

Q.P. Code: 313016

Reg. No:.....

**Third Year B.Sc Perfusion Technology Degree Supplementary
Examinations August 2024**

Perfusion Technology – Advanced

(2016 Scheme)

Time: 3 hrs

Max. Marks: 100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

Essays:

(2x15=30)

1. What is Deep Hypothermic Circulatory Arrest. Discuss the brain and spinal cord protection strategies in DHCA. Compare alpha stat, pH stat and mixed strategy in acid base management.
2. Discuss indications and contraindications of ECMO. Compare and contrast VA and VV ECMO

Short notes:

(5x7=35)

3. Non cardiac indications of extracorporeal circulation
4. CPB in pregnancy
5. Crystalloid Vs Blood cardioplegia
6. Coated CPB circuits
7. Endo aortic clamping

Answer briefly:

(7x5=35)

8. Nitric oxide
9. Recent advances in perfusion technology
10. Cannulation issues in aortic dissection surgery
11. Technique of Antegrade Cerebral perfusion in arch repair for Interrupted Aortic Arch.
12. Safety checks in CPB
13. Describe the various cannulation strategies for minimally invasive aortic surgery
14. Foetal circulation
