

APRIL - 2001

[KD 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

Branch I — Thoracic Surgery

(Revised Regulations)

Paper III — THORACIC AND CARDIOVASCULAR
SURGERY — II

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe the causes of difficulties in weaning off bypass following open heart surgery and their management. (25)
2. Discuss the various biological prosthetic valves (25)
3. Short notes on : (5 × 10 = 50)
 - (a) Pulmonary arterial hypertension in cardiac surgery.
 - (b) Ductus-Dependent circulation.
 - (c) Non-surgical management of cancer oesophagus.
 - (d) Spontaneous oesophageal rupture.
 - (e) Chylothorax.

MARCH - 2002

[KG 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch I — Thoracic Surgery

**Paper III — THORACIC AND CARDIOVASCULAR
SURGERY — II**

Time : Three hours

Maximum: 100 marks

Answer ALL questions.

1. Describe the principles and current status of lung transplantation procedure. (25)
2. Describe the role of the diaphragm repair in different diseases of the chest. (25)
3. Write briefly on : (5 × 10 = 50)
 - (a) Thoracic outlet syndrome
 - (b) Physiologic pacing
 - (c) Bronchoscopic electro-surgery
 - (d) Cavo pulmonary anastomosis
 - (e) Arterial switch operation.

SEPTEMBER - 2002

[KH 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch I — Thoracic Surgery

Paper III — THORACIC AND CARDIOVASCULAR
SURGERY — II

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Classification and management of dissecting aortic aneurysm. (25)
2. Prosthetic valve endocarditis and management. (25)
3. Short notes on : (5 × 10 = 50)
 - (a) Bronchogenic cyst.
 - (b) Scimitar syndrome.
 - (c) Bronchopleural fistula and management.
 - (d) L.A. myxoma.
 - (e) Oesophagoscopy.

APRIL - 2003

[KI 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Thoracic Surgery

Paper III — THORACIC AND CARDIOVASCULAR
SURGERY — II

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the types and management of thoraco-abdominal aneurysms. (25)
 2. Describe the etiopathogenesis of atrio ventricular septal defects and their management. (25)
 3. Short notes on : (5 × 10 = 50)
 - (a) Aneurysm of ductus arteriosus
 - (b) Double aortic arch
 - (c) Absent pulmonary valve syndrome
 - (d) Barret's esophagus
 - (e) Subaortic obstructions.
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APRIL - 2004

[KK 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

**Paper III — THORACIC AND CARDIO VASCULAR
SURGERY — II**

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

A. Essay Questions.

(2 × 15 = 30)

(1) Write briefly about single ventricle physiology. Discuss the evolution and modifications of the Fontan operation.

(2) Describe the developmental anatomy of the aortic arch and its branches. Discuss the surgical options for interrupted aortic arch.

B. Short notes on :

(10 × 5 = 50)

- (1) Ductus dependent circulation
- (2) Substrate enhanced cardioplegia
- (3) Cerebral protection during CPB
- (4) Pancoast tumour
- (5) Boerhave's syndrome
- (6) Shone complex
- (7) Blalock-Taussig shunt
- (8) Eisenmenger's syndrome
- (9) Cervical sympathectomy
- (10) Activated clotting time.

AUGUST - 2004

[KL 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

**Paper III — THORACIC AND CARDIO VASCULAR
SURGERY — II**

Time : Three hours

Maximum : 100 marks

Theory : Two hours and

Theory : 80 marks

forty minutes

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I Essay Questions :

(2 × 15 = 30)

(1) Describe the anatomy of trachea. Discuss the etiology and management of Benign tracheal stenosis.

(2) Describe the classification, etiology, clinical features and management of Aortic dissection.

II. Short notes :

(10 × 5 = 50)

(a) Management of prosthetic valve thrombosis.

(b) Techniques of Aortic Root Enlargement.

(c) Atrial Myxoma—clinical features and management.

(d) Rupture of sinus of valsalva – types and management.

(e) Briefly mention different techniques of Aortic valve repair.

(f) Indications for different approaches to mitral valve.

(g) Management of massive haemoptysis.

(h) Differential diagnosis of solitary pulmonary nodule.

(i) Congenital lobar emphysema.

(j) Traction diverticulum of esophagus.

