

BRANCH – I M.Ch, CARDIO – THORACIC SURGERY

SYLLABUS:-

Applied Anatomy and Developmental Anatomy of the chest wall
diaphragm: Pleura, Lungs, Mediastinum, Oesophagus, Heart , Pericardium, Great Vessels
and its branches, Congenital Cardio-vascular and Thoracic anomalies.

Applied Physiology – Respiration, Pulmonary function tests,
Blood Pressure, Cardiac cycle, Cardiac output, Production of heart sounds and murmurs,
Physiology of Extracorporeal Circulation and Hypothermia, Cardiac metabolism, Acid
base balance, Fluid and Electrolytes Balance, Physiology of Oesophagus, Gastro
Oesophageal reflux.

Applied Pathology Thoracic injuries, Chest wall tumours,
Emphysema, Pleural tumours, Pulmonary suppuration, Congenital and Great Vessels,
Benign strictures of Oesophagus, Cancer of Oesophagus, Achalasia Cardia Reflux
Oesophagitis, Diaphragmatic hernia. Cardiac tumours, Pulmonary Embolism.

Applied Bacteriology – Thoracic infection, Pulmonary infections,
Bacterial and fungal endocarditis, infections during open heart surgery, intra thoracic
infection and nosocomial infection / HIV in cardiac and pulmonary disease.

Clinical examination and management including chest injuries,
chest deformities and tumours of the chest wall.

Infection of the pleura and tumours of the pleura.

Pulmonary tuberculosis, lung abscesses, bronchiectasis, lung cysts
and lung tumours, techniques and complication of pulmonary resections, mediastinal
tumours.

Congenital anomalies of Oesophagus.

Foreign body in Oesophagus, Benign strictures of Oesophagus,
Peptic Oesophagitis : Hernia, Corrosive strictures of the Oesophagus, Cancer of
Oesophagus and Diaphragmatic hernia.

Diseases of the Pericardium, Myocardium and endocardium,
Rheumatic heart diseases, Diseases of the conducting system of the heart, coronary
diseases. Congenital cyanotic and a cyanotic heart disease. Syndromes associated with

congenital heart disease. Aneurysm of great vessels / dissection.

Detailed knowledge of the treatment of all cardiac surgery problems.

Detailed knowledge of extra corporeal circulation and recent developments like Echmo.

Detailed knowledge of Recent Advances in Cardiac Surgery – Heart Transplant, Heart Lung Transplant, Myocardial revascularization, Laser surgery, Robotic surgery – Computer Aided surgical developments – Genetic Engineering Cardiac Disease Treatments, Cloning Etc., Total Artificial heart ventricular assist devise. Stem Cell Research, Cardiac arrhythmia surgeries.

Video assisted Thoracic Surgery:- Principles, Indications, Techniques and complications. Minimally Invasive cardiac surgery.

PATTERN OF EXAMINATION:-

Theory -4 papers 100 Marks each Duration – Three hours each

Paper I Applied Basic Sciences 100

Paper II Thoracic and Cardio vascular surgery I 100

Paper III Thoracic and Cardio Vascular Surgery II 100

Paper IV	Recent Advances in Thoracic and Cardio Vascular Surgery	100
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DISTRIBUTION OF MARKS:-

MCQ (Multiple Choice Questions)	20 Questions (20 x 1)	20 Marks
One Essay		20 Marks
Two Essay	15 Marks each (15 x 2)	30 Marks
Six short notes	5 Marks each (5 x 6)	30 Marks

	Total	100 Marks

- XXX SAB dated: 28.12.2005

PRACTICAL / CLINICAL AND ORAL EXAMINATION

No. of CASES DURATION MARKS

LONG CASE	ONE	One hour	100
SHORT CASE	Two (30 mts each)	One hour	100
WARD ROUNDS	Four (Minimum)	One hour	100
X-rays – Pathological Specimens Instruments			-----
		Total	300
Oral / Viva Examination / Paper presentation			100

		Total	400

DISSERTATION:- Approved / Not Approved (No Marks)

MARKS QUALIFYING FOR A PASS

	Maximum Marks	ss	Marks Qualifying for a Pass (50%)
Theory	400		200
Clinical	300		150

Oral / Viva	100	50
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Aggregate	800	400
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