

Book work (page number 83).

Name the following.

1. A term used to denote removal of waste materials produced in the cells of the Living Organism.

1. Excretion

2. Excretory organs responsible for removal of carbon dioxide during exhalation.

2. Lungs

3. Images of waste product of our body that is removed from the blood by Kidneys.

3. Urea

4. Narrow tube which run from the inner side of each kidney and carry urine from Kidneys to the bladder.

4. Ureters

5. Thousands of tiny filters present in each kidney.

5. Nephrons.

6. A Cup shaped bag at the upper end of nephron.

6. Bowman's capsule.

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Name the following.

1. **urine** is stored in the bladder for some time and ultimately passed out of the body through urethra.

2. **Sweat** is removed through the skin.

3. During respiration **CO₂** is a waste product expelled out of the body by lungs through nostrils.

4. The liver produces **bile** pigments from haemoglobin of destroyed and dead RBC.

5. Microorganisms such as chlamydia and **mycoplasma** can cause urinary tract infections .

EXERCISES

A. Choose the correct option.

1. Which of the following may cause UTI?

d. All of these

2. Which of the following is an example of nitrogenous waste products?

d. All of these

3. Which of the following is not an excretory organ?

C. Uterus

4. Which of the following is an accessory excretory organ in human beings?

d. Kidney

5. Which of the following is a chief excretory organ?

d. Kidney

6. During the situation stage which substance is secreted into the filtrate in exchange of reabsorbed sodium?

b. Potassium

7. Kidney stone refers to solid deposit that occurs in the following system:

a. Urinary

FILL IN THE BLANKS:

1. The main excretory product in human being is **urine**.
2. The tubes which connect kidney together are called **ureters**
3. The tube which carries urine from the bladder to outside of the body is called **urethra**.
4. The Kidneys contains thousands of Tiny filters called **nephrons**
5. Excretion involves the removal of those rays which are produced in the **body** of living organisms.

C.WRITE TRUE OR FALSE.

1. Oxygen is expelled out of the body through lungs. **False**
2. Function of urine takes place in the Kidney in three stages. **True**
3. The most common treatment for urinary tract infection is antibiotics. **True**
4. The solid deposits that occur in the urinary system are called bladder stones. **False**
5. An artificial kidney is called dialyser. **True**

D. Answer the following questions in short.

1. What is excretory organs? Give examples.

Ans. The organs for the removal of waste materials in the human body are known as excretory organs. Lungs ,Kidneys and sweat glands are excretory organ in human body.

2. Define ureter and nephron.

Ans.**Ureter:** ureters are the narrow tubes which runs from the inner side of each kidney and carry urine from the Kidneys to the bladder.

Nephrons: Nephrons are functional unit of the kidney, the structure that actually produces urine in the process of removing waste and excess substances from the blood.

3. What do you understand by urinary tract infection?

Ans. An infection in the urinary tract is called an urinary tract infection or UTI. It is caused by bacteria such as E.coli.

4. What is dialysis? Why is it used?

Ans.A machine that performs dialysis, it is used to remove impurities from the blood of patients .

5. How do kidney stones form?

Ans. Solid deposits that occur in the urinary system are called kidney stone. They form inside the Kidneys out of substance found in urine.

6. What do you understand by the term kidney failure?

Ans. Failure of Kidneys leads to the accumulation of excessive urea in the blood of a person.

7. How can a person having kidney failure survive?

Ans. A person having kidney failure cannot survive unless is blood is filtered pre-order Kali through kidney machine to remove urea.

E. Answer the following questions in detail.

1. What is meant by excretion? What are the various waste materials excreted from the human body? Why is it necessary to excrete waste products?

Ans. The process of removal of waste materials produced in the cells of the living organism is known as excretion.

The various waste materials produced in the cells of the human body are carbon dioxide, urea and sweat.

It is necessary to excrete waste products because it can harm our body. It contains undigested particles in the human body.

2. What is the urinary system? Describe the system with a well-labelled diagram.

Ans. The urinary system, also known as the renal system or urinary tract, consists of the kidneys, ureters, bladder, and the urethra. The purpose of the urinary system is to eliminate waste from the body, regulate blood volume and blood pressure. (draw diagram from Pg no.82 fig.5.1)

The excretory system of human beings consists of the following organs: two kidneys, two ureters, a bladder and a urethra.

Kidneys: The kidneys are bean-shaped organs towards the back of our body just above the waist. Every person has two kidneys. The function of kidneys is to filter the blood to remove urea.

Ureters: Ureters are the narrow tubes which run from the inner side of each kidney and carry urine from the kidneys to the bladder.

Bladder: The bladder is a muscular bag situated in the lower abdomen which stores urine till the time we go to the toilet.

Urethra: The urine collected in the bladder is passed out from the body at regular intervals through the opening at the end of a tube called urethra.

