[KD 146]

Sub. Code: 2004

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch VIII - Radio Diagnosis

Part II - Final

Paper III — RADIO DIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

1. What is rectification? Discuss the solid state rectifiers and its advantages over conventional vacuum rectifiers.

How do you test the working of rectifier system?

(25)

- 2. Describe the development of GIT. Write in short the radiological appearances in Malrotation of the gut. (25)
- 3. Short notes on:

 $(5 \times 10 = 50)$

- (a) Film badge
- (b) Ichexol
- (c) Transducers
- (d) Radiological anatomy of the sella
- (e) Sialography.

[KG 146]

Sub. Code: 2044

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch VIII - Radiodiagnosis

Part II - Final

Paper III — RADIODIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES

Time: Three hours

-Maximum: 100 marks

Answer ALL questions.

- Discuss the role of imaging in Abdominal Trauma.
 (25)
- Describe the various "Image guided" procedures commonly performed. (25)
- 3. Write briefly on:

 $(5 \times 10 = 50)$

- (a) High resolution CT.
- (b) Stress fracture.
- (c) Portal hypertension.
- (d) Solitary pulmonary nodule.
- (e) CNS anomalies in the fetus.

[KI 146]

Sub. Code: 2043

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch VIII - Radiodiagnosis

Part II - Final

Paper III — RADIODIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

- Discuss the role of radiology in diagnosis and management of pancreatitis? (25)
- 2. Discuss the current status of vascular interventional techniques. (25)
- Write short notes on

 $(5 \times 10 = 50)$

- (a) Imaging of pituitary adenoma
- (b) CT and MRI in intervertebral disc prolapse
- (c) Sequestration (lung)
- (d) Intraventricular neoplasms in children
- (e) Digital radiography.

[KJ 146]

Sub. Code: 2044

M.D. DEGREE EXAMINATION.

(New/Revised Regulations)

Branch VIII - Radiodiagnosis

Part II - Final

Paper III — RADIODIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES

· Time : Three hours <

Maximum: 100 marks

Theory: Two hours and

Theory: 80 marks

Forty minutes

....

M.C.Q.: Twenty minutes

M.C.Q. : 20 marks

M.C.Q. must be answered SEPARATELY on the answer sheet provided as per the instructions on the first page.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

Essay questions:

 $(2 \times 15 = 30)$

- Role of interventional radiology in the evaluation of intra cranial AV Malformations.
- Role of interventional radiology in gastrointestinal bleeding.

Short notes :

 $(10 \times 5 = 50)$

- Transhepatic biliary drainage procedure and indications.
- 2. Spin echo technique in MR imaging.
- Stereotaxis in Mammography.
- Evaluation of pseudo-pancreatic cysts by ultrasound.
- Ring lesions in the brain evaluation by C.T.
- Congenital dislocation of the hip joint radiological evaluation.
- Spleeno portogram procedure and indications.
- 8. Differential diagnosis of cystic lung disease.
- Role of echocardiography in congenital heart disease.
- 10. Write about positron emission tomography.

KM 146]

Sub. Code: 2044

M.D. DEGREE EXAMINATION.

(Revised Regulations)

3ranch VIII - Radiodiagnosis

Part II - Final

Paper III — RADIODIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions:

 $(2 \times 15 = 30)$

(1) Classify and discuss ADRENAL MASSES. Discuss the imaging investigations of the past and present and add notes on the salient findings noted on the various imaging investigations. (2) Discuss the currently used Angiography methods in Neuro Radiology and elaborate on present day interventional neuroradiology. Describe the congenital anomalies of the "circle of willis".

II. Short notes:

 $(10 \times 5 = 50)$

- (a) Portable chest radiography techniques and teleradiology
 - (b) Extraluminal air, diagnosis and significance
 - (c) Scrotal ultrasound
- (d) Positron emission tomography imaging of the. thorax
 - (e) Technical aspects of helical C.T.
 - (f) MR imaging of the meniscus of the knee
- (g) Catheter based angiography its present and future applications
 - (h) Post menopausal bleeding value of imaging
- (i) Radiological evaluation of inflammatory myopathies
- (j) Paediatric upper gastro-intestinal tract evaluations

[KO 146]

Sub. Code: 2043

 $(2 \times 15 = 30)$

M.D. DEGREE EXAMINATION.

