APRIL - 2001

[KD 026] **Sub. Code : 1502**

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch I — Thoracic Surgery

(Revised Regulations)

Paper II — THORACIC AND CARDIOVASCULAR SURGERY — I

Time : Three hours **Maximum : 100 marks**

Answer ALL questions.

1. Anatomy of conducting bundle and aberrant conducting tissues in heart. (25)

2 Anatomy of tricuspid atresia and its management. (25)

3 Short notes on : (5 × 10 = 50)

(a) Pancost tumour.

(b) Myasthenia gravis and associated syndromes

(c) Bronchopulmonary segments.

(d) Solitary pulmonary nodules.

(e) Anatomy of Thymus and its blood supply.

MARCH - 2002

[KG 026] Sub. Code : 1502

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Thoracic Surgery

Paper II — THORACIC AND CARDIOVASCULAR SURGERY— I

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Describe the conduction system of the heart. Describe the changes of the conduction in congenital cardiac anomalies including the positional, and also in coronary artery disease. (25)

2. Describe the clinicopathological difference between pulmonary atresia with ventricular septal defect, and pulmonary atresia with intact ventricular septum. Discuss the role of surgery in both of them. (25)

3. Write briefly on : (5 × 10 = 50)

(a) Impalement injury of the chest

(b) Neurogenic mediastinal tumour

(c) Volume reduction surgery in emphysema of the lung

(d) Closed versus balloon mitral valvotomy

(e) Ischaemic preconditioning of the heart.

SEPTEMBER - 2002

[KH 026] **Sub. Code : 1502**

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch I — Thoracic Surgery

Paper II — THORACIC AND CARDIOVASCULAR SURGERY – I

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Give a diagramatic presentation of various coronary artery patterns in transposition of great arteries. Discuss the management of a 5 month old child with 'd' Transposition of Great Arteries.

What is the only criteria for the correction of transpoeition of coronary arteries? (25)

2. Discuss the etiopathogenesis of lung cancer and the management. (25)

3. Short notes on : (5 × 10 = 50)

(a) Air embolism in cardiopulmonary bypass.

(b) Cor Triatriatum.

(c) Supra Cardiac TAPVC & management.

(d) Complications of mitral stenosis.

(e) Minimal invasive cardiac surgeries.

APRIL - 2003

[KI 026] Sub. Code : 1502

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Thoracic Surgery

Paper II — THORACIC AND CARDIOVASCULAR SURGERY – I

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Describe the pathophysiology of Mitral stenosis and discuss the various treatment modalities. (25)

2. Discuss the etiopathology of truncus arteriosus and its management. (25)

3. Write short notes on : (5 × 10 = 50)

(a) Intra-Aortic Balloon pump

(b) Bronchial Adenoma

(c) Pulmonary atresia with intact ventricular septum

(d) Myasthenia gravis

(e) ECMO.

APRIL - 2004

[KK 026] **Sub. Code : 1502**

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper II — THORACIC AND CARDIO VASCULAR SURGERY — I

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) Discuss the etiology and management of Massive Haemoptysis.

(2) Management of Low Cardiac output in the peri operative period.

B. Short notes on : (10 × 5 = 50)

(1) Barrett's esophagus

(2) Superior Vena Cava syndrome.

(3) Pectus excavatum.

(4) Casoni's test.

(5) Flail chest.

(6) Sleeve resection.

(7) Pulsus Paradoxus.

(8) Kawasaki's disease.

(9) TEE.

(10) Mycetoma.

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AUGUST - 2004

[KL 026] **Sub. Code : 1502**

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper II — THORACIC AND CARDIO VASCULAR SURGERY — I

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 clinical features, diagnosis and management of Ebstein's anomaly of tricuspid valve.

(2) Enumerate different types of palliative systemic to pulmonary artery shunt and discuss any one them.

II. Short notes : (10 × 5 = 50)

(a) Classification of Endocardial cushion defect.

(b) Management of left superior vena cava during atrial septal defect closure.

(c) Treatment of hypertensive patent ductus arteriosus.

(d) Merits and demerits of right atrial approach to ventricular septal defect.

(e) Explain unifocalisation and its indications.

(f) Treatment of Interrupted Aortic arch.

(g) Long term results after total correction of tetralogy of fallot.

(h) Absent pulmonary valve syndrome – diagnosis and treatment.

(i) Ross procedure – surgical technique.

(j) Current role of pulmonary artery banding.

FEBRUARY - 2005

[KM 026] Sub. Code : 1502

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper II — THORACIC AND CARDIO VASCULAR SURGERY – I

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 in detail the anatomy, physiological consequences and treatment of Hypoplastic Left Heart Syndrome.

