

Supplements for online classes held on 12th July
BSc Part II Hons

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Heart, basic structure ,function and its Evolution

Plate – 6

iv. Accessory Heart (dilated portion of blood vessel, act as booster pump) found in insects, cephalopods, fishes, amphibians and reptiles.

v. Myogenic Heart, here heart beat originates in the muscles of the heart, Acetylcholine inhibits heartbeat. Found in vertebrate and molluscs

vi. Neurogenic Hearts- in the neurogenic hearts the heart beat originates in ganglion cell. Acetylcholine accelerates the neurogenic heart- found in insects, Limulus, and many Annelids.

Plate – 7

Blood Vessel

Arteries- thick walled vessels- carry blood away from the heart to the tissues

Veins- thin wall vessels- carry blood to the heart

Capillaries- join artery and vein- these are formed as a result of branching of the arterioles and they reunite to form a vein

Plate – 8

Basic Structure of Human Heart

Four chambered heart - left atrium or auricle, left ventricle, right atrium, right ventricle- Myogenic

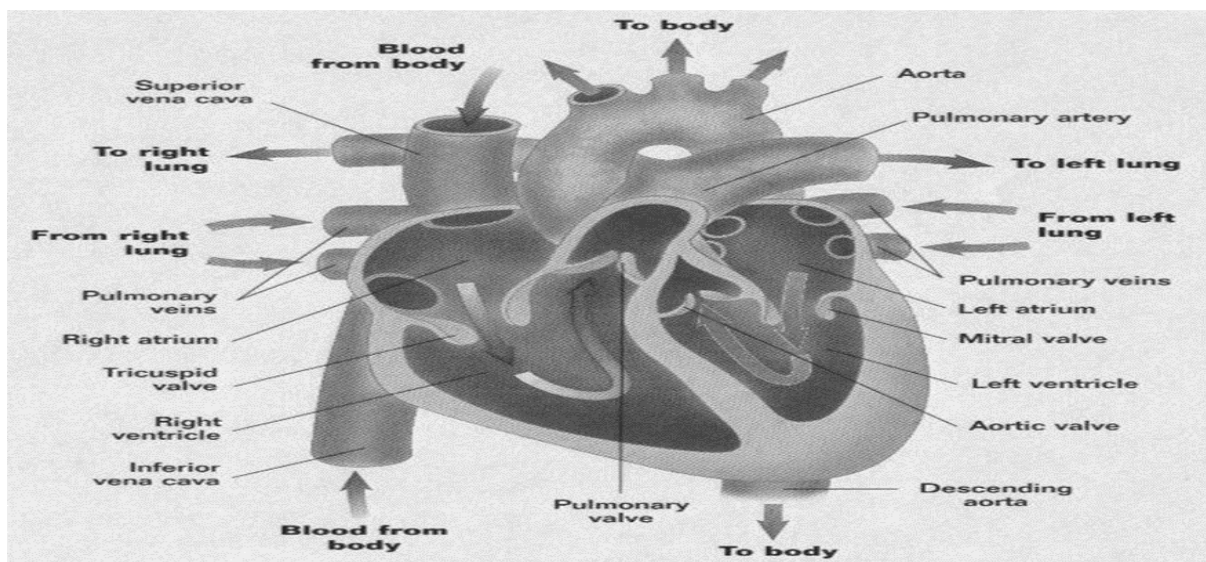


Plate - 9

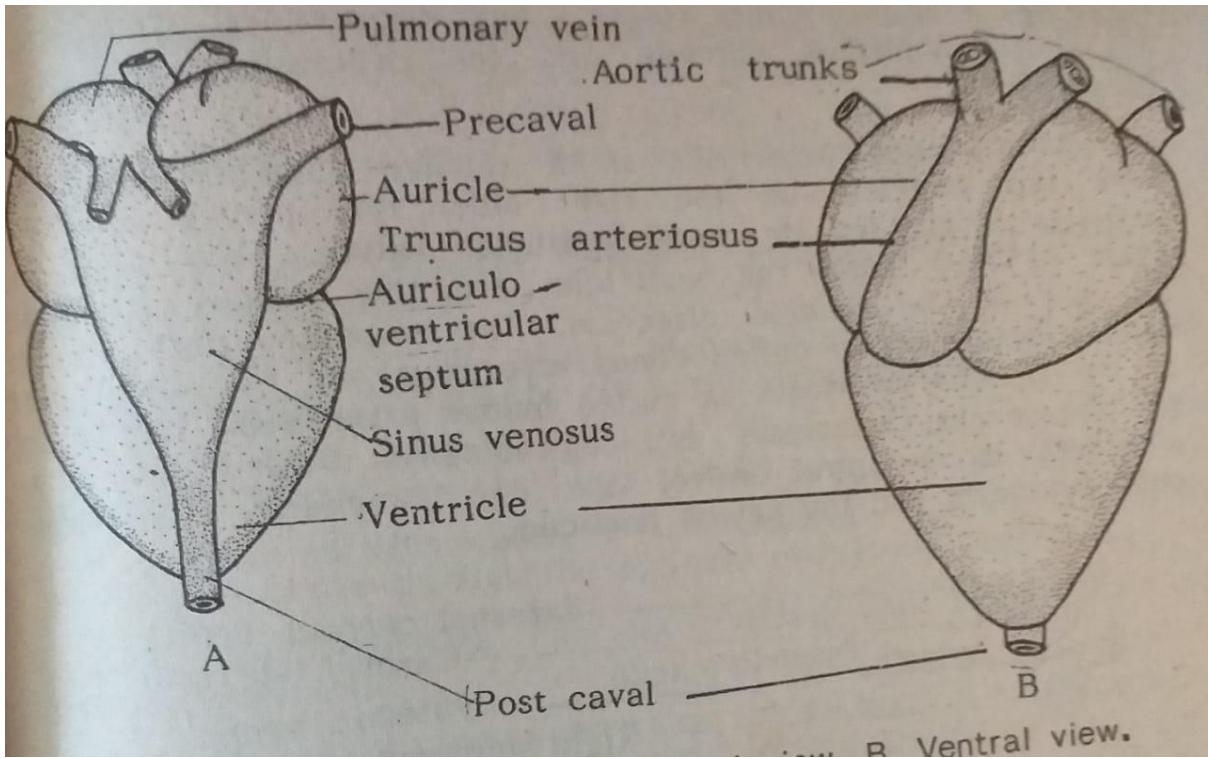


Plate - 10

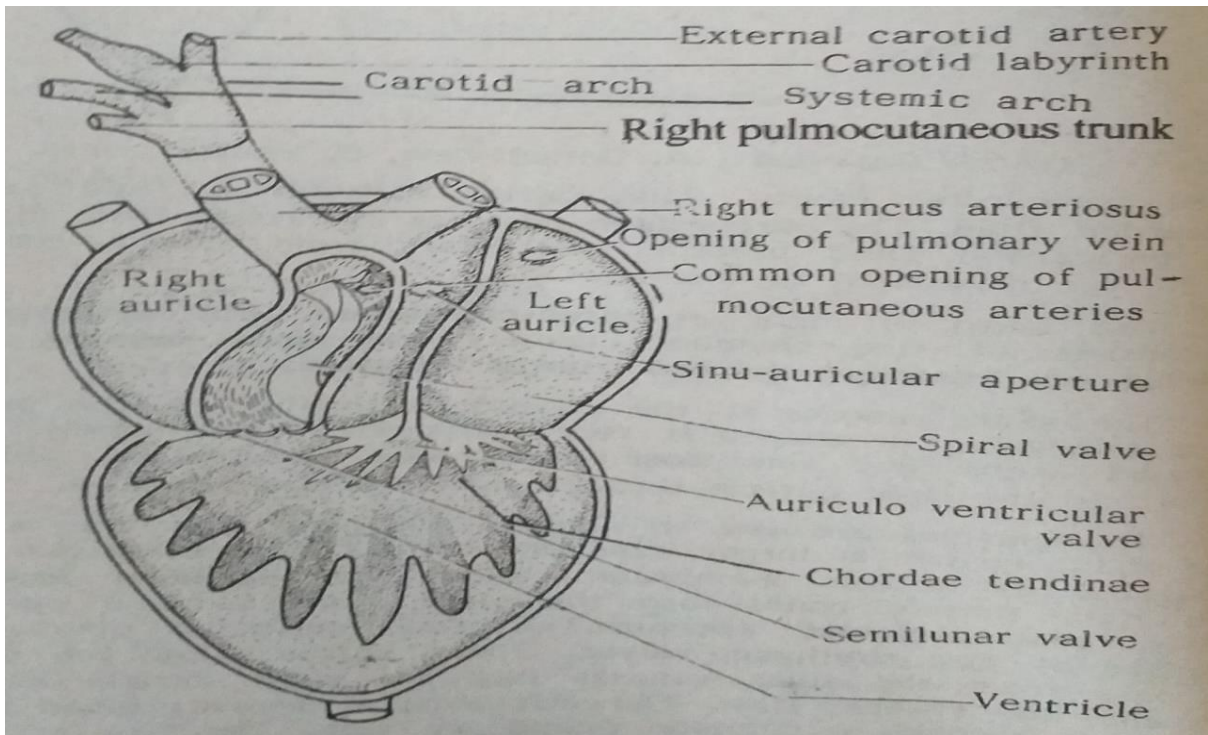


Plate 11

- *Three venacava (two precaval veins and one postcaval vein) - Deoxygenated blood - Sinus venous - sinuauricular aperature - R Auricle-auriculo ventricular aperature (guarded by two semilunar valves) - Ventricle*
- *Oxygenated blood - Pulmonary veins - L Auricle-auriculo ventricular aperature - Ventricle*
- *Common Ventricle - truncus arteriosus (guarded by three semilunar valves)*