Branch VIII — Radiodiagnosis

RADIODIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

- I. Essay questions:
- What are the causes of unilateral proptosis.
 Discuss radiological diagnosis and management carotico-covernus fistula.
- (2) Classify mucopoly sacharidosis. Describe radiological features of MPS IV.

II. Short notes :

 $(10 \times 5 = 50)$

- (a) Contrast Enhanced Magnetic Resonance Angiography (CEMRA).
 - (b) CT guided biopsy of lung mass.
 - (c) Pneumo mediastinum.
 - (d) I.V.C. filter placement.
- (e) Doppler evaluation of deep vein thrombosis of leg.
- (f) Pyogenic meningitis in a child-imaging features.
 - (g) Urothelial malignancy.
 - (h) Functional MRI of brain.
 - (i) Inverted pappilloma.
 - (i) Leforte fractures.

[KQ 136]

Sub. Code: 2044

M.D. DEGREE EXAMINATION.

Branch VIII - Radio Diagnosis

Paper IV (For candidates admitted from 2004-2005 onwards)

RADIO DIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary

- I. Essay Questions :
- Write about image production in Magnetic resonance, mention briefly about 2D & 3D pictures & contrast used in MRI.
- M.R. Spectroscopy in the evaluation of Pediatric Cancers. (15)
- Write about Dental CT Techniques, Applications and Advantages. (15)

II. Short notes:

 $(6 \times 5 = 30)$

- (a) M.R. Urography
- (b) PACS in managing digital images
- (c) Spleeno portogram procedure & indications
- (d) Transcranial Deppler
- (e) Hypotonic Duodenography Procedure and Indications
 - (f) Imaging of para thyroid gland

MARCH 2008

[KS 139]

Sub. Code: 2034

M.D. DEGREE EXAMINATION.

Branch VIII — Radio Diagnosis

(Common to all Regulations)

Paper IV — RADIO DIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES

Q.P. Code: 202034

Time: Three hours Maximum: 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay: $(2 \times 20 = 40)$

- 1. Write about interventional procedures of the kidney and its blood vessels.
- 2. Discuss the differential diagnosis and radiological features of pulsating exopthalmos. Briefly discuss the role of interventional radiology in pulsating exophthalmos.
- II. Short notes: $(10 \times 6 = 60)$
 - 1. SPECT.
 - 2. Artifacts in Cardiac CT.
 - 3. Role of penile colour doppler in the evaluation of erectile Dysfunction.
 - 4. Isotope scanning in liver disorder.
 - 5. Role of CT in cerebral bleeds.
 - 6. Mammography.
 - 7. Role of MRI in demylinating disease.
 - 8. Barium swallow.
 - 9. Neurocysticercosis.
 - 10. Base of the Skull.

March 2009

[KU 139] Sub. Code: 2034

M.D. DEGREE EXAMINATION

Branch VIII – RADIO DIAGNOSIS (Candidates admitted from 2007-2008)

Paper IV – RADIO DIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES O.P. Code: 202034

Time: Three hours Maximum: 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions:

 $(2 \times 20 = 40)$

- 1. Discuss the procedure and role of magnetic resonance shoulder arthrography in Gleno –Humeral instability.
- 2. Discuss the differential diagnosis and radiological features of collapsed vertebra. Briefly discuss the role of interventional radiology in collapsed vertebra.

II. Write short notes on:

 $(10 \times 6 = 60)$

- 1. Transjugular liver biopsy.
- 2. Clinical applications of diffusion weighted magnetic resonance imaging.
- 3. Femoro Acetabular impingement.
- 4. Role of interventional radiology in male infertility.
- 5. Magnetic resonance imaging findings in extra axial mass lesions.
- 6. Vascular ultrasound.
- 7. Artefacts in cardiac computer tomography.
- 8. Hepato-biliary scintigraphy.
- 9. Magnetic resonance cholangio pancreatography (MRCP).
- 10. Cardiac computer tomography angiogram.

