

(LI 1514)

APRIL 2016

Sub. Code:3019

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

MEDICAL RADIATION PHYSICS AS APPLIED TO RADIO DIAGNOSIS

I. Elaborate on:

(2 x 15 = 30)

1. Describe briefly physics principles of ultrasound and Color Duplex doppler.
2. Write in detail the physical principles of direct digital Radiography.
Describe its advantages over conventional radiography.

II. Write notes on:

(10 x 7 = 70)

1. Principles of MDCT.
2. Comet tail Artifact, reverberation artifacts in Ultrasound.
3. Physics of MR spectroscopy.
4. Cones and filters in Radiology.
5. Physics of PET, SPECT.
6. Super conducting magnets.
7. Grids in Radiology.
8. Pocket dosimeter.
9. Factors affecting radiographic image.
10. Film Gama.

(LI 1515)

APRIL 2016

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 the imaging features of sellar and parasellar masses.
2. Discuss the approach to a solitary pulmonary nodule on CT.

II. Write notes on:

(10 x 7 = 70)

1. Transposition of great vessels.
2. Barium meal and CT findings of Carcinoma stomach.
3. Imaging of small bowel lymphoma.
4. Ultrasound Imaging of Intra Uterine Growth Retardation.
5. Radiological and imaging features of Neuroblastoma.
6. Osteogenesis imperfecta.
7. Various imaging modalities of Breast for early detection of a malignancy.
8. PNDT Act.
9. Endoluminal Sonography.
10. CT and MRI findings of choledochal cyst.

(LI 1516)

APRIL 2016

Sub. Code:3021

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

RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P.Code: 343021

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

**(2 x 15 =
30)**

1. Discuss in detail the importance of ultrasonogram in first trimester and anomaly scan.
2. Discuss the imaging algorithm and role of ultrasound and Nuclear Medicine in the evaluation of neonatal jaundice.

II. Write notes on:

(10 x 7 = 70)

1. BIRADS 3.
2. HRCT of Temporal bone.
3. Role of imaging in acute stroke.
4. MRI features of focal liver lesion.
5. Imaging of congenital lung lesions.
6. Imaging protocol for Carcinoma Rectum with justification.
7. Renal mass evaluation in children.
8. Gastric volvulus.
9. Parathyroid scintigraphy.
10. DEXA scan.