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### MANIPAL UNIVERSITY

## FIRST YEAR M.Sc. CVT DEGREE EXAMINATION – JUNE 2010

SUBJECT: BASIC SCIENCE IN CARDIOLOGY

Tuesday, June 08, 2010

Time: 10:00 – 13:00 Hrs. Max. Marks: 80

- Answer ALL questions.
- 1. Explain the mitosis cell division with diagram and genetic factors in various congenital heart disease.

(20 marks)

- 2. Write short notes on:
- 2A. Embryonic blood vessels
- 2B. Development of sinus venosus
- 2C. Formation of embryonic ventricles
- 2D. Lipid profile
- 2E. Renin angiotensin system
- 2F. Cata cholamines

 $(10\times6 = 60 \text{ marks})$ 



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#### MANIPAL UNIVERSITY

#### FIRST YEAR M.Sc. CVT DEGREE EXAMINATION – JUNE 2010

SUBJECT: CLINICAL CARDIOLOGY

Thursday, June 10, 2010

| Tim | ne: 10:00 – 13:00 Hrs. | Max. Marks: 80 |  |  |  |
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| Ø   | Answer ALL questions.  |                |  |  |  |

- Ø Draw the diagrams wherever necessary.
- 1. Discuss the etiology and diagnosis of Aortic regurgitation.

(20 marks)

- 2. Write short notes on:
- 2A. Bulls eye plot and myocardial infarction
- 2B. Infective Endocarditis
- 2C. Echo scoring in mitral stenosis
- 2D. Burnoulli equation
- 2E. Electrical axis
- 2F. S<sub>I</sub> S<sub>II</sub> S<sub>III</sub> Syndrome

 $(10\times6 = 60 \text{ marks})$ 



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### MANIPAL UNIVERSITY

# FIRST YEAR M.Sc. CVT DEGREE EXAMINATION – JUNE 2010 SUBJECT: RECENT ADVANCES IN CARDIOLOGY

Saturday, June 12, 2010

Time: 10:00 – 13:00 Hrs. Max. Marks: 80

- & Answer ALL questions.
- 1. Discuss the recent advances of 3D Echocardiography.

(20 marks)

- 2. Write short notes on:
- 2A. Right ventricular function (RV)
- 2B. Common fit falls in ECG interpretation
- 2C. Speckle tracking
- 2D. Name the various areas of myocardial infarction as per Bull's eye plot
- 2E. Automated strain
- 2F. His-bundle ECG

 $(10\times6=60 \text{ marks})$ 

