

V II / Paper III / 14/09/10

## URINO-GENITAL SYSTEM IN SCOLIODON

In Scoliodon the excretory and reproductive systems are closely associated structures, particularly in male and so the two systems are usually considered together as urinogenital system.

Sexes are separate in Scoliodon and they exhibit sexual dimorphism. In the male the inner margin of pelvic fin bears copulatory organs called clasper. These claspers are absent in female.

### Male Urinogenital System:

The male urinogenital system of Scoliodon may be discussed under two heads (i) Excretory (Urinary) system and (ii) Reproductive system.

#### ① Excretory System:

The excretory system consists of following organs - ① A pair of kidney ② Ureter

③ Urinary aperture ④ Urinogenital sinus.

The kidneys are opisthonephric and are large ribbon like dark red organ situated in the coelom, one on either side of the vertebral column. Each kidney is covered by a layer of peritoneum and extends from the base of the liver to the side of the cloaca. Each kidney consists of two portions. The anterior portion is slender and non-renal part, called the genital kidney and the posterior thicker part is called renal kidney. The posterior part of kidney is composed of thousands of tubules called uriniferous tubules or nephrons. One end of each uriniferous tubule has a malpighian corpuscle. It is formed of a cup like structure called Bowman's capsule enclosing a network of capillaries called glomerulus. The other end is connected to a collecting tubule which receives many uriniferous tubules. The collecting tubules of the anterior region of kidney are small and open into the ureter.

Wolffian duct, but those of the posterior region open independently into the ureter. The ureter opens into the urinogenital sinus through urinary aperture. The urinogenital sinus opens into the cloaca.

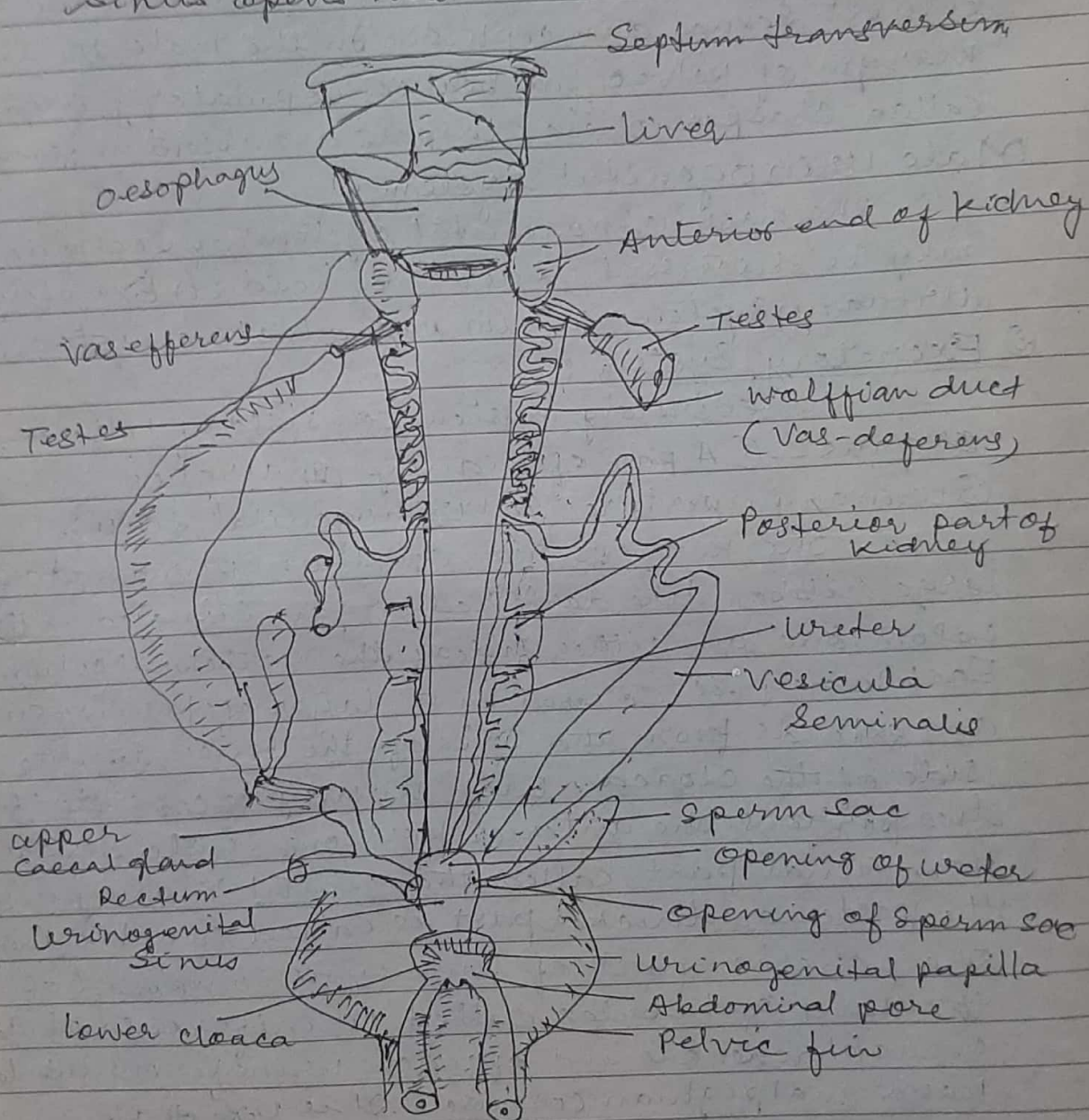


Fig - Scylliodon - Male urinogenital Organs.