

QP Code: 101116

Reg. No.:.....

**PG Degree Supplementary Examinations in Radio diagnosis (MD) -  
November 2016**

**Paper I – Basic Science, Radiation Physics, Radiological Anatomy and  
Contrast Media**

**Time: 3 hrs**

**Max marks:100**

- ***Answer all questions***
- ***Draw diagrams wherever necessary***

**Essays: (20)**

1. Draw the basic structure of an ultra sound transducer. Enumerate the merits and demerits of various transducers. Discuss the principle of colour Doppler flow imaging

**Short essays: (8x10=80)**

2. Describe the radiological anatomy of adrenals.
3. Describe the adverse reactions to X-ray contrast media.
4. Magnetic resonance angiography – principles and techniques.
5. Enumerate various interactions of X-ray photons with matter and describe any two of them.
6. Describe the embryology of the urinary tract.
7. Describe the principles in cardiac computed tomography.
8. Describe five Doppler artefacts and ways to prevent them.
9. Draw a neat labelled diagram of a gamma camera and enumerate the various indications of scintigraphy.

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