



Dr. Bbosa Science

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Uganda East Africa

Senior one to senior six

+256 778 633 682, 753 802709

Based on, best for sciences

Excretion

This is the removal of metabolic waste products from the body

Example of excretory product

1. Carbon dioxide
2. Ammonium excretory product (ammonia, urea and uric acid)

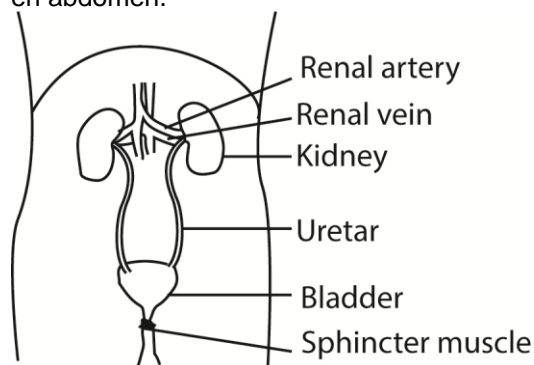
Table of excretory organs and their excretory product

Excretory organ	Products of excretion
Lungs	Carbon dioxide
Skin	Urea, ammonia
Kidney	Urea ammonia and uric acid

The kidney

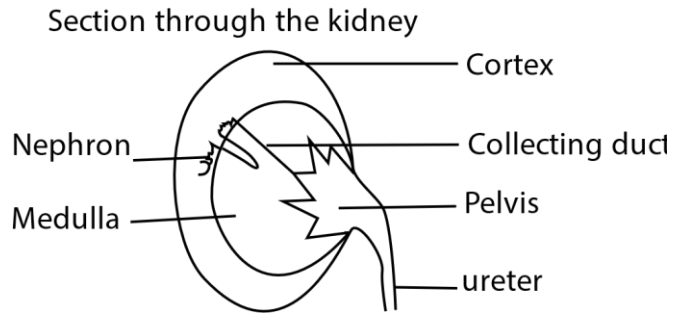
This is an excretory organ of the body

Kidneys are situated in the abdominal cavity. They are two dark red bean shaped organ on each side of the abdomen.



Functions of the kidney

- (i) Filter blood
- (ii) They remove nitrogenous wastes (urea, ammonia and uric acid) from the body in form of urine
- (iii) They regulate water in the body



Function of other parts of urinary system

- (i) Ureter carries urine from the kidney to bladder
- (ii) Bladder temporarily stores urine before passed out of the body
- (iii) Sphincter releases urine from the bladder

Diseases and disorders of the Urinary system

- (i) Bilharzia
- (ii) Kidney failure
- (iii) Kidney stone
- (iv) Kidney cancer
- (v) Enlarged prostate
- (vi) Infections

Signs and symptoms of urinary system

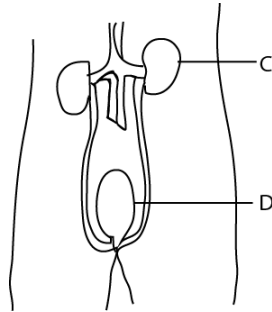
- (i) Frequency of urination
- (ii) Difficult in passing urine
- (iii) Fever

Good habit of promoting urinary system health

- Eat balanced diet
- Avoid smoking
- Drink a lot of water each day
- Regular exercise
- Avoid excessive consumption of alcohol

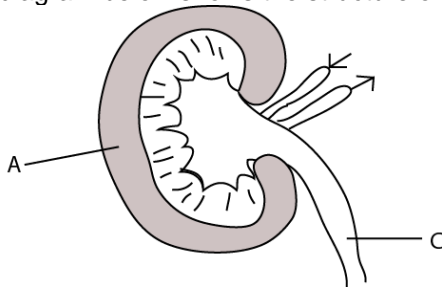
Revision questions

1. Name the human body system to which the lungs, kidneys and skin belong.
.....
2. Name the human body system which eliminated wastes.
.....
3. Why does blood go to the kidneys during circulation?
.....
4. Name the human body organ where filtration of blood takes place
.....
5. Apart from the skin and lungs name any one other excretory organ.
.....
6. State any one function of human kidney.
.....
7. The diagram below is one of the systems of human being



- (a) Name parts labelled:
 - (i) C:
 - (ii) D:
- (b) What is the function of structure C?
.....

