per the specifications of BARC. =10m
2. Enumerate the substances (contrast medias) used in the following and discuss the merits & demerits=10m
   a) Barium Meal b) OCG c) Bronchogram d) Angiogram=10m
3. Write notes on: a) Intra cranial calcifications b) The amount of I/131 used in thyroid scan
   c) Number of Corpal bones seen in neonates
   d) Name the persons who invented: 1) X-ray; 2) Ultrasound; 3) CT Scan; 4) MRI =10m
4. What are the bone changes in Rickets and Scurvy? Name the earliest changes on Roentgenography=10m
5. What is Looser's Zone? Describe the radiological appearances. Name the condition where it is seen=10m
6. Describe the techniques of water's view and name the condition where it is taken =10m
7. Name the isotopes used in the following a) Liver Scan b) Renal scan c) Bone Scan d) Lung scan.10m

SEPT./OCT.2003. (N.R.)

1. Write briefly about the structure of X-ray tube and tube shielding =10m
2. Write short notes on: a) Focused grids b) Single coated X-ray films c) Fluorescent material
   d) Inverse square law e) Tube puncture =10m
3. Discuss the Radiological Anatomy of Urinary tract 4. Discuss various methods of Radiation protection =10m
5. Discuss the cross sectional anatomy of pancreas and its relations =10m
6. Discuss the technique of Double Contrast Barium Enema 7.Discuss the various transformers in an X-ray installation
8. Describe the Radiographic technique of Chest X-ray PA view =10m
9. Write briefly on: a) Intensifying screens b) Half value layer c) Classification of Gastric tumours
   d) Components of Developer e) Soft tissue neck lateral view =10m
10. Discuss the chest X-ray findings in Mitral Stenosis =10m

MARCH, 2003. (N.R.)

1. Describe the anatomy of breast. Mention various radiographic investigations help to distinguish non neoplastic lesions from neoplastic lesions of the breast =10m
2. Write short notes on: a) Functions of gall bladder b) Water's view c) Transducers
   d) Luminescent screens e) Digital Radiography =10m
3. Describe the anatomy of uterus with the help of a diagram. How will you investigate various pathological lesions of the uterus =10m
4. Describe the factors influence the Radiographic contrast and unsharpness =10m
5. Discuss in detail about Taeniasis and Cysticercosis. Mention various radiographic studies with findings in soft tissue and Neuro cysticercosis =10m
6. Describe the pathology of osteosarcoma and correlate the pathology with radiological findings =10m
7. Describe the blood supply of heart with suitable diagram and discuss the technique of coronary angiography =10m
8. Write short notes on: a) Attenuation b) Quality control in radiology c) Radiation protection
   d) Electromagnetic radiation e) Complications of arteriography =10m
9. Describe various imaging techniques in diagnosis of diseases of Genito-Urinary system =10m
10. Discuss the role of plane X-ray chest in diagnosis of various lung diseases =10m

SEPT./OCT.2002 (N.R.)

1. Write in brief on Radioisotopes used in nuclear medicine =10m
2. Write notes on: 10marks; a) X-Ray films b) Filters c) Gride d) Half value layer e) Blow out techniques
3. Describe the anatomy of subarachnoid cisterns. Discuss various methods of imaging in suspected case of Hydrocephalous.=10m
4. Discuss the role of plane x-ray chest in diagnosis of congenital heart diseases =10m
5. Life cycle of Echinococcus and radiological features of lung when affected =10m
6. Describe the technique of double contrast studies of upper gastrointestinal tract. Describe radiological features in any 3 duodenal diseases =10m
7. Discuss the principles involved in production of images in C.T.Scan. =10m
8. Write notes on: a) Air myelography b) Factors affecting the quality of radiologic image
   c) Looser's Zones d) Intesifying screens, Advantages and disadvantages e) Classification of thyroid tumours
9. Describe the Pathology of hypernephroma and correlate the pathology with radiological findings.=10m
10. Describe conventional and automatic processing techniques =10m

SEPT./OCT. 2002. (N.R.)

1. Draw diagrams bringing out the Cardiovascular circulation in the following and label them:
   a) Fallots tetralogy b) Total anomalous pulmonary venous drainage
2. Describe the anatomy of urinary bladder. What are the investigations you do to exclude, bladder and urethral pathology
3. What is the role of Gamma Camera and Rectilinear scanner in nuclear scanning=10m
4. Write notes on: a) Hypotonic duodenography b) Urographic contrast media c) Collimation
   d) Spot film radiography e) Optic foramen view =10m
5. Describe the anatomy of Carotid artery with its Intra and extra cranial branches with suitable diagram and briefly mention the techniques of Carotid angiography.
6. Describe the various imaging techniques in diagnosis of Liver and Gall Bladder diseases
7. Write short notes on: a) Fluroscopic screen b) Modern X-ray tube c) Stenver's view
   d) Bronchopulmonary segments – Diagram and label e) Positron-Emission Tomography (PET) =10m
8. Draw and label a neat diagram of modern image intensifier. Discuss the functions of each part. What are the advantages of image intensified fluoroscopy over conventional fluoroscopy=10m
9. Describe the principles of construction and clinical application of ultra sonographic unit. =10m
10. Describe basic principles of tomography and discuss the factors influencing the quality of tomographic image.=10m

SEPT./OCT. 2002. (O.R.)

1. Describe the anatomy of Broncho-Pulmonary segments. Give in brief the various techniques of bronchography
2. Describe the normal anatomy of Adrenal glands. Discuss the radiological and allied investigations, techniques of diseases of adrenal glands.
3. Write short : a) Cine radiography b) Replenisher c) Non ionic water soluble contrast media d) Stenver's view

MAY, 2000

1. Write a neat diagram of Thermionic diagnostic x-ray tube and label the parts. Describe the properties of x-rays used in diagnostic x-ray department.
2. Describe the technique o f pedal Lymphangiography& its diagnostic value in Hodgkins disease &carcinoma of cervix.
3. Describe the anatomy of Uterus and its appendages. And How do you help in treating a case of sterility.
4. Write short notes on: a) Pelvic inlet view b) Rib notching c) Stenver's view d) Transducers

JUNE, 1999.

1. Discuss the causes of low back pain. Briefly mention M.R.I.findings.
2. Write short notes on: a) SPEC b) HRCT c) Echo-cardiography d) GRID
3. Define double contrastenema indications can be listed and mention briefly the techniques.
4. Discuss the following: a) Properties of x-rays b) Automatic film processor c) Acquistic window
d) Vaginal probe

FEBRUARY, 1998.

1. Describe the pathway CSF circulation, formation, absorption and function. Define Hydrocephalous & briefly mention C.T.Findings.
2. Write short notes on: a) Principles of spiral C.T. b) Mamogram c) Thallium 201 d) Florosis
3. Discuss the Radiological features of Mitral valvular. Discuss haemodynamic.
4. Discuss the following: a) Spinal Dystraphiam b) Double contrast enema c) Film Badge d) Ectopic pregnancy

SEPTEMBER, 1997.

1. Classify Breast Tumors. Describe mammography technique. Mention the radiological features.
2. Write short notes on: a) Spinal C.T. b) Grid c) Floroscopy d) Color Dopler
3. Describe in detail technique of Aortography. Mention the indications and complications of procedures.
4. Discuss the following: a) Hazards of Radiations b) Gamma Camera c) Screens d) Film Badge

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Q.P.CODE:125-NR

DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA
M.D. DEGREE EXAMINATION – DECEMBER, 2017
RADIO DIAGNOSIS
Paper-II : Principles and Practice of Radio Diagnosis

Time : 3 Hours Max. Marks : 100

Note: Answer all questions
All questions carry equal marks
Draw diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLWING:

1. Imaging in head trauma
2. Role of radiology in Ulcerative Colitis and Crohn's disease
3. Rib notching
4. Role of USG in varicose veins
5. Sellar and suprasellar tumors
6. Role of ultrasound in first trimester of pregnancy
7. Imaging of adrenal tumors
8. Imaging in Spinal canal tumors
9. Imaging in thoracic aorta aneurysm
10. Neurogenic bladder

Q.P.CODE:125-NR-Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – MAY, 2017-RADIO DIAGNOSIS-Paper-II : Principles and Practice of Radio Diagnosis-Time : 3 Hours-Max. Marks : 100-Answer all questions-All questions carry equal marks-Draw diagrams wherever necessary

Write short essays on the follwing:

1..Imaging of congenital lung lesions
2..Ultrasound in intussusception
3..MDCT in coronary artery disease
4..Imaging in peri-ampullary carcinoma
5..Budd Chiari syndrome
6..Imaging of acute pancreatitis
7..BI-RADS scoring system for breast lesions
8..MDCT in small bowel obstruction
9..Tree-in-bud appearance
10.Imaging in gastric outlet obstruction

DR NTR UNIVERSITY OF HEALTH SCIENCES, VIJAYAWADA - 8

M.D. DEG. INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2016-RADIO DIAGNOSIS

Paper-II : Components of MD Radio diagnosis (clinical radiology and imaging related to gastrointestinal tract, genitourinary tract and Obstetrics and Gynecology)-Time : 3 Hours-Max. Marks : 100-Answer all questions-All questions carry equal marks-Draw diagrams wherever necessary

Write short essays on the follwing:

1..Describe the imaging features of gastrointestinal lymphoma.
2..Describe the imaging signs of ovarian tumors in children and adolescent.
3..Discuss the imaging features of cystic renal lesions.
4..Imaging signs of haemangioma liver.
5..How do you evaluate a case of haematuria in a 20 year old female?
6..Discuss imaging of Mullarian Duct anomalies with relevant to Embryology.
7..Discuss the role of imaging in Groove Pancreatitis and Auto Immune Pancreatitis.
8..Imaging of endometriosis.
9..Imaging of adrenal tumours.
10.Carcinoid tumour.

125-NR-Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – NOVEMBER, 2016-RADIO DIAGNOSIS

Paper-II : Principles and Practice of Radio Diagnosis-Time : 3 Hours-Max. Marks : 100-Answer all questions-All questions carry equal marks-Draw diagrams wherever necessary

Write short essays on the follwing:

1..Cyanotic congenital heart diseases
2..Intracranial calcification
3..VU reflux and PU valves.
4..Meconium ileus
5..Imaging in hydronephrosis
6..Role of USG in painful scrotum
7..Mediastinal masses
8..Imaging of paranasal sinuses
9..Discuss role of USG in infertility.
10.Role of CT in abdominal trauma

125-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – MAY, 2016-RADIO DIAGNOSIS-PAPER-II

Principles and Practice of Radio Diagnosis-Time : 3 Hours-Max. Marks : 100-Answer all questions

All questions carry equal marks-Draw diagrams wherever necessary

Write short essays on the follwing:

1..Imaging of interstitial lung disease
2..Imaging of subarachnoid hemorrhage
3..Write short notes on: a) Acromegaly b) Thymic tumors c) caudate lobe
d) Slipped capital femoral epiphysis e) Pseudotumors of kidney
4..Imaging of malrotation
5..Role of imaging in intussusceptions
6..Imaging of Achalasia cardia
7..Imaging of solitary pulmonary nodule
8..Imaging of skull base tumors
9..Imaging of lung tumors
10.Pulmonary manifestations in immunocompromised patients

DR NTR UNIVERSITY OF HEALTH SCIENCES, VIJAYAWADA - 8

M.D. DEG. INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2015-RADIO DIAGNOSIS

Paper-II : Components of MD Radio diagnosis (clinical radiology and imaging related to gastrointestinal tract, genitourinary tract and Obstetrics and Gynecology)-Time : 3 Hours-Max. Marks : 100-Answer all questions-All questions carry equal marks-Draw diagrams wherever necessary

Write short essays on the follwing:

1..Describe the Radiological and imaging features of Renal tuberculosis
2..Classify Renal cystic disease and describe in detail the Radiological and imaging features of polycystic kidney disease.
3..Describe Radiological and imaging features of Intussusception
4..Describe the role of imaging modalities in the diagnosis of biliary tract diseases
5..How do you detect the various fetal anomalies in second trimester pregnancy
6..What are the different congenital anomalies of uterus detected
7..Radiological features of polycystic ovaries
8..Discuss role of imaging in abdominal trauma
9..Cystic neoplasms of the pancreas
10.Imaging of male infertility

125-NR-Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION –OCTOBER, 2015-RADIO DIAGNOSIS-PAPER-II

Principles and Practice of Radio Diagnosis-Time: 3 Hours-Max. Marks : 100-Answer all questions-All questions carry equal marks-Draw diagrams wherever necessary

Write short essays on the follwing:

1..Discuss the role of imaging in pituitary tumors
2..Describe the differential diagnosis of cavitating lung lesions. Describe the role of a interventional radiologist in the management of a case of hemoptysis.
3..Describe the pathogenesis and radiological features of Crohn's disea se.
4..Describe the embryology and congenital anomalies of the respiratory tract. Discuss the role of imaging in their evaluation.
5..Discuss the physiology of digestion and absorption. How will you investigate a case of malabsorption?
6..Write short notes on: a) Bronchogenic cyst b) Midgut volvulus c) Diverticulitis
d) Lymphangitis carcinomatosa e) Endocrine tumors of the pancreas
7..Describe the imaging approach in pulmonary complications of AIDS.

