

#### **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 **TOPICS :** MAJOR BLOOD VESSELS OF HEART, CORONARY ARTERIES



#### **MAJOR BLOOD VESSELS OF HEART**



### Superior Vena Cava (SVC):

Origin:

Formed by the confluence of the left and right brachiocephalic veins.

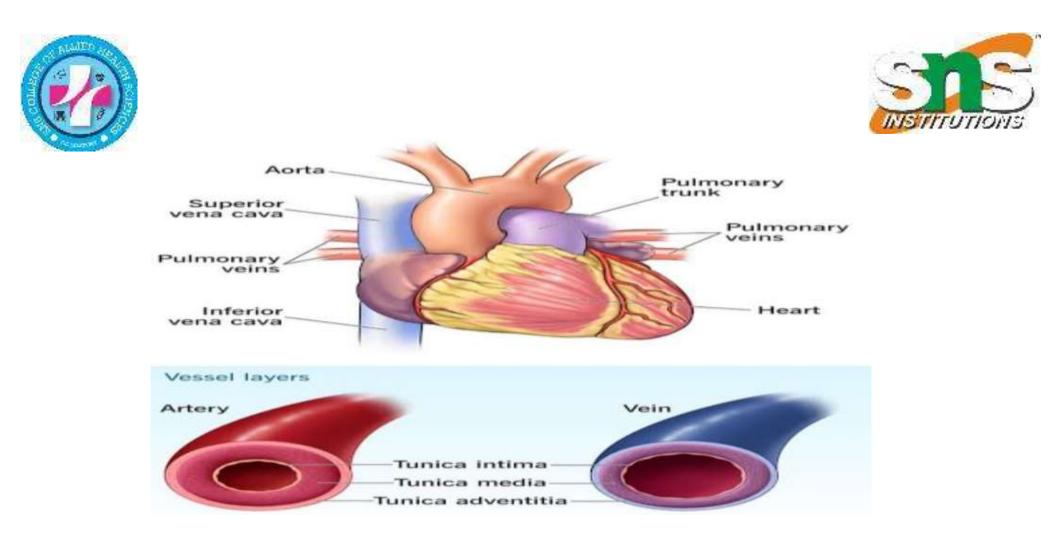
Right brachiocephalic vein is formed by the union of the right subclavian and right internal jugular veins.

Course:

Enters the right atrium from above.

Passes through the superior mediastinum.

Tributaries: Drains blood from the head, neck, upper limbs, and the upper part of the thorax.







# Inferior Vena Cava (IVC):

Origin:

Formed by the confluence of the common iliac veins.

Common iliac veins are formed by the union of the internal and external iliac veins.

Course:

Enters the right atrium from below.

Passes through the abdominal and thoracic cavities.

Tributaries: Drains blood from the pelvis, abdominal organs, and lower limbs.





#### **SYSTEMIC CIRCULATION**

### Aorta: Ascending Aorta:

Origin: Arises from the left ventricle. Course: Rises superiorly. Gives off the coronary arteries.





#### Arch of the Aorta:

Course: Curved portion. Gives off the brachiocephalic artery, left common carotid artery, and left subclavian artery.

#### **Descending Aorta:**

Thoracic Aorta: Descends through the thorax. Abdominal Aorta: Passes through the abdomen, giving off various branches.



#### **CORONARY ARTERIES**



#### **Right Coronary Artery (RCA):**

Origin:

Arises from the right aortic sinus.

Branches:

**Right Marginal Artery.** 

Posterior Descending Artery (PDA).

Distribution:

Supplies the right atrium, right ventricle, sinoatrial (SA) and atrioventricular (AV) nodes.





### Left Coronary Artery (LCA):

Origin: Arises from the left aortic sinus.

Divisions:

Left Anterior Descending (LAD) Artery:

Course:

Descends in the anterior interventricular sulcus.

Distribution:

Supplies the anterior part of the interventricular septum and portions of the right and left ventricles.





#### **Circumflex Artery:**

Course:

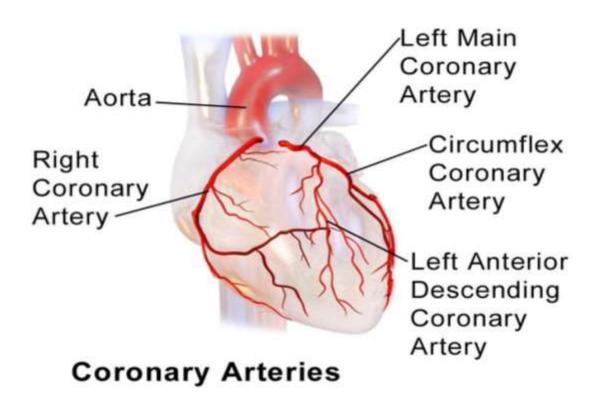
Curves around the left side in the coronary sulcus.

Distribution:

Supplies the left atrium and the posterior walls of the left ventricle.









### ASSESSMENT



- What all are the Major blood vessels ?
- What is Coronary Artery ?