

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

**B.Sc. (Perfusion Technology) DEGREE EXAMINATION
September 2021
Third Year**

PERFUSION TECHNOLOGY - CLINICAL

Time: Three hours

Maximum: 75 marks

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

1. Conduct of CPB – methodology.
2. Membrane oxygenator.

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

3. Types of cannulae used in CPB.
4. The benefits of pulsatile flow
5. Priming fluids used in CPB.
6. Why is heat exchanger used in the circuit?

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

7. Reperfusion injury and its management.
8. Name some vasodialators and vasoconstrictors used on CPB.
9. Why is protamine given?
10. Write short notes on types of cardioplegia.
11. What is meant by shunting during bypass?
12. How are coated membrane oxygenators helpful?
13. Anti-inflammatory drugs.
14. The additives used in cardioplegia.
15. Write on hypothermia and its purpose.
16. The steps followed when coming off bypass.