

April-2001

[KD 144]

Sub. Code : 2041

M.D. DEGREE EXAMINATION.

(New Regulations/Revised)

Branch VIII — Radio Diagnosis

Part II — Final

Paper I — RADIO DIAGNOSIS INCLUDING
NUCLEAR MEDICINE

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the radiological and imaging evaluation of unilateral proptosis in paediatric age group. (25)
 2. Describe the radiological anatomy of mediastinum. Discuss in detail radiological and imaging evaluation of posterior mediastinal masses. (25)
 3. Short notes : (5 × 10 = 50)
 - (a) Radionuclide scanning of biliary system.
 - (b) Oesophageal varices.
 - (c) MR angiography.
 - (d) Spiral/Helical CT.
 - (e) Neurotuberculosis .
-

March-2002

[KG 144]

Sub. Code : 2041

M.D. DEGREE EXAMINATION.

(New/Revised Regulations)

Branch III — Radiodiagnosis

Part II — Final

Paper I — RADIODIAGNOSIS INCLUDING
NUCLEAR MEDICINE

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe the radiological anatomy of the small bowel. Discuss the radiological and imaging evaluation of small bowel disorders with emphasis on enteroclysis.
(25)
 2. Describe the radiological anatomy of the spinalcord. Discuss the radiological and imaging evaluation of spinal dysraphism.
(25)
 3. Write Short notes on : (5 × 10 = 50)
 - (a) Role of HRCT in interstitial lung disease.
 - (b) Neuro sonography.
 - (c) Renal scan/Renogram.
 - (d) Interventional procedures in intra cranial aneurysm.
 - (e) MR contrast agents.
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[KI 144]

Sub. Code : 2041

M.D. DEGREE EXAMINATION.

(New/Revised Regulations)

Branch VIII — Radiodiagnosis

Part II — Final

Paper I — RADIODIAGNOSIS INCLUDING
NUCLEAR MEDICINE

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the radiological approach to a patient with haematuria. (25)
 2. Discuss the role of various imaging techniques in the evaluation of cerebro-vascular accident. (25)
 3. Short notes : (5 × 10 = 50)
 - (a) Pulmonary edema
 - (b) Skeletal scintigraphy
 - (c) Coin lesions of lung
 - (d) Neuro tuberculosis
 - (e) Osteo-lytic lesions of skull.
-

[KJ 144]

Sub. Code : 2041

M.D. DEGREE EXAMINATION.

(New/Revised Regulations)

Branch VIII — Radiodiagnosis

Part II — Final

Paper I — RADIODIAGNOSIS INCLUDING
NUCLEAR MEDICINE

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 × 15 = 30)

1. (a) Enumerate on Second and Third trimester
bleeding during pregnancy.

(b) Space occupying lesions of the liver – Role of
Ultrasound and CT in evaluating the same.

2. Short notes / Each 5 marks (10 × 5) Answer ALL
questions : (50)

(a) Predicting foetal weight by ultrasound.

(b) Thyroid nodule evaluation by ultrasound and
radio isotopes.

(c) Bladder outlet obstruction –Radiological
evaluation.

(d) Radiological evaluation of right upper quadrant
pain.

(e) Trasrectal sonography – write about
indications.

(f) Precautions while handling
Radiopharmaceuticals.

(g) Write about development of kidney.

(h) Imaging of the parathyroid gland.

(i) Writing about M.R.I. artefacts.

(j) Pott's Spine – discuss the radiological
features.

[KM 144]

Sub. Code : 2041

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch VIII — Radiodiagnosis

Part II — Final

Paper I — RADIODIAGNOSIS INCLUDING
NUCLEAR MEDICINE

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions : (2 × 15 = 30)

(1) Write an essay on the historical evolution of Arteriography. Describe in detail the equipments required and the technique involved in performing a four vessel arteriographic study of the cranium.

(2) Discuss diffuse Pulmonary Disease. Describe the Patho-physiology and radiology of Pulmonary Edema.

