



FC Cardio(SA) Final Blueprint

The College of Cardiothoracic Surgeons of SA will use 38 opportunities to assess the curriculum:

- (a) A total of 6 written questions over 6 hours. Each question will consist of 3 independent components (18 components).
- (b) 3 virtual clinical examination cases (3 components).
- (c) Thoracic radiology OSCE examination comprising 12 radiological studies (12 components).
- (d) Cardiovascular Angiography examination comprising 3 coronary angiograms and 2 paediatric cardiac catheter studies (5 components).

Written Examination: This is a closed-book examination of two 3-hour written papers, each consisting of 3 questions. Each question should be sub-divided into sections that are unrelated. Paper I – Cardiovascular Surgery (3 hours) (sub-minimum 50%). Paper II – General Thoracic Surgery (3 hours) (sub-minimum 50%).

Oral Examination: In each of these sections each candidate is examined individually by the examination panel. Virtual clinical cases/case scenarios will comprise of general thoracic surgery, acquired and congenital cardiovascular surgery.

Thoracic Radiology Examination: Radiology, which includes plain chest radiographs, computerised axial tomography or magnetic resonance scans. This should take the form of an OSCE examination.

Cardiovascular Angiography Examination: Angiograms, which will include coronary angiograms and paediatric cardiac catheter studies, will be presented to the candidate.

Viva voce: This is on the surgical pathology and operative techniques in Cardiothoracic Surgery. This component of the examination may be incorporated into the above, thus obviating the need for a formal viva voce.

The following will comprise the assessment of **BASIC SCIENCES**

BASIC SCIENCES

TOPICS	WEIGHT %
Surgical Anatomy of the Lung and Chest Wall	10
Surgical Anatomy of the Heart and Blood Vessels	10
Pulmonary Physiology and Assessment of Pulmonary Function	10
Cardiovascular Physiology	10
Cardiopulmonary Bypass (CPB)	20
Myocardial Preservation	20
Cardiovascular Pharmacology	5
Blood Conservation in Cardiac Surgery	10
Diagnostic and Therapeutic Procedures in Cardiac Surgery	5

The following will comprise the assessment of **GENERAL THORACIC SURGERY**

GENERAL THORACIC SURGERY

TOPICS	WEIGHT %
The Trachea	10
Chest Wall Abnormalities and Tumours	10
The Pleura	15
The Mediastinum	15
The Lung	20
The Oesophagus	15
The Diaphragm	5
Thoracic Trauma	10

The following will comprise the assessment of **SURGERY FOR ACQUIRED CARDIOVASCULAR DISEASE**

SURGERY FOR ACQUIRED CARDIOVASCULAR DISEASE

TOPICS	WEIGHT %
The Pericardium	10
Valvular Heart Disease: Mitral, Aortic, Tricuspid	30
Surgery for Coronary Artery Disease	20
Cardiac Pacemakers and Conduction Abnormalities	5
Surgery for Cardiac Arrhythmias	5
Cardiac Tumours	5
Cardiac Failure: Assist Devices and Cardiomyoplasty	5
Transplantation	5
Thoracic Vascular Surgery	15

The following will comprise the assessment of **SURGERY FOR CONGENITAL CARDIOVASCULAR DISEASE**

SURGERY FOR CONGENITAL CARDIOVASCULAR DISEASE

Topic	Weight %
Perioperative care of the neonate and infant (including cardiopulmonary bypass)	10
Anomalies of the aortic arch (including airway disease)	10
Anomalies of atrial and ventricular septation (including endocardial cushion anomalies)	15
Conotruncal anomalies	15
Congenital valve defects	10
Anomalies of pulmonary venous drainage	10
Single ventricle palliation	10
Adult congenital heart disease	10
Coronary artery anomalies	5
Cardiomyopathies	5

This document is to be considered as a guideline. It is not prescriptive, and the number of questions per topics will not always be exact, as the topics overlap and may interface with each other.

September 2019