

**DIPLOMA IN MEDICAL RADIODIAGNOSIS (DMRD)
EXAMINATION**

MEDICAL RADIATION PHYSICS AS APPLIED TO RADIODIAGNOSIS

Q.P. Code: 343019

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Composition of Xray films and discuss different parameters which influence film contrast?
2. Describe various techniques of MR angiography.

II. Write notes on:

(10 x 7 = 70)

1. Doppler artefacts.
2. Idiosyncratic reaction to contrast agent and its management.
3. Dose reduction techniques in MDCT.
4. Clinical applications and techniques of MR spectroscopy.
5. Write about USG contrast agents and their use in focal liver lesions.
6. Photoelectric effect and its application in diagnostic radiology.
7. Various techniques of CT angiography and contrast optimization.
8. Describe radiopharmaceuticals used in PET CT.
9. Xray beam restrictors.
10. MRI Coils used in Musculo Skeletal imaging.