II. Short notes :

(10 × 5 = 50)

- (a) Adverse reaction to contrast media
- (b) Causes of lung consolidation in adults
- (c) C.T. evaluation of mediastinal masses
- (d) Adult respiratory distress syndrome
- (e) The circulatory changes at birth
- (f) Cyanotic heart disease
- (g) Congenital anomalies of the pericardium
- (h) Doppler in intra-uterine growth retardation
- (i) Hystero-salpingography
- (j) Breast cancer screening.

[KO 144]

Sub. Code : 2041

M.D. DEGREE EXAMINATION.

Branch VIII – Radiodiagnosis

**RADIODIAGNOSIS INCLUDING NUCLEAR
MEDICINE**

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 × 15 = 30)

**(1) What are the causes for non-cardiac chest
pain in a middle aged man?**

**Discuss in detail the role of Radiology and
imaging in a case of suspected pulmonary embolism.**

**(2) Discuss the radiological evaluation of a
patient brought in emergency department with blunt
abdominal trauma.**

II. Short notes : (10 × 5 = 50)

- (a) Dynamic renal scan.**
- (b) Parapharyngeal space.**
- (c) Brain herniation.**
- (d) Thymoma.**
- (e) Dissecting aneurysm of thoracic aorta.**
- (f) Adrenal Myelolipoma.**
- (g) Atypical Meningioma.**
- (h) Pathological intracranial calcifications.**
- (i) Developmental dysplasia of hip.**
- (j) Scintigraphy in acute cholecystitis.**

[KQ 134]

Sub. Code : 2041

M.D. DEGREE EXAMINATION.

Branch VIII — Radio Diagnosis

RADIO DIAGNOSIS INCLUDING NUCLEAR
MEDICINE

Common to

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

(Candidates admitted from 1988–89 onwards)
and

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

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

1. What are Radiopharmaceuticals? Mention precautions taken while handling them Enumerate the role of Radio isotopes scan in obstructive jaundice. (20)

2. Write about space occupying lesions of the liver, role of Ultrasound and CT in evaluating the same. (15)

3. Role of Radiology and Imaging in the evaluation of Acute Abdomen. (15)

II. Short notes : (6 × 5 = 30)

(a) Classify anatomical locations of mediastinal masses.

(b) Spinal canal stenosis

(c) Thyroid nodule evaluation by radio isotopes and ultrasound.

(d) Blighted Ovum.

(e) Placenta Previa.

(f) Describe briefly Radiological features of cretinism.

MARCH 2008

[KS 137]

Sub. Code : 2032

M.D. DEGREE EXAMINATION.

Branch VIII — Radio Diagnosis

RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Common to all regulations

Q,P. Code : 202032

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

- I. Essay questions : (2 × 20 = 40)
1. Describe ionization and scintillation. Describe scintillation detector in detail and explain how it helps in imaging organs in modern techniques. (20)
 2. Describe radiology and imaging of acute pancreatitis. (20)
- II. Short notes : (10 × 6 = 60)
1. Virtual colonoscopy.
 2. Ventilation perfusion radionuclide lung scan
 3. Double contrast study in upper G.I, Tract.
 4. SARS (Severe Acute Respiratory Syndrome)
 5. Fistulography VS and Endo sonography in Fistula-in-ano.
 6. Adrenal metastasis.
 7. Ultrasonographic features of cyst in liver and its differential diagnosis.
 8. Image intensifier
 9. Discuss differential of coin lesion of lung.
 10. Hysterosalpingography.
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March 2009

[KU 137]

Sub. Code: 2032

M.D. DEGREE EXAMINATION

Branch VIII – RADIO DIAGNOSIS

(Candidates admitted upto 2007-2008)

Paper II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code : 202032

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 x 20 = 40)

1. Discuss lung perfusion studies in various diseases of lungs.
2. Discuss the role of radiology and imaging in portal hypertension.

II. Write short notes on :

(10 x 6 = 60)

1. MRCP - Magnetic Resonance Cholangio Pancreatography.
2. Isotopic hepatobiliary study.
3. PET – CT – Positron emission tomography – computer tomography.
4. Isotopic cardiac imaging.
5. Imaging of pancreas.
6. ARDS – Acute Respiratory distress syndrome.
7. Pulmonary microlithiasis.
8. Spalding sign.
9. Agenesis of lung.
10. Patent ductus arteriosus.

