[KD 145]

Sub. Code: 2048

M.D. DEGREE EXAMINATION.

Branch VIII - Radio Diagnosis

(Revised Regulations)

Part II - Final

Paper II — RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

Time: Three hours

Maximum : 100 marks

Answer ALL questions.

- 1. Enumerate the causes of haematuria. Describe the radiological approach to a case of haematuria.
- 2. What is Spiral CT? Discuss the principle and the components of Spiral CT. What are its advantages and disadvantages as compared to conventional CT?
- 3. Write briefly on:
 - (a) Ultrasound contrast media.
 - (b) Magnavist.
 - (c) Gardner's syndrome.
 - (d) Rib notching.
 - (e) Venous doppler.

[KG 145]

Sub. Code: 2043

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch VIII - Radiodiagnosis

Part II --- Final

Paper II — RADIODIAGNOSIS INCLUDING INSTRUMENTATION CONTRAST STUDIES

Time; Three hours

Maximum; 100 marks

Answer ALL questions.

- Discuss the role of imaging in a focal liver lesion.
 (25)
- 2. How will you plan a 'Department of Radiology Imaging' in a 1000 bedded speciality hospital. (25)
- Write short notes on :

 $(5 \times 10 = 50)$

- (a) Spiral CT.
- (b) Lung changes in AIDS.
- (c) Non ionic contrast media.
- (d) Perthes' disease.
- (e) Biophysical profile of fetus.

[KI 145]

Sub. Code: 2042

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch VIII — Radiodiagnosis

Part II - Final

Paper II — RADIODIAGNOSIS INCLUDING INSTRUMENTATION CONTRAST STUDIES

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

- Discuss the role of various imaging modalities in the diagnosis and management of blunt abdominal trauma. (25)
- Describe the technique of Myelogram. Describe the various radiographic features of diseases in and around spinal canal. (25)
- 3. Short notes on :

 $(5 \times 10 = 50)$

- (a) Peripheral Venography
- (b) CT angiography
- (c) Placental sonography
- (d) PTC (Percutaneous Transhepatic cholangiography)
 - (e) RGP (Retrograde pyelography)

[KJ 145]

Sub. Code: 2043

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch VIII — Radiodiagnosis

Part II - Final

Paper II — RADIODIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

Time: Three hours.

Maximum: 100 marks

Theory: Two hours and forty

Theory: 80 marks

minutes

M.C.Q.: Twenty minutes

M.C.Q. : 20 marks

MCQ 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 question :

 $(2 \times 15 = 30)$

- (a) Acute abdomen role of radiology and imaging.
- (b) Write about image production in Magnetic Resonance and about 2D, 3D pictures and contrast used in MRI imaging.

Short notes (Each 5 marks):

 $(10 \times 5 = 50)$

- (a) Procedure for CT guided lung biopsy.
- (b) Colour Doppler evaluation of the scrotum.
- (c) Procedure and indications for hypotonic duodenography.
- (d) Congenital dislocation of the hip radiological evaluation.
 - (e) Radiological features of bowel ischemia.
- (f) Radiological evaluation of benign strictures of the oesophagus.
 - (g) Chest radiogram in pulmonary oedema.
- (h) Evaluation of obstructive jaundice by ultrasound.
- (i) Classify anatomical locations of mediastinal masses.
- (j) Positioning and indications for base of skull view.

[KM 145]

Sub. Code: 2043

M.D. DEGREE EXAMINATION.

(Revised Regulations)

3ranch VIII - Radiodiagnosis

Part II - Final

Paper II RADIODIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

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:

 $(2 \times 15 = 30)$

- (1) Describe the various Methods involved in IMAGING OF THE SPLEEN. Elaborate on the causes of Spleenomegaly and give a detailed description of the value of splenoportography in Portal Hypertension.
- (2) Describe the General Characteristics of Bone Tumours. Discuss in detail the Radiology and Imaging Characteristics of Bone tumours of Osteoid Origin.

II. Short notes :

 $(10 \times 5 = 50)$

- (a) Hounsfield Units.
- (b) Strictures of the Small Intestine.
- (c) Disorders of Thymus.
- (d) Intravenous Urography in Acute Obstruction.
- (e) Radiology of Renal Tuberculosis.
- (f) "CARPAL INSTABILITY".
- (g) Bone and Joint Changes in Bleeding disorders.
- (h) Describe conditions associated with dense metaphyseal bands.
 - High frequency X-ray generator.
 - (j) Radiology of Systemic Sclerosis.

