

**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**DM (CARDIOLOGY) DEGREE EXAMINATION – JULY 2020**  
**SUBJECT: PAPER I: BASIC SCIENCES**

Wednesday, July 01, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essay:**

1. Briefly outline the causes of syncope and describe your approach to a patient with syncope with special focus on diagnostic tests.

(20 marks)

2. Define continuous murmur. Mention any five causes of continuous murmur and the characteristic features of each.

(20 marks)

3. **Write Short notes on:**

3A. Acute fulminant myocarditis

3B. Sick sinus syndrome

3C. Stress echocardiography

3D. Low gradient severe aortic stenosis

3E. CRT D

3F. Exercise testing in non atherosclerotic heart disease

(10 marks × 6 = 60 marks)



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**DM (CARDIOLOGY) DEGREE EXAMINATION – JULY 2020**  
**SUBJECT: PAPER II: ISCHEMIC HEART DISEASE**

Thursday, July 02, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

---

✍ **Answer ALL the questions.**

✍ **Long Essay:**

1. Briefly outline the benefits of echocardiogram in post MI patients.  
(20 marks)
  
2. Rotational atherectomy in coronary interventions - mechanism, procedure, indications and contraindications.  
(20 marks)
  
3. **Write short notes on:**
  - 3A. Stent thrombosis
  - 3B. Hybrid coronary revascularisation
  - 3C. Saphenous vein graft interventions
  - 3D. No reflow phenomenon
  - 3E. ECMO
  - 3F. Coronary Bifurcation lesions

(10 marks × 6 = 60 marks)



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**DM (CARDIOLOGY) DEGREE EXAMINATION – JULY 2020**  
**SUBJECT: PAPER III: CONGENITAL AND VALVULAR HEART DISEASE**

Friday, July 03, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

---

✍ **Answer ALL the questions.**

✍ **Long Essay:**

1. Discuss the role of clinical examination, Echocardiography and Cardiac Catheterization in the management of Atrial Septal Defect.

(20 marks)

2. Discuss the etiology, diagnosis and management of Tricuspid valve disease.

(20 marks)

3. **Write Short notes on:**

3A. How will you measure cardiac output in the catheterization laboratory?

3B. Eisenmenger syndrome

3C. Treatment of prosthetic valve thrombosis

3D. Atrial Septostomy

3E. Asplenia syndrome

3F. Intra cardiac echocardiography

(10 marks × 6 = 60 marks)