8..Write short notes on: a) Mitral stenosis b) Double contrast barium enema c) Achalasia cardia
d) Hepatoblastoma e) Constrictive pericarditis
9..Write the algorithm for radiological evaluation of a suspected case of acute pulmonary embolism.
10.Discuss the role of HRCT in diffuse lung diseases.

125-NR-M.D. DEGREE EXAMINATION –APRIL, 2015-RADIO DIAGNOSIS-PAPER-II

1..Describe the Radiological/imaging approach in a case of lump in the right iliac fossa
2..Describe the role of a radiologist in the management of a case of blunt abdominal trauma.
3..Describe the differential diagnosis of solitary pulmonary nodule. Write the algorithm for radiological evaluation of a case of solitary pulmonary nodule
4..Describe the role of imaging in a suspected case of acute pancreatitis
5..Describe the pathogenesis and radiological features of abdominal Koch's
6..Write short notes on a) Pulmonary sequestration b) Role of CT scan in acute appendicitis
7..Describe the role of a radiologist in the evaluation of a suspected case of mal-absorption
8..Write short notes on a) Radiological interventions in obstructive jaundice
b) Pneumocystis carinii pneumonia
9..Write the algorithm for radiological evaluation of a suspected case of congenital heart disease
10.Discuss the role of a radiologist in the evaluation of a child with acute abdomen

MD. DEG. INTERNAL ASSESSMENT EXAMS-DECEMBER, 2014-RADIO DIAGNOSIS-PAPER-II

1..Draw a neat line diagram of perinephric spaces including its relationship with other spaces. Write CT features of perinephric abscess and urinoma.
2..How do you evaluate a case of solid ovarian tumor? Describe the differentials of solid ovarian neoplasm
3..Role of MRI in evaluation of carcinoma bladder
4..Describe imaging features, types, staging and interventions in esophageal carcinoma
5..Emphysematous cholecystitis 6..Discuss the imaging features of retroperitoneal masses
7..Choledochal cyst. 8..Discuss the D. D of adnexal masses.
9..Describe the method of Tiffa examination in ante natal patients.
10.Discuss the role of colour doppler in a case of IUGR

125-NR-M.D. DEGREE EXAMINATION – OCTOBER, 2014-RADIO DIAGNOSIS-PAPER-II

1..Discuss the causes of acute upper abdominal pain and role of various imaging modalities
2..A young female presenting with acute pain in the pelvis, what are various causes? How will you evaluate Radiologically?
3..Write short notes on:
a) Psoriatic arthritis b) Pheochromocytoma c) Liver segments disease d) Benign tumors of kidney
4..Hypertrophic pyloric stenosis 5..Role of Color Doppler and ultrasound in post renal transplant patient
6.Role of ultrasound in thyroid tumors 7.Pulmonary sequestration 8.Classical signs of congenital heart dis.
9. Pulmonary metastases 10.CNS manifestations in immunocompromised patients

125-NR-M.D. DEGREE EXAMINATION – APRIL, 2014-RADIO DIAGNOSIS-PAPER-II

1..Discuss the role of a radiologist in management of jaundice in an adult patient.
2..Describe the mechanism and causes of lung collapse. Discuss the imaging features of various patterns of lung collapse.
3..Enumerate the causes of lower GIT bleed and discuss the role of Radiology in evaluation and management of lower GI bleed.
4..How as a Radiologist do you approach a suspected case of congenital heart disease? Discuss in detail] various cyanotic congenital heart diseases
5..Discuss the differential diagnosis of an incidentally discovered breast lump and the different modes of investigation you will adopt to arrive at a provisional diagnosis.
6..Write short notes on:
a) BI-RADS b)Thoracic manifestations of histocytosis c) Secondary Hyperparathyroidism
d) Cystic adenomatoid malformations e) Benign gastric tumors
7. Discuss the imaging of abdominal lymphoma.
8. Write short notes on: a) Oesophageal atresia and tracheo-oesophageal fistula
b) Cystic lesions of the breast c) Round atelectasis d) Ultrasound imaging of appendicitis
e) Anomalies of aortic arch and its major branches
9..Describe the blood supply of the large and small intestine. Discuss the role of a radiologist in evaluation and management of a suspected case of bowel ischemia.
10.Discuss the role of a radiologist in management of a patient with vascular claudicating pain.

M.D. DEG. INTERNAL ASSESSMENT EXAMS – DEC., 2013-RADIO DIAGNOSIS-PAPER-II

1..Imaging features of Torsion of the Testis. 2. Discuss the role of imaging in renal transplant.
3. Role of ultrasonography and Doppler in ectopic pregnancy.
4. How do you investigate a case of dysphagia and discuss various esophageal disorders?
5. What is Intersex? How do you evaluate of case of Ambiguous genitalia?
6. Describe the embryological development of pancreas. Discuss radiological evaluation of acute pancreatitis.
7. Mention the causes of upper Gl obstruction in neonate. Describe the imaging features of congenital hypertrophic pyloric stenosis.
8. Describe the role of imaging in cholangio carcinoma.
9. What is the role of 3D ultrasound in detection of fetal anomalies?
10.Discuss the role of ultrasound in paediatric abdominal emergencies

125-NR-M.D. DEGREE EXAMINATION – OCTOBER, 2013-RADIO DIAGNOSIS-PAPER-II

1..Discuss the imaging features and differential diagnosis of metaphyseal bone tumors.
2. Discuss differential diagnosis and radiological features of generalized increase in bone density.
3. Discuss the role of imaging in evaluation of renal transplant.
4. How will you investigate a case of primary infertility?
5. How would you investigate a case of hypertension in a young adult?
6. Describe the role of imaging in evaluation of craniocerebral trauma.
7. Discuss the differential diagnosis and imaging evaluation of intramedullary neoplasms of the spinal cord.
8. Discuss the role of Magnetic Resonance Imaging (MRI) in evaluation of prostate gland.
9. Describe the radiological anatomy of the diaphragm and discuss the various diaphragmatic hernias.
10.Discuss the differential diagnosis and imaging features of posterior mediastinal masses.

125-NR-M.D. DEGREE EXAMINATION – APRIL, 2013-RADIO DIAGNOSIS-PAPER-II

1..Enumerate pre-malignant conditions of GIT. Describe imaging features of small and large bowel malignancies
2. Briefly describe the pulmonary arterial anatomy. Discuss in detail the role of a Radiologist in management of a suspected case of pulmonary thromboembolism.
3. Discuss the role of a Radiologist in management of palpable and non palpable breast lesions utilizing X-ray mammography and sonomammography.
4. Describe embryology of gut rotation and fixation. Discuss the differential diagnosis of a neonate with bilious

vomiting.
5. Discuss the role of imaging in pituitary tumours.
6. Discuss the principles, techniques, advantages, limitations of CTA and MRA.
7. Write short one on: a) Gastric volvulus b) Calcifications in malignant breast disease
c) Meckel's diverticulum d) Truncus arteriosus e) Functioning tumours of pancreas
8. Discuss the anatomy of secondary pulmonary lobule. Discuss the pattern of interstitial lung diseases on HRCT and briefly discuss their differential diagnosis.
9. Write short notes on: a) Choledochal cyst b) Double outlet right ventricle c) Adrenal adenoma
d) Pulmonary venous hypertension e) Meconium ileus
10. Discuss the role of ultrasound and CT in diffuse liver disease.

125-NR-M.D. DEG. INT. ASSESSMENT EXAMS – DEC., 2012-RADIO DIAGNOSIS-PAPER-II

1..Describe the role of imaging and radiological features and GI tract lymphomas.
2..Enumerate causes of lower gastrointestinal bleeding. Mention imaging findings in Colonic Carcinoma.
3 .Mention details about PNDT.
4. Mention the various congenital lesions of kidney and its imaging findings.
5. Role of color Doppler and ultrasound in post renal transplant patient.
6. Enumerate various Benign Liver Masses. How will you evaluate them by CT and MRI?
7. A young female presenting with acute pain in the pelvis, what are various causes? Howe will you evaluate Radiologically?
8. Mention various causes of upper GI bleed in an young adult. Discusses Radiological evaluation including interventions.
9. Describe anatomy of Prostate. Discuss TRUS guided biopsy in prostate malignancy.
10. Radiological evaluation of intestinal Tuberculosis.

125-NR-M.D. DEGREE EXAMINATION – APRIL, 2012-RADIO DIAGNOSIS-PAPER-II

1..Enumerate the causes and describe the radiological features of hyperparathyroidism.
2. Describe the plain x-ray findings in raised intracranial pressure.
3. Discuss the differential diagnosis and imaging features of renal cystic disease.
4. Describe the ultrasonography findings in ovarian malignancy.
5. Discuss the radiological and imaging techniques in a fifty year male with haematuria.
6. Describe the causes and imaging investigations in a 25 yrs old patient with intracerebral haemorrhage.
7. Describe the anatomy of the cranio-vertebral junction. Discuss the role of imaging in basilar invagination.
8. Discuss the imaging evaluation of acute scrotal pain in a young male.
9. Describe the sonographic findings in abdominal tuberculosis.
10. Describe the imaging features of pulmonary sequestration.

125-NR-M.D. DEG. EXAMINATION – OCTOBER/NOV., 2011-RADIO DIAGNOSIS-paper-II

1. Discuss the differential diagnosis of osteolytic lesions of skull.
2. Explain in detail the radiological features of Fibrous dysplasia.
3. Describe the radiological and imaging features of renal tuberculosis.
4. Write short notes on: a) Ectopic kidney b) Anencephaly c) CT findings in fontal mucocele
d) Isotope findings in biliary atresia e) Haemangioma of liver
5. How will you evaluate cerebrovascular accidents?
6. Explain in detail radiological and imaging features of bladder carcinoma.
7. Describe the imaging features of Arnold-Chiari Malformation.
8. Write short notes on: a) Down's syndrome b) TRUS of prostate c) Subarachnoid haemorrhage
d) Coarctation of aorta e) Tuberous Sclerosis
9. Describe the radiological features of pulmonary tuberculosis.
10. Briefly mention imaging features of portal hypertension.

125-N.R.M.D. DEGREE EXAMINATION – APRIL, 2011-RADIO DIAGNOSIS-PAPER-II

1. Describe the radiological features of ulcerative colitis.
2. Discuss the differential diagnosis of benign lesions of kidney.
3. How will you investigate a patient with acute abdomen? Describe the imaging features.
4. Write short notes on: a) Cystic Hygroma b) Perineal ultrasound
c) CT Sinogram d) Silhoutte sign e) Ventricular septal defect.
5. Mention briefly about calcium scoring in MDCT.
6. What is MR angiogram? Mention its clinical application.
7. Briefly mention how sonohysterogram done? Mention the indications and contraindications.
8. Write short notes on: a) Sonomammogram – Benign versus malignant lesions.
b) Isotope findings in thyroid lesions. c) Cledio cranial dysplasia.
d) Osgood-slatter's disease e) Xanthogranulamatous pyelonephritis.
9. Briefly mention the imaging findings of anorectal anomalies.
10.Describe the radiological findings of renal artery stenosis.

