

[MD 0721]

JULY 2021

Sub. Code: 2031

(MAY 2021 SESSION)

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 physics of conventional fluoroscopy, flat panel with DSA. The differences and indications for single plane and by plane fluoroscopy.
2. Quality checking in radiology, auditing and accreditations pertaining to radiology departments.

II. Write notes on:

(10 x 7 = 70)

1. Physics of PET.
2. Artifacts related to X-ray and how to rectify them.
3. Advanced ultrasound techniques.
4. MDCT.
5. Mobile radiography.
6. Maximum permissible dose.
7. Fast sequences in MRI.
8. Collimators.
9. MRI Hazards.
10. Tomosynthesis.

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**JULY 2021
(MAY 2021 SESSION)**

**Sub. Code:
Sub. Code: 2032**

M.D. DEGREE EXAMINATION

BRANCH VIII – RADIO DIAGNOSIS

PAPER II – RADIO DIAGNOSIS INCLUDING NUCLEAR MEDICINE

Q.P. Code: 202032

Time : Three Hours

Maximum : 100 Marks

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

1. Describe in detail fetal facial abnormalities with time of deduction and follow ups.
2. Aetiology and role of imaging in scoliosis.

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

1. Hepatobiliary scintigraphy.
2. GIT lymphomas imaging.
3. Post renal transplant imaging.
4. Imaging of cervical incompetence.
5. Polyp Vs diverticulas in barium enema.
6. Biochemical markers in first and second trimesters.
7. Pelvic floor imaging.
8. Measurements in femoro acetabular impingement.
9. Cerebral microhaemorrhages.
10. Post operative small bowel.

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M.D. DEGREE EXAMINATION

**PAPER III – RADIO DIAGNOSIS INCLUDING INSTRUMENTATION AND
CONTRAST STUDIES**

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

1. Discuss about orbital tumors and imaging approach and role of CT and MRI.
2. Describe the normal anatomy of coronary arteries and discuss the role of MDCT in coronary artery disease.

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

1. Differentiate diagnosis of ground glass opacities.
2. Sialography.
3. Write imaging findings of the following :
 - a) Bronchial carcinoid
 - b) Boop
 - c) Meleod's syndrome.
4. MR in evaluation of pericardium and its pathologies.
5. IG G4 related diseases imaging.
6. Paraneo-plastic syndrome.
7. Conventional X-ray imaging features of mitral heart disease.
8. Ba enema techniques and applications.
9. MRCP ductal variants.
10. Renal hypertension.

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**JULY 2021
(MAY 2021 SESSION)**

Sub. Code: 2034

M.D. DEGREE EXAMINATION

**BRANCH VIII – RADIO DIAGNOSIS
PAPER IV – RADIO DIAGNOSIS INCLUDING INTERVENTIONAL
PROCEDURES AND RECENT ADVANCES**

Q.P. Code: 202034

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Cleaning and disinfection of all radiology equipments in the radiology department.
How to prepare for a pandemic?
2. Imaging evaluation of hepatic nodules and interventional management of hepatocellular carcinoma imaging in post liver transplant.

II. Write notes on:

(10 x 7 = 70)

1. AI in head injury.
2. Sonosalpingogram.
3. Leucodystrophy with contrast enhancement.
4. Contrast mammography.
5. MRI in muscular dystrophy.
6. Intervention in portal hypertension.
7. MR urology.
8. MR evaluation of placental abnormalities.
9. Recent advances to detect early osteo arthritis by imaging.
10. RECIST.
