

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[AHS 0321]**

**MARCH 2021**

**Sub. Code: 3602**

**(OCTOBER 2020 EXAM SESSION)**

**POST GRADUATE DIPLOMA IN RADIOLOGY & IMAGING TECHNOLOGY**

**(From 2014-2015 onwards)**

**PAPER II – RADIO DIAGNOSTIC EQUIPMENTS – INSTRUMENTATION, RADIATION, SAFETY AND  
QUALITY CONTROL**

***Q.P. Code : 363602***

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Production of X-rays with diagrammatic representation.
2. Factors controlling CT image quality. Enumerate CT artefacts.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Collimators
2. Pocket dosimeter
3. Intensifying screens
4. Digital subtraction angiography [DSA]
5. Helical CT
6. Principle of time, distance & shielding in radiation protection
7. Diffusion weighted imaging in MRI
8. Guidelines for establishing nuclear medicine facility
9. Characteristic curve of X-ray film
10. Types of ultrasound transducers

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