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## MANIPAL UNIVERSITY

THIRD YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2011

SUBJECT: PAPER I - ECHOCARDIOGRAPHY

Tuesday, June 07, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

✍ Answer all the Questions, Label the diagram wherever necessary.

- 1A. How do you assess the Severity of Mitral regurgitation by Echocardiography?
- 1B. Explain the role of Echocardiography in Diagnosis and management of Tetralogy of Fallot.

(20+20 = 40 marks)

### 2. Short notes:

- 2A. Echo in Coronary Artery Disease.
- 2B. Ebsteins anomaly of Tricuspid valve.
- 2C. Tissue Harmonic imaging.
- 2D. Echo in Chronic constrictive pericarditis.
- 2E. Pulmonary Artery pressure measurement.

(8×5 = 40 marks)



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## MANIPAL UNIVERSITY

THIRD YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2011

SUBJECT: PAPER II – CARDIAC CATH AND INTERVENTION

Thursday, June 09, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

**Answer all the Questions, Label the diagram wherever necessary.**

1. Describe cardiac catheterization and angiography findings in Tetralogy of Fallot.  
(20 marks)
2. Describe cardiac catheterization and angiography findings in Mitral Stenosis and explain the steps of BMV.  
(20 marks)
3. **Write Short notes on:**
  - 3A. No Reflow Phenomenon.
  - 3B. Implantable Cardioverter Defibrillator.
  - 3C. Coronary Guide wires.
  - 3D. Coronary anomalies.
  - 3E. Balloon Atrial Septostomy.

(40 marks)



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## MANIPAL UNIVERSITY

THIRD YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2011

SUBJECT: PAPER III – CLINICAL CARDIOLOGY

Saturday, June 11, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

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✍ **Answer all the Questions, Label the diagram wherever necessary.**

1. Explain clinical aspect, diagnosis and management of mitral stenosis.

(20 marks)

2. Explain the diagnosis utility of X-ray in different congenital Heart disease.

(20 marks)

3. **Write short notes on:**

3A. Aortic Dissection.

3B. Glenn shunt

3C. NYHA classification

3D. Acute Myocardial Infarction.

3E. Beta Blockers.

(40 marks)



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**MANIPAL UNIVERSITY**

**THIRD YEAR B. Sc. C.V.T. DEGREE EXAMINATION – JUNE 2011**

**SUBJECT: BIOSTATISTICS & RESEARCH METHODOLOGY**

Tuesday, June 14, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

- 1A. State the functions and limitations of statistics.
- 1B. Explain the characteristics of ordinal scale of measurement. Give two examples for the same.  
(5+(3+2) = 10 marks)
- 2A. Distinguish between discrete and continuous variable with one example each.
- 2B. Define simple random sampling. State the advantages of sampling over census.  
(5+5 = 10 marks)
- 3A. Differentiate inclusive and exclusive type class intervals with example.
- 3B. When do you choose pie diagram to represent the data? List the difference between histogram and bar diagram.  
(5+(2+3) = 10 marks)
- 4A. Define inter-quartile range. State the qualities of a good measure of variation.
- 4B. What do you mean by central tendency?  
Followings are length in inches of 10 babies:  
Length in inches: 21, 25, 23, 19, 20, 24, 18, 22, 23, 21, 24  
Compute mean and median.  
(1+4)+(1+2+2) = 10 marks)
- 5A. Mean of a distribution is 50 and standard deviation is 3.  
In a sample of 1000 observations, assuming Normality estimate the number of observations  
i) less than 47    ii) between 47 and 56
- 5B. State the advantages of scatter diagram in the study of Correlation.  
(5+5 = 10 marks)
- 6A. List any four sources of health information system. Enumerate the uses of health information system.
- 6B. Explain the terms incidence and prevalence with example.  
((3+2)+5 = 10 marks)
- 7A. Define Validity. Explain the meaning of any one type of validity.
- 7B. Define Crude Birth rate. What are its uses and limitations?  
((2+3)+5 = 10 marks)
8. State the aims of epidemiology. Discuss the usefulness and limitations of Cross-sectional studies.  
(3+3+4 = 10 marks)

