

**Q.P. CODE: 213016**

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

**Second Year B.Sc Perfusion Technology Degree Supplementary  
Examinations August 2023**

**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. Describe the differences between bubble and membrane oxygenators. Mention the advantages of true membrane oxygenators. What is the principle of extracorporeal gas exchange across oxygenators. List the differences between adult and pediatric oxygenators
2. Compare and contrast roller and centrifugal pumps. Describe the anticoagulation strategies in CPB. What is priming. What are advantages of blood prime.

**Short notes:**

**(5x7=35)**

3. Bivalrudin
4. Pulmonary function tests
5. Cardiac cycle
6. Waves in a normal ECG
7. Hemodilution

**Answer briefly:**

**(7x5=35)**

8. Blood groups
9. Protamine
10. Platelet dysfunction post CPB
11. SIRS
12. Aprotinin
13. Indicators of low cardiac output
14. Starling Law

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