

MANIPAL ACADEMY OF HIGHER EDUCATION**PG DIPLOMA IN RADIO-DIAGNOSIS (D.M.R.D.) EXAMINATION – JUNE 2020****SUBJECT: PAPER I: BASIC SCIENCES RELATED TO RADIOLOGY (ANATOMY,
PATHOLOGY, BASIC AND RADIATION PHYSICS, TECHNIQUE AND DARK ROOM
PROCESSING AND APPARATUS CONSTRUCTION)**

Wednesday, June 03, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Questions:**

1. Discuss the basic physics and Instrumentation of a mammographic unit. What are the different mammographic projections?

(15 marks)

2. Discuss the imaging anatomy of the knee joint.

(15 marks)

3. **Short Questions:**

3A. Wedge filter

3B. Paramagnetic contrast media

3C. High KV technique in chest X-ray

3D. Methods of evaluation of grid performance

3E. Intra operative ultrasound

3F. CT Enterography

3G. Nephrogenic systemic fibrosis

3H. ALARA

3I. Inversion recovery Sequence

3J. Blood brain barrier.

(7 marks × 10 = 70 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION

PG DIPLOMA IN RADIO-DIAGNOSIS (D.M.R.D.) EXAMINATION – JUNE 2020

SUBJECT: PAPER II: CNS INCLUDING HEAD AND NECK, MUSCULOSKELETAL,
CHEST, MAMMOGRAPHY, C.V.S.

Thursday, June 04, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL questions.

✍ Long Questions:

1. Classify pediatric brain tumors. Describe imaging features of pediatric glial tumors in detail.
(15 marks)
2. Elaborate the role of computed tomography in assessment of coronary artery disease.
(15 marks)

3. Short Notes:

- 3A. Pigmented villonodular synovitis
- 3B. Chondrosarcoma
- 3C. Benign breast masses
- 3D. Role of Radio isotope in pulmonary embolism
- 3E. Broncho alveolar carcinoma
- 3F. Mediastinal lines and stripes
- 3G. Imaging in Otitis media
- 3H. Cardiovascular abnormalities in Marfan's syndrome.
- 3I. McLeod's syndrome
- 3J. MRI evaluation of cartilage in joints

(7 marks × 10 = 70 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION**PG DIPLOMA IN RADIO-DIAGNOSIS (D.M.R.D.) EXAMINATION – JUNE 2020****SUBJECT: PAPER III: ABDOMINAL IMAGING INCLUDING GI, GU, HEPATOBILIARY,
INTERVENTIONAL RADIOLOGY, OBST AND GYNAE**

Friday, June 05, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **Long Questions:**

1. Discuss etiology, classification, imaging features and complication of choledochal cyst.
(15 marks)
2. Classify and discuss imaging of ovarian tumours.
(15 marks)

3. **Short Questions:**

- 3A. Normal and abnormal extrinsic impressions on aesophagogram.
- 3B. Multicystic dysplastic kidney
- 3C. Barium findings in coeliac disease
- 3D. Ovarian follicular monitoring
- 3E. Emphysematous Pylonephritis
- 3F. Liver metastasis
- 3G. Renal biopsy
- 3H. Biliary atresia
- 3I. Diabetic nephropathy
- 3J. Segmental anatomy of liver and its importance.

(7 marks × 10 = 70 marks)

