

**VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM  
(Deemed to be University)**

**B.Sc. (PERFUSION TECHNOLOGY) DEGREE  
EXAMINATION - February 2020  
Second Year**

**INTRODUCTION TO PERFUSION TECHNOLOGY**

Time: Three hours

Maximum: 75 marks

**I. Write an essay on any ONE of the following: (1 x 20 = 20)**

1. Membrane oxygenators, types and merits.
2. Heat exchanger, material, principles and function.

**II. Write short notes on any TWO of the following: (2 x 10 = 20)**

3. Cardioplegia delivery system.
4. Suctions – vent and cardiotomy.
5. Ideal blood pump.
6. Aseptic technique followed during CPB.

**III. Write short answers on any SEVEN of the following: (7 x 5 = 35)**

7. Who were Dr. John Gibbons, Dr. Walton Lillehei and Dr. Debaakey?
8. The purpose of cooling down the patient.
9. The use of chest X – ray in cardiac cases.
10. Filters used in CPB.
11. Write notes on blood pH, respiratory acidosis and alkalosis.
12. Tubings used in CPB circuits.
13. Cardioplegia types.
14. Blood groups that are known to you.
15. Centrifugal blood pump.
16. Venous drainage.

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