Write short notes on:

1. Minimally invasive cardiac surgery: 2+2+3+3
   a) Indications.
   b) Arterial and venous access.
   c) Aortic clamping techniques.
   d) De-airing techniques.

2. Thoracic outlet syndrome: 3+2+5
   a) Diagnosis.
   b) Indications of surgery.
   c) Various surgical approaches.

3. Chronic empyema thoracis: 2+3+5
   a) Treatment options.
   b) Decortications.
   c) Management of residual space by various thoracoplasty.

4. Deep vein thrombosis: 4+3+3
   a) Approach to diagnosis
   b) Differential diagnosis
   c) Treatment

5. a) Endovascular techniques in aortic aneurysm management. 4+3+3
    b) Elephant trunk technique.
    c) Cerebral protection in aortic arch surgery.

6. Solitary pulmonary nodule: 3+3+4
   a) Differential diagnosis.
   b) Approach to diagnosis.
   c) Management algorithm.

P.T.O.
7. a) PARTNER II A trial.  
b) STICH trial.  

8. a) Oesophageal motility disorders diagnosis.  
b) Oesophageal manometry.  
c) Modified Heller’s operation.  

9. a) Propensity Score matching:  
b) Levels of evidence.  
c) Risk stratification.  
d) 3D Printing.  

10. a) Embryological development of diaphragm.  
b) Types of congenital diaphragmatic hernias.  
c) Management of Bochdalek hernia.  
d) Postoperative diaphragmatic palsy after open heart surgery.