March 2010

[KW 137]

Sub. Code: 2032

M.D. DEGREE EXAMINATION

Branch VIII – RADIO DIAGNOSIS

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

RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code : 202032

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 x 20 = 40)

1. Discuss the role of radiologic imaging modalities in the evaluation of mid line brain lesions.
2. Discuss the role of MR findings in the evaluation of koch's involvement of appendicular skeleton.

II. Write short notes on :

(10 x 6 = 60)

1. MR spectroscopy.
2. Colour doppler in DVT.
3. PET scan.
4. MRI – diffusion weighted imaging.
5. Tumor embolisation.
6. Virtual bronchoscopy.
7. C.T. guided biopsy.
8. Post operative stomach barium study.
9. Sono salphingography.
10. Calvarial metastasis.

MAY 2011

[KY 137]

Sub. Code: 2032

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE**

Q.P. Code : 202032

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|---|----|----|----|
| 1. A child aged three years presents with a palpable flank mass. Discuss the imaging algorithm with justification. List the differentials and describe the imaging findings of Wilm's Tumour. | 11 | 35 | 15 |
| 2. Enumerate the differentials for back pain in a male aged 25 years. What is the role of MRI in the evaluation? Describe the imaging findings in infective spondylitis. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Hepatic hemangioma. | 4 | 10 | 7 |
| 2. IDA scan. | 4 | 10 | 7 |
| 3. Sesta MIBI scan. | 4 | 10 | 7 |
| 4. Craniovertebral junction – normal radiographic measurements. | 4 | 10 | 7 |
| 5. Pterygopalatine fossa. | 4 | 10 | 7 |
| 6. Metadiaphyseal lucent lesion. | 4 | 10 | 7 |
| 7. Platyspondyly. | 4 | 10 | 7 |
| 8. Microcalcification on mammogram. | 4 | 10 | 7 |
| 9. Painful scrotal swelling. | 4 | 10 | 7 |
| 10. Pancreas divisum. | 4 | 10 | 7 |

[LA 137]

April 2012
M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE
Q.P. Code : 202032

Sub. Code: 2032

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Write the principles of MDCT and the various reconstruction methods.	16	35	15
2. Write in detail the imaging & radiological features of Rheumatoid arthritis.	16	35	15

II. Write notes on :

1. Role of Meta Iodo Benzyl Guanidine Scintigraphy in diagnosis of adrenal lesions.	4	10	7
2. Role of investigation in management of Choriocarcinoma.	4	10	7
3. Pneumocystis Carinii Pneumonia – radiological and CT findings.	4	10	7
4. Metaphyseal dysplasia – classify and write their radiological findings.	4	10	7
5. Describe the types of aneurysm emphasizing on Thoracic aortic aneurysm.	4	10	7
6. Tetralogy of Fallot – Describe the radiological and imaging findings.	4	10	7
7. Classify Testicular tumors, and describe the imaging features of nongerm cell tumors incorporating serology.	4	10	7
8. Give a note on common congenital coronary anomalies.	4	10	7
9. Hydatid Cyst – Imaging findings in various locations.	4	10	7
10. Write down the radiological and imaging findings of Chondrosarcoma.	4	10	7

(LC 137)

APRIL 2013

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII –RADIO DIAGNOSIS

RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P.Code: 202032

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Classify lymphomas.

Describe in detail the imaging features of thoracoabdominal lymphoma.

2. Describe the radiological evaluation of renovascular hypertension.

II. Write notes on:

(10X7=70)

1. Clinical applications of PET CT imaging in oncology

2. Radiological evaluation of acute stroke.

3. Solitary pulmonary nodule

4. Ebstein anomaly.

5. Skeletal features of Thalassemia.

6. Biliary atresia

7. Nonaccidental injury.

8. Mesenteric ischemia

9. Spiculate mass on mammogram

10. Use of scintigraphy in evaluation of hyperparathyroidism

[LD 137]

OCTOBER 2013

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P.Code: 202032

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2 x 15 = 30)

1. Enumerate causes of soft tissue calcification and role of MRI in evaluation.
2. Describe a solitary pulmonary lobule and outline the systematic approach to interstitial lung disease.

