

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
THIRD YEAR
PAPER II – CARDIOPULMONARY BYPASS & PERFUSION TECHNOLOGY**

Q.P. Code: 801422

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Hemodynamic aspects of Cardio Pulmonary Bypass.
2. Induced Cardiac Arrest.
3. Hypothermia.

II. Write notes on:

(8 x 5 = 40)

1. Coagulation cascade.
2. Oxygen Toxicity.
3. Biocompatible materials.
4. Nervous Control of Heart.
5. LV assist devices.
6. Blood surface interface.
7. Cerebral protection during Cardio Pulmonary Bypass.
8. Priming solution.

III. Short answers on:

(10 x 3 = 30)

1. Extra corporeal membrane oxygen.
2. Intra Aortic Balloon Pump.
3. Circuit alarms.
4. Hematocrit.
5. Auto transfusion.
6. Roller pumps.
7. Electrolyte imbalance.
8. Venting of the heart.
9. Priming volume.
10. Gas transfer.
