

**CARDIO THORACIC SURGERY**

**PAPER-I**

Time: 3 hours  
Max. Marks:100

CTS/D/19/04/I

**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) Embryology of ventricular septum. 4+3+3  
b) Classifications of VSD.  
c) Describe VSD in TOF.
2. a) Draw arterial waveform and discuss its importance in cardiac surgery. 5+5  
b) Discuss pulsus alternans.
3. a) Discuss inotropes in cardiac surgery. 5+5  
b) Discuss management of septic shock.
4. a) Describe various types of filters used in cardiopulmonary bypass and their merits and demerits. 5+5  
b) Discuss modified ultra-filtration.
5. a) Embryology of the esophagus. 5+5  
b) Discuss about types, diagnosis and management of tracheo-esophageal fistula.
6. a) Anatomy of Tricuspid Valve Repair. 5+5  
b) Describe types of Tricuspid Valve Repair.
7. a) Development of PDA. 6+4  
b) Management of Hypertensive Ductus.
8. a) Define Pulmonary Artery Hypertension (PAH). 2+2+6  
b) Etiopathology of PAH.  
c) Management of Pulmonary Hypertensive crisis.
9. a) Protamine - origin, mechanism of action & doses for CPB. 5+5  
b) Discuss protamine reactions and management.
10. a) Etio-pathogenesis of infective endocarditis. 5+5  
b) Classification and management of infective endocarditis.

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