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HEALTH SCIENCES LIBRARY

## MANIPAL UNIVERSITY

MD (RADIODIAGNOSIS) DEGREE EXAMINATION – APRIL 2009

SUBJECT: PAPER I: PHYSICS AS APPLIED TO RADIO DIAGNOSIS,  
BASIC SCIENCES APPLIED TO RADIO DIAGNOSIS

Wednesday, April 01, 2009

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

1. What is digital subtraction angiography? Discuss its principle and advantages over conventional angiography system.

(34 marks)

2. Write short notes on:

- 2A. Mammography unit.
- 2B. High K V technique in chest xray.
- 2C. Co2 angiography.
- 2D. Anode heel effect.
- 2E. Ultrasound in orbital disease.
- 2F. Anatomy of the retroperitoneum.

(11×6 = 66 marks)



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## MANIPAL UNIVERSITY

### MD (RADIOLOGICAL) DEGREE EXAMINATION – APRIL 2009

SUBJECT: PAPER II: RADIOLOGY AND IMAGING RELATED TO THE GASTROINTESTINAL TRACT, GENITOURINARY TRACT AND CARDIOVASCULAR SYSTEM

Thursday, April 02, 2009

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

1. Describe the types of intrauterine growth retardation. How do you assess I.U.G.R. by ultrasound?

(34 marks)

2. Write short notes on:

- 2A. Ventricular aneurysm.
- 2B. Left atrial myxoma.
- 2C. Anatomy and development of anomalies of conotruncal septum.
- 2D. Meckel's diverticulum.
- 2E. Hirschprung's disease.
- 2F. Peutz-Jegher syndrome.

(11×6 = 66 marks)



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## MANIPAL UNIVERSITY

MD (RADIODIAGNOSIS) DEGREE EXAMINATION – APRIL 2009

SUBJECT: PAPER III: RADIOLOGY AND IMAGING RELATED TO NEUROLOGY,  
CHEST AND SKELETAL SYSTEM

Friday, April 03, 2009

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

☞ Answer ALL the questions.

1. Role of MRI in the evaluation of the knee joint in ligamental and meniscal injuries.

(34 marks)

2. Write short notes on:

2A. Round atelectasis.

2B. Congenital lobar emphysema.

2C. HRCT in interstitial lung disease.

2D. Pituitary adenoma.

2E. Orbital meningioma.

2F. Arteriovenous malformation.

(11×6 = 66 marks)



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## MANIPAL UNIVERSITY

MD (RADIODIAGNOSIS) DEGREE EXAMINATION – APRIL 2009

SUBJECT: PAPER IV: RECENT ADVANCES INCLUDING IMAGING AND CLINICAL RADIOLOGY

Saturday, April 04, 2009

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

1. How would you approach a case of sellar/parasellar mass? Discuss the imaging features of craniopharyngioma.

(34 marks)

2. Write short notes on:

- 2A. PACS and film-less radiology practice.
- 2B. Balloon angioplasty in arterial disease.
- 2C. Signs of malignant and benign lesions on mammography.
- 2D. 3D USG.
- 2E. Electron beam CT.
- 2F. TACE of hepatic neoplasms.

(11×6 = 66 marks)

