

**RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER**  
**SYLLABUS FOR SCREENING TEST FOR THE POST OF**  
**ASSISTANT PROFESSOR (Super Speciality)**  
**CARDIO VASCULAR & THORACIC SURGERY**  
**MEDICAL EDUCATION DEPARTMENT**

**Unit-I**

**Cardiac diseases**

- Cardiopulmonary Bypass, Myocardial Protection, Circulatory Support, Cardiac Anatomy & Physiology.
- Heart Valvular Disease - Etiopathogenesis & Management including medical and surgical management, (Replacement & Repair techniques).
- Ischemic Heart Diseases - Assessment and Management of patients with Coronary Artery Diseases including off pump and on pump CABG and management of Myocardial infarction complications.
- Congenital Cardiac Diseases - Embryology, Pathophysiology and Management of simple and complex congenital cardiac diseases.
- Cardiothoracic trauma.
- Minimally invasive Cardiac surgery & recent advances.
- Cardiac failure management including cardiac assist devices (ECMO & IABP) and transplant surgery.
- Evaluation of Cardiac patients including all clinical workup & investigations eg. X-ray, ECG, ECMO and Cath procedures (angiography and cath study).
- Post operative management of Cardiac patients in ICU and Critical Care including ventilator management.
- Follow-up management of post operative Cardiac patients.

**Unit- II**

**Thoracic Diseases**

- Thoracic trauma.
- Lung Disorders including chronic infectious diseases eg. Tuberculosis, bronchiectasis, Bullous diseases, lung malignancy and tumors-management including open lung reduction surgeries and VATS.
- Disorders of pleura- Including management of empyema (Medical and Surgical- open & VATS), Pneumothorax and Chylothorax.
- Disorder of Diaphragm and Oesophagus.
- Disorders of Chest wall- chest wall abnormalities, tumors and thoracic outlet disorders.
- Disorders of Airways- Including tracheal and bronchial tumors and stenosis.

- Disorders of the Pericardium- Including pericardial cyst, tumors, cardiac tamponade and C.C.P.
- Disorder of the Mediastinum- Including tumors and thymus diseases.
- Evaluation of Thoracic patients- Including clinical workup and investigational evaluation eg. P.F.T. and Bronchoscopy.
- Post operative management of thoracic surgery patients in I.C.U and ward.

### **Unit-III**

#### **Vascular Diseases**

- Aortic diseases - Including dissection and aneurysms of Aorta management.
- Peripheral Vascular Diseases - Including atherosclerotic occlusive diseases and management (open and endovascular).
- Carotid Vascular Diseases- Carotid body tumors, stenosis and aneurysms.
- Venous Diseases - Including Varicose veins diseases and management (open and laser), venous malformations including haemangioma and A-V malformations.
- A-V fistula, fundamentals of vascular surgery and evaluation of vascular patients and follow-up of post operative vascular patients.

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#### **Pattern of Question Papers:**

1. **Objective Type Paper**
2. **Maximum Marks: 180**
3. **Number of Questions: 180**
4. **Duration of Paper : Three Hours**
5. **All Questions carry equal marks**
6. **Medium of Screening Test: English**
7. **There will be Negative Marking**  
(1/3 part of the mark(s) of each question will be deducted for each wrong answer)