March 2010

[KW 139] Sub. Code: 2034

M.D. DEGREE EXAMINATION

Branch VIII - RADIO DIAGNOSIS

Paper IV – (for candidates admitted upto 2007-2008) and Part II / Paper III – (for candidates admitted from 2008-2009 onwards)

RADIO DIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES

O.P. Code: 202034

Time: Three hours Maximum: 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions:

 $(2 \times 20 = 40)$

- 1. Classify bone tumors and discuss in detail about tumors of cartilage origin.
- 2. Discuss the methods of radiation protection. How do you protect the occasional exposed and occupationally exposed.

II. Write short notes on:

 $(10 \times 6 = 60)$

- 1. Retrocaval ureter.
- 2. Medullary sponge kidney / page kidney.
- 3. M.R. Angiography.
- 4. Intra operative ultrasound.
- 5. C.T. pneumosialography.
- 6. Broncho-pulmonary segments and hypoplasia / aplasia of lung.
- 7. H.R.C.T. in Sweyer James syndrome.
- 8. Renal scintigraphy.
- 9. Small kidney.
- 10. VACTEREL anomaly.

MAY 2011

[KY 139] Sub. Code: 2034

M.D. DEGREE EXAMINATION BRANCH VIII – RADIO DIAGNOSIS

RADIO DIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES

Q.P. Code: 202034

Time: 3 hours	Maximum: 100 marks				
(180 Min) Answer ALL questions in the same order.					
I. Elaborate on :	Pages (Max.)	Time (Max.)	Marks (Max.)		
1. What are the differentials for a patient presenting					
with fever, altered sensorium and seizures. Discuss					
the imaging findings in Herpes Encephalitis.	11	35	15		
2. Describe the boundaries and contents of the					
Carotid Space. List the differentials for a mass in					
the carotid space. Discuss the role of intervention					
radiology in the diagnosis and management.	11	35	15		
II. Write notes on :					
1. Direct digital radiography.	4	10	7		
2. Ring enhancing lesions in the brain.	4	10	7		
3. Arterial supply to the liver and normal variants.	4	10	7		
4. Acroosteolysis.	4	10	7		
5. Spinal ultrasound.	4	10	7		
6. Hydrocephalus.	4	10	7		
7. Radiofrequency ablation.	4	10	7		
8. 'Spoiled' Gradient Echo sequences.	4	10	7		
9. MRI shoulder arthrogram.	4	10	7		
10. Cytotoxic edema.	4	10	7		

APRIL 2012

[LA 139] **Sub. Code: 2034**

M.D. DEGREE EXAMINATION **BRANCH VIII - RADIO DIAGNOSIS**

RADIO DIACNOSIS INCI LIDING INTERVENTIONAL PROCEDURES AND

RADIO DIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES					
<i>Q.P. Code : 202034</i> Time : 3 hours	Maximum: 100 marks				
(180 Min) Answer ALL questions in the same ord	ler.				
I. Elaborate on :	Pages (Max.)	Time (Max.)	Marks (Max.)		
1. Discuss the vascular interventional procedures.	16	35	15		
2. Write the causes of Gastrointestinal bleeding. Role of Interventional radiology in Gastrointestinal bleeding.	16	35	15		
II. Write notes on:					
1. Explain the procedure of percutaneous transhepatic					
biliary drainage.	4	10	7		
2. Give an account on IVC filters.	4	10	7		
3. Write a note on CT perfusion imaging and its role in stro	ke				
management.	4	10	7		
4. Imaging findings of Retinoblastoma.	4	10	7		
5. Writes notes on Picture Archiving and Communication					
System (PACS).	4	10	7		
6. Explain the techniques, limitations and uses of Magnetic					
Resonance Cholangio Pancreatography.	4	10	7		
7. Intraoperative ultrasound – Role in Management of					
Pancreatic lesions.	4	10	7		
8. Cardiomyopathies – Give the role of MRI in diagnosis.	4	10	7		
9. Solitary collapse vertebra - differential diagnosis and sali	ent				
features of each.	4	10	7		
10. Give an account on "Prenatal Diagnostic Techniques" Ac	ct. 4	10	7		