[KO 145]

Sub. Code: 2042

M.D. DEGREE EXAMINATION.

Branch VIII - Radiodiagnosis

RADIODIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

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 :

 $(2 \times 15 = 30)$

- Enumerate causes of bleeding per rectum in an adult male. Describe the procedure and interpretation of double contrast barium enema in ulcerative colitis.
- (2) Discuss radiological approach to arthritis. Briefly describe the conventional radiological finding in a case of poly-articular rheumatoid arthritis.

II. Short notes :

 $(10 \times 5 = 50)$

- (a) Sono mammography.
- (b) CT and MRI features of vertebral haemangioma.
- (c) Skeletal manifestations of hyper parathyroidsm.
 - (d) Super conductive magnet in MRI.
- (e) Three dimensional CT (3D CT) in fracture acetabulum.
- (f) Positron Emission Tomography in brain imaging.
 - (g) Quantitative CT in osteoporosis.
 - (h) Antenatal diagnosis of duodenal atresia.
- Magnetic Resonance Spectroscopy in brain imaging.
 - (j) CT image artefacts.

[KP 145]

Sub. Code: 2042

II. Short notes :

 $(6 \times 5 = 30)$

M.D. DEGREE EXAMINATION.

Branch VIII - Radiodiagnosis

RADIODIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

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 :

- (1) Describe the technique of spinal angiogram embolizations. (20)
- (2) Describe the role of HRCT in diffuse interstitial lung disease. (15)
- (3) Discuss the principle of spiral CT. What are the applications of various reconstruction methods? (15)

(a) Neurofibromatosis.

(b) Aneurysmal bone cyst.

(c) Hirshprung's disease.

d) Acute pancreatitis.

(e) Hyaline membrane disease.

(f) Neuropathic joint.

2

[KQ 135]

Sub. Code: 2042

M.D. DEGREE EXAMINATION.

Branch VIII — Radio Diagnosis

RADIO DIAGNOSIS INCLUDING
INSTRUMENTATION AND CONTRAST STUDIES

Common to

Part II — Final Paper II — (Old/New/Revised Regulations)

(Candidates admitted from 1988-89 onwards

And

Paper III — (For candidates admitted from 2004–2005 onwards)

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

WO HOURS AL

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 :
- Compare and contrast eth Role of CT and Carotid angiography in the intracranial – supratentorial lesions.

- Mention in detail the techniques of Aortography.
 What are the indications and complications of Aortography.
- Renal Tuberculosis Discuss the role of Radiology and Imaging. (15)

II. Short notes:

 $(6 \times 5 = 30)$

- (a) Procedure for CT guided lung biopsy
- (b) Non-ionic contrast media
- (c) Bladder outlet obstruction -Radiological evaluation.
- (d) Radiological evaluation of benign strictures of the oesophagus.
- (e) Percutaneous Transhepatic biliary drainage
 procedure and indications.
 - (f) Write about Ultrasound contrast media.

wk se

MARCH 2008

[KS 138]

Sub. Code: 2033

M.D.DEGREE EXAMINATION.

Branch VIII — Radio Diagnosis

RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

(Common to all Regulations)

Q.P. Code: 202033

Time: Three hours Maximum: 100 marks

Answer ALL questions.

I. Essay:

 $(2 \times 20 = 40)$

- 1. Discuss the value of MR cholangiography in children and young adults with biliary disease.
- 2. How do you evaluate bone tumours with magnetic resonance imaging and correlation with surgical and gross pathological finding?

II. Short notes:

 $(10 \times 6 = 60)$

- 1. Ultrasonography of shoulder (rotator cuff)
- 2. Ultrasound of musculoskeletal soft tissue mass.
- 3. MR and MR pancreaticorgraphy in annular pancreas.
- 4. Para-duodenal hernias.
- 5. Splenic artery aneurysms.
- 6. Tuberculoma.
- 7. Towns view.
- 8. Focal liver lesions.
- 9. Biophysical profile.
- 10. Thyroid scan.

