

## Chapter 6

# LIFE PROCESSES

Excretion is the process by which the waste products produced during metabolic activities are removed from the body.

### Excretion in Human beings:

The excretory system consists of a pair of kidneys, a pair of ureters, urinary bladder and urethra. Basic unit of kidneys is Nephron.

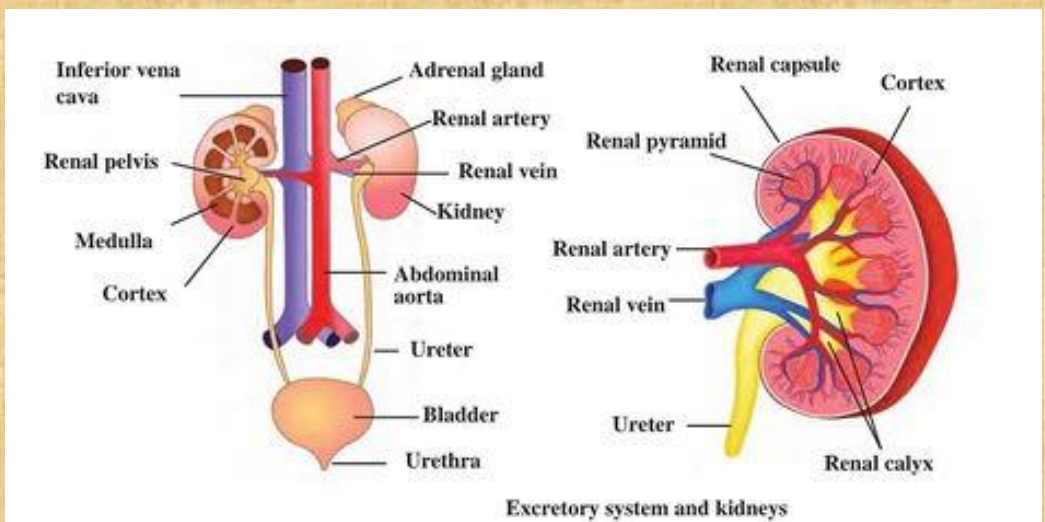
Nephron:

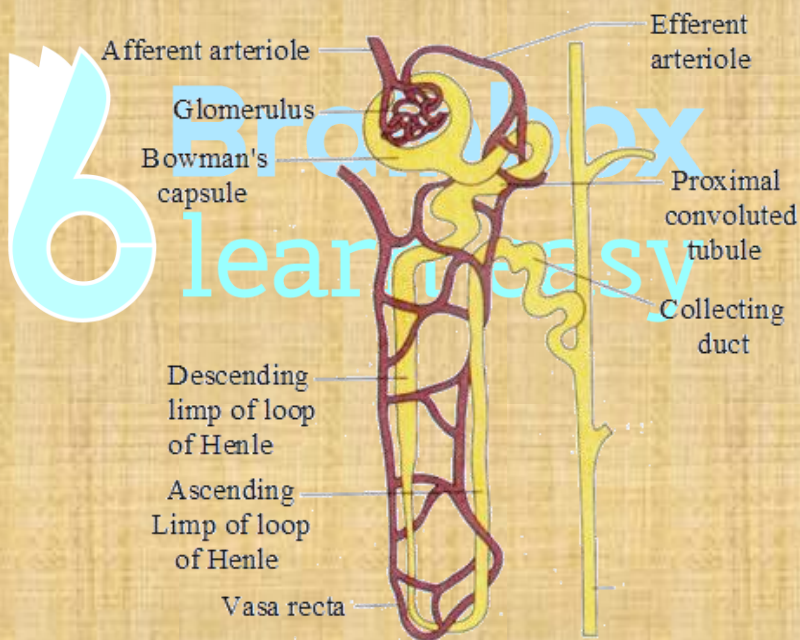
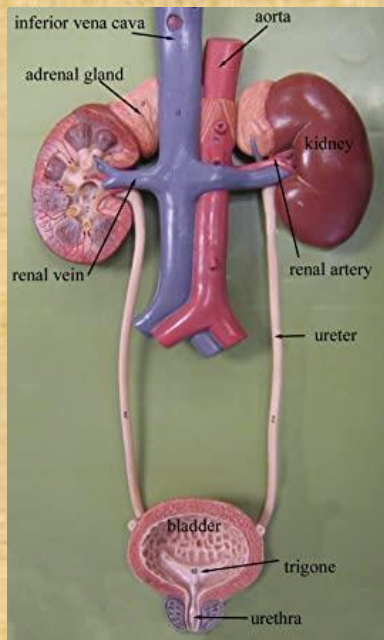
1. Each nephron has a cup like structure called Bowman's capsule containing a bundle of capillaries called glomerulus.
2. The Bowman's capsule leads into a tubular structure, which joins into a collecting duct.

The renal artery brings the nitrogenous waste like ammonia, urea, uric acid (urine) along with excess water, salts etc. into the nephron.

The waste then passes through the ureters into the urinary bladder and is then sent out through the urethra as urine.

The useful products like amino acids, glucose, salts etc. are reabsorbed by the capillaries around the tubular structure and goes into the renal vein.





**Figure : REPRESENTATION OF A NEPHRON**

**Excretion in plants:**

- In plants the gaseous waste products produced during respiration ( $\text{CO}_2$ ) and photosynthesis ( $\text{O}_2$ ) are removed through the stomata. Excess water is removed through the stomata. This process is called transpiration.
- Some waste products are stored in the leaves and removed when the leaves dry and fall off.