(2) Discuss the indications for the Rastelli procedure.

II. Short notes : (10 × 5 = 50)

(a) Clinical features and treatment of Bronchial Adenomas.

(b) Discuss Middle Lobe Syndrome.

(c) Discuss the treatment of recurrent Spontaneous Pneumothorax.

(d) Discuss the treatment of Post Pneumonectomy Empyema.

(e) "Silhouette" sign.

(f) Traumatic Diaghpramatic rupture.

(g) Indications of surgery in Pulmonary Tuberculosis.

(h) Neurogenic tumours of Mediastinum.

(i) Extralobar sequestration.

(j) Pulmonary AV Fistula.

FEBRUARY - 2006

[KO 026] **Sub. Code : 1502**

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper II — THORACIC AND CARDIO VASCULAR SURGERY — I

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. Describe the etiopathogenesis and diagnosis of bronchopleural fistula. Discuss the management of bronchopleural fistula.

2. Define solitary pulmonary nodule (SPN). Discuss the differential diagnosis of SPN.

II. Short notes : (10 × 5 = 50)

(a) Carinal pnemonectomy

(b) Endo vascular stenting

(c) Bronchial artery embolisation

(d) Management of multilocular empyema

(e) Esophagomyotomy

(f) PTEE grafts

(g) Techniques of lung isolation

(h) Compartment syndrome

(i) Esophageal bougienage

(j) Paraplegia following surgery on descending aorta.

AUGUST - 2006

[KP 026] **Sub. Code : 1502**

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper II — THORACIC AND CARDIO VASCULAR SURGERY — I

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 the Pathophysiology, diagnosis and management of palmonary embolism. (20)

(2) Discuss various treatment modalities used in post thoracotomy pain management. (15)

(3) Discuss surgical treatment of carcinoma oesophagus involving the lower third. (15)

II. Short notes : (6 × 5 = 30)

(a) Role of surgery in Pulmonary tuberculosis.

(b) Chylothorax.

(c) Benign tumours of lung.

(d) Pectus excavatum.

(e) Thoracic outlet syndrome

(f) Tracheostomy.

FEBRUARY - 2007

[KQ 026] **Sub. Code : 1502**

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper II — THORACIC AND CARDIO VASCULAR SURGERY — I

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 the natural history, haemodynamics and management of a child born with total anomalous pulmonary venous connexion (TAPUC). (20)

2. Discuss the morphology, natural history and management options in Epstein's Anomaly. (15)

3. Discuss the principle of pontain's circulation. Describe the various modification of pontain's procedure. (15)

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

(a) Congenital tracheo esophageal fistula

(b) Pulmonary arterio venous fistula

(c) Management of cyanotic spell

(d) Pulmonary hypertension crisis

(e) Differential diagnosis of continuous murmur in left precardium

(f) Unroofed coronary sinus.

[KR 026] **Sub. Code : 1502**

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper II — THORACIC AND CARDIO VASCULAR SURGERY — I

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) Compare Off pump CABG versus On pump CABG with reference to multivessel coronary artery disease. (20)

(2) Discuss Bioprosthetic Heart Valves and their utility in clinical practise. (15)

(3) Discuss the pathophysiology of chronic constrictive pericarditis and its surgical management. (15)

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

(a) Transhiatal resection of oesophagus

(b) Tracheostomy

(c) Pulmonary embolism – management

(d) Surgical versus Device closure of PDA

(e) Low molecular weight heparin

(f) Redocardiac surgery – problems and management.

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[KS 026] **Sub. Code : 1502**

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch I — Cardio Thoracic Surgery

Paper II — THORACIC AND CARDIO VASCULAR SURGERY — I

Q.P. Code : 181502

Time : Three hours Maximum : 100 marks

Answer ALL questions.

I. Essay questions :

(1) Classify complete AV canal defects and describe the principles of surgical corrections. (20)

(2) Discuss the pathogenesis, investigations and surgical management of recurrent haemoptysis. (20)

II. Short notes : (10 × 6 = 60)

(1) Pulmonary thromboendarterectomy.

(2) Cryopreservation.

(3) Pulmonary vascular disease in shunt lesions.

(4) Retrograde cardiophagia.

(5) Mediastinoscopy.

(6) Achalasia cardia.

(7) Lung volume reduction.

(8) Total arterial revascularisation.

(9) Infracardiac TAPVC.

(10) Phrenic nerve injury.

