

Q.P. Code: 312016

Reg. No:.....

**Third Year B.Sc Perfusion Technology Degree Regular/Supplementary
Examinations February 2025**

**Perfusion Technology – Applied
(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. Anticoagulation in CPB, its monitoring, reversal and complications, and heparin less bypass.
2. What is deep Hypothermic Circulatory Arrest (DHCA). What are the steps taken to limit brain damage. Enumerate spinal protection strategies in DHCA.

Short notes: (5x7=35)

3. Inline blood gas monitoring during CPB
4. Miniaturized cardiopulmonary bypass
5. Left ventricular assist devices
6. Compare and contrast conventional and modified ultrafiltration
7. Retrograde cerebral protection

Answer briefly: (7x5=35)

8. Landsteiner's Law
9. Prothrombin time
10. Lactic acidosis
11. Microplegia
12. Venting in CPB
13. Complications of blood transfusion
14. Foetal circulation
