

MANIPAL UNIVERSITY

M.Ch. (CARDIO VASCULAR AND THORACIC SURGERY)
DEGREE EXAMINATION – DECEMBER 2014

SUBJECT: PAPER I: BASIC SCIENCES

Tuesday, December 09, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **All questions carry TEN marks each.**

1. Discuss Embryology and Development of the interatrial septum
2. Arterial blood gases in cardiac surgery
3. Miniplegia
4. Oxygenators
5. Non invasive ventilation
6. Blood supply of trachea
7. Lymphatic drainage of the lung
8. Classify and discuss the pathology of lung cancer
9. Pulmonary sequestration
10. Barrett's oesophagus

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M.Ch. (CARDIO VASCULAR AND THORACIC SURGERY)
DEGREE EXAMINATION – DECEMBER 2014

SUBJECT: PAPER II: THORACIC AND ACQUIRED HEART DISEASES

Thursday, December 11, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ All questions carry TEN marks each.

1. Write a short note on Achalasia Cardia and describe the Blood Supply of Oesophagus.
2. Write a short note on management of Carcinoma of Middle Third of Oesophagus with or without Tracheo Oesophageal Fistula.
3. Write a short note on Sliding Hiatus Hernia and enumerate the causes of Gastro-oesophageal Reflux.
4. Write a short note on Open Positive Cavity and describe the steps of Left Upper Lobectomy.
5. Write a short note on Clinical Presentation of Cervical Rib.
6. Enumerate the causes of Chylothorax and give a brief description of its surgical management.
7. Describe the causes and management of Acute Cardiac Tamponade.
8. Write in detail the techniques of Myocardial Preservation in a case of Aortic Stenosis undergoing Aortic Valve Replacement.
9. Describe the technique of repair of Mitral Regurgitation caused by Degenerative Disease.
10. Write a short note on Off Pump Coronary Artery Bypass and different maneuvers to expose the target vessel.

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SUBJECT: PAPER III: CONGENITAL HEART DISEASES

Saturday, December 13, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ All questions carry TEN marks each.

1. Make diagram of different types of Atrial Septal Defects. Describe with diagram the technique of repair of Partial Anomalous Pulmonary Venous Connection with Right Pulmonary Veins draining into Inferior Vena Cava (Scimitar Syndrome).
2. Give the classification of Total Anomalous Pulmonary Venous Connection along with diagrams. Make diagram to explain the technique of repair of any one of them.
3. Describe Cor Triatriatum with suitable diagrams.
4. What is Obligatory Ductus Arteriosus? Explain with diagram the technique of repair of Adult Ductus.
5. Enumerate the types of Ventricular Septal Defects. What are the associated Cardiac Anomalies in patients with Primary Ventricular Septal Defect? Describe Heath Edwards Classification of Pulmonary Vascular Disease Pathology.
6. Describe Tetralogy of Fallot explaining its embryological basis. Give a brief account of its natural history. Explain one of the techniques of its intra cardiac repair with diagrams.
7. Describe the natural history of Coarctation of the Aorta and draw suitable diagrams to show two techniques for its repair.
8. Give a brief description of the anomaly of Complete Transposition of the Great Arteries and draw diagrams to show the Atrial Switch Operation (Mustard Technique).
9. Write a brief note on Double Outlet Right Ventricle.
10. Describe in short with diagrams the anomaly of Congenitally Corrected Transposition of the Great Arteries.

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SUBJECT: PAPER IV: RECENT ADVANCES

Monday, December 15, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ All questions carry TEN marks each.

1. Cardiac Xenotransplantation
2. Vats in Diagnosis of Cardiothoracic Diseases
3. Oesophageal Stents
4. Total Endoscopic bypass grafting
5. Stentless valves
6. Therapeutic angiogenesis
7. Blood conservation for open heart surgery
8. Percutaneous catheter intervention in congenital heart disease
9. Complications of Lvad
10. New approaches for surgical treatment of arterial fibrillation