August 2008

[KT 026] **Sub. Code: 1502**

M.CH DEGREE EXAMINATIONS

(Higher Specialities)

(Revised Regulations)

Branch I – Cardio Thoracic Surgery

Paper II – THORACIC AND CARDIO VASCULAR SURGERY - I

Q.P. Code: 181502

Time: Three hours **Maximum: 100 Marks**

ANSWER ALL QUESTIONS
Draw suitable diagrams wherever necessary.

I. Essays: **(2 x 20 = 40)**

1. Describe various causes of right ventricular outflow tract obstruction and their treatment with surgery.

2. Describe the aetiology of stricture oesophagus and its treatment.

II. Write short notes on: **(10 x 6 = 60)**

1. Glenn shunt.
2. Vanishing lung.
3. Aortic arch interruptions.
4. Dysphagia lusoria.
5. Jet Ventilation.
6. Rib notching.
7. Benign tumours of oesophagus.
8. Systemic inflammatory response syndrome.
9. Foregut cysts.
10. Branchial artery embolization.

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August 2009

[KV 026] **Sub. Code: 1502**

MASTER OF CHIRUGIAE (M.Ch.) DEGREE EXAMINATIONS

(Higher Specialities)

(Revised Regulations)

Branch I – Cardio Vascular and Thoracic Surgery

Paper II – THORACIC AND CARDIO VASCULAR SURGERY - I

Q.P. Code: 181502

Time: Three hours **Maximum: 100 Marks**

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays: **(2 x 20 = 40)**

1. Discuss the various techniques of myocardial protection and their cellular and molecular basis.

2. Discuss the etiopathology of myasthenia gravis and outline the management of a patient admitted with myasthenic crisis.

II. Write short notes on: **(10 x 6 = 60)**

1. Transplantation biology.
2. Thoracic duct.
3. Ross procedure.
4. Walton C Lillehar.
5. VATS.
6. Enumerate the causes of continuous cardiac murmur.
7. Pectus excavatum.
8. Nitric oxide.
9. Ebstein’s anomaly.
10. Mediastinal tumours in children.

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February 2010

[KW 026] **Sub. Code: 1502**

MASTER OF CHIRUGIAE (M.Ch.) DEGREE EXAMINATIONS

(Super Specialities)

(Revised Regulations)

Branch I – Cardio Vascular and Thoracic Surgery

(Common to all candidates)

Paper II – THORACIC AND CARDIO VASCULAR SURGERY - I

Q.P. Code: 181502

Time: Three hours **Maximum: 100 Marks**

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays: **(2 x 20 = 40)**

1. What is video assisted thoracic surgery? Describe various procedures done with this modality.
2. Describe various posterior mediastinal masses and their surgical treatment.

II. Write short notes on: **(10 x 6 = 60)**

1. Empyema necessitalis.
2. Paradoxic movement of chest.
3. Atrial septal defect surgery using thoracotomy approach.
4. Dextrocardia.
5. Diaphragmatic pacing.
6. Struck valve.
7. Oesophageal perforation.
8. Complete heart block.
9. Closure of ventricular septal defect.
10. Pectus carinatum.

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February 2011

[KY 026] **Sub. Code: 1502**

MASTER OF CHIRUGIAE (M.Ch.) DEGREE EXAMINATIONS

(Super Specialities)

(Revised Regulations)

Branch I – Cardio Vascular and Thoracic Surgery

(Common to all candidates)

Paper II – THORACIC AND CARDIO VASCULAR SURGERY - I

Q.P. Code: 181502

Time: Three hours **Maximum: 100 Marks**

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays: **(2 x 20 = 40)**

1. Discuss about protection of the Brain during aortic surgery.
2. Discuss the techniques of Mitral Valve Repair.

II. Write short notes on: **(10 x 6 = 60)**

1. Extra Corporeal Membrane oxygenators.
2. Features of a membrane oxygenator.
3. Indications for surgery in pulmonary tuberculosis.
4. Classification of bronchial adenomas.
5. Middle lobe syndrome.
6. Double lumen endotracheal tubes.
7. Cor triatriatum.
8. Effects of nicotine on the cardiovascular system.
9. ‘Metabolic’ Syndrome.
10. Pulmonary Arteriovenous fistula.