125-NR-M.D. DEG. EXAMINATION – OCT./NOVEMBER, 2010-RADIO DIAGNOSIS-PAPER-II

1.Describe the anatomy of the functioning unit of the kidney& discuss the excretory urography as a test of renal function
2. Describe the anatomy of the colon. List the congenital anomalies and discuss the radiological features of any one condition in detail.
3. Write short notes on: a) Pancoast's Tumour b) T-Tube Cholangiogram
4. Describe briefly the anatomy of the paranasal sinuses and their radiological investigations.
5. Describe radiological changes seen around the knee joint in cretinism, congenital syphilis and scurvy.
6. Write short notes on: a) Sequestration of the lung b) Fibrous Dysplasia
7. Write short notes on: a) Stress fractures b) Myxofibroma
8. Write short notes on: a) Acromegaly b) Hysterosalpingiogram
9. Describe the radiological and imagiological features of hyper parathyroidism.
10.Describe in detail the physical principles involved in taking a good diagnostic radiograph.

125-NR-M.D. DEGREE EXAMINATION – APRIL, 2010-RADIO DIAGNOSIS-PAPER-II

1. Radiological evaluation of postoperative chest. 2. Imaging of Seronegative spondyloarthritis.
3. Discuss the role of the various imaging techniques in the evaluation of renal transplant.
4. Write short notes on: a) Biliary atresia b) Imaging of eclopic pregnancy c) Papillary necrosis
d) Renal ectopia e) Radioisotopes in thyroid diseases
5. Ventilation and perfusion scan in acute pulmonary embolism.
6. Features of intra and extra lobar sequestration of lung. 7. Syringomyelia.
8. Write short notes on: a) Neuropathic joints b) Adrenal incidentalomas c) Anomalies of aortic arch
d) Ileo caecal valve e) Imaging of cerebral AVM
9. Radiographic appearances of pulmonary edema. 10. MRI of breast.

125-NR-M.D. DEGREE EXAMINATION – NOVEMBER, 2009-RADIO DIAGNOSIS-PAPER-II

1. Discuss imaging approach in interstitial lung disease. 2. Radiological features of Acromegaly.
3. Imaging of subarachnoid hemorrhage.
4. Write short notes on: a) Oesophageal varices b) Prune belly syndrome
c) PET in solitary pulmonary nodule d) Congenital megaureter e) Intussuception
5. Describe the radiological manifestations in metabolic disorder.
6. Role of nuclear medicine in oesophageal motility disorders. 7. Imaging of Thymic tumours.
8. Write short notes on: a) Bronchial atresia b) Slipped capital femoral epiphsis c) Pheochromocytoma
d) Anatomy of caudate lobe of liver e) Basilar invagination
9. Radiological features of SMA syndrome. 10. Pseudotumors of kidney.

125-NR-M.D. DEGREE EXAMINATION – APRIL/MAY, 2009-RADIO DIAGNOSIS-PAPER-II

1. Discuss the differential diagnosis of lytic and expansile lesion of vertebra.
2. How will investigate a case of peptic ulcer? Describe the radiological findings.
3. Describe the radiological features of tuberous sclerosis.
4. Write short notes on: a) Cliedo cranial dysplasia. b) Malrotation of gut
c) Double contrast brarium enema d) Arterio porto graphy
5. Describe the use of radio isotopes in lung studies.
6. Describe the radiological features of acoustic schwanomma.
7. Describe radiology of pneumatic carcinoma.
8. Write short notes on: a) Developmental dysplasia of hip. b) Turner's syndrome.
c) USG finding in first trimester d) Extra coanal lesion in orbit. e) Fibrous dysplasia
9. Describe the radiological finding in intestinal obstruction.
10. Embryological development of adrenals.

125-NR-M.D. DEG. EXAMINATION –RADIODIAGNOSIS- NOVEMBER, 2008

Write short essays on the following=1. Discuss the differential diagnosis of lytic lesions of long bone.
2. How will you investigate a patient of bleeding per rectum?
3. Describe the radiological and imagiological features of renal Tuberculosis.
4. Write short notes on:=a) Osteopetrosis b) Ulcerative colitis c) Enteroclysis d) Hydatid cyst in liver
5. Describe the USG findings in hepatobiliary pathologies. 6. Describe the radiological features of neurofibromatosis I.
7. Discuss the radiological features of acute pancreatisis.
8. Write short notes on:=a) Avascular necrosis of head of femur b) Acromegaly
c) USG in second trimester of pregnancy d) Empty sella e) Hyper parathyroidism
9. How will you investigate a case of abdominal trauma?
10. Describe the embryologic development of Diaphragm and radiological features of Diaphragmatic hernia.

125-NR-M.D. DEGREE EXAMINATION – JUNE, 2008-RADIO DIAGNOSIS-Paper-II

1. Role of imaging in pulmonary thromboembolism.
2. Describe the differential diagnosis, radiological features of expanding lesions in metaphysic of long bones.
3. Enumerate the HRCT patterns of interstitial lung disease.
4. Causes of unilateral opaque hemithorax. Discuss radiological features of pleural effusion.
5. Pulmonary sequestration. 6. Imaging in spinal TB.
7. Radiological features of bronchogenic carcinoma and role of MRI.
8. Short notes on: a) Brown tumor b) Pyknodysostosis
9. Short notes on: a) Post mediastinal masses b) Cardiac tumors
10.Short notes: a) Developmental Dysplasia of Hip. b) Salter – Harris classification of epiphyseal injuries.

125-NR-MAY/JUNE, 2007

1. Discuss the differential diagnosis of solitary pulmonary nodule.
2. Describe the radiological features of hyperparathyroidism.
3. How will you investigate a patient with haematuria. Describe the imaging features.
4. Write short notes on: a) Acute cholecystitis b) Omphalocele
c) Isotope findings in Parathyroid adenomas. d) CT findings in mesenteric ischaemia.
e) Multicystic dysplastic kidney
5. Describe the use of radioisotopes in Cardio Vascular System.
6. Explain in detail radiological features of pulmonary hypertension.
7. Describe the radiological features of neurofibromatosis type II.
8. Write short notes on: a) Congenital dysplasia of hip b) Sequestration lung
c) Grave's disease – imaging findings d) Imaging anatomy of prostate e) Intratentorial brain bermiations.
9. Describe the radiological features of pulmonary thromboembolism.
10.Briefly mention the contrast examinations available for the urinary tract. Add a note on voiding cystomethrogram

NOVEMBER-2006 (N.R.)

1. Discuss the differential diagnosis of lytic and sclerotic lesions of skull
2. How will you investigate a patient with dysphasia. Describe the radiological features
3. Describe the radiological and imagiological features of renal artery stenosis
4. Write short: a) Pykondystosis b) Intestinal obstruction c) Instant barium enema d) Target sign in liver
5. Describe the use of radio isotopes in hepatobiliary studies
6. Describe the radiological features of Meningioma.
7. Discuss the radiological features of pseudocyst of pancreas and its complications
8. Write short: a) Perthe's disease b) Down's syndrome c) Triple test in pregnancy
d) Bare orbit e) Pseudoarthrosis

MAY/JUNE-2006. (N.R.)

1. How will you investigate a patient suspected of Congenital Heart disease? Describe the radiological features of any two Congenital Heart disease=10m
2. Discuss the differential diagnosis of posterior fossa tumours
3. Describe the radiological features of ulcerative colitis
4. Write short notes on: 10m; a) Acute deep vein thrombosis b) Posterior urethral valve
c) Benign lesions of breast-mammographic findings d) Caviating lesions of lung
5. What is superscan? Mention the therapeutic uses of Radio isotopes=10m
6. Describe the radiological features of Mucopolysaccharoidosis
7. Describe the radiological features of Pheochromocytoma
8. Write short notes on: 10m; a) Coarctation of aorta b) T-tube cholangiogram
c) Fungal ball d) Subpulmonic effusion e) Benign splenic lesions
9. Describe the radiological and imagiological features of Intussusception=10m
10.Describe the cerebrospinal fluid (CSF) pathways=10m

APR/MAY, 2005. (N.R.)

1. Describe the development of lung and how will you help the clinician in management of pulmonary agenesis?
2. Enumerate the causes of melaena and describe radiological features in a case of melaena
3. Describe the radiological and imagiological features of hyper parathyroidism.
4. Write short notes on: a) Lung metastasis b) Sarcoidosis c) Mediastinal lymphoma

d) Hirschsprung's disease e) Demonstration of peptic ulcer perforation
5. What are the causes of pleural effusion?Describe radiological & imagiological features in loculated pleural effusion.
6. Describe various imagiological investigation to diagnose liver and gall bladder diseases
7. Enumerate the indications for portal venography and mention about the techniques.
8. Enumerate the causes of dysphagia and describe the radiological investigation
9. Write short notes on: a) Total anomalous pulmonary venous drainage b) Cretinism c) Coin lesion of lung d) Adrenal metastasis e) Pleuro-Peritoneal hiatus
10.Discuss the radiological and imagiological features of lymphosarcoma of small bowel.

SEPT./OCT.2004.

1. How will you investigate a patient suspected of pulmonary embolism?Describe radiological & imagiological features.
2. Discuss the differential diagnosis of irregular deformity of Caecum and demonstrate them on Ba.Enema.
3. Describe the radiological and imagiological features of Hydatid Cyst in lung and its complications.
4. Write short notes on: a) Oesophageal lung b) Ba. Swallow findings in Achalasia Cardia c) Spleeno-portovenogram in cirrhosis of liver d) Air under diaphragm
5. Describe the use of radio isotopes in diseases of Thyroid
6. Describe the radiological features of bronchogenic carcinoma
7. Describe anatomical and Biochemical changes in Jaundice due to extra hepatic obstruction
8. Write short notes on: a) Miliary tuberculosis b) Pulmonary stenosis c) Pulmonary Hamartoma d) Pseudo pancreatic cyst e) Encysted pleural effusion
9. Describe the radiological and imagiological features of congenital hypertrophic pyloric stenosis
10.Describe the embryological development of diaphragm.

MARCH/APRIL, 2004. (N.R.)

1. Discuss the uses of ultrasonography in the diagnosis of Hip Joint abnormalities =10m
2. Classify tumours of the lung and discuss their radiological evaluation =10m
3. Write short notes on; a) Osteoclastoma b) Rib notching c) Sarcoidosis d) Acroosteolysis=10m
4. Discuss the radiological features of ventricular septal defect =10m
5. Discuss the causes and evaluation of Cor Pulmonale.
6. Write briefly on: a) Total anomalous pulmonary venous drainage b) Lymphangitis Carcinomatosa c) Perthes disease d) Isotope Bone Scan=10m
7. Discuss the role of Magnetic resonance Imaging in rotator cuff injuries of shoulder =10m
8. Discuss evaluation of Aortic Dissecting Aneurysms =10m
9. Discuss Doppler evaluation of arterial insufficiency of lower limb =10m
10.Discuss the utility of ultrasonography in evaluation of chest pathology =10m

SEPT./OCT. 2003. (N.R.)

1. Classify Bone tumours. Describe the radiological features of Osteogenic Sarcoma =10m
2. Discuss the differential diagnosis and radiological evaluation of Anterior Mediastinal masses =10m
3. Write short notes: a) Osteoporosis b) Scimitar Syndrome c) Sequesteration of lung d) Rickets=10m
4. Discuss the Radiological features of atrial septal defect (ASD)=10m
5. Define and classify Bronchiectasis. Discuss the radiological evaluation of Bronchiectasis =10m
6. Write briefly on: a) Bronchial arteriography b) Bone Densitometry c) Tubercular Dactylitis
d) Kerley Lines
7. Discuss the role of Magnetic Resonance Imaging in Knee Injuries =10m
8. Discuss the radiological evaluation of abdominal aortic aneurysms. =10m
9. Discuss the role of Duplex Doppler evaluation of lower limb venous system =10m
10.Discuss the complications of Arteriography =10m

SEPT./OCT.2002. (O.R.)

1. Describe the ultrasonographic features of:a) hepatic amoebiasis b) hepatic hydatid cyst and
c) hepatic malignancy
2. A 60 years old man is referred to you with history of cough, heamoptysis and loss of weight, how will you investigate the case, describe briefly radiological appearances in two common conditions.
3. Write short notes on: a) Pleural mesothelioma b) Neurofibroma of mediastinum c) Ileocaecal tuberculosis d) Cholecystitis glandularis proliferans.

MAY, 2000.

1. Describe the radiological features of congenital hypertrophic pyloric stenosis.
2. Discuss the following: a) Achalasia cardia b) Horse shoe kidney c) Azygoslob d) Tracheomalacia
3. Describe the development of lung and how do you help in the management of pulmonary agenesis.
4. Write short notes on: a) Crowfoot sign b) Costal cartilage c) Dextrocardia d) Twins.