March 2009

[KU 138] Sub. Code: 2033

M.D. DEGREE EXAMINATION

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

Paper III – RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

O.P. Code: 202033

Time: Three hours Maximum: 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions:

 $(2 \times 20 = 40)$

- 1. Magnetic Resonance (MR) angiography of brain. (In children and adults).
- 2. Discuss sclerotic lesions of the bone in an elderly person.

II. Write short notes on:

 $(10 \times 6 = 60)$

- 1. Role of ultrasound in first trimester of pregnancy.
- 2. Ultrasound imaging in adrenal tumors.
- 3. Undescended testis.
- 4. Eventeration of diaphragm.
- 5. Neurocysticercosis.
- 6. Skyline view.
- 7. Cystic diseases of the kidney.
- 8. Renal artery stenosis.
- 9. Retinoblastoma.
- 10. Classification of contrast media.

March 2010

[KW 138] Sub. Code: 2033

M.D. DEGREE EXAMINATION

Branch VIII - RADIO DIAGNOSIS

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

RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

O.P. Code: 202033

Time: Three hours Maximum: 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions:

 $(2 \times 20 = 40)$

- 1. Discuss the role of radio imaging modalities in the evaluation of extra thoracic manifestations of bronchogenic carcinoma.
- 2. Discuss the role of radio imaging modalities in the evaluation of granulomatous pyelonephritis. How will you differentiate from non-granulomatous pyelonephritis?

II. Write short notes on:

 $(10 \times 6 = 60)$

- 1. Iodism.
- 2. Right iliac fossa masses.
- 3. Terato dermoid.
- 4. Haematuria.
- 5. Role of colour Doppler in erectile dysfunction.
- 6. Interventional techniques in ultrasound.
- 7. Post operative T- tube cholangiogram.
- 8. Bronchial fistula.
- 9. Hamartoma.
- 10. Duplication of collecting systems.

MAY 2011

[KY 138] **Sub. Code: 2033**

M.D. DEGREE EXAMINATION **BRANCH VIII – RADIO DIAGNOSIS** RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

Q.P. Code: 202033					
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 male aged 55 years	(=:====)	(======)	(======)		
presenting with hemoptysis. Discuss plain radiograph					
and CT findings in the evaluation of Bronchogenic					
carcinoma.	11	35	15		
2. What is the schedule for antenatal ultrasound					
scans? Discuss the significance of scans done in the					
first trimester.	11	35	15		
II. Write notes on :					
1. HRCT in sarcoidosis.	4	10	7		
2. Bilateral inferior rib notching.	4	10	7		
3. Pulmonary venous hypertension.	4	10	7		
4. Crohn's v/s TB.	4	10	7		
5. Small bowel enema.	4	10	7		
6. Neonate not having passed meconium.	4	10	7		
7. Image guided treatment of pelvic abscess.	4	10	7		
8. MRI in female infertility.	4	10	7		
9. Contrast enhanced ultrasound.	4	10	7		
10. GIST.	4	10	7		

[LA 138] Sub. Code: 2033

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

Q.P. Code: 202033

Q.P. Code: 202033					
Time: 3 hours		Maximum: 100 marks			
(180 Min)					
Answer ALL questions in the same order.					
I. Elaborate on :	Pages (Max.)	Time (Max.)	Marks (Max.)		
 Discuss the role of HRCT in diffuse interstitial lung disease. 	16	35	15		
2. Enumerate causes of bleeding per rectum in adult male. Describe the procedure and interpretation of double contrast barium enema in Inflammatory bowel disease.	16	35	15		
II. Write notes on :					
1. Hirschsprung disease – Barium enema findings.	4	10	7		
2. Enumerate ultrasound contrast media and its role in					
diagnosis of focal liver lesions.	4	10	7		
3. Describe procedure of T.Tube cholangiogram and its climater of the cholangiogra of the cholangiogram and its climater of the cholangiogram and	nical				
application.	4	10	7		
4. Vesicoureteric Reflux – Radiological findings and its cli	nical				
Significance.	4	10	7		
5. Describe the physics of 3D ultrasound.	4	10	7		
6. Explain with a neat sketch the technique of Axial view					
patella.	4	10	7		
7. Biophysical profile - Tabulate and give its significance.	4	10	7		
8. Write about the Barium meal findings in Malrotation &					
Non rotation.	4	10	7		
9. Necrotising Enterocolitis – Imaging Diagnosis.	4	10	7		
10. Enteroclysis – describe the procedure and its application	. 4	10	7		

