

The West Bengal University of Health Sciences
D.M. (Cardiac Anesthesiology) Examination, August 2022

Paper : 1

Full Marks : 100
Time : 3 hours

Attempt all questions. All Questions carry 10marks each.

1. Describe right heart catheterization giving its indications and procedures. How is the shunt calculated by clinical and echocardiography ? 5+5
2. Discuss the cardiac cycle. Describe hemodynamic goals for stenotic valvular lesions. 5+5
3. Write short notes on: 5+5
 - a) Heparin coated circuit
 - b) Drug sequestration in oxygenator
4. What is vasoplegia? What is mechanism of it? How will you manage? 2+3+5
5. Describe the endocrine responses to cardiac anesthesia. 10
6. During Transesophageal echocardiography how do you achieve transgastric view? What all information can be achieved from this view ? 5+5
7. Discuss the role of adenosine in cardiac regulation including mechanism of action in arrhythmias and in ischemia reperfusion injury. 10
8. Discuss the structure and function of neonatal myocardium. 5+5
9. Explain the physiology of one lung ventilation. Discuss the anaesthetic management of left upper lobe abscess posted for left upper lobectomy. 5+5
10. Draw detailed diagram of coronary circulation. Discuss the effect of inhalation anaesthetics on coronary circulation. 5+5