

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

**B.SC. (PERFUSION TECHNOLOGY) DEGREE
EXAMINATION August 2019
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. The method that you follow while coming off bypass.
2. Cardioplegia – their types and methods of delivery.

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

3. Heparin, its action site and monitoring during CPB.
4. The priming fluids used in CPB.
5. The function, principles and purpose of heat exchanger.
6. The various types of membrane oxygenators.

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

7. Pulsatile perfusion and its benefits.
8. Adequacy of perfusion – microvascular circulation.
9. Anti-inflammatory agents.
10. What is reperfusion injury? How can it be managed?
11. Mannitol.
12. Protamine.
13. Non-cardioplegic cardiac surgery on CPB.
14. Write about the merits and demerits of haemodilution.
15. Bubble oxygenator.
16. What are the normal cannulation sites for CPB?