

HOME ASSIGNMENT :

Q. How is the amount of urine produced?

A) The amount of urine is regulated by kidney. It depends on the quantity of excess water and wastes dissolved in water.

(i) Quality of water - when water is abundant in body tissues, large quantities of dilute urine is excreted out. When water is less in

quality in body tissues, a small quantity of concentrate urine is excreted.

(ii) Quality of dissolved wastes.

Dissolved wastes, especially nitrogenous wastes, like urea and uric acid and salts

(iii) Quantity of dissolved wastes.

Dissolved wastes, especially nitrogenous wastes, like urea and uric acid and salts are excreted.

(iv) Hormones. The amount of urine produced is also regulated by certain hormones which control the movement of water.

19. Compare the functioning of alveoli in the lungs and nephrons.

Alveoli	Nephron
→ Alveoli are functional unit of lungs.	→ Nephron are functional unit of kidney.
→ A mature lung has about 30 crore alveoli.	→ A kidney has about 10 lakh nephron.
→ Alveoli provide a wide surface for gaseous exchange.	The Bowman's capsule in nephron regulates the concentration of water and salts.