

Q.P. Code: 313016

Reg. No:.....

**Third Year B.Sc Perfusion Technology Degree Regular/Supplementary
Examinations December 2020**

Perfusion Technology - Advanced

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 ECMO. Describe the indications, circuitry and monitoring of ECMO.
Differentiate between veno-arterial and veno-venous ECMO.
2. Describe the differences between adult and paediatric CPB. What are the technologies for neuro monitoring in paediatric CPB. Mention the advantages of modified ultrafiltration in paediatric CPB.

Short notes:

(5x7=35)

3. Mini bypass circuit
4. Endoaortic clamping
5. IABP
6. Perfusion accidents
7. Retrograde cerebral perfusion

Answer briefly:

(7x5=35)

8. Bivalirudin.
9. Cannulation strategies for minimally invasive cardiac surgery
10. CPB in pregnancy
11. NIRS
12. HTK solution
13. Complications of endoaortic clamping
14. Kinetic assisted venous drainage
