

Q.P.Code: 302016

REG. No:.....

**Third Year B.Sc Perfusion Technology Degree Examinations,
September 2015**

Time: 3 hrs

Max. Marks:- 100

Perfusion Technology - Applied

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

Essays: (2x15=30)

1. Describe the principles of cardioplegia. What are the different cardioplegia solutions. What the beneficial additives in cardioplegia. What is HTK solution and mention its advantages over St.Thomas 2 cardioplegia
2. Compare and contrast paediatric and adult CPB. What are the specific differences and the additional safeguards in neonatal CPB as compared to adult CPB. Differentiate between conventional and modified ultrafiltration

Short notes: (5x7=35)

3. Blood conservation strategies in CPB
4. Causes of emboli during a pump run and methods to limit these events
5. Left ventricular assist devices
6. Retrograde cerebral perfusion
7. Left heart venting strategies

Answer briefly: (7x5=35)

8. IABP
9. Heparin bonded circuits
10. Platelet dysfunction post CPB
11. Mismatched blood transfusion
12. Aprotinin
13. Indicators of low cardiac output
14. Starling law