JUNE, 1999.

1. Discuss the role of imaging modalities in the diagnosis of obstructive jaundice.
2. Discuss the following: a) Pericardial effusion b) Hystero salpingography c) Sarcoidosis
d) Hirschsprung's disease
3. Classify the spinal cord tumours. Discuss the role of Myeloct and M.R.findings.
4. Write short notes on: a) Vesico-ureteric reflex b) Tuberculoma c) Coin lesion d) Hiatus Hernia

FEBRUARY, 1998.

1. Classify the pulm. segments & discuss in detail the role of nuclear Med. in the diagnosis of 'pulmonary embolism'.
2. Discuss the following: a) Scimitar syndrome b) Ulcerative colitis c) Choledochal cysts d) Paget's disease
3. Discuss the role of imaging modalities in the diagnosis of Portal hypertension.
4. Write short notes on: a) Aoroto Arteritis b) Tuberculoma of the Brain c) Placental Location

SEPTEMBER, 1997.

1. Classify the intracranial trauma. Discuss the role of computer tomography in their diagnosis.
2. Discuss the following: a) Scurvy b) Osteoporosis c) Ulcerative colitis d) Ectopic thyroid
3. Discuss the role of imaging modalities in the diagnosis of renal hypertension.
4. Write short notes on: a) Coartation of Aorta b) Venolobar syndrome c) Mugs study
d) A typical plural effusion.

Q.P.CODE:126-NR

DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – **DECEMBER**, 2017

RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions
All questions carry equal marks
Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1)	Role of imaging in Intracranial tumors
2)	Role of imaging in solitary pulmonary nodule
3)	Discuss technique and role of skeletal scintigraphy
4)	Imaging in mitral valve disease
5)	Interventional radiology in hepatobiliary system
6)	CT difference between pleural effusion and ascites
7)	Plain X ray chest PA appearances of cardiac chambers in normal and abnormal state
8)	Role of imaging in abdominal trauma
9)	Write short notes on: a) Amyloidosis b) Gaucher's disease
10)	Write short notes on: a) Adenomyosis b) Endometriosis

126- IA-Dr. NTR University of Health Sciences::AP::Vijayawada – 520 008

M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2017-RADIO DIAGNOSIS-Paper-III: Components of MD Radiodiagnosis (Clinical Radiology related to respiratory system, cardiovascular system, musculoskeletal system and pediatrics)-Time: 3 Hours-Max. Marks: 100-Answer all questions-All questions carry equal marks

Write short essays on the following:

1..Importance of doppler study in hypertension with renal vascular anatomy.
2..Classify Mediastinal masses and discuss the imaging findings of Posterior Mediastinal Masses.
3..Discuss the role of MRI in knee joint injury.
4..Classify and discuss the Imaging features of Interstitial Lung Disease.
5..Cardiac CT.
6..How do you investigate hemoptysis and radiological findings?
7..Metabolic bone disease.
8..Imaging of Tetrology of Fallot's.
9..Role of imaging in avascular necrosis of bone and different types of AVN.
10.Role of imaging in rotator cuff injuries.

Q.P.CODE:126-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – MAY, 2017-RADIO DIAGNOSIS-Paper-III: Principles and Practice of Radio Diagnosis -Time: 3 Hours-Max. Marks: 100-Answer all questions-All questions carry equal marks-Draw neat diagrams wherever necessary

Write short essays on the following:

1..Imaging of placenta accreta
2..Mesial temporal sclerosis
3..Imaging in Polycystic Ovary Disease
4..Write a brief note on Hip Replacement Imaging
5..Imaging of meningiomas
6..Imaging of a solid abdominal mass in neonate
7..Imaging of parathyroid adenoma including radio-isotope imaging
8..PET - MR
9..MRI in bone marrow evaluation
10.Subarachnoid hemorrhage

126-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – NOVEMBER, 2016-RADIO DIAGNOSIS-PAPER-III

Principles and Practice of Radio Diagnosis-Time: 3 Hours-Max. Marks: 100-Answer all questions

All questions carry equal marks-Draw neat diagrams wherever necessary

Write short essays on the following:

1..Discuss the role of radiology in renal hypertension
2..Role of imaging in benign soft tissue masses
3..Discuss the imaging features of rheumatoid arthritis on plain radiographs
4..Write in brief about supratentorial tumors
5..Role of CT in vertebral trauma
6. Role of MRI in knee trauma
7. Role of 3D ultrasound in detection of Foetal anomalies
8. Imaging approach in nephrolithiasis

9. Role of ultrasonography and Doppler in ectopic pregnancy
10.Role of MR in cardiac diseases

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126- IA-Dr. NTR University of Health Sciences::AP::Vijayawada – 520 008

M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JULY, 2016-RADIO DIAGNOSIS

Paper-III: Components of MD Radiodiagnosis (Clinical Radiology related to respiratory system, cardiovascular system, musculoskeletal system and pediatrics)-Time: 3 Hours-Max. Marks: 100

Answer all questions-All questions carry equal marks

Write short essays on the following:

1. .Role of MRI in evaluation of CP angle mass lesions.
2..Doppler evaluation of carotid stenosis.
3..Role of imaging in Rheumatoid arthritis..
4. Imaging of HIV manifestations of thoracic disease.
5..Evaluation of solitary pulmonary nodule.
6. Role of plan radiography in cyanotic heart diseases.
7. Coronary calcium scoring.
8. Posterior fossa malformations.
9. Describe ultrasound features of anencephaly and holoprosencephaly.
10.Imaging of pulmonary aspergillosis.

126-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – MAY, 2016-RADIO DIAGNOSIS-PAPER-III

Write short essays on the following:

1..Radiology in evaluation and management of hemoptysis
2..Discuss imaging features of bronchogenic carcinoma with staging
3. Intervention radiology in management of hepatoma
4. Write short notes on: a) Fetal doppler b) Skeletal manifestations of cardiovascular disorders
c) Role of USG in orbital disorders d) Emphysematous cholecystitis
e) Endoscopic ultrasound
5. Radiological features of sigmoid diverticulitis
6. Differential diagnosis of cystic lesions of mandible
7. Write short notes on: a) TLD badge b) Digital mammography
c) Skeletal manifestations of neurofibromatosis d) HRCT(High Resolution Computed Tomography
e) Islet cell tumors of pancreas
8. Imaging of renal anomalies
9. Imaging of inflammatory bowel disease
10.CT guided lumbar sympathectomy

126-NR-Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – OCTOBER, 2015-RADIO DIAGNOSIS-PAPER-III

Principles and Practice of Radio Diagnosis-Time: 3 Hours-Max. Marks: 100-Answer all questions-All questions carry equal marks

Write short essays on the following:

1..Describe the embryology and congenital anomalies of the small intestine. Discuss the role of imaging in their evaluation.
2..Describe the role of a radiologist in the investigation of a case of enlarging head size in an infant.
3..Describe the imaging evaluation of a case of recent onset seizure in an young adult.
4..Discuss the role of radiology in the evaluation of emergencies in the third trimester of pregnancy.
5..Discuss the differential diagnosis of neonatal respiratory distress. How will you investigate such a case?
6..Write short notes on: a) Doppler indices in IUGR b) Dysphagia lusoria c) Nuchal translucency
d) Vesico-ureteric reflux e) CT scan for paranasal sinuses
7..Enumerate benign focal lesions of the liver. Describe their imaging features.
8..Write short notes on: a) Multicystic dysplastic kidney b) Phacomatoses
c) Xanthogranulomatous pyelonephritis d) Neural tube defects e) Aneurysmal bone cyst
9..Describe the technique of Arch aortogram. Mention the indications and complications of aortogram.
10..Discuss the role of imaging and intervention in a case of hematuria.

126- IA-Dr. NTR University of Health Sciences::AP::Vijayawada – 520 008

M.D.DEG. INTERNAL ASSESSMENT EXAMS-JUNE, 2015-RADIO DIAGNOSIS-PAPER-III

1..Brief Anatomy of the Coronary circulation, Anatomical variants and short essay on percutaneous Trans Luminal Angioplasty
2..What are the radiological features of inflammations of Aorta?
3..Discuss technique and role of skeletal scintigraphy
4..Describe role of ultrasound and MRI in evaluation of Rotator Cuff
5..How do you diagnose pulmonary aspergillosis
6..What is the role of imaging in benign soft tissue masses?
7..Describe principles and applications of diffusion tensor imaging.
8..CT difference between pleural effusion and ascites
9..Describe the radiological features of bronchogenic carcinoma
10..Classify bone tumors. Discuss in detail imaging feature of Ewing's Sarcoma

126-NR-M.D. DEGREE EXAMINATION – APRIL, 2015-RADIO DIAGNOSIS-PAPER-III

1..Describe the role of a radiologist in the investigation of a case of knee pain in a young adult.
2..Describe the role of imaging in a suspected case of ectopic pregnancy
3..Classify ovarian tumors. Discuss the role of imaging in the evaluation of ovarian tumors
4..Describe the imaging algorithm to diagnose a case of adrenal mass lesion
5..Describe the role of a radiologist in the investigation of a case of sudden onset visual loss
6..Write short notes on: a) CT in ischemic stroke b) Cystic renal lesions
7..Enumerate benign renal masses. Describe their imaging features.
8..Write short notes on a) MR urography b) PCPNDT act
9..Write the algorithm for radiological evaluation of a case of first trimester vaginal bleeding
10..Describe the various types of craniosynostosis and their imaging evaluation

126-NR-M.D. DEGREE EXAMINATION – OCTOBER, 2014-RADIO DIAGNOSIS-PAPER-III

1..Classify congenital heart disease. Discuss the radiological features in conditions with left right shunt.
2..Role of doppler in male infertility 3..Transrectal ultrasound of prostate
4..Write short notes on: a) Role of MRI in shoulder injuries b) Metabolic bone diseases

c) Orbital tumors d) Interventions in emphysematous pyelonephritis e) Endoscopic ultrasound
5..Radiological features of ovarian malignancies 6..Cystic tumors of pancreas
7..Write short notes on: a) PCOS b) Types of calcification in mammography c) DISH
d) HRCT manifestations of sarcoidosis e) Functional tumours of pancreas
8..Imaging of renal tumors 9..Imaging of acute appendicitis 10..Uterine artery embolization

126- IA-MD.DEG. INTERNAL ASSESSMENT EXAMS-JUN, 2014-RADIO DIAGNOSIS-PAPER-III

1..Discuss imaging features of bronchogenic carcinoma with staging.
2..Describe the role of imaging in rheumatoid arthritis.
3..Discuss the role of MR evaluation of myocardial infarction.
4..Describe imaging features of aortic dissection, its complications and role of interventional radiology in its Rx.
5..Classify bone tumors. Discuss in detail imaging feature of Ewing's sarcoma.
6..What is the role of imaging in benign soft tissue masses?
7..Pathology and the imaging features of pulmonary thrombo embolism.
8. Discuss the role of plain radiography in cyanotic heart disease.
9. Write an essay on plural mesotheliomas.
10.How do you evaluate a case of interstitial lung disease?

126-NR-M.D. DEGREE EXAMINATION – APRIL, 2014-RADIO DIAGNOSIS-PAPEER-III

1..Discuss the embryology and congenital anomalies of the urinary system. 2..Discuss the role of imaging in their evaluation.
3..Discuss the differential diagnosis of an expanding lesion at the end of a long bone.
3..Enumerate renal masses in children. Describe in detail the radiological and imaging features of Wilm's tumour.
4..Discuss the imaging features and diagnosis of inherited white matter diseases (Leukodystrophies).
5..Describe ultrasound features of first trimester pregnancy. Enumerate the causes of bleeding in first trimester and discuss their imaging features.
6..Enumerate major apertures of skull base and discuss their location, transmitted structures through them and their connects. Describe the imaging features of various anterior skull base lesions.
7..Write short notes on:
a) Retroperitoneal fibrosis b) Pheochromocytoma c) Adenomyosis
d) Medullary sponge kidney e) Pigmented villonodular synovitis
8./Describe the types of IUGR. Discuss the role of Radiologist in evaluation of IUGR.
9..What is Phakomatosis? Enumerate the various conditions in this group and describe the imaging features of Neurofibromatosis.
10.Write short notes on:
a) Schizencephaly b) MRI in meniscal injuries c) Solitary thyroid nodule
d) Hypoxic ischemic encephalopathy e) Juvenile angiofibroma

126-NR-M.D. DEGREE EXAMINATION – OCTOBER, 2013-RADIO DIAGNOSIS-PAPER-III

1..Enumerate the points you would convey in your report of HRCT of paranasal sinuses in a patient being considered for endoscopic sinus surgery (FESS).
2. Discuss the sonographic techniques and criteria used in evaluation of uterine cervical incompetence.
3. Describe the imaging findings and role of intervention in management of aneurysm of the aorta.
4. Enumerate and describe the management of Central Nervous System (CNS) vascular malformations.
5. Describe the imaging protocol of Multi Detector Computed Tomography (MDCT) angiography in the evaluation of coronary arteries.
6. Discuss the imaging and differential diagnosis of hypervascular Liver Space Occupying Lesions (SOLs).
7. Describe the differential diagnosis of a palpable breast lump in a 44 yr old female with special reference to imaging features.
8. How will you investigate a neonate presenting with an abdominal lump?
9. Discuss the role of imaging in multiple gestations.
10. Discuss the evaluation of thyroid nodules on ultrasonography with description of features differentiating benign from malignant nodules.