II. Write notes on:

(10 x 7 = 70)

1. Write a note on septic arthritis.
2. Role of ventilation Perfusion scanning in Pulmonary embolism.
3. Thyroid scintigraphy.
4. Role of imaging in solitary collapse vertebra.
5. Role of MDCT in renal donor.
6. Write a note on MRI evaluation of rotator cuff lesions.
7. Give an account on Bronchial carcinoid.
8. Write a note on Total anomalous pulmonary venous return.
9. X-ray and imaging findings of Juvenile angio fibroma.
10. Explain Weigert Meyer rule.

[LE 137]

APRIL 2014

Sub. Code: 2032

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE**

Q.P. Code :202032

Time : Three Hours

Maximum : 100 marks

I. Elaborate on: **(2X15=30)**

1. Discuss in detail Odontogenic tumors and how will you Proceed to establish the diagnosis.
2. An elderly man presenting with a neck mass. Enumerate the differential diagnosis and imaging modalities used in arriving at a diagnosis with a note on Radio isotopes used.

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

1. Plain X-ray Findings in Mitral Stenosis.
2. Disorders of Ventral Induction of the Brain.
3. Causes of pneumothorax and imaging findings.
4. Role of Radioisotopes in Onco imaging.
5. Technique of MR Enteroclysis.
6. Classify Ovarian Neoplasms and imaging findings.
7. Anatomy of the Retroperitoneum and imaging Techniques.
8. Evaluation of Intra Uterine Growth Retardation.
9. Classify Glottic Tumors and imaging appearances.
10. Imaging findings in Cholesteatoma.

[LF 137]

OCTOBER 2014

Sub. Code: 2032

M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER II - RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code :202032

Time : Three Hours

Maximum : 100 marks

I. Elaborate on: **(2 x 15 = 30)**

1. Write on the Classification of arthritis and discuss in detail the role of imaging in psoriatic arthritis.
2. What are phakomatoses? Write about Von Hippel-Lindau syndrome and discuss the role of a radiologist in the management of these patients.

II. Write notes on: **(10 x 7 = 70)**

1. Radiological features of renal osteodystrophy.
2. Role of Nuclear Medicine in urinary system disorders evaluation in children
3. Ultrasound evaluation of ectopic pregnancy.
4. MRI features of adenomyosis.
5. Radiology of Bronchopulmonary aspergillosis.
6. Indications for bone scintigraphy.
7. Basic principles and imaging of pneumoconiosis
8. PET-CT in Oncology.
9. Neuroblastoma Vs Wilms tumor and imaging
10. Enumerate cystic lesions in brain and the modalities of imaging useful in their diagnosis

[LG 137]

APRIL 2015

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P.Code: 202032

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Describe the Embryology and development of the pancreas. Describe the imaging features of congenital anomalies of the pancreas.
2. Describe the normal anatomy of coronary arteries and discuss the role of isotope imaging in coronary artery diseases.

II. Write notes on:

(10 x 7 = 70)

1. Skeletal scintigraphy.
2. Define pulmonary sequestration. Describe its types & discuss CT findings.
3. Thoracic diseases associated with HIV Infection.
4. HRCT features of Cryptogenic organizing pneumonia.
5. Diagnostic criteria and imaging features of Emphysematous pyelonephritis.
6. Isotope imaging in pediatric renal problems.
7. Radiological evaluation and intervention in acute cholecystitis.
8. Adrenal incidentaloma.
9. Pediatric renal tumors.
10. Principles of PET imaging.

[LH 137]

OCTOBER 2015

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Enumerate hepatic masses. Discuss the role of various imaging modalities including Nuclear Medicine in its diagnosis and management.
2. Differential diagnosis of right iliac fossa pain. Describe in detail imaging features of ileo-cecal tuberculosis.