FEBRUARY - 2005

[KM 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper III — THORACIC AND CARDIO VASCULAR
SURGERY — II

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay Questions :

(2 × 15 = 30)

(1) Discuss the embryology, clinical features and treatment for Supracardiac Total Anomalous Pulmonary Venous Connection.

(2) Discuss in detail the Blood supply of the Spinal Cord and its surgical implications.

II. Short notes :

(10 × 5 = 50)

(a) Surgical treatment of small cell carcinomas of the lung.

(b) Extra cardiac Fontan.

(c) Low molecular weight heparin in valve surgery.

(d) Atrial Natriotic Peptide.

(e) Role of Statins after CABG.

(f) Bi-directional Glenn shunt.

(g) Dissection of the Aorta.

(h) Oncogenes in Lung cancer.

(i) Surgical treatment in Congestive Heart Failure.

(j) Vascular Endothelial Growth Factor.

FEBRUARY - 2006

[KO 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

**Paper III — THORACIC AND CARDIO VASCULAR
SURGERY — II**

Time : Three hours Maximum : 100 marks

**Theory : Two hours and Theory : 80 marks
forty minutes**

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

I. Essay questions : (2 × 15 = 30)

- 1. Describe the evolution of porcine xenografts.**
- 2. Describe the role of the diaphragm repair in different diseases of the chest.**

II. Short notes ; (10 × 5 = 50)

- (a) Management of carotid artery stenosis in a patient for coronary bypass grafting.**
- (b) Pros and cons of various incisions for minimally invasive cardiac operations.**
- (c) Indications and results of pulmonary autografts**
- (d) Management of thrombosed mechanical valve**
- (e) Wound infection following CABG operation**
- (f) Bruce protocol**
- (g) Intra coronary shunts**
- (h) Arterial switch operation**
- (i) Mitral annuloplasty rings**
- (j) Enlist and describe in brief reconstructive operations for aortic regurgitation**

AUGUST - 2006

[KP 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

**Paper III — THORACIC AND CARDIO VASCULAR
SURGERY — II**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay questions :

(1) Discuss coarctation of aorta with special reference to – Morphology, collateral circulation, natural history and techniques of operation. (20)

(2) Discuss the role of internal mammary artery as a conduit for coronary artery bypass grafting (CABG). (15)

(3) Discuss the diagnosis and management of Prosthetic Valve Endocarditis (PVE). (15)

II. Write short notes :

(6 × 5 = 30)

(a) Surgically induced complete heart block (CHB)

(b) Benign cardiac tumours

(c) Morphology of Right ventricular outflow track obstruction (RVOT) in Tetralogy of Fallot (TOF)

(d) Treatment options for patent ductus arteriosus (PDA)

(e) Hypertrophic obstructive cardiomyopathy (HOCM)

(f) Role of Aprotinine in cardiac surgery.

FEBRUARY - 2007

[KQ 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper III — THORACIC AND CARDIO VASCULAR
SURGERY — II

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay questions:

1. Management Acute complications of myocardial
infarction. (20)

2. Discuss the management of post Pneumonectomy
Broncho plural fistula. (15)

3. Discuss the merits and demerits of various
mechanical heart valves currently in use. (15)

II. Write short notes on : (6 × 5 = 30)

1. Endarterectomy in coronary artery disease.

2. Frateis Stich

3. Chylothorax.

4. Long term results of Ross procedure

5. T.M.R.

6. Leriche syndrome.

[KR 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

**Paper III — THORACIC AND CARDIO VASCULAR
SURGERY — II**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay Questions :

1. Classify cardiac tumours and describe their management. (20)
2. Discuss the role of "Blood Components" in Open Heart Surgery. (15)
3. Discuss the management of "Aortic Arch Aneurysms". (15)

II. Write short notes on :

(6 × 5 = 30)

- (a) Virtual Bronchoscopy
- (b) Protamine
- (c) Deep Vein Thrombosis
- (d) Anti arrhythmic Drugs used in cardiac surgery
- (e) Re-exploration in cardiac surgery
- (f) Synthetic patches and grafts used in cardiac surgery.

[KS 027]

Sub. Code : 1503

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper III — THORACIC AND CARDIO VASCULAR
SURGERY — II

Q.P. Code : 181503

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

I. Essay Questions :

1. Discuss management of newborn with
d-transposition great vessels. (20)

2. Mention the ductus dependant conditions. Discuss
the surgical management of any one of them. (20)

II. Short notes questions : (10 × 6 = 60)

- (1) Mitral valve prolapse.
- (2) Profound hypothermia.
- (3) Anastamotic devices in CABG.
- (4) Myasthenia Gravis.
- (5) Cyanotic spell.