M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013-RADIO DIAGNOSIS-PAPER-III

1..Describe the segmental anatomy of the liver. Write in detail about imaging in Budd-Chiari syndrome
2. Discuss imaging in developmental dysplasia of hip.
3. Discuss the role of interventional Radiology in management of uterine fibroids
4. How do you investigate a case of pulmonary thrombosis and give various radiological findings.
5. How do you investigate a case of Hemoptysis and discuss various imaging findings.
6. Discuss the role of MRI in shoulder injuries
7. Enumerate various sellar and parasellar mask lesions. Discuss their radiological features.
8. Describe the imaging signs of acute hemorrhagic infarction.
9. Differential diagnosis of orbital lesions
10. Explain in detail neural tube defects. Mention image findings.

126-NR-M.D. DEGREE EXAMINATION – APRIL, 2013-RADIO DIAGNOSIS-PAPER-III

1..Discuss the role of Neurosonography in neonates.
2. Describe in detail individual conditions that can present with monoarthritis. What is the imaging approach to a case of monoarthritis?
3. Describe the radiological approach in male infertility
4. Write short note on: a.Doppler of orbit b. Multilocular cystic renal neoplasm c. Atypical Osteosarcoma
d. ADEM e. Carotid cavernous fistula
5. Describe the role of imaging in Acute Pelvic pain in females
6. Discuss the principles, techniques, advantages, limitations and complications of catheter angiography.
7. Describe in detail the imaging features of injuries to facial bones.
8. Write short note on: a. Retinoblastoma b. Septo-Optic dysplasia c. Biophysical profile
d. Interrupted periosteal reaction e. Thrombolytic therapy in stroke.
9. Describe the development of embryological development of spinal cord. Classify Congenital anomalies of spine and discuss in detail occult spinal dysraphism.
10.Describe the role of imaging in planning endoscopic sinus surgery. Write briefly on the imaging of fungal sinusitis.

126-NR-M.D. DEGREE EXAMINATION – APRIL, 2012-RADIO DIAGNOSIS-PAPER-III

1..Enumerate the causes and discuss the differential diagnosis in a patient presenting with unilateral exophthalmos.
2. Discuss the role of interventional radiology in management of uterine fibroids.
3. Discuss the classification and imaging features of Dissection of aorta.
4. Enumerate and discuss the role of embolic agents in vascular radiology.
5. Describe the imaging protocol of Computed tomography (CT) angiography and imaging findings in

pulmonary embolism.
6. Describe the role of imaging in gastrointestinal (GI) tract lymphoma.
7. Describe the role of Doppler ultrasound in intrauterine growth retardation (IUGR).
8. How will you investigate a neonate presenting with jaundice.
9. Discuss the role of MRI in Gynaecologic malignancies.
10.Describe the role of ultrasonography in evaluation of developmental dysplasia of the hip.

126-NR-M.D. DEGREE EXAMINATION-OCTOBER/NOV., 2011-RADIO DIAGNOSIS-PAPER-III

1..Discuss the differential diagnosis of periorbital lesions.
2. Discuss the role of interventional radiologist in female infertility.
3. Describe the technique of Arch aortogram. Mention the indications and complications of aortogram.
4. Write short notes on: a) Embolic materials. b) MRI contrast c) Splenic space occupying lesions.
d) Isotope findings in acute cholecystitis. e) Pulmonary hydatid cyst.
5. Describe the radiological features of bronchogenic carcinoma.
6. Describe the radiological features of benign and malignant. lesions of small bowel.
7. Write short notes on: a) MRCP. b) Fetal MRI. c) Ultrasound guided renal biopsy.
d) Cystic masses in adnexa. e) Nasopharyngeal angioma.
8. Explain in detail anterior abdominal wall defects in fetus. Mention the imaging findings.
9. Mention the imaging findings in bleeding per vagina in first trimester.
10. Discuss the differential diagnosis of Rt. Iliac Fossa Mass.

126-N.R.-M.D. DEGREE EXAMINATION – APRIL, 2011-RADIO DIAGNOSIS-PAPER-III

1..Explain in detail biliary interventions.
2. Describe the imaging features of disc lesions. Add a note on MR myelography.
3. How neurosonogram is done? Mention its clinical applications.
4. Write short notes on: a) Secondaries in liver – ultrasound appearance
b) CT difference between pleural effusion and ascites. c) MR fistulogram.
d) CT appearance of glioma. e) Superficial ultrasound
5..Describe the role of ultrasound in thorax (extra cardiac lesions).
6. Differential diagnosis of benign pancreatic lesions.
7. Write short notes on: a) Congenital lesions of kidney. b) Pheochromocytoma.
c) Intussusception d) Actinomycosis of lung e) Tracheoesophageal fistula.
8..Discuss in detail tuberculous abdomen. 9. Differential diagnosis of colonic lesions.
10.How will you investigate male infertility? Mention the imaging features.

126-N.R.M.D. DEG. EXAMINATION – OCT./NOV., 2010-RADIO DIAGNOSIS- PAPER-III

1. Describe briefly the anatomy of the spinal canal and discuss the diagnostic procedures and radiological findings in any one pathological conduction.
2. Discuss briefly the role of radiology in intussusceptions.
3. Write short notes on: a) Neurosonography b) Rectrocaval ureter
4. Discuss the role of ultrasound in midline pelvic masses.
5. Classify the tumours of the orbit and discuss the role of CT and MRI in malignant tumours of the orbit.
6. Write short notes on: a) Radionecrosis b) Superior vena cava compression syndrome
7. Write short notes on: a) Rhabdomyosarcoma b) Oligohydramnios
8. Write short notes on: a) Infertility b) Ectopia vesicae
9. Describe the role of radiology in diagnosis of haematuria.
10. Describe ultrasound features of anencephaly and holoprosencephaly.

126-N.R.M.D.RADIODIAGNOSIS DEGREE EXAMINATION – APRIL, 2010-PAPER-III

1. Therapeutic interventions of liver tumours 2. Bronchial artery embolization. 3. Foregut Duplication Cysts.
4. Write short notes on: a) Choledochal Cysts b) Gastro Oesophageal Reflux c) Madelung deformity d) Virtual endoscopy
e) Epispadias – exstrophy complex
5. Radiological features of malabsorption syndrome. 6. Pseudotumour of the orbit.
7. Write short on: a) Filters b) Grids c) Elastography d) Congenital pancreatic anomalies
e) Bronchiolitis f) Imaging in Arnold Chiari malformations
9. Role of US in first trimester bleeding 10. Percutaneous nephrostomy

126-NR.MD.RADIODIAGNOSIS DEG. EXAMINATION-NOVEMBER, 2009-PAPER-III

1. Radiology in evaluation and management of lower GI bleed.
2. Differenital diagnosis of intrapulmonary calcification.
3. Intervention radiology in management of hydatid cyst liver.
4. Write short notes on: a) IUGR b) Meconium ileus c) Role of USG in orbital disorders
d) Emphysematous cholecystitis e) Endoscopic ultrasound
5. Radiological features of sigmoid diverticulitis. 6. Differential diagnosis of cystic lesions of mandible
7. Write short notes on: a) TLD badge b) Digital mammography c) Congenital syphilis
d) HRCT e) Islet cell tumors of pancreas
8. Embyology of gut rotation 9. Differential diagnosis of large bowel strictures
10. CT guided biopsy in thorax.

126-NR-MD. DEG. EXAM – APR/MAY, 2009-RADIO DIAGNOSIS-PAPER-III

1. How to investigate a female with infertility.
2. Enumerate the cause of retroperitoneal mass with radiological features.
3. Describe the technique of sonosalpingography with indications and complication.
4. Write short notes on: a) Schatzki ring b) Aneurysmal bone cyst c) Krukenberg's tumor
d) Sever's disease e) Doppler imaging
5. Describe CT & MRI finding in CP angle lesion. 6. What is the principle of Ultrafast CT.? Describe its uses.
7. Write short notes on: a) Digital mammography b) Double dose contrast CT c) MRI Contrast
d) Esophageal varices
8. What are the radiological finding in fetus of Down's Syndrome? Describe the USG. finding prenatal ultrasound.
9. Discuss the differential diagnosis of filling defect in esophagus.
10. Describe cerebral tumor with radiological finding.

126-NR-M.D. DEG. EXAMINATION –RADIODIAGNOSIS- NOVEMBER, 2008-Paper-III

1. How will you investigate a case of haemoptysis and its management?
2. How will you investigate a case of infertility and its management in brief?
3. Investigate a case of obstructive jaundice and intervention in its management.
4. Write short notes:=a) Paget's Disease b) Codfish vertebra c) Ovarian teratoma d) Kienböck's Disease
e) USG contrast media
5. Describe the imaging findings in posterior fossa tumours in brain 6. Multidetector CT scan & its applications
7. Write short notes :=a) CT angiogram b) Contrast used in MRI c) Digital radiography d) Peptic ulcer
8. Enumerate congenital lesions in the colon. Describe about Hirschsprung's disease.
9. Describe the differential diagnosis of female pelvic masses.

10. Radiological features of cystic lesions in mandible.

126-NR-M.D. DEGREE EXAMINATION – JUNE, 2008-RADIO DIAGNOSIS-Paper-III

1. Classify cystic renal diseases. Describe radiological features of polycystic kidney
2. Discuss the differential diagnosis of focal liver lesions & the radiological features of hemangioma in detail.
3. Imaging of urethral injuries.
4. Classify congenital anomalies of kidney. Describe imaging features of fusion anomalies
5. Discuss in detail imaging Primary retroperitoneal neoplasm.
6. Describe the radiological anatomy of adrenal glands and discuss in detail imaging of adrenal tumor
7. Role of ultrasound and MR in female infertility. 8. Write short notes on: a) Enteroclysis b) Carcinoids
9. Write short notes on: a) Primary retroperitoneal neoplasms. b) Periampullary
10. Write short notes on: a) Imaging of appendicitis b) Cholecystitis

126-NR-MAY/JUNE, 2007

1. Discuss the role of interventional radiologist in carticocavernous fistula.
2. Discuss the differential diagnosis of Miliary mottling in lung.
3. Describe the technique of Radio Frequency Abalation (RFA). Mention the indications and complications of Radio Frequency Abalation.
4. Write short notes on: a) Vertebroplasty b)Haemangioma of liver c) Perthe's disease d) 4D ultrasound e) Congenital hydronephrosis
5. Describe the radiological features of colonic carcinoma. 6. Differential diagnosis of orbital lesions.
7. Write short notes on: a) Focal spot b) Digital mammography c) Ultrasound Contrast d) Congenital lesions of lung e) Acute pancreatitis.
8. Explain in detail neural tube defects. Mention imaging findings.
9. Discuss the differential diagnosis for adnexal masses.
10. How transrectal ultrasound guided biopsy done? Mention imaging findings of prostatic lesions.

NOVEMBER-2006 (N.R.)

