

Q.P. CODE: 203016

Reg. No:

Second Year B.Sc Perfusion Technology Degree Examinations, September 2016

Introduction to Perfusion Technology

Time: 3 Hrs

Max. Marks:100

- Answer all questions
- Draw diagram wherever necessary

Essays:

(2×15=30)

1. What are the components of a cardiopulmonary bypass circuit. Differentiate between positive displacement and centrifugal pumps. Add a note on cavitation effect.
2. What are the drugs used for anticoagulation on CPB. What are the congeners of heparin and mention its advantages. Define protamine and list the different protamine reactions.

Short notes:

(5×7=35)

3. Differentiate between bubble and membrane oxygenator
4. Cold cardioplegia and its delivery mechanisms
5. Safeguards in a CPB circuit
6. Controlled cross circulation and azygous flow principle
7. Neurological monitoring in CPB

Answer briefly:

(7×5=35)

8. Venting of heart
9. Mannitol
10. Hemofiltration
11. Heat exchanger
12. Pulse oxymetry
13. Venous cannulas in a CPB circuit
14. Waves in a normal ECG
