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Class 10th

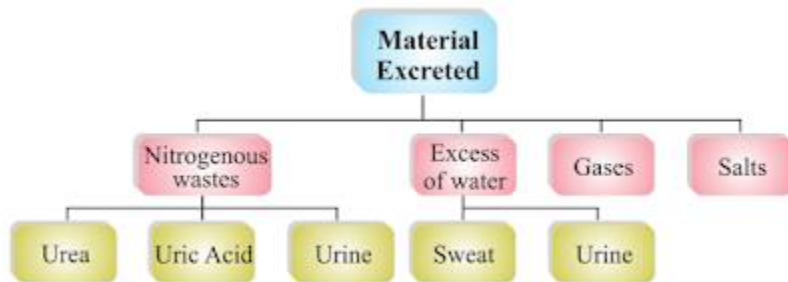
Subject Biology

Date:- 30.05.21

LIFE PROCESSES

Excretion System in Human Beings

Excretory wastes



Functions of Organs involved in Excretory System

Each kidney contains many filtration units called as **nephrons**.

→ Nephrons are made up of a cluster of thin walled capillaries called glomerulus which is associated with a cup like structure called as Bowman's capsule and the long tube which terminates through this capsule.

→ The renal artery brings oxygenated blood to the kidneys along with the nitrogenous wastes like urea and uric acid and many other substances.

→ The blood gets filtered through the glomerulus and this filtrate enters the tubular part of nephron.

→ As this filtrate moves down the tubular part, glucose, amino acids, salts and excess of water gets selectively reabsorbed by the blood vessels surrounding these tubules.

→ The amount of water reabsorbed depends upon :

(i) How much excess of water is there in the body and,

(ii) How much nitrogenous wastes need to be excreted out.

→ So the fluid now flowing in the tubular part is urine which gets collected in collecting ducts of nephrons.

→ These collecting ducts together leave the kidney at a common point by forming the ureter.

→ Each ureter drains the urine in the urinary bladder where it is stored until the pressure of expanded bladder leads to an urge to pass it out through urethra.

→ This bladder is a muscular structure which is under nervous control.

→ 180 litres of filtrate is formed daily but only 2 litres is excreted out as urine so the rest is reabsorbed in the body.