

Third Year B.Sc Perfusion Technology Degree Examinations July 2018

Perfusion Technology – Applied

Time: 3 hrs

Max. Marks:- 100

- *Answer all the questions*
- *Draw diagrams wherever necessary*

Essays:

(2x15=30)

1. Describe the principles of cardioplegia. What are the different cardioplegia solutions. Mention the beneficial additives in cardioplegia. Enumerate the differences between standard CP delivery system and calafiore technique.
2. What are the causes of difficult weaning from CPB (ie post cardiectomy cardiogenic shock). What corrective solutions can be taken to assist CPB weaning. What is the principle behind IABP. Mention the advantages and disadvantages of ECMO usage in post cardiectomy cardiogenic shock.

Short notes:

(5x7=35)

3. Blood conservation strategies in CPB
4. SIRS
5. Management of protamine reaction
6. Methods to reduce immune response to CPB
7. Haemodialysis and hemofiltration

Answer briefly:

(7x5=35)

8. Arterial filter
9. Heparin less bypass
10. Post CPB arrhythmias
11. Post CPB coagulopathy
12. Steroids
13. Diagnosis and management of poor brain perfusion in CPB
14. Complications of blood transfusion
