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# MANIPAL UNIVERSITY

## DIPLOMA IN RADIO-DIAGNOSIS (D.M.R.D.) EXAMINATION – OCTOBER 2009

### PAPER I: BASIC SCIENCES

Monday, October 05, 2009

Time: 14:00 – 17:00 Hrs. Max. Marks: 100

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✍ **Answer ALL the questions.**

1. Describe in detail the structures and principle of intensifying and fluroscopic screens. Discuss their application in diagnostic radiology.

(34 marks)

2. **Write short notes on:**

2A. Radiation protection.

2B. Artifacts in radiographic film.

2C. Radiological anatomy of sella.

2D. MR angiography.

2E. Methods of evaluation of grid performance.

2F. Principle of Doppler with color flow imaging.

(11×6 = 66 marks)

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# MANIPAL UNIVERSITY

## DIPLOMA IN RADIO-DIAGNOSIS (D.M.R.D.) EXAMINATION – OCTOBER 2009

## SUBJECT: PAPER II: GIT, GUT, CVS

Tuesday, October 06, 2009

Time: 14:00 – 17:00 Hrs. Max. Marks: 100

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✍ **Answer ALL the questions.**

1. Classify ovarian tumours. Discuss the role of radiology and imaging in diagnosing malignant and benign ovarian tumours.

(34 marks)

2. Write short notes on:

2A. Cardiac tumors
2B. Left atrial myxoma
2C. Benefits of power doppler sonography
2D. Cystic neoplasms of liver
2E. Benign vs malignant gastric ulcers on barium studies
2F. Duodenal tumours

(11×6 = 66 marks)

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# MANIPAL UNIVERSITY

## DIPLOMA IN RADIO-DIAGNOSIS (D.M.R.D.) EXAMINATION – OCTOBER 2009

## SUBJECT: PAPER III: RESPIRATORY SYSTEM, BONES AND CNS

Wednesday, October 07, 2009

Time: 14:00 – 17:00 Hrs. Max. Marks: 100

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✍ **Answer ALL the questions.**

1. Spinal vascular malformations-Imaging features.

(34 marks)

2. Write short notes on:

2A. Benign cartilaginous bone tumours.
2B. Isotopes in bone imaging.
2C. Discal calcification.
2D. Wegener's granulomatosis.
2E. Sub pulmonic effusion.
2F. Thymic tumours.

(11×6 = 66 marks)