APRIL 2013 M.D. DEGREE EXAMINATION

Sub. Code: 2034

BRANCH VIII - RADIO DIAGNOSIS

RADIODIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES

Q.P.Code: 202034

Time: Three Hours Maximum: 100 marks

I. Elaborate on: (2X15=30)

1. Enumerate the causes of haemoptysis and role of Bronchial artery embolisation.

2. Discuss the Interventional procedures of Kidney and its blood vessels.

II. Write notes on: (10X7=70)

- 1. TIPSS (Transjugular intrahepatic portosystemic shunt) Explain procedure and complications.
- 2. Explain the procedure of CT guided biopsy of Lung.
- 3. Write notes on functional MRI of Brain.
- 4. Cartico Cavernous Fistula Imaging findings.
- 5. Describe a flat panel detector in Direct Digital Radiography.
- 6. Diffusion weighted sequences Physics and its applications.
- 7. Role of Intravascular ultrasound in diagnosis of vascular lesions.
- 8. Radiofrequency ablation Procedure and applications.
- 9. Write notes on Femoroacetabular impingement
- 10. Give an account on foetal MRI.

M.D. DEGREE EXAMINATION

BRANCH VIII - RADIO DIAGNOSIS

RADIODIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES

AND RECENT ADVANCES

Q.P.Code: 2020334

Time: Three Hours Maximum: 100 marks

I. Elaborate on: $(2 \times 15 = 30)$

- 1. Role of interventional radiology in intracranial aneurysms.
- 2. Role of MDCT in evaluation of congenital heart diseases.

II. Write notes on: $(10 \times 7 = 70)$

- 1. CT guided Lung biopsy.
- 2. PNDT Act Explain.
- 3. Describe Ultrasound contrast media.
- 4. Role of Diffusion weighted imaging in CNS lesions.
- 5. Intraoperative ultrasound.
- 6. Describe technique of PCN (Percutaneous nephrostomy).
- 7. Imaging findings of hepatic hemangioma.
- 8. Write a note on PACS (Picture Archiving and communication system)
- 9. Radiological and Imaging findings of Intussusception.
- 10. Role of ultrasound in Antepartum hemorrhage.

M.D. DEGREE EXAMINATION BRANCH VIII – RADIO DIAGNOSIS RADIO DIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES

O.P. Code :202034

Time: Three Hours Maximum: 100 marks

I. Elaborate on: (2X15=30)

1. How will you proceed to investigate a patient presenting with acute stroke.

2. Elaborate in detail the Clinical features diagnosis and Imaging appearances in Ischaemic Heart Disease.

II. Write notes on: (10X7=70)

- 1. Duplex Ultrasonography of Erectile Dysfuntion.
- 2. Imaging findings in Acoustic Neuroma.
- 3. Role of Imaging in Orbital Trauma.
- 4. Classification and Imaging findings in Nasal and Paranasal Sinus Tumors.
- 5. Embryology of the brain and disorders of dorsal induction.
- 6. Imaging findings in Scimitar Syndrome.
- 7. Imaging features of Neoplasms of the Parotid Gland.
- 8. Imaging findings in Crohn's disease.
- 9. Radiological features in Ankylosing Spondylitis.
- 10. Imaging features of Paraganglioma.

M.D. DEGREE EXAMINATION BRANCH VIII – RADIO DIAGNOSIS

PAPER IV - RADIO DIAGNOSIS INCLUDING INTERVENTIONAL PROCEDURES AND RECENT ADVANCES

Q.P. Code: 202034

Time: Three Hours Maximum: 100 marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Discuss about gynaecological interventions in radiology and its clinical applications.

2. Briefly write about the embryology of heart. Discuss the radiology of cyanotic congenital heart disease.

II. Write notes on: $(10 \times 7 = 70)$

- 1. Percutaneous cholecystostomy.
- 2. Imaging features of Sturge Weber syndrome.
- 3. Radiological features of silicosis.
- 4. Write about vascular ultrasound.
- 5. Colonic polyp Vs diverticulae in barium study.
- 6. Imaging features of coarctation of aorta.
- 7. Techniques and clinical applications of MR urography.
- 8. Write about technique and clinical applications of sleep MRI.
- 9. Role of Radiology in congenital anomalies of renal pelvis and ureter.
- 10. Imaging of Pleural masses.