(6) Nitric oxide.

(7) Annuloplasty rings.

(8) Geometric repair of L.V. aneurysms.

(9) Isoprenalin.

(10) Damus Kaye Stansel operation.

August 2008

[KT 027]

Sub. Code: 1503

M.Ch. DEGREE EXAMINATION

**(Higher Specialities)
(Revised Regulations)**

Branch I – Cardio Thoracic Surgery

Paper III – THORACIC AND CARDIO VASCULAR SURGERY -II

Q.P. Code: 181503

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

(2 x 20 = 40)

1. Describe the management of aortopulmonary collaterals in cyanotic congenital heart disease.
2. Discuss the surgical management of chronic pulmonary thrombo-embolism.

II. Write short notes on:

(10 x 6 = 60)

1. Barrett's oesophagus.
 2. Small cell carcinoma of lung.
 3. Intra coronary shunts.
 4. Dermoid cyst of mediastinum.
 5. Retrograde Cardioplegia.
 6. Megooou's stitch.
 7. Paraneoplastic syndromes of bronchogenic carcinoma.
 8. Acquired tracheoesophageal fistula.
 9. Lung volume reduction surgery.
 10. Free arterial grafts for coronary revascularization.
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August 2009

[KV 027]

Sub. Code: 1503

MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATIONS

(Super Specialities)

(Revised Regulations)

Branch I – Cardio Vascular and Thoracic Surgery

Paper III – THORACIC AND CARDIO VASCULAR SURGERY - II

Q.P. Code: 181503

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

(2 x 20 = 40)

1. Classify different types of double outlet right ventricle and discuss the various surgical options in management of DORV.
2. Discuss the management of a child born with respiratory distress due to congenital diaphragmatic hernia.

II. Write short notes on:

(10 x 6 = 60)

1. Corrected TGA.
2. Scimitar syndrome.
3. Unroofed coronary sinus.
4. REV procedure.
5. Anomalous left coronary artery from pulmonary artery.
6. Supra valvular aortic stenosis.
7. Radial arterial grafts.
8. Aprotinin.
9. Discuss the management options in tight mitral stenosis.
10. Discuss the factors affecting the haemodynamic performance of mechanical heart valves.

February 2010

[KW 027]

Sub. Code: 1503

MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATIONS

(Super Specialities)

(Revised Regulations)

Branch I – Cardio Vascular and Thoracic Surgery

(Common to all candidates)

Paper III – THORACIC AND CARDIO VASCULAR SURGERY - II

Q.P. Code: 181503

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

(2 x 20 = 40)

1. Describe the indications for mitral valve replacements and discuss the merits and demerits of various valves available
2. Describe the various indications for coronary artery bypass grafting. Discuss the various conduits used for bypass.

II. Write short notes on:

(10 x 6 = 60)

1. Hypoplastic left heart syndrome.
2. Seat belt injury.
3. Ventriculoplasty.
4. Ruptured sinus of valsalva into left ventricle.
5. Bronchiectasis.
6. Achalasia cardia.
7. Thymectomy.
8. Cardiac tumours.
9. Maze procedure.
10. Ectopia cordis.

February 2011

[KY 027]

Sub. Code: 1503

MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATIONS

(Super Specialities)

(Revised Regulations)

Branch I – Cardio Vascular and Thoracic Surgery

(Common to all candidates)

Paper III – THORACIC AND CARDIO VASCULAR SURGERY - II

Q.P. Code: 181503

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

(2 x 20 = 40)

1. Discuss surgical management of atrial fibrillation.
2. Describe surgical techniques of cardiac transplantation.

II. Write short notes on:

(10 x 6 = 60)

1. Ebstein's anomaly.
2. Tricuspid Annuloplasty.
3. Ischemic Mitral Regurgitation.
4. Internal Mammary Artery.
5. Left lower lobectomy.
6. Interrupted Aortic Arch Syndrome.
7. Complications of CPBP.
8. Mick's procedure of Aortic Root Enlargement.
9. RSOV.
10. Cardiac Tamponade.

