

[LK 140]

MAY 2017

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER I – MEDICAL RADIATION PHYSICS AS APPLIED TO RADIO
DIAGNOSIS**

Q.P. Code :202031

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the Physical Principles of MRI.
2. Digital Radiography and Computerised Radiography.

II. Write notes on:

(10 x 7 = 70)

1. Discuss the function of image intensifier.
2. Thermoluminescent dosimetry (TLD Badge).
3. What are the advanced techniques in ultrasound machines?
4. Digital Subtraction Angiography.
5. Give a note on Compton effect.
6. What do you mean by ALARA Principle (As Low as Reasonably Achievable)?
7. X ray Artifacts.
8. X ray Tube.
9. Filters.
10. Describe the various radiation protection aprons with regards to the materials used for manufacturing.

[LK 137]

MAY 2017

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE**

Time : Three Hours

Maximum : 100 Marks

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

1. PET CT and its role in Oncology.
2. Role of imaging in evaluation of a female patient presenting with acute lower abdominal pain.

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

1. Bone Scintigraphy.
2. Transarterial Radioembolisation for HCC.
3. MUGA scan.
4. IDA Scan.
5. Ultrasound of Thyroid.
6. 11 to 13 week Obstetric scan.
7. Imaging in portal hypertension.
8. Ultrasound of rotator cuff injury.
9. Calcifications in breast lesion.
10. Imaging of hydatid cyst.

[LK 138]

MAY 2017

Sub. Code:

**M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER III – RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND
CONTRAST STUDIES**

Q.P. Code :202033

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write in detail about MRI Contrast media.
2. Imaging of ovarian tumors.

II. Write notes on:

(10 x 7 = 70)

1. Ultrasound Contrast Media.
2. Sonosalpingography.
3. Contrast reaction and management.
4. Lipiodol.
5. Ultrasound of placenta.
6. Angiographic catheters.
7. Imaging of posterior mediastinal tumor.
8. Principle of HRCT.
9. Imaging in renal hypertension.
10. Embolic agents.

[LK 139]

MAY 2017

M.D. DEGREE EXAMINATION
BRANCH VIII – RADIO DIAGNOSIS
PAPER IV – RADIO DIAGNOSIS INCLUDING INTERVENTIONAL
PROCEDURES AND RECENT ADVANCES
Q.P. Code :202034

I. Elaborate on:

1. Interventional Radiology in Liver tumors.
2. Fetal interventions.

II. Write notes on:

1. Contrast enhanced digital mammography.
2. Radiofrequency ablation.
3. Vertebroplasty.
4. Imaging in post liver transplant.
5. BRTO (Balloon occluded retrograde transvenous obliteration of varices).
6. Vascular embolisation techniques.
7. Transjugular liver biopsy.
8. Cardiac CT.
9. MR enteroclysis.
10. Celiac plexus neurolysis.
