

[LP 136]

OCTOBER 2019

Sub. Code: 2031

**M.D. DEGREE EXAMINATION**  
**BRANCH VIII – RADIO DIAGNOSIS**  
**PAPER I – MEDICAL RADIATION PHYSICS AS APPLIED TO**  
**RADIO DIAGNOSIS**

*Q.P. Code: 202031*

**Time : Three Hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Enumerate the differences between Film-Screen Radiography, Computed Radiography and Digital Radiography.
2. Briefly describe a superconducting MRI magnet with a neat diagram. List various coils involved in imaging with their specific uses.

**II. Write notes on:**

**(10 x 7 = 70)**

1. Dual energy CT.
2. Time, Distance, Shielding.
3. Image resolution in radiography.
4. Ultrasound artifacts – How to rectify?
5. Filters.
6. Cone beam CT.
7. Factors that affect Doppler signal and spectrum.
8. Grid: types and uses.
9. FAT suppression technique in MRI.
10. Barium as a contrast agent.

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