

**Q.P. CODE: 213016**

**Reg. No: .....**

**Second Year B.Sc Perfusion Technology Degree Regular/Supplementary  
Examinations February 2024**

**Introduction to Perfusion Technology**

**(2016 Scheme)**

**Time: 3 Hrs**

**Max. Marks:100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Essays:**

**(2x15=30)**

1. Discuss myocardial protection strategies in CPB. What are the components of St.Thomas Cardioplegia solution. Differentiate St.Thomas 2 CP from Del Nido CP.
2. Differentiate between membrane and bubble oxygenators. What are the essential components of a membrane oxygenator. What are specific differentiating features of oxygenators used in ECMO circuits

**Short notes:**

**(5x7=35)**

3. Azygous flow principle
4. Hypothermia
5. Normal arterial blood gas analysis
6. Types of Blood pumps
7. Calafiore technique of blood cardioplegia delivery

**Answer briefly:**

**(7x5=35)**

8. Arterial Cannula
9. Defibrillators
10. Defoaming
11. Venting in CPB
12. NIRS
13. Boyles Law
14. Flow meters

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