



FINAL EXAM  
JUNE 2013

NATIONAL BOARD OF EXAMINATIONS

**CARDIOLOGY**

PAPER - I

CARDIO/J/13/05/I

Time : 3 hours

Max. Marks : 100

Attempt all questions in order.

Each question carries 10 marks.

- |     |                                                                                                    |         |
|-----|----------------------------------------------------------------------------------------------------|---------|
| 1.  | Describe the embryology, presentation and management of corrected transposition of great arteries. | 3+2+5   |
| 2.  | What is apoptosis? Discuss its role in cardiovascular disease.                                     | 2+8     |
| 3.  | Describe the pharmacology and use of ticagrelor.                                                   | 6+4     |
| 4.  | Discuss atrial isomerism and its importance in congenital heart disease.                           | 3+7     |
| 5.  | What is hangout interval? Describe its mechanism and effect on cardiac auscultation.               | 3+(3+4) |
| 6.  | Describe Tissue Doppler Imaging in health and disease.                                             | 4+6     |
| 7.  | What are hypercoagulable states? Outline its diagnosis and management                              | 3+(3+4) |
| 8.  | Outline the approach to evaluation of asymptomatic pre-excitation.                                 | 10      |
| 9.  | What is Chi-Square test? Discuss its application in clinical medicine?                             | 5+5     |
| 10. | Discuss cardiovascular involvement in HIV disease.                                                 | 10      |

\*\*\*\*\*

CARDIOLOGY

PAPER - II

CARDIO/J/13/05/II

Time : 3 hours

Max. Marks : 100

Attempt all questions in order.

Each question carries 10 marks.

1. What is facilitated PCI? Describe the rationale and clinical status of the procedure. 3+(3+4)
2. Define idiopathic pulmonary hypertension. Discuss its etiopathogenesis and treatment. 2+(3+5)
3. What are the stages of heart failure? Describe treatment options of systolic heart failure. 4+6
4. Describe the cardiovascular complications and management of non cardiac surgery after percutaneous coronary interventions. 5+5
5. What is hypersensitive carotid sinus syndrome? Outline its diagnosis and management. 2+(3+5)
6. Describe the criteria for selection of patient for Fontan procedure. What are the post operative complications? 6+4
7. What is afterload mismatch? Discuss evaluation and management of aortic stenosis in left ventricular dysfunction. 3+4+3
8. Define VT storm. How is it managed? 3+7
9. Outline the classification, diagnosis and management of hypertensive disorders of pregnancy. 3+2+5
10. Describe transeptal puncture. What are the indications for the procedure? 5+5

\*\*\*\*\*

CARDIOLOGY

PAPER - III

CARDIO/J/13/05/III

Time : 3 hours

Max. Marks : 100

Attempt all questions in order.

Each question carries 10 marks.

1. Describe therapeutic hypothermia and its role in cardiac arrest. 5+5
2. What is the pharmacogenetic approach to warfarin therapy? What are the advantages? 7+3
3. Outline the non pharmacological treatment of hypertension and discuss the evidence of its beneficial effect. 6+4
4. Discuss the Characteristics and applications of real time 3D Echo. 6+4
5. FREEDOM Trial: Describe inclusion criteria and results. 5+5
6. What are drug eluting balloons? What is the current status of drug eluting balloons in PCI? 4+6
7. What are the causes of Troponin-I elevation? Discuss pitfalls of Troponin elevation in diagnosis of ACS (Acute Coronary Syndrome). 4+6
8. Describe transcatheter aortic valve implantation. What are the current indications and complications? 5+(3+2)
9. Describe the therapeutic options in management of coarctation of aorta. What are growth stents? 7+3
10. What are the current indications and status of Fetal Cardiac interventions? 5+5

\*\*\*\*\*