

[LS 136]

NOVEMBER 2020
(OCTOBER 2020 SESSION)

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. Discuss the Biological effects of Radiations and the measures taken against its protection for Radiation workers and patients in Radio-diagnosis dept.
2. Describe the principles of acoustics applicable to ultrasound. Construction of transducers and write a note on the various ultrasonography controls

II. Write notes on:

(10 x 7 = 70)

1. AERB (Atomic energy regulatory board) Guidelines for X- ray and CT installation
2. MRI artefacts. How to rectify them in the study?
3. Half value layer
4. Anode heel effect.
5. Role of Phosphorescence in Radiology
6. PACS in radiology
7. Physical principles of PET-CT. Discuss the role of PET in post treatment evaluation of lymphoma.
8. Various views for Paranasal sinuses
9. Compare stationary and rotating anode, Describe the advantages of rotating anode.
10. MR angiography technique.