August 2011

[KZ 027]

Sub. Code: 1503

MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATION
(SUPER SPECIALITIES)
BRANCH I – CARDIO VASCULAR AND THORACIC SURGERY
THORACIC AND CARDIO VASCULAR SURGERY II
Q.P. Code: 181503

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages Time Marks
(Max.) (Max.) (Max.)

- | | | | |
|--|----|----|----|
| 1. A patient who has undergone left pneumonectomy has developed a bronchopleural fistula and empyema. How will you manage him? | 11 | 35 | 15 |
| 2. Classify atrioventricular canal defects. Briefly discuss the surgical techniques. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|--|---|----|---|
| 1. Discuss the surgical approaches for a patient with “Pan Coast” Tumour. | 4 | 10 | 7 |
| 2. Classification of Tricuspid atresia. | 4 | 10 | 7 |
| 3. Surgical technique in coronary A-V fistula. | 4 | 10 | 7 |
| 4. Indications and techniques of femoral bypass. | 4 | 10 | 7 |
| 5. Discuss the various approaches for surgery in constructive Pericarditis. | 4 | 10 | 7 |
| 6. Coronary arterial pattern in TGA. | 4 | 10 | 7 |
| 7. A 30 year old lady comes for surgical correction of thoracic outlet compression. She also has a subclavian artery aneurysm Describe the approach best suited for her. | 4 | 10 | 7 |
| 8. Congenital lobar emphysema. | 4 | 10 | 7 |
| 9. Pulmonary A-V malformations. | 4 | 10 | 7 |
| 10. Traumatic Aortic transection. | 4 | 10 | 7 |

[LB 027]

AUGUST 2012

Sub. Code: 1503

M.Ch – CARDIO VASCULAR AND THORACIC SURGERY
Paper – III THORACIC AND CARDIO VASCULAR SURGERY II
Q.P. Code: 181503

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Discuss the aetiology, diagnosis and management of tracheal stenosis.	16	35	15
2. Classify different types of double outlet right ventricle and discuss various surgical options in management of DORV.	16	35	15

II. Write notes on:

1. Describe the embryology, diagnosis, classification and management of corrected TGA.	4	10	7
2. Describe Anomalous left coronary artery from pulmonary artery and its operative management.	4	10	7
3. Embryology of Truncus Arteriosus and its management.	4	10	7
4. Etiology, diagnosis and management of endomyocardial fibrosis.	4	10	7
5. Surgical management of ectopia cordis.	4	10	7
6. Benefits of techniques of substrate enhanced cardioplegia.	4	10	7
7. Traction diverticulum of Oesophagus.	4	10	7
8. Describe various types of Mitral annuloplasty rings.	4	10	7
9. Paraneoplastic syndrome in bronchogenic carcinoma.	4	10	7
10. Indications and techniques of Aortic valve repair.	4	10	7

M.Ch. – CARDIO VASCULAR AND THORACIC SURGERY
Paper – III THORACIC AND CARDIO VASCULAR SURGERY - II
Q.P.Code: 181503

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Technique of total arterial revascularization. Conduits used, long term results.
2. Classification of truncus arteriosus with different surgical techniques.

II. Write notes on:

(10X7=70)

1. Management broncho plural fistula following lung resections.
2. Hepatothorax.
3. Preoperative work up of a case of benign tracheal stenosis.
4. Indications for ascending aortic replacements.
5. Management of acute massive pulmonary embolism.
6. Maze procedure.
7. Management of occluded prosthetic mitral valve.
8. Management of pulmonary hypertensive crisis.
9. Classification of ventricular septal defects.
10. Morphology of Ebstein's anomaly.

[LF 027]

AUGUST 2014

Sub. Code: 1503

M.Ch. – CARDIO VASCULAR AND THORACIC SURGERY

Paper III – THORACIC AND CARDIO VASCULAR SURGERY - II

Q. P. Code: 181503

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on:

(2 x 15 = 30)

1. Tetralogy of Fallot - Diagnosis and Management
2. Post-lobectomy complications and management.

II. Write notes on:

(10 x 7 = 70)

1. Spinal cord protection in aortic surgery.
2. Coronary Artery Bypass Grafting surgery in Renal failure.
3. Trussler Repair.
4. Coronary Artery Fistula.
5. Swiss Cheese Defect.
6. Retrograde Cerebral Perfusion.
7. Arterial Blood Gas Analysis.
8. Bioprosthetic valves.
9. Nitric Oxide.
10. McGoon Ratio.
