



CARDIO THORACIC SURGERY

PAPER – I

CTS/D/14/04/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.

1. Discuss in brief 'coagulation cascade'. How will you plan anticoagulation in a lady with prosthetic valve during pregnancy? 5+5
2. Discuss pathophysiology, types & principles of management of Double Outlet Right Ventricle (DORV). 3+3+4
3. What is fibrous skeleton of heart? Draw a labeled diagram of it. What are the surgical implications of these structures in different procedures? 2+2+6
4. Describe mechanism of cerebral injury during cardiopulmonary bypass. Discuss various neuroprotective strategies. 5+5
5. Illustrate the surgical anatomy of aortic root. Draw labeled diagrams to show methods of aortic root enlargement. 4+6
6. Discuss lymphatic drainage of lungs to mediastinal lymph nodes. Illustrate lymph node stations in relation to bronchogenic carcinoma. 4+6
7. Describe various criteria to diagnose left ventricular hypertrophy on electrocardiogram. Enumerate various treatment options available for hypertrophic obstructive cardiomyopathy (HOCM). 5+5
8. a) Describe the anatomy of venous drainage of heart. 4+4+2
b) Draw a diagram of triangle of Koch.
c) Enumerate various coronary sinus interventions.
9. Discuss pathophysiology of cardiopulmonary bypass (CPB). Compare the effects of CPB in terms of hypothermia and normothermia. 5+5
10. Discuss applications of statistical tests. What are limitations and deficiencies of these tests, related to research skills in cardiac surgery? 6+4
