

(LI 1514)

APRIL 2016

Sub. Code:3019

**DIPLOMA IN MEDICAL RADIO DIAGNOSIS (DMRD)  
EXAMINATION**

**MEDICAL RADIATION PHYSICS AS APPLIED TO RADIO DIAGNOSIS**

*Q.P.Code: 343019*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:** **(2 x 15 = 30)**

1. Describe briefly physics principles of ultrasound and Color Duplex doppler.
2. Write in detail the physical principles of direct digital Radiography.  
Describe its advantages over conventional radiography.

**II. Write notes on:** **(10 x 7 = 70)**

1. Principles of MDCT.
2. Comet tail Artifact, reverberation artifacts in Ultrasound.
3. Physics of MR spectroscopy.
4. Cones and filters in Radiology.
5. Physics of PET, SPECT.
6. Super conducting magnets.
7. Grids in Radiology.
8. Pocket dosimeter.
9. Factors affecting radiographic image.
10. Film Gama.

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