

## BLOOD VASCULAR SYSTEM OF SCOLIODON

The circulatory system of scoliodon is well developed. The blood is redish in colour. RBC, WBC, platelets float in plasma. The circulatory system consists of ① Heart ② Arteries and ③ veins.

### Heart:

The heart is located beneath the pharynx. It is dorsoventrally bent muscular tube. It is enclosed in a two layered sac called <sup>pericardium</sup> ~~peritoneum~~. The heart is made up of four parts ① Sinus venosus ② Atrium or auricle ③ ventricle and ④ Conus arteriosus.

### ① Sinus Venosus:-

The sinus venosus is triangular, thin walled chamber lying along the base of pericardial cavity. It receive two large vein ducts cuvieri laterally, one on each side, while two hepatic sinuses open into it in the postero-medial line. Anteriorly, the sinus venosus open into the atrium through the sinu-atrial aperture which is provided with a pair of membranous valve by which the backward flow of blood is checked.

② Atrium: It lies anterior to the sinus venosus and dorsal to the ventricle. It is also triangular sac and its sides project as ear-like outgrowths on the side of the ventricle. The atrium opens ventrally into the ventricle by the atrio-ventricular aperture which is guarded by a bivalvate valve preventing back flow of blood.

### ③ Ventricle:

The ventricle is thick walled, muscular chamber on the ventral side of atrium which continues anteriorly into the Conus arteriosus. Its wall, are spongy being produced into numerous muscular strands, the Chordae tendinae.

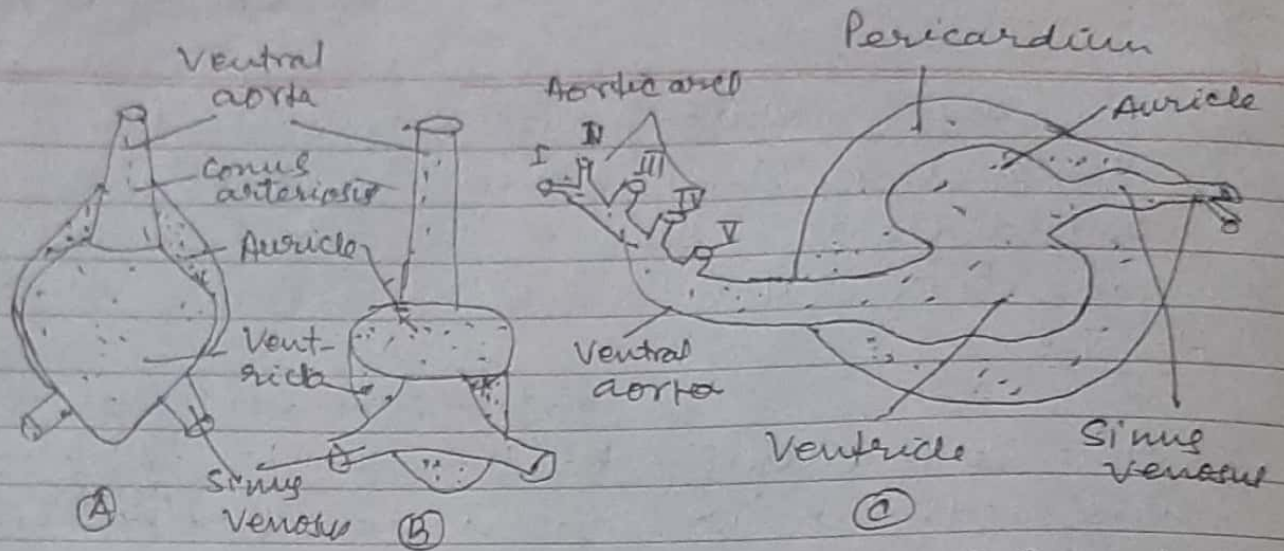


Fig - Heart of Scoliodon (A) Ventral view (B) Dorsal view (C) Lateral view

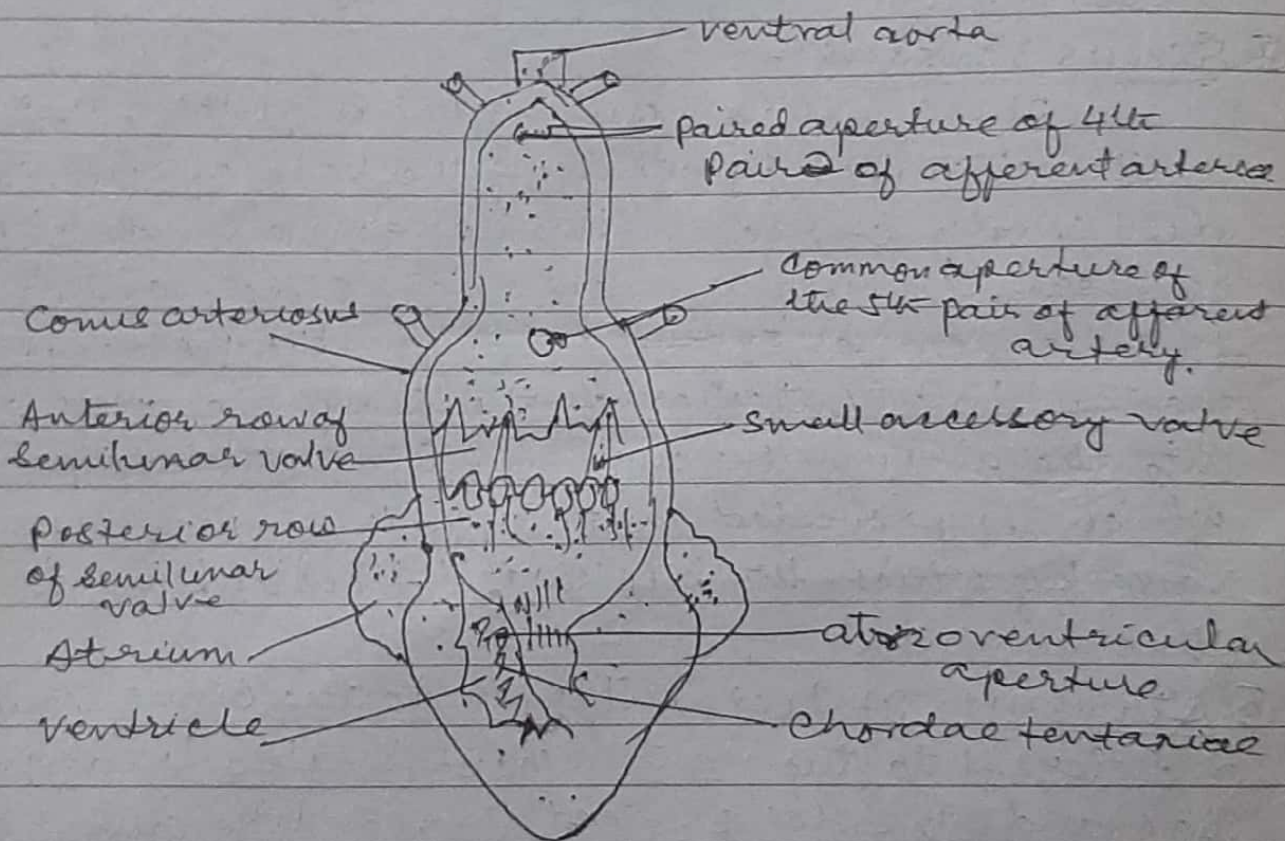


Fig - Heart of Scoliodon dissected from ventral surface.