

**M.D. DEGREE EXAMINATION, IN RADIODIAGNOSIS, DECEMBER 2008**

**Paper I—BASIC SCIENCES, RADIATION PHYSICS, RADIOLOGICAL ANATOMY AND CONTRAST MEDIA**

Time : Three Hours

Maximum : 100 Marks

*Answer all questions.*

I. Write short notes on :

- 1 Anodes in X-ray tube.
- 2 Contrast agents in MRI.
- 3 Adverse reactions to iodinated I.V. contrasts.
- 4 TLD.
- 5 Heel effect.

(5 × 5 = 25 marks)

II. Write briefly on :

- |                                    |                      |
|------------------------------------|----------------------|
| 1 Grids in conventional radiology. | 2 Fracture healing.  |
| 3 Rotator cuff of shoulder.        | 4 X-ray tube rating. |

(4 × 5 = 20 marks)

III. Write short notes on :

- 1 Double contrast examination of stomach.
- 2 Sialography.
- 3 Radiological anatomy of oesophagus.
- 4 HRCT technique.
- 5 MRCP technique.

(5 × 5 = 25 marks)

IV. Describe radiography of :

- |                  |                       |
|------------------|-----------------------|
| 1 Scapula.       | 2 Sacro-iliac joints. |
| 3 Optic foramen. | 4 Sternum.            |
| 5 Mandible.      |                       |

(5 × 4 = 20 marks)

V. Describe briefly the following :—

- 1 Piezoelectric effect.
- 2 Digital Radiography.

(2 × 5 = 10 marks)