

TREND IN THE EVOLUTION OF HEART :

IMPORTANT NOTES

The structure and function of heart show progressive complexity and specialization from lower chordates to Mammals.

The evolution of heart occurs in two aspects:—(a) increase in the number of the chambers of heart.

(b) Conversion of single type of circulation to complete double type of circulation.

General Structure :

(i) In all the vertebrates, the heart is enclosed by a double-walled sac known as the Pericardium. Between the two layers of Pericardium, there is a Pericardial cavity filled with a Pericardial

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fluid acts as shock absorber while the heart is working.

(i) Generally, Heart - Consists of following chambers:—

(A) Auricle (Atrium)

- Anterior thin walled chamber of the heart.

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(B) Ventricle

- Posterior and thick walled contractile portion of the heart.

Besides, there are 2 accessory chambers of the heart:—

(a) Sinus-Venosus

- Thin-walled sac.

(b) Conus arteriosus

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- Tube like chamber provided with several sets of valves.

In advanced groups of vertebrate sinus-venosus and conus arteriosus lose their identity.