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. Describe principles and various uses of PET in cardiac evaluation. 5+5
2. Discuss the risk factors for developing paraplegia during coarctation of aorta repair and management to prevent it. 4+6
3. Brief discuss indications and complications of lung resection surgery. What is completion pneumonectomy? (4+4)+2
4. Classify thymic tumors and describe role of thymectomy in myasthenia gravis. 4+6
5. Describe concept of “Tissue engineered heart valves”. Discuss in brief current status of heart valve banking and heart valve substitutes in India. 3+4+3
6. Describe etiology, clinical features and treatment of infantile lobar emphysema. 2+3+5
7. Define and classify heart failure. Discuss current status of total artificial heart. (2+2)+6
8. Describe gene therapy in ischaemic heart disease. 10
9. When is myocardial viability tests indicated? Discuss current modalities available for this test. 4+6
10. Discuss the indications and scope of robotic in cardiac surgery. 4+6

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