[LI 136] APRIL 2016 **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. Describe basic physics of mammography imaging. Write about various views and interpretations in it.

2. What is sharpness in radiography? Classify unsharpness. Write about factors affecting radiographic images quality.

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

1. Artifacts in CT imaging.
2. Inverse square law and its clinical application.
3. Composition of ultrasound gel and its role.
4. Physics of ultrasound elastography.
5. Evaluation of grid performance.
6. Computed Radiography.
7. Principles of MRI imaging.
8. Annihilation coincidence detection.
9. Radiology Information System (RIS).
10. Film gamma.

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