



**RAE-9142**

Seat No. \_\_\_\_\_

**P. G. Diploma In Medical Examination**

**March / April – 2019**

**Diploma in Radiodiagnosis (DMRD) : Paper - I**  
*(New Course)*

Time : 3 Hours]

[Total Marks : 100

**Instructions :** (1) Draw the diagram whenever necessary.  
(2) Figures on right side indicate full marks.  
(3) All the questions are compulsory.  
(4) Irrelevant writing will reduce value of your answers.

- 1 Describe anatomy and vascular supply of kidney. **25**  
Enumerate causes of renovascular hypertension. Which radioimaging tests can help to evaluate renovascular hypertension? Describe two pathological conditions causing renovascular hypertension in detail with respect to radioimaging findings.
- 2 What is multislice computed tomography? How does it differ from conventional CT scanner? Describe basic technology, detector design, collimator design, data acquisition system, image reconstruction in multislice computed tomography. Enumerate its clinical advantages over conventional CT. **25**
- 3 What is MR spectroscopy? Describe its basic principle, localisation techniques, data acquisition and analysis. Describe various clinical applications of MR spectroscopy in detail. **25**
- 4 Write short notes on : (5 marks each) **25**
  - (A) Ultrasound contrast media and its clinical applications.
  - (B) Tube rating chart.
  - (C) Digital radiography-components and acquisition.
  - (D) PET CT -Principles and clinical applications.
  - (E) Bone densitometry-Techniques and interpretation.