HOMEWORK

In Non question - 3 Pg - 112

Q How is the amount of urine produced regulate?

A The amount of urine produced depends on the amount of excess water and dissolved wastes present in our body. Habitat of an organism and hormone such as Antidiuretic hormone (ADH) also regulates the amount of urine produced.

Exercise question No. - 13

Q Compare the functioning of alveoli in the lungs & nephrons in the kidneys with respect to their structure and functioning.

A

	ALVEOLI	NEPHRONS
(i)	Alveoli are tiny balloon-like structure present inside the lungs	Nephrons are tubular structures present inside the kidneys.

(ii) The walls of alveoli are one cell thick and it contains an extensive network of blood capillaries.

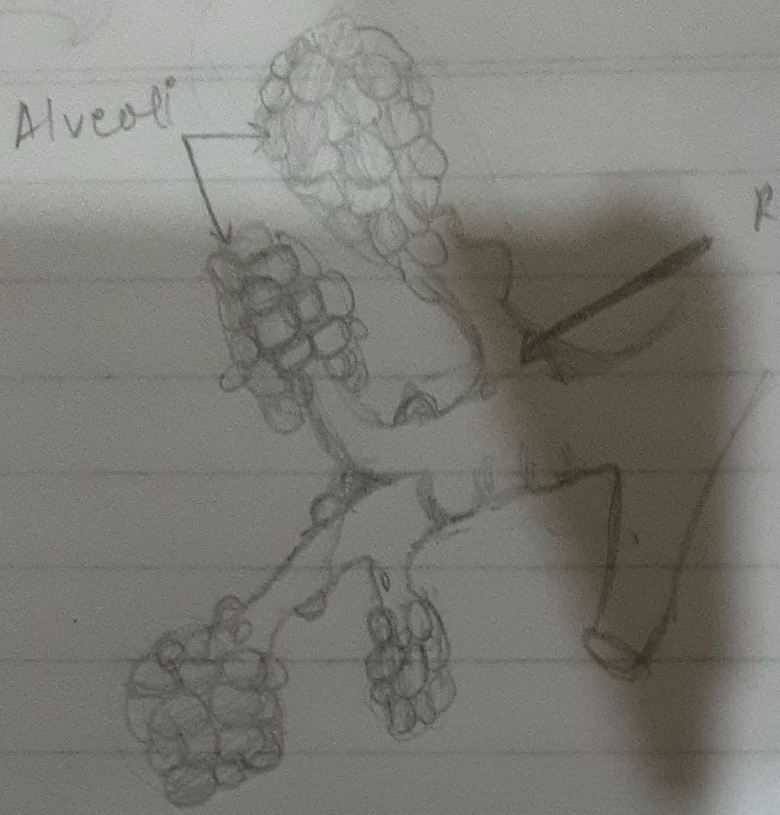
Nephrons are made of glomerulus, Bowman's capsule and a long renal tube. It also contains a cluster of thin walled capillaries.

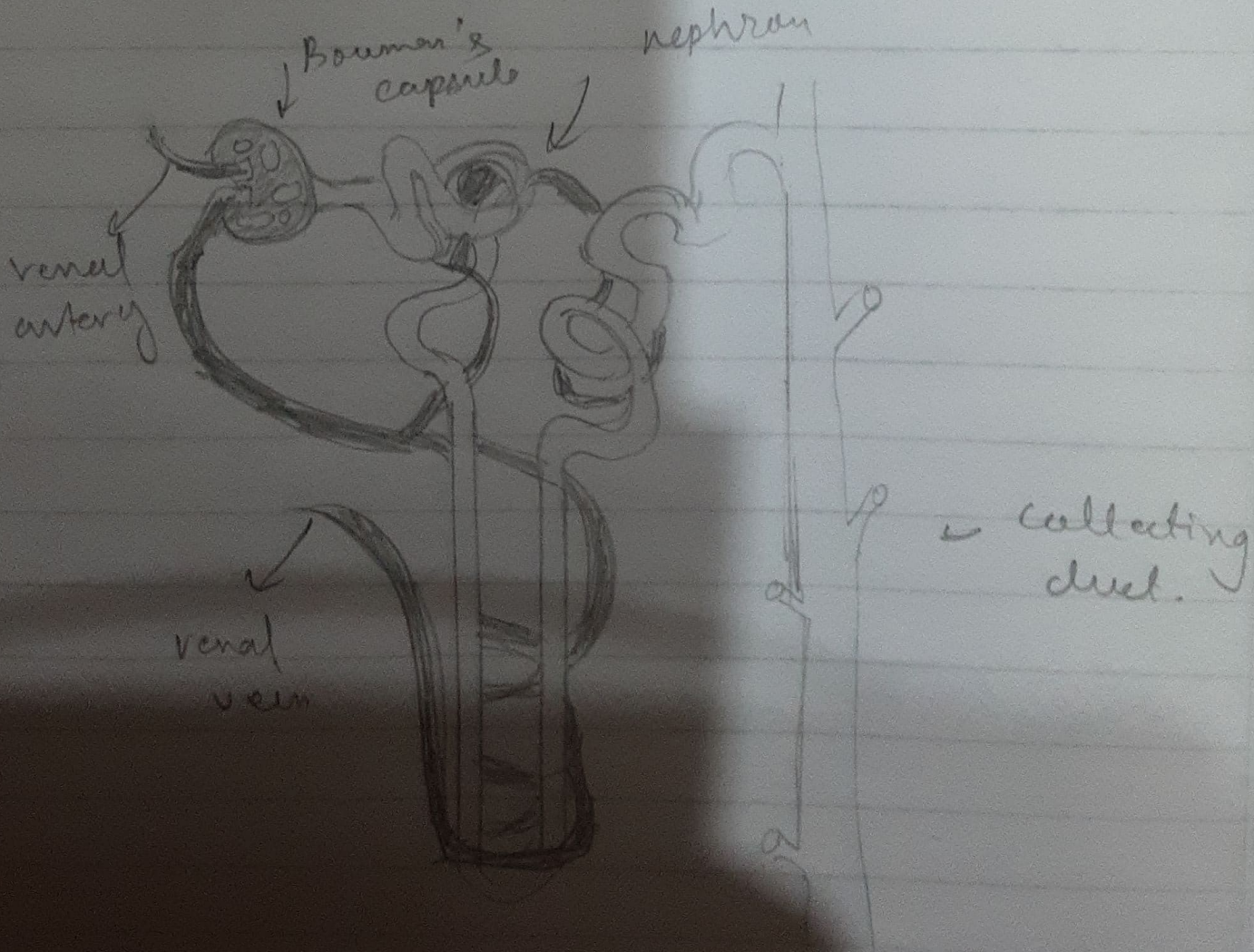
(iii) The exchange of O_2 and CO_2 takes place between the blood of the capillaries that surround the moist alveoli and the gases present in alveoli. The alveoli provides surface area where the exchange of gases can take place.

The blood enters the kidney through renal artery which branches into capillaries in glomerulus. The water & solute is transferred to nephron at Bowman's capsule. The filtrate moves through proximal tubule, distal tubule & collecting duct. Collecting duct collects urine from many nephrons and passes it to ureter. During the flow of filtrate, substances like glucose, amino acids and water are selectively reabsorped.

(iv) Alveoli are the site of the gaseous exchange

Nephrons are the basic functional filtration unit.


Alveoli
Respiratory bronchioles


Bowman's capsule
nephron
renal artery
collecting duct.
renal vein