

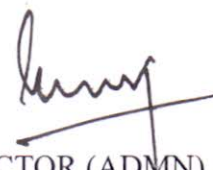
Syllabus for Written Test to the post of Perfusionist A to B- MFCP

CARDIOPULMONARY BYPASS

1. Anatomy of Heart, Blood vessels and Lungs
2. Physiology of Circulation and Respiration, Laws of gas exchange
3. Renal and Hepatic Physiology
4. Effects of CPB on various organ systems
5. History of CPB
6. Principles of Cardiopulmonary Bypass
7. Pharmacology of drugs used in CPB
8. Heparin Protamine Chemistry
9. Cardioplegia
10. Deep Hypothermic Circulatory Arrest and antegrade cerebral perfusion
11. Ultrafiltration
12. Temperature management in CPB
13. Acid Base Management
14. Blood groups ,Blood Clotting mechanisms ,Anticoagulation ,ACT
15. Systemic Immune Response to CPB
16. Conduct of CPB in Adults ,Infants and Children – Methodology ,Monitoring and safeguards
17. CPB for minimally invasive cardiac surgery
18. Accidents in CPB
19. CPB for non-cardiac surgery

EQUIPMENT

1. Oxygenators
2. Blood Pumps
3. Filters
4. CPB circuit – tubing ,cannula
5. ECMO
6. IABP
7. Mini CPB
8. Ventricular Assist Devices
9. NIRS ,Inline monitoring systems



DEPUTY DIRECTOR (ADMN)