

**Shahid Gangalal National Heart Centre
Bansbari, Kathmandu**

Syllabus for Registrar, Cardiac Surgery

Full Marks: 100

Pass marks: 40

Time: 2 Hours

Objective Questions: 25 x 2 = 50

Short Questions: 3 x 10 = 30

Long Question: 1 x 20 = 20

A. Cardiac Surgery – 70 marks

1. History of cardiac surgery including Nepali perspective.
2. Cardiovascular anatomy, physiology and embryology.
3. Anatomy of thorax and mediastinum.
4. Adult and congenital heart diseases.
5. Assessment of cardiac patients and preparation for surgery.
6. Preoperative, intraoperative and postoperative management of cardiac patients.
7. Cardiopulmonary bypass
 - Effects of CPB
 - Hypothermia including circulatory arrest.
 - Cardioplegia, myocardial protection, cerebral and spinal protection.
 - Heparin, heparinoids and antagonists.
8. Proper use of blood and blood products.
9. Drugs used in cardiology and cardiac surgery.
10. ICU
 - Postoperative management of cardiac surgery patients
 - Drugs used in ICU setting
 - Ventilator and ABG.
 - IABP, ECMO
 - Arrhythmias
 - CPR

B. General, Thoracic and Vascular Surgery – 20marks

1. Thoracic surgical emergencies.
2. Aortic aneurysm and dissection.
3. Peripheral vascular disease and acute limb ischaemia.
4. Principles of general surgery.
5. General surgical emergencies.

C. Biostatistics – 10 marks