

**CARDIO THORACIC SURGERY**

**PAPER-I**

CTS/D/18/04/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) Definition, pathophysiology and management of unroofed coronary sinus. 5+5  
b) Embryology and surgical significance of left superior venacava.
2. a) Pathophysiology of cervical rib syndrome. 6+4  
b) Definition and clinical manifestation of pectus excavatum.
3. a) Embryology of patent ductus arteriosus and mechanism of its spontaneous closure. 5+5  
b) Definition of differential cyanosis mentioning the various clinical conditions associated with it.
4. a) Development of different types of pulmonary collateral arterial system in congenital cyanotic heart diseases. 6+4  
b) Pathophysiology of sequestration of lung.
5. a) Electrophysiological mechanism and electrocardio-graphic (ECG) manifestation of atrial fibrillation. 5+5  
b) Mode of action of amiodarone and its clinical uses.
6. a) ECG changes in left ventricular hypertrophy. 5+5  
b) Definition of WPW Syndrome mentioning the clinical conditions associated with it.
7. a) Microbiology and pathology of fungal endocarditis. 5+5  
b) Histopathology of rheumatic cardiac lesions.
8. a) Definition, mode of action and clinical uses of inodilators. 5+5  
b) Mode of action and clinical uses of direct thrombin inhibitors mentioning the drugs.
9. a) Mode of action of low molecular weight heparin (LMWH) and their clinical use mentioning the drugs. 5+5  
b) ACT (activated coagulation time) and its application in cardiac surgery.
10. a) Clinical uses of thromboelastography (TEG). 5+5  
b) The mode of action of adenosine and its clinical use.

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