II. Write notes on:

(10 x 7 = 70)

1. Radiological appearances and differential diagnosis of rib notching.
2. Neurocysticercosis – Imaging findings and differential diagnosis.
3. Adult Respiratory Distress Syndrome (ARDS).
4. Ultra sound and Doppler findings in Ectopic pregnancy.
5. Imaging findings and differential diagnosis of Rickets.
6. Role of imaging in metabolic bone disease.
7. Imaging Lymph nodes of neck.
8. Describe Pancreatic embryology and its Congenital Anomalies.
9. Radiological Approach to Adrenal incidentaloma.
10. Radionuclide imaging of central nervous system.

[LI 137]

APRIL 2016

Sub. Code: 2032

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE**

Q.P. Code :202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the various clinical presentations in acute head injury and write in detail the imaging modalities useful in their diagnosis management.
2. How will you evaluate hepatic mass lesions in adult and in children? What is the role of Nuclear medicine in management of these patients in the present era?

II. Write notes on: **(10 x 7 = 70)**

1. Imaging of Endocrine skeletal disorders.
2. Radiology of tuberous sclerosis.
3. Doppler imaging in ovarian lesion.
4. Role of Isotope imaging in the assessment of GI bleed.
5. First trimester ultrasound.
6. Radiology of Congenital lung lesions.
7. Aneurysmal bone cyst diagnosis by radiography and C.T.
8. Imaging features of Prune Belly Syndrome.
9. Jaw lesions and role of imaging.
10. Thyroid ophthalmopathy Vs Orbital pseudotumor by CT and MRI findings.

[LJ 137]

OCTOBER 2016

Sub. Code: 2032

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

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code :202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the CT and MRI, evaluation of an adrenal mass detected during ultrasonography. Write a note on the nuclear medicine techniques used in the evaluation of adrenal mass.
2. Define the secondary pulmonary lobule. Describe the basic imaging patterns of interstitial lung disease in high resolution computed tomography. Write a note on the imaging features in Hypersensitivity pneumonitis.

II. Write notes on:

(10 x 7 = 70)

1. Imaging of reno-vascular hypertension.
2. Comparative radiographic features of benign and malignant gastric ulcer.
3. Salient imaging features of renal tuberculosis.
4. Imaging features of Ewing's sarcoma.
5. Neuro-imaging applications of SPECT, PET.
6. Normal variants in CT- Paranasal sinuses imaging.
7. Indications for breast MRI.
8. Imaging features of Endometriosis.
9. Pneumocystis carinii pneumonia – Clinical and imaging features.
10. Technique of thyroid scintigraphy.

[LK 137]

MAY 2017

Sub. Code: 2032

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE**

Q.P. Code :202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. PET CT and its role in Oncology.
2. Role of imaging in evaluation of a female patient presenting with acute lower abdominal pain.

II. Write notes on:

(10 x 7 = 70)

1. Bone Scintigraphy.
2. Transarterial Radioembolisation for HCC.
3. MUGA scan.
4. IDA Scan.
5. Ultrasound of Thyroid.
6. 11 to 13 week Obstetric scan.
7. Imaging in portal hypertension.
8. Ultrasound of rotator cuff injury.
9. Calcifications in breast lesion.
10. Imaging of hydatid cyst.

[LL 137]

OCTOBER 2017

Sub. Code: 2032

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE**

Q.P. Code :202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the various pathological types of Bronchogenic malignancy and their salient imaging features, Discuss the staging and the role of PET-CT in the evaluation.
2. Discuss the differential diagnosis of small bowel wall thickening. Describe the imaging features of Crohn's disease.

II. Write notes on: **(10 x 7 = 70)**

1. Imaging of aortic dissection.
2. Evaluation of Renal transplant by USG and Duplex doppler.
3. Bone dysplasias.
4. CT and MRI imaging features of Herpes encephalitis.
5. Nuclear imaging in Bone scan.
6. CT and MRI evaluation of Thyroid lesions.
7. Ring enhancing lesions of MRI brain.
8. Time signal intensity curves in MR mammography.
9. Neuropathic arthropathy – Causes and Imaging features.
10. Ventilation-Perfusion scintigraphy.

[LM 137]

MAY 2018

Sub. Code: 2032

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE**

Q.P. Code :202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Role of Nuclear Medicine in Hepatobiliary and Gastrointestinal tract.
2. Describe in detail about Anomaly scan including Fetal Echo.

