

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

B.Sc. (PERFUSION TECHNOLOGY) DEGREE EXAMINATION

March 2019

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. What are the various types of blood pumps known to you?
2. Write about the various types of oxygenators that have been used till date.

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

3. Write about azygous flow principle.
4. The connectors and tubings used in CPB circuit.
5. What are the parameters which are monitored during CPB?
6. Write about the cardioplegia delivery system.

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

7. What is a deforming agent and where is it useful?
8. Cardiotomy suction, its significance and how is it used?
9. Management of venous drainage during CPB.
10. Write about the principles and uses of heat exchangers.
11. What is an ideal pump?
12. ACT monitoring.
13. Write about the blood components.
14. Crystalloid cardioplegia.
15. Write notes on arterial and venous cannulae.
16. Who discovered blood circulation, aseptic surgery and blood grouping?