

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

**B.Sc. (Perfusion Technology) DEGREE EXAMINATION
August 2018
Third Year**

PERFUSION TECHNOLOGY- APPLIED

Time: Three hours

Maximum: 75 marks

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

1. How could the patient's blood be conserved during CPB?
2. Write an essay on IABP. On what basis are the various sizes of IAB catheters chosen?

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

3. How can CPB contribute to coagulopathy?
4. How are heparinless bypass helpful?
5. How can embolic events be prevented during CPB?
6. The role of ultrafiltration in CPB.

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

7. Write about cell saver with a suitable diagram.
8. How can CPB cause DIC, how can it be prevented?
9. What are the possible dangers of adding bank blood on CPB?
10. Write an essay on the haemoconcentrate filter?
11. How are the lungs and splanchnic organs affected by SIRS?
12. What is antithrombin – III deficiency? How can it be managed on CPB?
13. What are the physical forces that cause trauma to the blood components?
14. How is anticoagulation monitored during CPB?
15. Write few lines on arterial filters used in CPB.
16. What are the adverse effects of protamine sulphate?