1. Describe the uterine artery embolisation
2. Enumerate the causes of Right-iliac Fossa Pain. Discuss radiological features of each of them.
3. Describe the technique of amniocentesis. Mention the indications and complications of amniocentesis
4. Write short notes on: a) Esophageal web b) Haemangioma of vertebra c) Dermoid cyst of ovary d) Osteonecroasis of tibia e) Tissue harmonic imaging
5. Describe the CT and MRI findings in sella and parasellar lesions.
6. What is the principle of spiral CT. Mention the clinical applications and artifacts which can occur in spiral CT.
7. Write short notes on: a) Diginal Radiography (DR) b) C.T.arterioportogram (CTAP) c) Contrast used in C.T.Scan d) Esophageal varices
8. What are all the anterior abdominal wall defects in fetus. Describe each one of them.
9. Discuss the different diagnosis of filling defects in duodenum
10. Classify mandibular tumours. What is ortho-pantomography

MAY/JUNE-2006 - N.R.

1. Enumerate the causes of solitary pulmonary nodule. Discuss the radiological features=10m
2. Describe the indications, contraindications, procedure and complications of bronchial artery embolisation =10m
3. Describe the technique of percutaneous nephrostomy. Mention its indication and complications.=10m
4. Write short notes on: 10m; a) Superior orbital fissure b) Maffucci syndrome c) Venous angioma c) Sella changes in increased intracranial tension e) Osteomyelitis
5. Describe the radiological and imaging features of glioma=10m
6. What is the principle of Magnetic Resonance Imaging (MRI) ? Mention the safety aspects of MRI=10m
7. Describe the ultrasound features of anencephaly and holoprosencephaly=10m
8. Write short notes on: 10m; a) Doppler findings in portal hypertension b) Chondroblastoma c) Testicular torsion d) Abdominal Circumference in Foetus
9. Discuss the role of 3D ultrasound in present day practice=10m
10. How will you do lower limb venogram? Mention the radiological findings in various conditions=10m

APR/MAY, 2005. (N.R.)

1. Discuss various syndromes associated with intestinal polyposes and how will you investigate radiologically and imagiologically of any two conditions.
2. Discuss the radiological and imagiological features in acute emergencies in paediatric age group
3. Describe the role of radiology and imagiology in mitral valve diseases
4. Write short notes on: a) Orbital venogram b) Enlargement of left atrium c) Echo cardiography d) Foetal death d) Sonographic evaluation of ovarian mass
5. Enumerate the causes of non-functioning kidney and how will you evaluate them radiologically and imagiologically.
6. How will you evaluate radiologically and imagiologically renovascular hypertension
7. How will you investigate a case of coarctation of aorta
8. Role of plain x-ray in diagnosis of heart diseases, explain and discuss.
9. Write short: a)A.V.Malformation b)V.S.D. c)Genito urinary tuberculosis d)Plebolith e)Endometriosis
10. Describe the role of radiology in diagnosis of haematuria

SEPT./OCT.2004. (N.R)

1. Describe the role of cerebral angiogram in diagnosis of intra cranial lesions
2. Enumerate cystic lesions of kidney & discuss radiological & imagiological features of polycystic kidney.
3. Describe the techniques of double contrast studies of upper G.I.tract and discuss radiological and imagiological features of any three.
4. Write short notes on: a) Achalasia Cardia b) Horseshoe Kidney c) Lymphangitis Carcinomatosa d) Constrictive pericarditis e) Teratoma of ovary
5. Describe the C.T. and MRI images of renal cell carcinoma.
6. What is the principle of ultrasound imaging? What are the ultrasound features of gall bladder diseases.
7. Describe the ultra sound features of hepatic amoebiasis and cirrhosis of liver.
8. Write short notes on: a) Aorto arteritis and renal hypertension b) Xanthogranulomatous pyelonephritis c) Ptosis of Kidney d) Concomittant peptic ulcer
9. How will you assess the foetal age with help of various imaging modalities.
10. How will you assess the mass in the fundus of stomach with help of various imaging techniques.

MARCH/APRIL, 2004. (N.R.)

1. Discuss the radiological evaluation of renal artery stenosis =10m
2. Discuss the causes and radiological evaluation of cholecystitis =-10m
3. Write short : a) Vesico-ureteric reflux b) Intussusception c) Ileocaecal tuberculosis d) Duplication cysts=10m
4. Discuss the imaging of Renal Transplant =10m
5. Classify diaphragmatic hernias, and describe briefly their radiological features =10m
6. Discuss the role of computerized tomography in Acute Abdomen =10m
7. Write briefly on: a) Renal Cyst Sclerotherapy b) Hepatoblastoma c) Carcino.na Pyriform fossa d) Parapharyngeal spaces =10m

8. Discuss the indications and methods of TIPS (Transjugular intrahepatic portosystemic shunt)=10m
9. What are the causes of upper gastro intestinal bleed. How do you manage as a Radiologist =10m
10.Discuss the congenital anomalies of renal tract. =10m

SEPT./OCT. 2003. (N.R.)

1. Discuss the radiological evaluation of the portal venous system =10m
2. What are the causes of obstructive jaundice ? How do you radiologically evaluate the same =10m
3. Write: a)Staghorn Calculus b)Prune Belly Syndrome c) Percutaneous Nephrostomy d) Gastro-oesophageal reflux
4. Discuss the radiological features of renal tuberculosis
5. Classify mandibular tumours. What is Orthopantomography=10m
6. Write briefly on: a) Micturating Cytourethrogram b) Complications of Excretory Urography
   c) Hyaline membrane disease d) Pancreating Pseudocysts =10m
7. Discuss imaging of Thyroid tumours =10m 8. Classify and discuss radiological evaluation of gastric volvulus=10m
9. Discuss the radiological evaluation of gastro intestinal bleeding =10m
10.Discuss radiological features of ileocaecal tuberculosis =10m

SEPT./OCT.2002 (O.R.)

1. Discuss the skeletal changes in renal diseases.
2. Enumerate few cyanotic congenital cardiac conditions with oligaemia in lungs, describe the radiological features in any one of them.
3. Write: a)Inferior vena caval obstruction b)Complication of arterigram c)Endometriosis d) Transvaginal ultrasound

MAY, 2000.

1. How do you help in treating a case of Anchylosing spondylitis.
2. Discuss the differential diagnosis of obliteration of Aortic window.
3. Discuss the differential diagnosis of Tumourlets of lung
4. Write short: a) Spinaventosa b) Ventricular Aneurysm c) Kohler's tear drop sign d) Lymphangitis Carcinomatosis.

JUNE, 1999.

1. Discuss the clinical features of pulmonary embolism. Briefly mention the role of imaging modalities in the diagnosis
2. Discuss the following: a) Choledochal cysts b) Horse shoe shape kidney c) Vertebral Biopsy d) Circle of Willis.
3. Describe the development of the heart. Discuss the myocardial perfusion study.
4. Write short notes on: a) Rickets b) Follicular study c) Archnoid cyst d) Osteogenic sarcoma

FEBRUARY, 1998.

1. Briefly mention the role of Nuclear medicine in the diagnosis of Cardio-vascular disorders.
2. Discuss : a) Imaging of Adrenals b) Vertebral Biopsy c) Baloon Angioplasty d) Ano Rectal Anomalies.
3. Mention the role of imaging modalities in the diagnosis of the Lump in the Rf iliac fossa.
4. Write short notes: a) MRI of knee joint b) Ultrasound Examination in last Trimester c) Mammogram

SEPTEMBER, 1997.

1. Discuss the role of imaging modalities in the diagnosis of Transplant kidney dysfunction.
2. Discuss the following: a) Hyper parathyroidism b) Mrangioram c) Non-ionic contrast
   d) Paget's diseases of the bone.
3. Discuss in detail the role of C.T. and M.R.I. in the diagnosis of Seizure disorders.
4. Write short notes on: a) Sturge Weber's syndrome b) Fallot's tetrology c) Primary complex
   d) Hydatid cysts in the liver.

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DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – **DECEMBER**, 2017

RADIO DIAGNOSIS

Paper-IV : Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions
All questions carry equal marks
Draw diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Gamma camera
2. Radionuclide imaging in pulmonary embolism
3. Discuss phacomatosis
4. Embryology of gonads. Enumerate congenital disorders
5. Role of isotopes in the imaging of hepatobiliary disorders
6. Hysterosalpingography
7. Role of MRI in spinal disorders
8. Discuss the role of advanced imaging in Epilepsy
9. Discuss the role of 3D U/S in present day practice
10. Role of 2 D echo in cardiac disorders

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127-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – MAY, 2017-RADIO DIAGNOSIS-Paper-IV : Radiodiagnosis including Nuclear Medicine and other diseases-Time: 3 Hours-Max. Marks:100-Answer all questions-All questions carry equal marks-Draw diagrams wherever necessary

Write short essays on the following:
1..The PC and PNDT Act
2..Application of contrast enhanced ultrasound in hepatic lesions
3..CT perfusion in acute stroke
4..Bronchial artery embolization
5..Adverse reactions to intravascular iodinated contrast media
6..PACS
7..Image guided interventions in bone tumors
8..MR neurography
9..Virtual tracheo-bronchoscopy
10.Dose reduction in pediatric CT.

DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA - 8

MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2016-RADIODIAGNOSIS

PAPER-IV: Clinical radiology related to CNS, Orbits and recent advances in radiology and imaging and

1..Discuss the role of 3D U/S in present days practice.
2. Discuss the role of scintigraphy in acute medical and surgical conditions.
3. Discuss principle of DWI and its use in non CNS conditions.
4. Write about MRCP and ERCP.
5. Discuss the role of PET-CT in the evaluation of Lymphoma.
6. What is Elastography? What are its applications?
7. Discuss the technique of radio frequency ablation of malignant tumours.
8. Diffusion tensor imaging.
9. Discuss the role of advanced imaging in Epilepsy.
10.Discuss PI-RAD and LI-RAD.

127-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – NOVEMBER, 2016-RADIO DIAGNOSIS-PAPER-IV

1..Describe high intensity focussed ultrasound (HIFUS) principle, instrumentation and its applications
2..Role of ultrasound and doppler in evaluation of IUGR
3. Role of imaging in Avascular necrosis head of femur
4. Radioisotopes used in imaging
5. Radionuclide imaging of thyroid
6. Discuss fMRI with various paradigms
7. Platybasia and basilar invagination
8. Role of imaging in oesophageal atresia
9. I.V Urography
10.Rotator cuff

127-NR-DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – MAY, 2016-RADIO DIAGNOSIS-PAPER-IV

1..MRCP (Magnetic Resonance Cholangiopancreatography)
2..Imaging of HIV manifestations of CNS
3. Doppler USG in portal hypertension
4. Write short notes on:
a) Functional MRI of brain b) Sturge weber syndrome
c) Prune belly syndrome d) Acro-osteolysis
e) Periosteal reaction
5. Trans rectal ultrasound
6. Imaging of sarcoidosis
7. Intervention and management of aortic aneurysm

8. Write short notes on: a) MR perfusion imaging b) MR contrast agents
c) MR features of prostatic carcinoma d) Testicular torsion e) CT angiography
9. MR features of intramedullary spinal tumors
10.Skeletal scintigraphy.

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DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA - 8

MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2015-RADIODIAGNOSIS

PAPER-IV: Clinical radiology related to CNS, Orbits and recent advances in radiology and imaging and interventional radiology and nuclear medicine-Time: 3 Hours-Max.Marks: 100-Answer All Questions

All Questions Carry Equal Marks-Draw a neat and labeled diagrams wherever necessary

Write short essays on the following:

1..Describe the principle, enumerate the radiopharmaceuticals used and detail the procedure of radionuclide imagine in a patient with lower gastrointestinal bleed
2..What is Magnetic resonance thermography? Describe the principle, advantages and disadvantages and complications of MR guided HIFU in the management of uterine fibroids
3..Describe in detail the technique, applications and complications of CO2 angiography.
4..Role of interventional Radiology in the management of varicose veins
5..Discuss the role of advanced imaging in epilepsy
6. Classify temporary and permanent embolization materials. Describe different interventional techniques of treatment of CNS arteriovenous malformations.
7. Define interventional radiology. Discuss role of intervention in Stroke Pathology.
8. Discuss molecular imaging and discuss its role in clinical practice
9. Role of PET CT in the management of lymphoma
10.Discuss the role of high intensity focused Ultrasound (HIFU)-Principle, instrumentation & its applications

127-NR-Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – OCTOBER, 2015-RADIO DIAGNOSIS-PAPER-IV

Radiodiagnosis including Nuclear Medicine and other diseases-Time: 3 Hours-Max. Marks: 100-Answer all

1..Discuss the role of imaging in white matter diseases.
2..Describe the pathophysiology and imaging features of hyperparathyroidism.
3..Describe the imaging evaluation of a case of Primary Infertility.
4..Discuss the role of current imaging modalities for epilepsy.
5..Discuss the role of MRI in the evaluation of TMJ disorders.
6..Write short notes on: a) MR enteroclysis b) CT Colonography c) PET MRI d) PACS e) Imaging in renal transplant
7..Discuss the role of MRI in the evaluation of CNS manifestations of AIDS.
8..Write short notes on ; a) Artificial neural network b) Myocardial viability imaging
c) MRI in brachial plexopathy d) Molecular imaging e) Cloud computing and its relevance to radiology
9..Discuss the role of interventional radiologist in a case of renovascular hypertension.
10.Discuss the current role of cardiac MRI.

