

**KALOJI NARAYANA RAO UNIVERSITY OF HEALTH SCIENCES
WARANGAL, TELANGANA STATE – 506 002**

P.G DIPLOMA SUPPLEMENTARY EXAMINATIONS: February/March, 2024

DIPLOMA IN MEDICAL RADIO DIAGNOSIS (DMRD)

PAPER – I

(BASIC SCIENCES RELATED TO RADIOLOGY AND GENERAL PHYSICS)

Time: 3 Hours

Max Marks: 100

Note: Answer all questions

Give Diagrammatic representation wherever necessary

Write an essay on the following:

4 X 15 = 60

1. Discuss the imaging anatomy of the sellar and parasellar region.
2. Time gain compensation (TGC) and dynamic range in ultrasound.
3. Discuss the basic physics and instrumentation of a mammographic unit.

What are the different mammographic projections?

4. Discuss basic interaction of X-rays with matter.

Write a short note on the following:

4 X 10 = 40

5. Piezo electric effect.
6. Personnel dosimetry systems.
7. Iso osmolar vs low osmolar CT contrast media.
8. ICRP recommendations.
