

Q.P. Code: 311016

Reg. No:.....

**Third Year B.Sc Perfusion Technology Degree Regular/Supplementary
Examinations February 2022**

Perfusion Technology – Clinical

(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 table/diagrams/flow charts wherever necessary*

Essays:

(2x15=30)

1. Discuss the pharmacokinetics of cardiopulmonary bypass
2. Discuss oxygenators used in cardiopulmonary bypass.

Short notes:

(5x7=35)

3. Protamine
4. Retrograde cardioplegia
5. Disadvantages of dextrose as a priming fluid.
6. Perfusion pressure
7. Venting of the heart during cardiopulmonary bypass.

Answer briefly:

(7x5=35)

8. Gas exchange across a bubble.
9. Sweep gas flow
10. Absolute contraindications for using an intra-aortic balloon pump
11. Mention the equation to calculate the predicted haematocrit on cardiopulmonary bypass.
12. Briefly discuss intracellular cardioplegia solution.
13. Mention the sites of venous cannulation for cardiopulmonary bypass.
14. Measurement of oxygenator efficiency.
