

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

**B.SC. (PERFUSION TECHNOLOGY) DEGREE
EXAMINATION - August 2019
Third Year**

PERFUSION TECHNOLOGY - ADVANCED

Time: Three hours

Maximum: 75 marks

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

1. The priming methods and handling of paediatric perfusion.
2. Challenges of performing CPB in minimally invasive cardiac surgery.

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

3. Explain alpha-stat and pH stat.
4. Explain oxyhaemoglobin dissociation curve.
5. Accidents during CPB.
6. Recent advances in perfusion.

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

7. MUF in paediatric cases. Its advantages.
8. How can CPB contribute to coagulopathy?
9. Safety devices used during CPB.
10. Write about cardiotomy suction bypass.
11. Perfusion for invasive cardiology in cathlab.
12. CPB management when there are mechanical and electrical failures.
13. Mention about experimental perfusion.
14. ECMO – its types.
15. Deep hypothermic circulatory arrest (DHCA).
16. Role of albumin in the prime.