



**SNS COLLEGE OF ALLIED HEALTH SCIENCES**  
SNS Kalvi Nagar, Coimbatore - 35  
Affiliated to Dr MGR Medical University, Chennai



**DEPARTMENT : OPERATION THEATRE AND  
ANAESTHESIA TECHNOLOGY**

**COURSE NAME : ANATOMY**

**UNIT : HEART**

**TOPIC : SURFACE ANATOMY OF HEART**



## SURFACE OF THE HEART



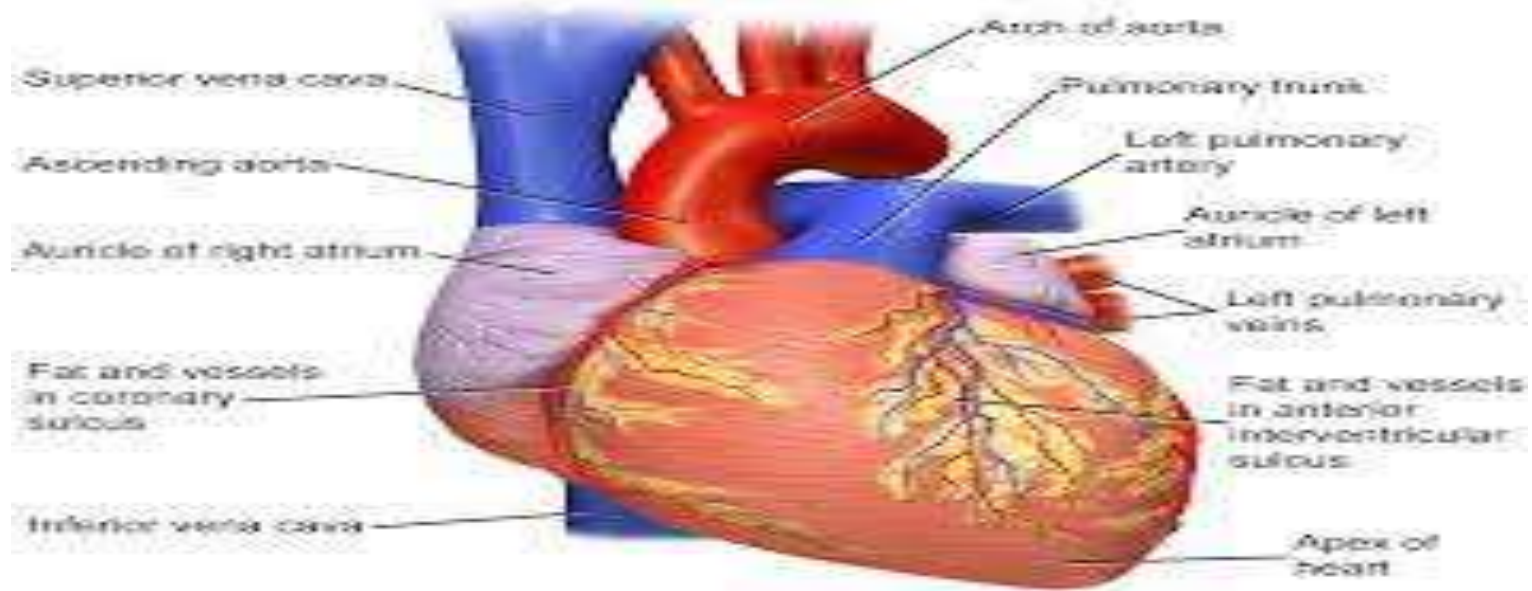
### **Anterior (Sternocostal) Surface:**

#### Right Atrium:

- Forms the right and upper part of the anterior surface.
- Receives deoxygenated blood from the superior and inferior vena cava.

#### Right Auricle:

- Small, ear-shaped extension of the right atrium.
- Increases the capacity of the right atrium.



## Superficial Heart Anatomy (Anterior)



### Coronary Sulcus (Atrioventricular Groove):

- Marks the boundary between the atria and ventricles.
- Contains the right coronary artery.

### Right Ventricle:

- Occupies a significant portion of the lower anterior surface.
- Pumps deoxygenated blood to the pulmonary artery.

### Tricuspid Valve:

- Located between the right atrium and right ventricle.
- Three cusps prevent backflow into the right atrium.



### Pulmonary Valve:

- Positioned at the base of the pulmonary trunk.
- Prevents backflow into the right ventricle.

### Pulmonary Trunk:

- Arises from the right ventricle.
- Divides into right and left pulmonary arteries, carrying deoxygenated blood to the lungs.

### Left Auricle:

- Small, ear-shaped extension of the left atrium.
- Increases the capacity of the left atrium.



### Left Atrium:

- Forms the left and upper part of the anterior surface.
- Receives oxygenated blood from the pulmonary veins.

### Bicuspid (Mitral) Valve:

- Located between the left atrium and left ventricle.
- Two cusps prevent backflow into the left atrium.

### Aortic Valve:

- Positioned at the base of the ascending aorta.
- Prevents backflow into the left ventricle.



### Ascending Aorta:

- Originates from the left ventricle.
- Carries oxygenated blood to the systemic circulation.

### Superior Vena Cava:

- Large vein bringing deoxygenated blood from the upper body into the right atrium.

### Inferior Vena Cava:

- Large vein bringing deoxygenated blood from the lower body into the right atrium.



## **Posterior (Base) Surface:**

**Left Atrium:**

Forms the majority of the base, with the openings of the pulmonary veins.

