

Reg. No.									
----------	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

MD (RADIOLOGICAL) DEGREE EXAMINATION – APRIL 2011

SUBJECT: PAPER I: BASIC SCIENCES

Monday, April 04, 2011

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

1. Discuss the principles, construction and functionalities of individual components of an image intensifier. Briefly describe the fluoroscopic imaging unit assembly.

(34 marks)

2. **Write short notes on:**

- 2A. Rectification
- 2B. Autotransformer
- 2C. Superior orbital fissure
- 2D. Myelography
- 2E. Tissue harmonic imaging
- 2F. A.E.R.B and its controlling functions in radiology

(11×6 = 66 marks)



Reg. No.										
----------	--	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

MD (RADIODIAGNOSIS) DEGREE EXAMINATION – APRIL 2011

SUBJECT: PAPER II: GASTROINTESTINAL TRACT, GENITOURINARY TRACT,
CARDIOVASCULAR SYSTEM AND BREAST

Tuesday, April 05, 2011

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

1. Breast calcifications: Mammographic evaluation.

(34 marks)

2. **Write short notes on:**

2A. Congenital hypertrophic pyloric stenosis

2B. Motility disorder of oesophagus

2C. Imaging in chronic pelvic pain in a adult female

2D. Adrenal haemorrhage

2E. Tetralogy of Fallot

2F. Truncus arteriosus

(11×6 = 66 marks)



Reg. No.										
----------	--	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

MD (RADIOLOGICAL) DEGREE EXAMINATION – APRIL 2011

SUBJECT: PAPER III: RESPIRATORY SYSTEM, BONES (MUSCULOSKELETAL SYSTEM)
HEAD AND NECK (CNS)

Wednesday, April 06, 2011

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

Answer ALL the questions.

1. Discuss the imaging in occupational lung diseases.

(34 marks)

2. **Write short notes on:**

2A. Differential diagnosis of expanding lesions of mandible

2B. Isotopes in bone imaging

2C. Giant Cell Tumor

2D. Neurotuberculosis

2E. Raised intracranial tension

2F. Atherosclerotic plaque assessment

(11×6 = 66 marks)



Reg. No.

MANIPAL UNIVERSITY

MD (RADIODIAGNOSIS) DEGREE EXAMINATION – APRIL 2011

SUBJECT: PAPER IV: RECENT ADVANCES

Thursday, April 07, 2011

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

1. Discuss imaging of aneurysms and CNS vascular malformations and the recent trends in their management.

(34 marks)

2. **Write short notes on:**

- 2A. 3D & 4D ultrasound in foetal imaging
2B. Flat panel detector
2C. Susceptibility weighted imaging
2D. MR Pelvimetry
2E. Imaging of breast implant
2F. MRI in bone marrow disease of the spine

(11×6 = 66 marks)

