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# MANIPAL UNIVERSITY

## DM (CARDIOLOGY) DEGREE EXAMINATION – JULY 2015

### SUBJECT: PAPER I: BASIC SCIENCES

Tuesday, July 14, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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✍ **Long Essay:**

1. Discuss the development, anatomy and congenital abnormalities of the conotruncal system. (20 marks)
2. Discuss Physiology of excitation contraction coupling and alterations in heart failure . (20 marks)

3. **Write short notes on:**

- 3A. Describe Bayes theorem and its clinical applications
- 3B. Long QT Syndrome
- 3C. What is Ficks principle? Describe its clinical application
- 3D. Takotsubo Cardiomyopathy
- 3E. Left ventricular remodeling after acute myocardial infarction
- 3F. Asplenia syndrome

(10 marks × 6 = 60 marks)



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# MANIPAL UNIVERSITY

## DM (CARDIOLOGY) DEGREE EXAMINATION – JULY 2015

### SUBJECT: PAPER II: ISCHEMIC HEART DISEASE

Wednesday, July 15, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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**✍ Long Essay:**

1. Describe the causes and management of Cardiogenic shock in acute MI. (20 marks)

2. Outline management of post MI ventricular tachycardia. Add a short note on drug induced TdP. (20 marks)

3. **Write short notes on:**

3A. Cardiac resynchronisation therapy

3B. New onset atrial fibrillation

3C. Coronary stent restenosis

3D. Coronary Plaque erosion

3E. Micro vascular angina

3F. Stress echocardiogram

(10 marks × 6 = 60 marks)



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## MANIPAL UNIVERSITY

DM (CARDIOLOGY) DEGREE EXAMINATION – JULY 2015

SUBJECT: PAPER III: CONGENITAL AND VALVULAR HEART DISEASE

Thursday, July 16, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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**Long Essay:**

1. Describe clinical features, diagnosis and management of coarctation of aorta. (20 marks)

2. Describe the causes, diagnosis and management of Severe mitral regurgitation. (20 marks)

3. **Write short notes on:**

3A. Eisenmengers physiology

3B. TAVR

3C. ALCAPA

3D. Ebsteins anomaly

3E. Acute severe AR

3F. Complications of IE

(10 marks × 6 = 60 marks)



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**MANIPAL UNIVERSITY**  
**DM (CARDIOLOGY) DEGREE EXAMINATION – JULY 2015**  
**SUBJECT: PAPER IV: OTHER CARDIO VASCULAR DISEASES**

Friday, July 17, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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✍ **Long Essay:**

1. Novel oral anticoagulants (NOAC). Indications. Benefits. Describe each one shortly. (20 marks)
  
2. Describe diagnosis and management of Acute decompensated heart failure. (20 marks)
  
3. **Write short notes on:**
  - 3A. Restrictive cardiomyopathy
  - 3B. Aspirin in primary prevention of CV events
  - 3C. LV assist devices
  - 3D. Management of severe primary pulmonary artery hypertension
  - 3E. OCT in coronary interventions
  - 3F. Cardiac complications in obstructive sleep apnea

(10 marks × 6 = 60 marks)

