

(LO 1514) MAY 2019

Sub. Code: 3019

**DIPLOMA IN MEDICAL RADIO DIAGNOSIS (DMRD)
EXAMINATION**

MEDICAL RADIATION PHYSICS AS APPLIED TO RADIO DIAGNOSIS

Q.P. Code: 343019

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Discuss factors affecting scatter radiation and techniques to minimize scatter radiation.
2. Recent advances in ultrasound imaging technique and brief about ultrasound elastography and tissue harmonic imaging.

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

1. Define contrast induced nephropathy. Discuss about the risk factors, management and prevention of the same.
2. Liver specific MR contrast agents.
3. Principles of planning of diagnostic X-ray installations.
4. Explain the basics of multidetector CT.
5. Write about CR cassettes.
6. Write about commonly used MR angiographic techniques.
7. Write about various radiation units and maximum permissible dose for radiation workers.
8. K edge filters in diagnostic radiology.
9. Write about any four common CT artefacts.
10. Emergency drugs with doses that should be available in radiology department.

(LO 1515)

MAY 2019

Sub. Code: 3020

DIPLOMA IN MEDICAL RADIO DIAGNOSIS (DMRD)

**EXAMINATION
RADIO DIAGNOSIS AND IMAGING**

Q.P. Code: 343020

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: (2 x 15 =30)

1. Discuss in detail about imaging of small bowel obstruction.
2. Discuss in detail about imaging of cystic mediastinal masses.

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

1. Write about doppler imaging of vertebral arteries.
2. Discuss about CT imaging features in pulmonary thrombo embolism.
3. Discuss about imaging features of congenital pulmonary airway malformation.
4. Write imaging features of perthes disease.
5. Write about imaging features of benign tumours of phalanges.
6. HRCT findings in sarcoidosis.
7. Role of various imaging modalities in pancreatic Islet cell tumors.
8. Write about imaging features of various types of Cholangitis.
9. Write about imaging of acute aortic syndrome.
10. Discuss about imaging of various cardiac tumours.

[LO 1516]

MAY 2019

3021

DIPLOMA IN MEDICAL RADIO DIAGNOSIS (DMRD)

EXAMINATION

RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

I. Elaborate on: (2 x 15 = 30)

1. Write in detail about imaging in acute renal infections.
2. Write about classification, vascular malformation of brain and discuss in detail about PIAL AVM.

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

1. Brachial plexus imaging.
2. Radiofrequency ablation of liver tumors.
3. USG evaluation of renal transplant related complications.
4. Imaging of varicocele and role of interventional radiology in it.
5. Imaging approach in a patient with h/o three months amenorrhea presenting with abdominal pain and bleeding PV.
6. Role of imaging in acute CNS infection.
7. Role of scintigraphy in imaging of neuroendocrine tumors.
8. Imaging of placental abnormalities.
9. Discuss the role of various imaging modalities in evaluation of Retinoblastoma.
10. HRCT imaging features of Chronic Otitis media and its complications. *****