

OCTOBER 2015

[LH 1514]

Sub. Code: 3019

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

MEDICAL RADIATION PHYSICS AS APPLIED TO RADIODIAGNOSIS

Q.P. Code : 343019

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Enumerate the artefacts in MRI; mention the causes and discuss how each can be eliminated.
2. Enumerate and justify the differences between a routine radiographic unit and a mammographic unit. Explain in detail the mammography techniques.

II. Write notes on:

(10 x 7 = 70)

1. Different modes of Ultrasound.
2. How do you reduce the radiation dose to a patient during radiology procedures?
3. Characteristic curve.
4. Flat panel detector.
5. Need for interface jelly in ultrasound imaging.
6. Rotating anode X-ray Tube.
7. CT numbers.
8. Advantages of a Grid.
9. C.R. – Plates for radiography.
10. TLD badge.

**[LH 1515] OCTOBER 2015 Sub. Code: 3020 DIPLOMA IN MEDICAL
RADIO DIAGNOSIS (DMRD) EXAMINATION**

RADIO DIAGNOSIS AND IMAGING

Q.P. Code : 343020

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Evaluation of focal space occupying lesions of the liver by imaging modalities.
2. Describe in detail the role of radiology and the radiologist in the management of Renal cell carcinoma patients.

II. Write notes on:

(10 x 7 = 70)

1. CT features of common anterior mediastinal masses.
2. X-ray and imaging findings of Aortic dissection.
3. Osteo Chondroma – Give an account.
4. Ultrasound and Doppler findings of portal hyper tension.
5. Role of Transvaginal ultrasound in first trimester bleeding.
6. X-ray and imaging findings of Wilm's tumour.
7. Imaging findings of tuberous sclerosis.
8. Virtual colonoscopy.
9. Breast MRI.
10. Barium meal and CT findings of Crohn's disease.

OCTOBER 2015

[LH 1514]

Sub. Code: 3019

**DIPLOMA IN MEDICAL RADIODIAGNOSIS (DMRD)
EXAMINATION
RADIODIAGNOSIS INCLUDING NUCLEAR MEDICINE**

Q.P. Code : 343019

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Brief the imaging algorithm in evaluation of an adult with hypertension.
Discuss in detail the role of Doppler Nuclear Medicine in such a patient.
2. Brief the imaging modalities useful in evaluating pathologies in pregnant women and discuss in detail the importance of ultrasonogram in the first trimester.

II. Write notes on:

(10 x 7 = 70)

1. CT imaging in Flat bones pathology.
2. Imaging a child with dribbling of urine.
3. GIST.
4. Complications of pancreatitis.
5. Tabulate differences between RCC and TCC.
6. BIRADS 4.
7. VU features of GU-TB.
8. Imaging features of malignant adnexal lesion.
9. Hepato biliary scintigraphy.
10. 18-F Bone scintigraphy.