M.D. DEGREE EXAMINATION

BRANCH VIII - RADIO DIAGNOSIS

RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

Q.P.Code: 202033

Time: Three Hours Maximum: 100 marks

I. Elaborate on: (2X15=30)

1. Discuss in detail the imaging features of bone tumours of Osteoid origin.

2. Discuss the principle of MR Cholangiography and role in imaging of CBD lesions.

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

1. Crohn's disease – describe the radiological and imaging findings.

- 2. Give a note on low osmolar contrast media.
- 3. Intussusception Radiological and Imaging findings.
- 4. Write a note on Superconductive magnets in MRI.
- 5. MR arthrogram shoulder explain the technique and findings in rotator cuff tear
- 6. Write the technique of Water's view with the help of a neat sketch.
- 7. Role of ultrasound in first trimester of Pregnancy.
- 8. Classify Internal hernias, describe findings of Paraduodenal hernias.
- 9. Give a note on Anorectal malformation.
- 10. Hiatus hernia enumerate the types and give their findings in Barium Swallow.

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

RADIODIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

Q.P.Code: 202033

Time: Three Hours Maximum: 100 marks

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

1. Discuss in detail the Radiological and imaging findings of Renal Cell carcinoma.

2. Role of CT and barium in Gastric malignancy.

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

- 1. Write a note on herpes encephalitis.
- 2. Give an account on Rectal lymphoma.
- 3. Write a note on CT cisternography.
- 4. Wilm's tumour Radiological and imaging findings.
- 5. Write a note on Congenital coronary anomalies.
- 6. Describe virtual colonoscopy.
- 7. Achalasia Cardia Discuss.
- 8. Imaging findings of Anterior mediastinal masses (Atleast 3).
- 9. Role of MRI in perianal fistula.
- 10. Give an account on sialography.

M.D. DEGREE EXAMINATION BRANCH VIII – RADIO DIAGNOSIS RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

Q.P. Code: 202033

Time: Three Hours Maximum: 100 marks

I. Elaborate on: (2X15=30)

1. Classify seller and supra sellar tumors and the imaging modalities used to diagnose them.

2. Elaborate in detail the causes of Lower Gastro intestinal Bleeding and the role of radiology and imaging in the diagnosis treatment of the same.

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

- 1. Imaging in Intussusception.
- 2. Evaluation of Spinal Cord Tumors.
- 3. Radiological findings in Ebstein Anomlay.
- 4. Imaging findings in Emphysematous Pyelonephritis.
- 5. Technique of Micturating Cysto Urethro gram.
- 6. Imaging findings in Hyaline Membrane Disease.
- 7. Ultra Sound and CT finding s in Acute Pancreatitis.
- 8. Techique and Ultrasonic Windows in Trans Cranial Doppler Sonography.
- 9. Aetiology and Role of Imaging in Scoliosis.
- 10. Imaging of Parathyroid Gland.

M.D. DEGREE EXAMINATION BRANCH VIII – RADIO DIAGNOSIS

PAPER III - RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND CONTRAST STUDIES

Q.P. Code :202033

Time: Three Hours Maximum: 100 marks

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

1. Enumerate neuro cutaneous syndromes. Describe in detail the imaging features of Sturge –Weber syndrome and NF.

2. Define contrast nephropathy. Elaborate on the mechanism of contrast nephropathy and the patients at risk of developing it. Describe the key recommendations to prevent it

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

- 1. Tethered cord-significance and imaging.
- 2. Preoperative imaging for cochlear implantation.
- 3. USG in retinal and choroidal detachment.
- 4. Technical details of MR venogram
- 5. Neonatal neurosonography
- 6. Pre operative CT evaluation of potential donors in living donor liver transplantation
- 7. Briefly discuss imaging of pre sacral masses in children
- 8. Bone marrow lesions- diagnostic approach
- 9. MR imaging of hypoxic-ischemic injury in term neonates
- 10. Conventional vs CT Urography