II. Write notes on: **(10 x 7 = 70)**

1. Isotope study of Kidney.
2. Ventilation Perfusion Imaging.
3. Isotopes used for PET SCAN.
4. Functional MRI.
5. Twin to twin transfusion syndrome.
6. Sonomammogram.
7. Radiological features of crohns disease.
8. Imaging of pituitary tumors.
9. Radiological features of cystic tumors of pancreas.
10. Imaging in DVT.

M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss about technetium 99m isotope in imaging. Write about its various clinical applications.
2. Explain migration disorders based on congenital malformations of brain and discuss the role of imaging in diagnosing them.

II. Write notes on: **(10 x 7 = 70)**

1. Radioisotopes of iodine and thyroid imaging.
2. Imaging of Hepatic masses in children.
3. True lumen Vs false lumen in aortic dissection and its angiographic findings.
4. Radiographic evaluation of ureterocele.
5. Role of nuclear medicine in myocardial illness evaluation.
6. HRCT findings in sarcoidosis.
7. Imaging features of Budd chiari syndrome.
8. Primary Vs secondary hyperparathyroidism with imaging findings.
9. Imaging of idiopathic hypertrophic pyloric stenosis.
10. List mullerian anomalies and their imaging findings.

[LO 137]

MAY 2019

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. A 60-year-female presents to the casualty with features of obstructive jaundice. Enumerate the possible causes for the same. Discuss the role of imaging in the diagnosis and management of patients with pancreatic head carcinoma.
2. What are the causes of mesenteric ischemia? Discuss the role of imaging in the diagnosis and management of patients with mesenteric ischemia.

II. Write notes on:

(10 x 7 = 70)

1. Clinical utility of Ga-68 DOTATATE PET-CT.
2. Role of imaging in differentiating focal nodular hyperplasia and fibrolamellar carcinoma of liver.
3. Penile Doppler.
4. Imaging features of renal tuberculosis.
5. Retro-peritoneal fibrosis.
6. Role of imaging in differentiating adrenal adenoma from metastasis.
7. Radionuclide cisternogram.
8. Superior mesenteric artery syndrome.
9. Auto-immune pancreatitis.
10. Emphysematous pyelonephritis.

[LP 137]

OCTOBER 2019

Sub. Code: 2032

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE**

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Imaging of dementia. Discuss in detail about role of nuclear medicine in Diagnosis.
2. What are the different types of Osteosarcoma? Describe the typical imaging features of various types along with relevant differential diagnosis.

II. Write notes on: **(10 x 7 = 70)**

1. Pulmonary TB vs Sarcoidosis.
2. PSMA PET CT.
3. Doppler findings in Renovascular hypertension.
4. MRI features of endometriosis.
5. Imaging features in Legg-Calvé-Perthes disease.
6. Anterior mediastinal mass; differentials with key imaging features.
7. Painful unilateral proptosis.
8. Indications for MRI Breast.
9. Acute osteomyelitis; differentials and key imaging features.
10. Lung collapse patterns.

[LQ 137]

**AUGUST 2020
(MAY 2020 SESSION)**

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Enumerate various causes of female infertility. Describe the role of HSG & MRI in their diagnosis.
2. Enumerate various Neurophakomatoses. Describe in detail about tuberous sclerosis.

II. Write notes on:

(10 x 7 = 70)

1. Role of isotopes in skeletal disease
2. Disposal of radioactive waste in nuclear medicine department.
3. Doppler study for a renal transplant
4. MR imaging in brachial plexus
5. CT cisternography – technique and applications
6. Pelvic USG in a perimenopausal woman
7. Solitary pulmonary nodule – Differentials and CT imaging findings
8. Classify internal hernias . Describe about Paraduodenal hernias
9. Classify Glottic tumours and imaging appearance
10. Pancreatic neuro endocrine tumors

[LS 137]

**NOVEMBER 2020
(OCTOBER 2020 SESSION)**

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the various types of primary traumatic lesions in head injury. Role of CT and MRI in head injury.
2. Role of Ventilation perfusion scan in pulmonary embolism