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August 2011

[KZ 026] **Sub. Code: 1502**

MASTER OF CHIRUGIAE (M.Ch.) DEGREE EXAMINATION

(SUPER SPECIALITIES)

BRANCH I – CARDIO VASCULAR AND THORACIC SURGERY

THORACIC AND CARDIO VASCULAR SURGERY I

Q.P. Code: 181502

Time : 3 hours **Maximum : 100 marks**

(180 Min)

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. A patient presents with a carcinoid tumour on the lower Trachea 4 cm from carina. Discuss the surgical technique and post operative management.	11	35	15
2. A 26 year old lady interested in bearing children comes for surgical correction of mitral regurgitation. What are the surgical options? Outline the technique.	11	35	15

II. Write notes on :

1. A victim of road traffic accident comes with a massive air leak in a right sided intercostals drain. How will you proceed to manage him?	4	10	7
2. A patient with a mechanical Mitral valve prosthesis comes in with Acute Dyspnoea. What are the possibilities and management.	4	10	7
3. A young lady comes up for closure of an Atrial Septal defect. What will be the surgical approach cosmetically?	4	10	7
4. A Healthy 5 year old child is brought to the hospital with breathlessness and mild stridor. What are the possibilities and line of management.	4	10	7
5. A 50 year old male develops a low cardiac output 6-7 hours after operation. How will you assess and manage him?	4	10	7
6. How will you compare a rigid with fibreoptic bronchoscope? advantages and limitations.	4	10	7
7. How will you manage a chylothorax following a CABG Surgery?	4	10	7
8. A patient develops massive bleeding posteriorly after a Mitral valve replacement. Possibilities and management.	4	10	7
9. Mention the various surgical procedures to repair coarctation of Aorta. Discuss the indications for each procedure.	4	10	7
10. Investigations and management of pulmonary embolism.	4	10	7

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[LB 026] **AUGUST 2012** **Sub. Code: 1502**

M.Ch – CARDIO VASCULAR AND THORACIC SURGERY

Paper – II THORACIC AND CARDIO VASCULAR SURGERY I

Q.P. Code: 181502

Time : 3 hours **Maximum : 100 marks**

(180 Min)

Answer ALL questions in the same order.

I. Elaborate on:	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Discuss in detail the anatomy, physiological consequences and management of hypoplastic left heart syndrome.	16	35	15
2. Describe the aetiology of stricture oesophagus and its treatment.	16	35	15
II. Write notes on:			
1. Discuss the surgical approaches for a patient with pan-coast tumour.	4	10	7
2. Surgical technique in coronary A-V fistula.	4	10	7
3. Indications for diaphragmatic pacing.	4	10	7
4. Total arterial revascularization.	4	10	7
5. Indication of Mediastinoscopy.	4	10	7
6. Indications of Bronchial artery embolisation.	4	10	7
7. Explain unifocalisation and its indications.	4	10	7
8. Explain Pulmonary artery banding, its indications and complications.	4	10	7
9. Management of hypertensive Patent Ductus Arteriosus.	4	10	7
10. Diagnosis and management Struck valve.	4	10	7

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(LD 026) **AUGUST 2013** **Sub. Code:1502**

M.Ch. – CARDIO VASCULAR AND THORACIC SURGERY
Paper – II THORACIC AND CARDIO VASCULAR SURGERY - I
Q.P.Code: 181502

Time: Three Hours **Maximum: 100 marks**

I. Elaborate on: **(2X15=30)**

1. What is meant by parenchymal sparing lung resection? Discuss the indications and technique of left main stem bronchial sleeve resection.
2. In a patient coming up for mitral valve replacement how will you assess and manage the tricuspid valve regurgitation. Methods and techniques?

II. Write notes on: **(10X7=70)**

1. Extra pulmonary non metastatic manifestations of bronchogenic carcinoma.
2. Classify thymic tumours. Outline the principles of diagnosis and management.
3. Manifestation and management of spontaneous esophageal rupture.
4. Management of giant left atrium during mitral valve procedures.
5. Assessment of myocardial viability.
6. Surgical ventricular restoration.
7. Stentless aortic valve. Classifications and indications.
8. Classification of aortic dissection.
9. Double aortic arch.
10. Unroofed coronary sinus.

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[LF 026] **AUGUST 2014** **Sub. Code: 1502**

M.Ch. – CARDIO VASCULAR AND THORACIC SURGERY

Paper II – THORACIC AND CARDIO VASCULAR SURGERY - I

Q. P. Code: 181502

Time: Three Hours **Maximum: 100 Marks**

Answer ALL questions in the same order.

I. Elaborate on: **(2 x 15 = 30)**

1. Classification of Tricuspid Atresia and the surgical procedures.
2. Complications of Coronary Artery Disease and their management.

II. Write notes on: **(10 x 7 = 70)**

1. Senning Procedure.
2. Thymolipoma.
3. Therapeutic options in Ebstein's anomaly.
4. Mediastinitis.
5. Retrosternal goitre.
6. Cervical Rib.
7. Gerbode Defect.
8. Tracheomalacia.
9. Oesophageal Leiomyoma.
10. Extensively Drug Resistant Tuberculosis (XDR-TB).

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