

Q.P. CODE: 213016

Reg. No:

**Second Year B.Sc Perfusion Technology Degree Regular/Supplementary
Examinations December 2025**

**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. What are the components of a CPB circuit. Describe briefly on the various access routes of arterial blood return. What is vacuum assisted venous return. What is priming volume
2. What is cardioplegia. What is the importance of cardioplegia. What are the components of blood cardioplegia solution. What are the various ways of administration of cardioplegia

Short notes:

(5x7=35)

3. Boyles law
4. Metabolic and respiratory acidosis
5. Management of hyperkalemia
6. Principle of extracorporeal gas exchange
7. Retrograde cerebral perfusion

Answer briefly:

(7x5=35)

8. EOPA (Elongated one-piece arterial) cannula
9. Uses of hypothermia
10. True membrane oxygenators
11. Left heart venting -advantages and techniques
12. Describe briefly about the tubing's used in a CPB circuit
13. Centrifugal pump
14. Pulse oximeter
