

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. Describe the steps in weaning off from cardiopulmonary bypass.
2. Types of hypothermia and write notes on deep hypothermic circulatory arrest.
3. Myocardial Protection in cardiac surgery.

II. Write notes on:

(8 x 5 = 40)

1. Write notes on Heparinisation.
2. What are the alternatives to Heparin?
3. Intra-aortic balloon pump - principle, indications and contraindications.
4. Describe Venous-Arterial Extracorporeal membrane oxygenation.
5. Write notes on Cannulation of the heart during bypass.
6. Write notes on Arterial Blood Gas and its uses.
7. Cell saver and its uses in cardiac surgery.
8. Write notes on Warfarin.

III. Short answers on:

(10 x 3 = 30)

1. Hematocrit management on cardiopulmonary bypass.
2. Write notes on Low urine output in the post operative period.
3. Complications of Blood Transfusion.
4. ECG changes in Hyperkalemia.
5. Write on the principle of Hemodialysis.
6. Types of pumps used in bypass.
7. Write notes on venting of the heart.
8. Describe the contributions of Walton Lillehei to Cardiac surgery.
9. Write notes on Auto transfusion.
10. Describe Heparin Induced Thrombocytopenia.