127-NR-M.D. DEGREE EXAMINATION – APRIL, 2015-RADIO DIAGNOSIS-APPER-IV

1..Describe the role of MRI in the evaluation of hypervascular focal hepatic lesions.
2..Describe the current role of MRI in the investigation of a case of acute abdomen
3..Describe the imaging evaluation of a case of paraplegia
4..Discuss the role of imaging in multiple sclerosis
5..Classify orbital tumors. Discuss the radiological approach to investigate a case of suspected orbital tumor
6..Write short notes on a) Radioisotope in cardiac imaging b) Neuro sonography
7..Discuss the role of dynamic MRI in a case of suspected lump breast
8..Write short notes on: a) Neonatal hip sonography b) Isotope renogram
9..Describe radiology of hand as a mirror of various diseases
10.Discuss the role of PET CT in the evaluation of Head and Neck cancers

MD DEG. INTERNAL ASSESSMENT EXAMS-DECEMBER, 2014-RADIODIAGNOSIS-PAPER-IV

Write short essays on the following:

1..Describe the principle of microwave ablation. What are the indications and applications of the technique? Advantages and disadvantages of microwave ablation.
2..Describe high intensity focused ultrasound (HIFU/S) principle, instrumentation and its application.
3..Classify the material used for embolization procedures. What is the procedure and complications of bronchial artery embolization?
4..Describe the principles of digital radiography – direct and indirect techniques. Role of flat palnel technology in mammographic tomosynthesis.
5..What is spectroscopy discuss role of spectroscopy in tumors of CNS?
6..Describe the technique of sonosalphingography with indications and contraindications.
7..Discuss the role of imaging in white matter diseases.
8..Principle and use of PET CT Scan in brain disorders. 9..Discuss fMRI with various paradigms.
10..Discuss the advantages of contrast enhanced MR imaging in breast lesions.

127-NR-M.D. DEGREE EXAMINATION – OCTOBER, 2014-RADIO DIAGNOSIS-PAPER-IV

1..Discuss the various radiological and imaging features of lesions in the posterior cranial fossa
2..Spinal dysraphism 3..Constructive Pericarditis
4..Wrote short notes on: a) BOLD technique b) Anencephaly c) Virtual bronchoscopy d) Fistula-in-ano
5..Imaging approach to hematuria 6..Role of ultrasound in I trimester bleeding
7..Classify uterine anomalies and role of imaging
8..Write short: a) Anorectal malformation b)MR contrast agents c)Ovarian torsion d) MR angiography
9..CP angle tumors 10.Mention role of imaging in Leukodystrophies

127-NR-M.D. DEGREE EXAMINATION – APRIL, 2014-RADIO DIAGNOSIS-PAPER-IV

1..Discuss the principles of diffusion weighted imaging and its clinical applications.
2..Discuss the role of MRI in a pregnant patient with acute abdominal pain
3..Describe the role of MRI in the imaging in diffuse liver disease.
4..Write short notes on: a) Cine MR imaging and its utility d) PET in evaluation of lymphoma b) TRUS guided interventions e) Cardiac stress imaging d) CT dosimetry
5..Discuss the concept of molecular imaging. What are the various modalities used in molecular imaging? Elaborate the role of MRI in molecular imaging.
6...Describe the anatomy of the limbic system. Discuss imaging in temporal lobe epilepsy.
7..Write short notes on: a) MR Enteroclysis b)) Intrauterine foetal intervention c) USG in Rheumatoid arthritis d)) Carotid and vertebral artery dissection e) Imaging of the brachial plexus

8. Discuss the role of MRI in breast diseases. 9. Describe the utility of Hepatobiliary contrast agents.
10.Describe the instrumentation and principles of Radiofrequency ablation. Discuss the indications, patient \
selection, procedure and complications of its various implications.

MD DEG. INTERNAL ASSESSMENT EXAMS-DECEMBER, 2013-RADIODIAGNOSIS-PAPER-IV

1..Digital Tomo synthesis and its role in the evaluation of breast lesions.
2..Role of diffusion weighted imaging in the diagnosis of intra cranial tumours.
3..What are the newer sequences used in MRI?
4. How do you manage a case of varicose veins by interventional radiology?
5. Describe the technique of CT enterography and its advantages over MR enterography.
6. Discuss PET-CT principles and clinical uses?
7. What is BIRADS-discuss Elastography principles and clinical uses?
8. What is Hunter triangle? Define Spectroscopy and discuss proton spectroscopy in CNS pathologies.
9. Contrast enhance MR imaging of the breast. 10.Captopril Scintigraphy.

127-NR-M.D. DEGREE EXAMINATION – OCTOBER, 2013-RADIO DIAGNOSIS-PAPER-IV

1..Discuss the role of MRI in evaluation of congenital heart disease.
2. Discuss the role of interventional radiology in management of Obstructive jaundice.
3. Enumerate various radio-isotopes used in Hepato-Biliary system. Describe the imaging features and techniques in biliary atresia.
4. What is chemical shift imaging? Elaborate the different types of chemical shift imaging used in MR system.
5. Describe the role of PET-CT in evaluation of Lymphoma.
6. Describe the approach to imaging in pulmonary afflictions of Acquired Immune Deficiency Syndrome (AIDS).
7. Enumerate the various Cerebello-pontine (CP) angle masses and discuss their imaging features.
8. Discuss the role of Doppler ultrasound in evaluation Peripheral Arterial Disease in the lower limb.
9..What are the reconstruction algorithms used in Computed tomography and explain them.
10.Discuss the role of Elastography in various organs of the body.

127-NR-M.D. DEGREE EXAMINATION – APRIL, 2013-RADIO DIAGNOSIS-PAPER-IV

1..Discuss the advances in imaging and management of ischemic stroke
2. Discuss the principles, instrumentation and methodology of PET imaging. Elaborate on its role in head and neck cancers.
3. Describe segmental anatomy of the liver. Discuss imaging in liver transplantation.
4. Write short note on: a) MR imaging of placenta b) Flat panel detector c) Cartilage imaging
d) Pharmacological agents used in cardiac CT & MRI
e) Intraductal papillary mucinous tumor of pancreas
5. Describe High intensity focused ultrasound (HIFU) – Principle, instrumentation and its applications.
6. Discuss the role of PET scanning in Gastrointestinal disorders.
7. Write short note: a) Imaging in brain death b) Nodal imaging on MR c) Imaging of breast implant
d) Susceptibility weighted imaging e) MR Tractography
8. What are isotopes? What is the principle of SPECT? Mention the common applications of radionuclide isotopes in diagnostic radiology.
9. Discuss the principles and basis of CT perfusion imaging and its various assessment parameters. Define the role of CT perfusion in onco imaging.
10.Discuss various images guided Musculoskeletal interventions.

MD DEG. INTERNAL ASSESSMENT EXAM – DECEMBER,2012-RADIODIAGNOSIS-PAPER-IV

1..Enumerate various ring enhancing lesions of Brain. Discuss MRI features of infective conditions.
2..Describe various congential anomalies of posterior cranial fossa. Discuss MRI findings of two conditions.
3..Discuss the radiological approach in a suspected case of subarachnoid haemorrhage.
4..What are the causes of Proptosis? Discuss radiological approach to unilateral proptosis.
5..Classify MRI contrast agents. Discuss the principles and their applications.
6..Discuss indications, technique and complications of bronchial artery embolization.
7..Enumerate causes of orbital masses. Discuss imaging features of two common masses in an adult.
8. Mention differential diagnosis of extradural spinal masses.
9. Mention role of imaging in Leukodystrophies.
10.Mention clinical applications of diffusion tensor imaging.

127-NR-M.D. DEGREE EXAMINATION – APRIL, 2012-RADIO DIAGNOSIS-PAPER-IV

1..Discuss the role of imaging in surgical obstructive jaundice.
2. Enumerate the causes and imaging features in Pseudomyxoma peritonei.
3. Describe the role of scintigraphy in evaluation of Gastro-intestinal bleeding.
4. What are the applications of MR spectroscopy in the evaluation of various intracranial lesions?
5. Describe the role of scintigraphy in cardiac imaging with emphasis on myocardial perfusion and viability.
6. Describe the role of HRCT in diffuse pulmonary lung disease.
7. Enumerate various causes of Supra-sellar masses. Describe imaging features in Craniopharyngioma.
8. Discuss the role of Doppler ultrasound in evaluation of varicose veins.
9. Discuss the radiological approach in a suspected case of subarachnoid haemorrhage.
10.Enumerate different varieties of osteosarcoma. Discuss their imaging features.

127-NR-M.D. DEG. EXAMINATION – OCTOBER/NOV., 2011-RADIO DIAGNOSIS-PAPER-IV

1..Discuss the role of MRI in congenital anomalies of uterus.
2. Describe the CT imaging features of peritoneal diseases. 3. Explain in detail pseudopancreatic cyst.
4. Write short notes on: a) Tissue harmonic imaging. b) CT features of bronchiectasis
c) Lymphangiogram d) Osteopetrosis e) Hip ultrasound (Paediatric)
5. Describe the imaging features of arteriovenous malformations (AVM) of brain. Add a note on interventional procedures available for AVM.
6. Describe the radiological features of metabolic bone disease.
7. Write briefly about percutaneous nephrostomy.
8. Write short notes on: a) Kartagener's syndrome b) Differential diagnosis of multiple cavities in lung.
c) TAPVD d) Undescended testis e) Chronic DVT
9. Mention the technique and indications for carotid doppler.
10. Differential diagnosis of posterior Fossa lesions in brain.

127-NR.M.D. DEGREE EXAMINATION – APRIL, 2011-RADIO DIAGNOSIS-PAPER-IV

1..Write briefly about the newer MR applications in breast disease.
2. Describe CT and MRI features of Meningioma. 3. Discuss the role of interventional radiologist in stroke.
4. Write short notes on: a) Tensor imaging b) Torsion testis c) Breast calcifications d) Baker's cyst
e) Ultrasound of tendoachiles
5. Describe the radiological features of multiple myeloma. 6. Write briefly about image guided renal biopsy.
7. Discuss the role of imaging in renal tumors.
8. Write short notes on: a) Agenesis of corpus collosum b) Doppler findings in AV fistula

c) MR findings in coarctation of aorta d) Haemangioma of vertebra e) Osteoid osteoma
9. Describe the role of MRI in chest diseases (excluding heart). 10.Describe the MRI features of liver lesions.

127-NR-M.D. DEG. EXAM – OCT./NOVEMBER, 2010-RADIO DIAGNOSIS- PAPER-IV

1. Describe the techniques of hysterosalphingiogram and discuss its merits and demerits.
2. Discuss how you will plan a 700 bedded hospital diagnostic imaging department of a post graduate teaching institute
3. Write short notes on: a) Adamantinoma b) Sarcoidosis
4. Describe the technique of mammography and its value in differential diagnosis of benign versus malignant masses of the breast.
5. Describe the plan X ray findings in osteosarcoma, osteoclastoma and chondrosarcoma.
6. Write short notes on: a) Transvaginal sonography b) Battered baby syndrome
7. Write short notes on: a) Bronchiectasis b) Cardiac tumours
8. Write short notes on: a) Hayaline membrane disease b) Renogram
9. Discuss the role of Magnetic Resonance imaging in obstetrics.
10. Describe the CT and MRI features of pancreatic lesions.