II. Write notes on:

(10 x 7 = 70)

1. Role of isotopes in renal disease
2. Imaging in osteomyelitis
3. MR imaging features in perianal fistula
4. Imaging in Thyroglossal cyst
5. Soft tissue calcification and role of MRI in evaluation
6. BIRADS – Breast imaging and reporting system
7. Imaging in a newborn with anorectal malformation
8. Skeletal scintigraphy
9. Imaging findings in mitral valve disease
10. Differentials for Lytic lesion of jaw

[MD 0721]

**JULY 2021
(MAY 2021 SESSION)**

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe in detail fetal facial abnormalities with time of deduction and follow ups.
2. Aetiology and role of imaging in scoliosis.

II. Write notes on:

(10 x 7 = 70)

1. Hepatobiliary scintigraphy.
2. GIT lymphomas imaging.
3. Post renal transplant imaging.
4. Imaging of cervical incompetence.
5. Polyp Vs diverticulas in barium enema.
6. Biochemical markers in first and second trimesters.
7. Pelvic floor imaging.
8. Measurements in femoro acetabular impingement.
9. Cerebral microhaemorrhages.
10. Post operative small bowel.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MD 1121]

**NOVEMBER 2021
(OCTOBER 2021 SESSION)
M.D. DEGREE EXAMINATION**

Sub. Code: 2032

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe fetal echo views. Fetal cardiac abnormalities in each view with diagrams.
2. Imaging of inflammatory bowel disease with emphasis on barium studies.

II. Write notes on:

(10 x 7 = 70)

1. Role of nuclear medicine in myocardial illness evaluation.
2. Twin to twin transfusion syndrome.
3. Mullarian anomalies.
4. Temporal arteritis imaging.
5. Bone marrow MRI.
6. Sclerosing skeletal dysplasia.
7. MR sequences you would employ to delineate internal derangement of knee.
8. Radiographic CVJ lines.
9. Role of nuclear medicine in brain death.
10. Neonatal neurosonography.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0522]

MAY 2022

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the role of nuclear imaging to assess infections in detail.
2. Discuss in detail the preoperative reporting required by neurosurgeon for various brain tumors.

II. Write notes on:

(10 x 7 = 70)

1. DOTANOC PET CT.
2. Radionuclide imaging for dementia
3. Pediatric Nuclear imaging.
4. Biases in radiology reporting.
5. Imaging of penile trauma.
6. COVID-19 Pneumonia mimics in HRCT.
7. MRCP in congenital anomalies of pancreas.
8. Cavernous sinus anatomy and lesions.
9. Grading of stress injuries of bone in MRI.
10. Temporomandibular joint (TMJ) MRI.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0723]

**JULY 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. CT Enteroclysis with special application to inflammatory disorder of Small Bowel other than Crohns Disease.
2. Paediatric brain tumours with special reference to Posterior Fossa.

II. Write notes on:

(10 x 7 = 70)

1. Biliary leak and its management.
2. Imaging features of meningioma.
3. Ossification of Posterior Longitudinal ligament and its differential diagnosis.
4. Magnetisation Transfer Imaging in Tuberculosis and Neurocysticercosis of brain.
5. Growth scan in third trimester.
6. PI-RADS.
7. Thyroid scintigraphy.
8. Imaging of male infertility.
9. Renal scan.
10. Role of FDG.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 1223]

**DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)**

Sub. Code: 2032

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Nuclear imaging in ischemic heart disease.
2. Describe in detail the role of Pre operative CT in Hepatic Transplantation and what the surgeon expects?

II. Write notes on:

(10 x 7 = 70)

1. Prostate Specific Membrane Antigen (PSMA) PET scan.
2. Radionuclide imaging for Parkinson disease.
3. Pitfalls in PET CT Imaging.
4. Superficial temporal artery Doppler.
5. Radiomics in gliomas.
6. Imaging of extra pulmonary disease manifestations of COVID-19.
7. HRCT Chest in mosaic attenuation.
8. MR Urography in children.
9. CT PNS reporting for Functional Endoscopic Sinus Surgery (FESS).
10. MRI in Sports related Groin pain.
