

**CARDIOTHORACIC SURGERY (PART-II/FINAL)**

**PAPER-III**

Time: 3 hours  
Max. Marks:100

CTS/J/20/04/III

**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) What are the overall blood conservation strategies in cardiac surgery? 5+5  
b) Mention the various parenteral and topical agents used for hemostasis describing their properties.
2. a) What is frozen elephant trunk technique? 3+3+4  
b) Describe its method.  
c) What is 'Chimney graft'? Where is it used?
3. a) What is high frequency oscillatory ventilation (HFOV)? 2+4+4  
b) What are its indications and contraindications?  
c) What are the treatment modalities used for congenital diaphragmatic hernia?
4. a) What are the indications for lung transplant? 4+3+3  
b) Compare single lung transplant with bilateral lung transplant.  
c) What are the indications and outcome of living donor lobar lung transplantation (LDLLT)?
5. a) Extracorporeal membrane oxygenation. 6+4  
b) Intra-aortic balloon pump.
6. a) Stem cells and its therapeutic uses in cardiovascular disease. 5+5  
b) Cardiac resynchronization therapy.
7. a) Discuss CTEPH (Chronic Thromboembolic Pulmonary Arterial Hypertension). 3+4+3  
b) Clinical features and diagnostic criteria.  
c) Surgical technique.
8. a) Management of cyanotic spell. 5+5  
b) Major aortopulmonary collateral arteries.

**P.T.O.**

**CARDIOTHORACIC SURGERY (PART-II/FINAL)**

**PAPER-III**

9. a) Mitral valve repair in rheumatic mitral valve disease. 5+5  
b) Compare different kinds of annuloplasty rings available for mitral valve.
10. Total Anomalous Pulmonary Venous Connection(TAPVC): 3+3+4  
a) Morphology.  
b) Clinical features and diagnostic criteria.  
c) Surgical management.

\*\*\*\*\*