

Sree Chitra Tirunal Institute for Medical Sciences & Technology

DM Cardiac Anaesthesiology

Part I

Paper 1  
July, 2009

Max. Marks 100

Time 3 hrs

1. Explain development of aorta and pulmonary artery in embryo. Write the embryonic events and their resultant congenital defects.
2. Write the principles of two dimensional echocardiography
3. What is opening snap? Explain the mechanism of formation of opening snap.
4. What are the individual components of right atrial pressure pulse? Write their determinants.
5. Explain physiology of one lung ventilation.
6. Write electrophysiological classification of anti-arrhythmic drugs.
7. Explain pharmacokinetic and pharmacodynamic changes of drugs administered during CPB.
8. Explain pros and cons of crystalloid verses colloid cardioplegia
9. What do you know about contrast material used during CT angiography? Write anaesthesiologist's concerns
10. What are NO donors? Write their mechanism of action.