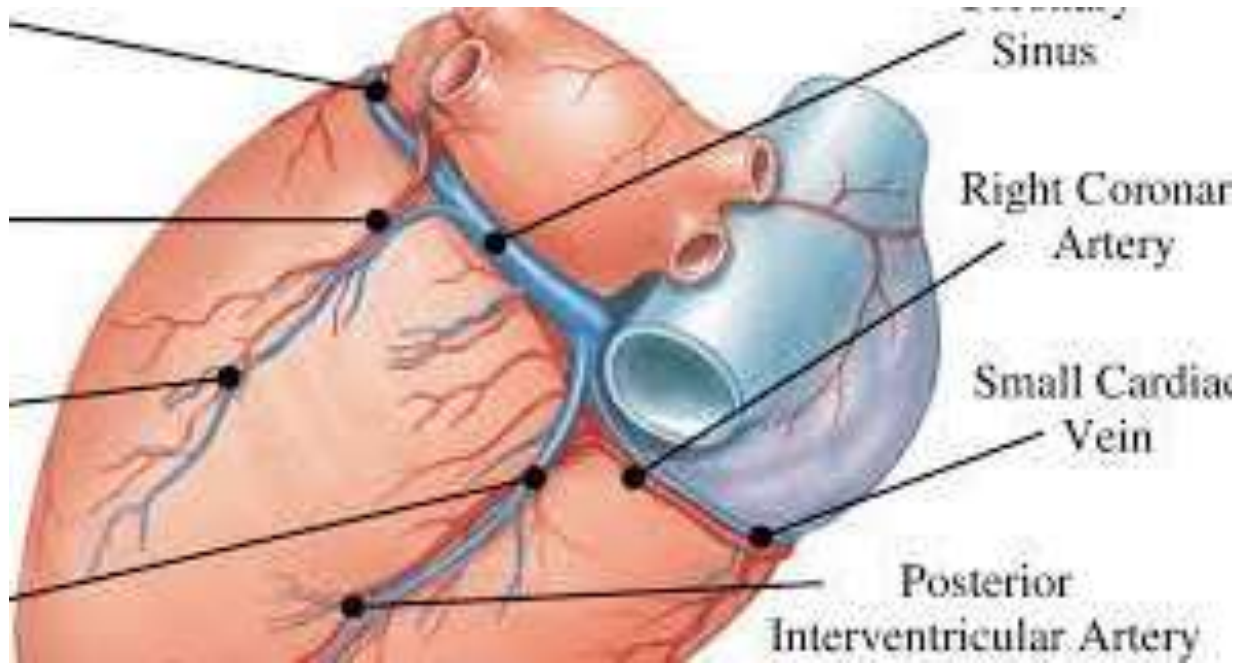
**Left Auricle:**

Visible on the left side of the base.

**Pulmonary Veins:**

Four veins (two from each lung) carrying oxygenated blood into the left atrium.







## **Inferior (Diaphragmatic) Surface:**

### Left Ventricle:

- Dominates this surface, resting on the diaphragm.

### Coronary Sinus:

- Collects deoxygenated blood from the heart muscle.
- Empties into the right atrium.

## **Right and Left Lateral Surfaces:**

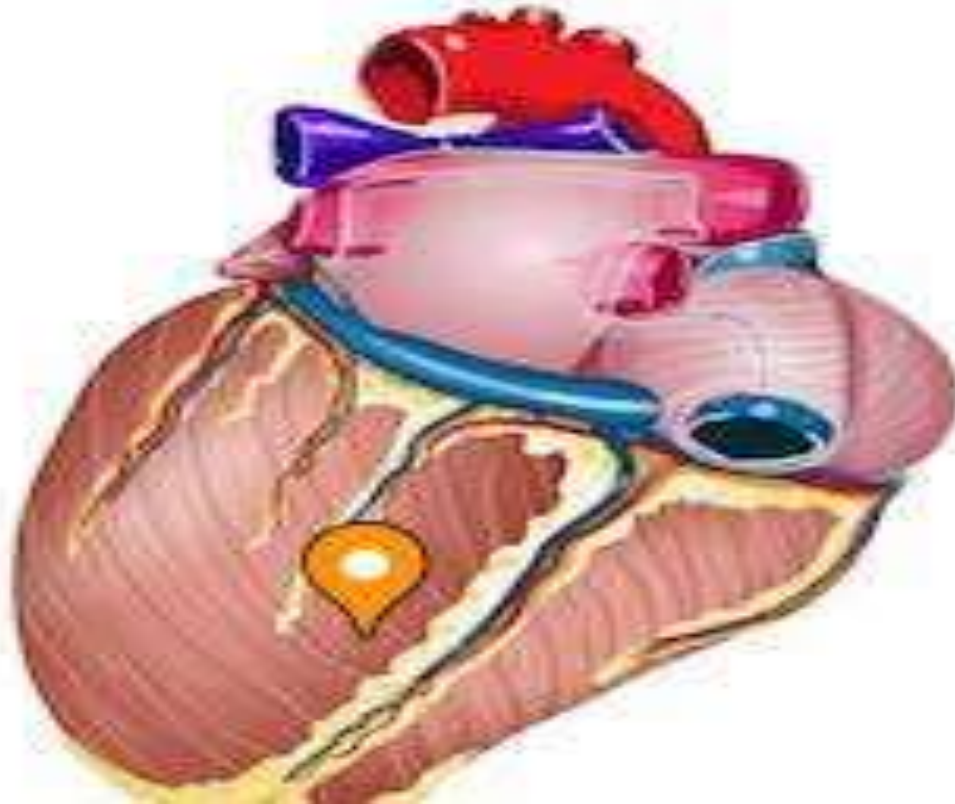
### Right Atrium and Right Ventricle:

- Form the right lateral surface.

### Left Ventricle:

- Forms the left lateral surface.







## ASSESSMENT



- What all are the Anterior surfaces ?
- What all are the Posterior surfaces ?