

CARDIOLOGY

PAPER – I

CARD/J/17/05/I

Time : 3 hours

Max. Marks : 100

Important instructions:

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

Write short notes on:

1. a) Anatomy of the pericardium. 3+2+3+2
b) Physiology of the pericardium.
c) Passive role of the normal pericardium in heart disease.
d) Usefulness of Bare area of pericardium.
2. a) Mitochondrial morphology and functions. 4+3+3
b) What are 'G' proteins?
c) Nitric oxide signaling.
3. a) Effects of exercise on myocardial oxygen demand and supply relationships. 4+4+2
b) Diagnostic value of the exercise ECG for identification of coronary artery disease.
c) Prognostic value of the exercise ECG.
4. a) Pathology in sudden cardiac death. 3+2+3+2
b) Compare specifically coagulation necrosis with contraction band necrosis.
c) Pathology of myocardial stunning.
d) Pathology of myocardial recovery in survivors of sudden cardiac death.
5. a) Anomalies of the coronary circulation. 4+4+2
b) Anatomy of coronary artery fistulas.
c) Myocardial Bridging.
6. a) List the organisms causing acute myocarditis. 3+5+2
b) What are the clinical syndromes of acute myocarditis?
c) Immunity in acute myocarditis.

P.T.O.

CARDIOLOGY

PAPER – I

7. a) Uses of Type IC antiarrhythmic drugs. 3+3+4
b) Their common electrophysiological actions.
c) Major adverse effects of Type IC antiarrhythmic drugs based on clinical trial.
8. a) Vascular excitation contraction coupling. 4+4+2
b) Determinants of vascular tone
c) Role of vasodilators in modification of vascular tone.
9. a) Fetal to adult circulation transition. 4+4+2
b) Fetal pulmonary circulation.
c) What is the function of the fetal heart?
10. a) Microbiology of infective endocarditis. 3+3+4
b) Pathogenesis of vegetations in infective endocarditis.
c) Enumerate indications for surgery in:
i) Native valve endocarditis.
ii) Prosthetic valve endocarditis.