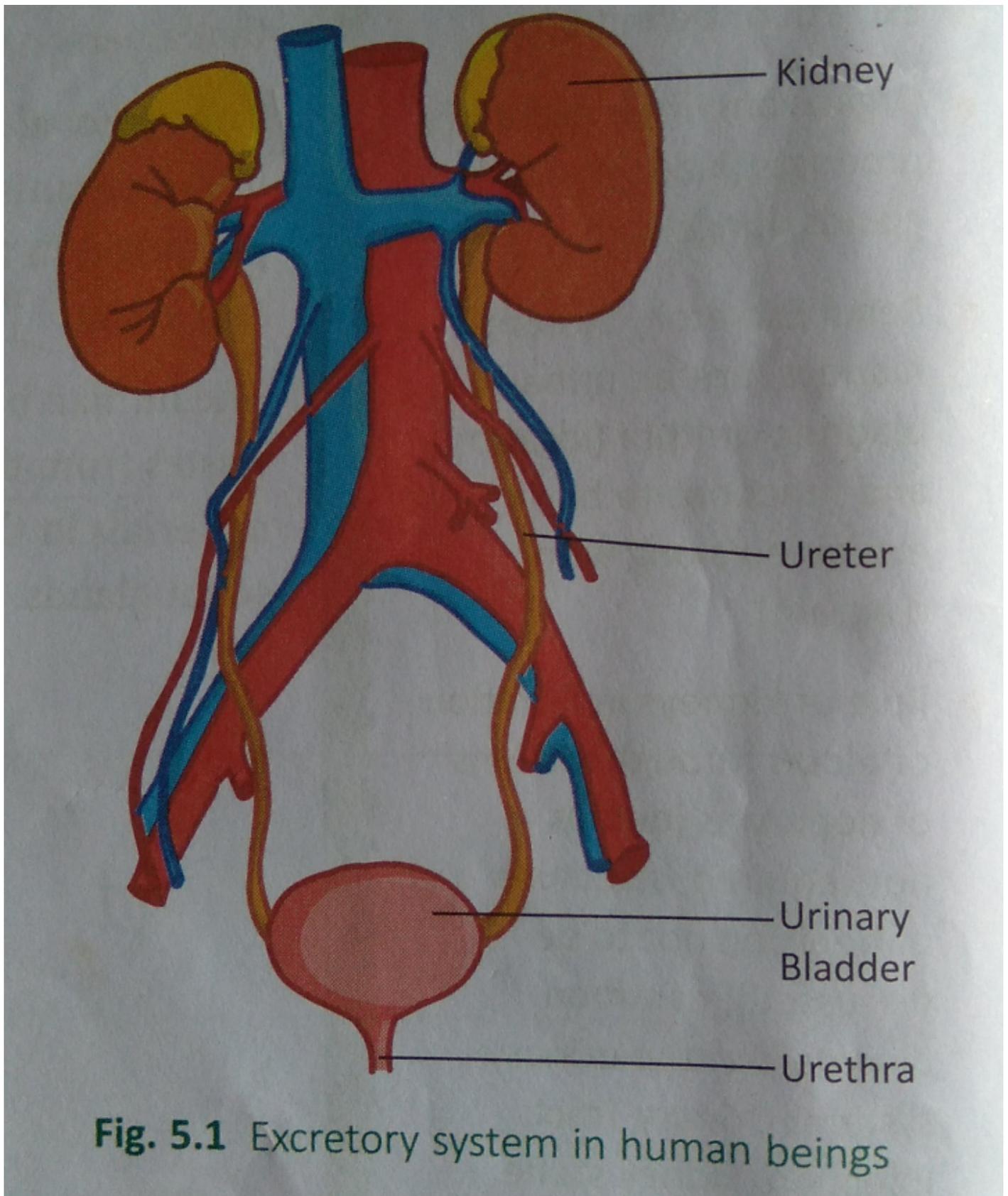
3. Describe the formation and composition of urine.

Ans. Urine is 95% water

The nephrons of the kidneys process blood and create urine through a process of filtration, reabsorption, and secretion. Urine is about 95% water and 5% waste products. Nitrogenous wastes excreted in urine include urea, creatinine, ammonia, and uric acid.

4. What are the various organs of the human excretory system? Draw a diagram of the human excretory system and label the various parts.

Ans. The excretory system of human beings consists of the following main organs: two kidneys, two ureters, bladder and urethra. The excretory system removes the poisonous waste substances from the body in the form of urine and maintains ionic balance called osmoregulation.



5. What do you understand by artificial kidney? Describe its function.

Ans. Hemodialysis is a procedure where a dialysis machine and a special filter called an artificial kidney, or a dialyzer, are used to clean your blood. To get your blood into the dialyzer, the doctor needs to make an access, or entrance, into your blood vessels. This is done with minor surgery, usually to your arm.