

Reg. No.									
----------	--	--	--	--	--	--	--	--	--

**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**PG DIPLOMA IN RADIO-DIAGNOSIS (DMRD) EXAMINATION – MAY**  
**2021**

**PAPER I**

Monday, May 03, 2021

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

---

✍ **Answer ALL the questions.**

✍ **Long answer questions:**

1. Discuss in detail the construction of a grid and explain how it helps in improving the radiographic quality.

(15 marks)

2. Define film contrast. Enumerate various factors affecting film contrast. Briefly discuss methods to improve it.

(15 marks)

3. **Short answer questions:**

3A. Nephrogenic systemic fibrosis.

3B. CT artifacts

3C. Myelography

3D. Post processing techniques in MDCT and their utility

3E. Segmental anatomy of liver and its importance

3F. PACS

3G. Piezo electric effect

3H. Pregnancy and radiation

3I. Automated exposure control.

3J. Ultrasonic display modes

(7 marks × 10 = 70 marks)



Reg. No.									
----------	--	--	--	--	--	--	--	--	--

**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**PG DIPLOMA IN RADIO-DIAGNOSIS (DMRD) EXAMINATION – MAY**  
**2021**

**PAPER II**

Tuesday, May 04, 2021

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long answer questions:**

1. Describe the anatomy of sella and parasellar regions. Describe imaging features of pituitary adenoma in detail.

(15 marks)

2. Classify various congenital lung diseases. Discuss the pre and postnatal imaging features of congenital cystic adenomatoid malformation.

(15 marks)

3. **Short answer questions:**

3A. BI-RADS

3B. Aneurysmal bone cyst

3C. Subclavian steal syndrome

3D. Imaging in brain death

3E. Bronchopulmonary aspergillosis

3F. Pyogenic and tuberculous osteomyelitis of spine

3G. Partial anomalous pulmonary venous drainage

3H. Osteogenesis imperfecta

3I. MR cerebral venography

3J. Mediastinal lines and stripes

(7 marks × 10 = 70 marks)





MANIPAL ACADEMY OF HIGHER EDUCATION  
PG DIPLOMA IN RADIO-DIAGNOSIS (DMRD) EXAMINATION – MAY  
2021

## PAPER III

Wednesday, May 05, 2021

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Long answer questions:

1. Describe embryology of gut rotation and fixation. Discuss the differential diagnosis of a neonate with bilious vomiting.

(15 marks)

2. What are the causes of hematuria? Describe the imaging approach in a case of hematuria.

(15 marks)

3. Short answer questions:

3A. Budd chiari syndrome

3B. Neurogenic bladder

3C. Ultrasound and Doppler sonography in portal hypertension.

3D. Testicular tumours

3E. Transjugular intrahepatic portosystemic shunt

3F. Adrenal incidentiloma

3G. Motility disorder of oesophagus

3H. Ovarian follicular monitoring

3I. TACE- chemoembolisation of liver tumours.

3J. Doppler in ovarian neoplasm

(7 marks × 10 = 70 marks)

