

Reg. No.

MANIPAL UNIVERSITY

MD (RADIODIAGNOSIS) DEGREE EXAMINATION – APRIL 2012

SUBJECT: PAPER I: BASIC SCIENCES

Monday, April 02, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

Answer ALL the questions.

1. Discuss the imaging anatomy of the shoulder joint.

(34 marks)

2. **Write short notes on:**

2A. Scattered Radiation

2B. Compton effect

2C. Sialography

2D. Segmental anatomy of liver and its importance

2E. Electromagnetic radiation

2F. Process of X-ray generation

(11×6 = 66 marks)



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MD (RADIODIAGNOSIS) DEGREE EXAMINATION – APRIL 2012

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

Tuesday, April 03, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

1. Describe barium swallow examination. Discuss the imaging approach to an elderly patient presenting with dysphagia.

(34 marks)

2. **Write short notes on:**

2A. Posterior urethral valve

2B. Adenomyosis

2C. Left to right shunts

2D. Coarctation of aorta

2E. Pre-operative localization of non palpable breast disease

2F. Benign breast conditions that mimic malignancy

(11×6 = 66 marks)



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

Wednesday, April 04, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

Answer ALL the questions.

1. Describe the development of embryological development of spinal cord. Classify Congenital anomalies of spine and discuss in detail occult spinal dysraphism.

(34 marks)

2. **Write short notes on:**

- 2A. Metastatic lung lesion
- 2B. Diaphragmatic hernias
- 2C. Coal workers pneumoconiosis
- 2D. Osteogenesis imperfecta
- 2E. Aneurysmal Bone Cyst
- 2F. Ivory vertebra

(11×6 = 66 marks)



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SUBJECT: PAPER IV: RECENT ADVANCES

Thursday, April 05, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

1. High intensity focused ultrasound (HIFU) – Principle, Instrumentation and its applications.

(34 marks)

2. **Write short notes on:**

2A. Ultrasound contrast media

2B. Recent advances in CT detector technology

2C. Steady state MR imaging sequences

2D. Carotid and vertebral artery dissection

2E. PET in evaluation of GIT

2F. Imaging in brain death

(11×6 = 66 marks)

