WORKSHEET 2

CHAPTER 1 – LIFE PROCESSES (IV) EXCRETION

A. Tick (✓) the correct option.

1. The network of capillaries in a nephron is
   a. Malpighian capsule. b. Bowman's capsule. c. the glomerulus. d. none of these.
2. Which of the following is not a part of a nephron?
   a. Henle's loop b. Proximal convoluted tubule
   c. Distal convoluted tubule d. Cortex
3. Mammalian kidney is
   a. oval. b. cylindrical. c. bean-shaped. d. trilobed.
4. The excretory organ in earthworm is
   a. nephridia. b. flame cells. c. nephron. d. raphides.
5. The substance which is not reabsorbed into the blood capillaries surrounding the tubule of a nephron is mainly
   a. glucose. b. amino acid. c. urea. d. water.

B. Fill in the blanks.

1. Bowman's capsule and tubule taken together make a _____
2. Gums and resins are the _____ products of plants.
3. _____ brings blood rich in nitrogenous waste into the kidney.
4. Each kidney is made up of a large number of excretory units called _____
5. The dialyser works as kidney except _____

C. State true (T) or false (F).

1. Kidney is located in the abdominal cavity.
2. Distal convoluted tubule opens in the loop of Henle.
3. Filtrate is hypotonic in proximal tubule.
4. *Amoeba* excretes excess water and nitrogenous waste through contractile vacuole.
5. Excretion helps in osmoregulation.

D. Name the following.

1. A nitrogenous waste product.
2. Excretory organ in flatworm.
3. The duct which carries urine from the kidney to the urinary bladder.
4. Ducts that drain the urine collected from the nephrons into the ureter.
5. A U-shaped loop formed in the middle of the nephric tubule.

Name: ..... Teacher's signature: .....

Class: X Date: .....

E. Answer the following questions.

1. What are the two vital functions of human kidney?
2. Give one advantage of having large number of highly coiled structure in kidney.
3. Mention any four substances which are selectively reabsorbed as the filtrate flows through the tubular part of nephron.
4. What are the waste products generated in plant? How do they get rid of them?
5. Draw a neat diagram of an excretory unit of human kidney and label on it:
   (*i*) Bowman's capsule (*ii*) Renal artery (*iii*) Glomerulus (*iv*) Collecting duct

ANSWERS

WORKSHEET 2

A. Tick (✓) the correct option.

1. c
2. d
3. c
4. a
5. c

B. Fill in the blanks.

1. Nephron
2. Excretory
3. Renal artery
4. Nephron
5. Selective reabsorption

C. State true (T) or false (F).

1. T
2. F
3. T
4. T
5. T

D. Name the following.

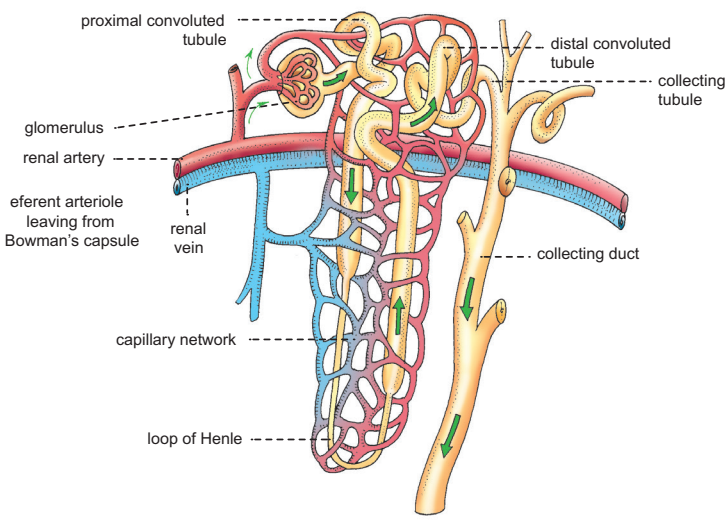
1. Urea
2. Flame cell
3. Ureter
4. Collecting tubule
5. Loop of Henle

E. Answer the following questions.

1. Removal of nitrogenous waste and osmoregulation.
2. Large number of highly coiled structures in kidney increase the surface area for selective reabsorption of useful metabolites and excess water.
3. Water, glucose, amino acids and salts.
4. The different waste products released by a plant are carbon dioxide, oxygen and excess water. Waste products are stored in cell vacuoles. The CO_2 and O_2 are utilized during photosynthesis and respiration respectively.

   Excess water escapes by transpiration. In the old xylem, resins and gums are stored and released when the barks fall off. When the leaves fall, the waste stored in cellular vacuoles are released.

5.



The fltration unit: Nephron