127-N.R.M.D. DEG. EXAMINATION – APRIL, 2010-RADIO DIAGNOSIS-PAPER-IV

1. Write briefly about MR Urogram. 2. Role of MR imaging in acute stroke. 3. Aorto arteritis.
4. Write short notes on: a) MRI artifacts b) Avascular necrosis hip c) Coarctation of aorta d) Chordoma e) Normal pressure hydrocephalus
5. Imaging approach in spinal trauma. 6. Pulmonary sarcoidosis. 7. Constrictive pericarditis
8. Writ short notes on : a) Role of USG contrast agents in GIT disease b) MRA c) Pulmonary microlithiasis d) PTC e) MR features of endometriosis
9. Discuss MR features of benign and pathological vertebral collapse. 10. Isotope renogram.

127-NR-M.D. DEG. EXAMINATION – NOVEMBER, 2009-RADIODIAGNOSIS-PAPER-IV

1. M.R. spectroscopy. 2. Imaging of HIV manifestations of CNS. 3. Doppler USG in portal hypertension.
4. Write short notes on: a) Functional MRI of brain b) Sturge weber syndrome c) MRI of Anterior cruciate ligament injury of knee. d) Acro-osteolysis e) Pericardial effusion
5. Trans rectal ultrasound. 6. Imaging of pulmonary asbestosis. 7. Imaging of aortic aneurysms.
8. Write short notes: a) MR Perfusion imaging b) MR contrast agents. c) MR features of pancreatic carcinoma d) Testicular torsion e) CT angiography
9. MR features of intramedullary spinal tumors. 10. Skeletal scintigraphy.

127-N.R.MD. DEG. EXAMINATION – APR/MAY, 2009-RADIO DIAGNOSIS-PAPER-IV

Write Short Essays On The Following: 1. Describe the principle of USG imaging with recent advances.
2. Mention CT and MR finding in pancreatic lesion. 3. How will evaluate a case of hepatic mass.
4. Write short notes on: a) Gyriform enhancement in MRI. b) IVU. c) Twin transfusion syndrome. d) Achondroplasia e) Autosomal dominant poly cystic Kidney diseases.
5. Describe principles of HRCT and its uses 6.How will evaluate on patient with right upper abdominal pain.
7. Classify adrenal tumour. Discuss radiological features of neuroblastoma.
8. Write short notes on: a) Sclerotic lesions of skull b) Neurofibromatosis 2 c) Parotid tumor d) MRI fininding in Lipomyelomeningocele e) Bone scintigraphy
9. Describe radiological features of bone tumor. 10. Describe MRI features of brain infarction.

127-NR-M.D. DEG. EXAMINATION –RADIODIAGNOSIS- NOVEMBER, 2008-PAPER-IV

Write short essays on the following:=1. PET CT. 2. How will you evaluate a case of Right Iliac fossa mass?
3. MR Spectroscopy and its applications in brain.
4. Write short notes on:=a) CT Cisternography b) Vertebroplasty c) MR angiography d) USG in chest diseases e) Developmental dysplasia of hip
5. Classify Adrenal tumors. Discuss the radiological features of Neuroblastoma.
6. HRCT temporal bone. 7. How will you investigate a case of unilateral exophthalmos
8. Write short notes on:=a) Parotid gland tumours b) Juvenile nasopharyngeal angiofibroma c) Virtual colonoscopy d) MR mammography e) Bone densitometry
9. How will you investigate case of posterior mediastinal mass?
10. CT and MRI findings in intraparenchymal hemorrhage in Brain.

127-NR-M.D. DEGREE EXAMINATION – JUNE, 2008-RADIO DIAGNOSIS- Paper-IV

1. Discuss imaging of CNS vascular malformations with specific discussion of role of CT & MR angiography
2. CT & MR findings in various stages of cerebral infarct
3. Describe anatomy of orbit. Discuss various imaging modalities in orbital lesions.
4. Diffusion MR imaging in brain and its clinical application
5. Discuss the radiological anatomy of the soft tissues of neck.
6. Differential diagnosis of incidentally discovered thyroid nodule and imaging approach to each.
7. Short notes on: a) Facial fractures b) Sialography
8. Short notes on: a) Radio isotopes in cardiac imaging b) Renogram
9. Short notes on: a) Mucocele b) Cholesteatoma
10.Short notes on: a) Percutaneous biopsy of mediastinal lesions c) Uterine artery embolization

127-NR-M.D. DEGREE EXAMINATION – MAY/JUNE, 2007-RADIO DIAGNOSIS-Paper-IV

1. Write briefly about MR Spectroscopy. 2. Mention CT and MRI features of cerebral infections.'
3. Discuss the role of radiologist in carotid artery disease.
4. Write short notes on: a) Diffusion weighted imaging b) Tuberous sclerosis c) MR findings in shoulder pathology d) Plain X-ray findings in LV anemysms e) Inferior rib notching
5. Write briefly about neurosonography. 6. Explain in detail the radiological findings in emphysema.
7. Discuss the role of imaging in diseases of aorta.
8. Write short notes on: a) Fibre tract imaging b) DSA c) Negative contrast agents d) MR features of Haemagioma liver. e) Scrotal calcifications.
9. Describe the MRI features of disc prolapse. 10.Discuss MR mammography Vs Digital mammography.

NOVEMBER-2006-(N.R.)

1. How 2D ultrasound differs from 3D ultrasound? Mention the advantages of 3D ultrasound over 2D ultrasound.
2. Mention the CT and MRI features of hepatic lesions 3. How will you evaluate a case of obstructive jaundice?
4. Write short =a) Ring enhancing lesions in MRI b) Sinogram c) Doppler findings in Intrauterine growth retardation d) Paset's/Paget's disease e) Congenital hydronephrosis
5. Write in brief HRCT findings in interstitial lung disease 6.How will you investigate a case of haemoptysis
7. Classify renal tumors. Discuss the radiological features of Wilm's tumr.
8. Write short notes on: a) Orbital calcification b) Skull changes in neurofibromatosis c) Parotid sialogram d) Magnetic Resonance findings in disc prolapse e) Bone densitometry
9. Discuss the radiological features of metabolic bone disease
10.Describe the Magnetic Resonance imaging features of haemorrhage

MAY-JUNE-2006 (N.R.)

1. How will you evaluate a case of systemic hypertension 2. Describe the CT and MRI features of Pancreatic lesions
3. Describe the function and clinical applications of PET-CT (Position Emission Tomography-ComputedTomography)
4. Write short notes: 10m; a) Colloid cyst b) Cystic hygroma c) Malignant lesions of breast in ultrasound

d) Bronchogenic cyst e) Bladder and ureter changes in tuberculosis-intravenous urogram findings
5. Describe the imaging findings in spinal tuberculosis=10m
6. How will you investigate distension of abdomen in Paediatric age group=10m
7. Describe the radiological features of osteosarcoma=10m
8. Write; a)Rickets b)Adamantinoma of Tibia c)Kartagener syndrome d)Diaphragmatic hernia e)Uterine anomalies
9. Mention indications and ultrasound findings in first trimester bleeding=10m
10.Discuss the role of Magnetic Resonance Imaging in obstetrics=10m

APR/MAY, 2005. (N.R.)

1. Explain how colour Doppler differs from ultrasound in echocardiography and discuss advantages and disadvantages.
2. Discuss the role of radiology and imagiology in intracranial meningioma
3. Discuss the role of radiology and imagiology in case of hernia through Foramen Magnum and Luschka.
4. Write : a) Myositis ossificans b)Congenital syphilis c)Cerebral syphilis d) Dacryocystis e) Nasolacrimal duct
5. Discuss how radiology and imagiology helps in Root Canal Treatment (RCT)
6. Describe the Radiological and imagiological features of calciferal deficiency
7. Give the differential diagnosis of generalized increase in bone density.
8. Discuss the Radiological and imagiological features of neurotuberculosis.
9. Write: a) Cleido cranial dystrophy b) Sutural diastasis c) Diaphysial achalasia d) Orthopentogram e) Sella turcica
10. Discuss the Radiological and imagiological features of ring enhancing lesions of brain

SEPT./OCT.2004. (N.R)

1. How C.T. image differs from MRI image? Write the principles of MRI Scanning.
2. What are C.T. and MRI features of Cerebral Gliomas 3. How will you evaluate a case of Syringomyelia?
4. Write short notes on: a) Cysticercosis b) Orbital venogram c) Cephalic index
d) Multiple myeloma e) Structures passing through foramen magnum
5. Write in brief radiological changes in increased intracranial tension
6. How will you investigate a case of Chronic Suppurative Otitis Media (CSOM)?
7. Classify midline anomalies of brain and discuss the role imagiology in identification of the same.
8. Write short : a) Congenital syphilis b) Anencephaly c) Optic foramen d) Styloid process e) Pineal calcification
9. Discuss the radiological and imagiological features of Thalassemia
10.How will you investigate a case of suspected Medullo blastoma?

MARCH/APRIL, 2004. (N.R.)

1. What is Angioplasty? What are the methods and complications of angioplasty =10m
2. Give the differential diagnosis of generalized increase in bone density =10m
3. Write briefly on: a) Dacryocystography b) Pituitary tumours c) Meigs syndrome d) Power Doppler Imaging
4. Classify tumours of the Spinal Canal and Cord. How do you investigate the same =10m
5. Write briefly on: a) B-flow Imagiang; b) MR Spectroscopy (Magnetic Resonance Spectroscopy)
c) Coin lesion of the lung d) Cortical vein thrombosis =10m
6. Discuss the congenital anomalies of the uterus and fallopian tubes =10m
7. Discuss the radiological evaluation of stroke =10m 8. Discuss computed tomography of the petrous bone =10m
9. Discuss the methods of foreign body localization in the orbit =10m
10.Write briefly on the applications of Neurosonography =10m

SEPT./OCT. 2003. (N.R.)

1. What is Embolisation. Classify the embolic material and indications for embolisation =10m
2. Discuss the radiological methods of investigation of Meningiomas =10m
3. Write briefly on: a) Orbital blowout fracture b) Syringomyelia c) Dumb-bell tumor of the spine
d) Balloon catheters =10m
4. Discuss the radiological methods of evaluation of ovarian tumours =10m
5. Write briefly on: a) Cortical vein thrombosis b) M R Spectroscopy (Magnetic resonance spectroscopy)
c) Cranio-vertebral junction anomalies d) Role of anticoagulants in Radiology =10m
6. Classify hydrocephalus. How do you investigate the same =10m
7. Discuss the role of Doppler in evaluation of pregnancy=10m
8. Discuss the diagnosis and management of Nasopharyngeal angiofibroma =10m
9. Discuss orbital foreign body localization 10.Classify pituitary tumours. How do you investigate the same =10m

SEPT./OCT. 2003. (O.R.)

1. Discuss interventional radiological methods of treating cerebral arterio venous malformations.
2. What is syringomyelia ? How do you radiologically investigate the same
3. Write short notes on: a) Embolic material b) Role of Heparin in Radiology
c) Uses of Lipiodol in Radiology d) Dumb-bell tumour of spine
4. Classify fibroids. How do you radiologically investigate the same =10m

SEPT./OCT.2002 (O.R.)

1. Discuss the role of C.T.Scan and MRI in unilateral proptosis.
2. Discuss the Imagiology in diagnosis of spinal cord compression and spinal cord tumours.
3. Write short notes on: a) Myositis osificans b) Sturge-Weber syndrome c) Acromegaly d) Mycosis of foot.

MAY, 2000.

1. Describe in detail how the spleenorportogram is done. What are the indications and its usefulness in the treatment.
2. In obstetrical management biophysical profile is essential how?
3. Discuss the X-ray of hands. How it is an indicator of general diseases.
4. write short notes on: a) Pancreatic cysts b) Erostberg's sign c) Sequestration of lung d) A.S.D.

JUNE, 1999.

1. Classify the bone tumours and discuss the role of imaging modalities in their diagnosis.
2. Define Renogram. Mention the clinical applications.
3. Write: a) Florosis b) Occupational diseases of the lungs c) Skeletal scintigram d) Voiding cyto Urethrogram.

FEBRUARY, 1998.

1. Discuss in detail the role of imaging modalities in the diagnosis of Renal hypertension.
2. Classify the bone tumors. Mention the various imaging modalities for the diagnosis.
3. Write short notes on: a) Intra cardiac shunts b) Carcinoid tumors c) Coartation of Aorta d) Agenesis of the lung.

SEPTEMBER, 1997.

1. Discuss the role of C.T. in the diagnosis of Meningitis and its complication.
2. Discuss the radiological manifestations of mitral stenosis.
3. Write short: a) Marfan Syndrome b) Diuresis Renogram c) Budd Chart's Syndrome d) Meningioma

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