8. The diagram below shows the structure of a kidney. Use it to answer question (a) and (b)



- (a) Name the part labelled with letter A.
.....

(b) What substance goes through the part labeled **C**?
.....

(c) State any two function of the kidney that are similar to those of a skin.
.....

(i)

(ii)

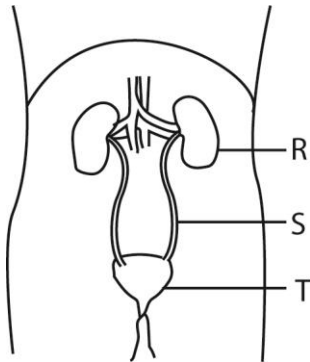
9. (a) Which organ removes urine from the body?
.....

(b) To which body system does the organ that removes urine from the body?
.....

(c) Where does urine collect before it is removed from the body?
.....

(d) Name one substance found in urine.
.....

10. The diagram below is of human urinary system. Study and use it to answer the questions that follow



(a) Name the parts marked S and T

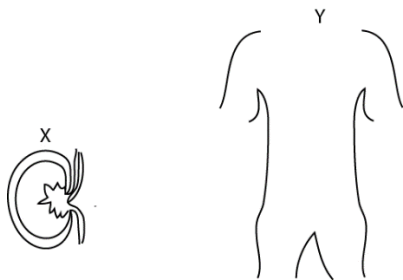
(i) S

(ii) T

(b) What is the function of the part marked R?
.....
.....

(c) Give any one disease that affects the above system
.....

11. Use the diagram X and Y below to answer the questions that follow.



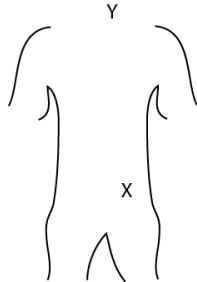
(a) Name the organ shown in diagram X.

.....

(b) What is the function of the organ shown in diagram X?

.....

(c) Mark on the drawing Y the position of the organ shown in drawing X.



(d) Name another organ in a mammal that carries out a similar function as the organ shown in the drawing X.

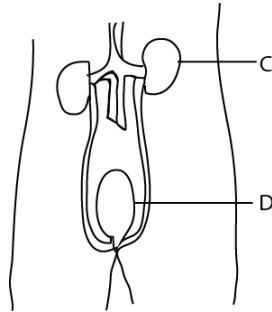
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12. What system is responsible for the removal of waste materials from our bodies?

.....

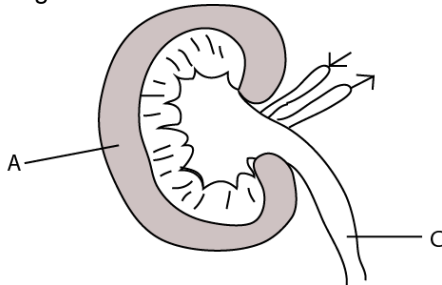
Suggested answers

1. Name the human body system to which the lungs, kidneys and skin belong.
Excretion system
2. Name the human body system which eliminated wastes.
Excretory system
3. Why does blood go to the kidneys during circulation?
To remove metabolic wastes and excess water
4. Name the human body organ where filtration of blood takes place
Kidney
5. Apart from the skin and lungs name any one other excretory organ.
Kidney
6. State any one function of human kidney.
Regulates body water
Removes urea and ammonia from blood
Controls pH of blood
7. The diagram below is one of the systems of human being



- (c) Name parts labelled:
(i) C: **kidney**
(ii) D: **urinary bladder**
- (d) What is the function of structure C?
It removes waste products, excess water and salts from the body

8. The diagram below shows the structure of a kidney. Use it to answer question (a) and (b)



(a) Name the part labelled with letter A.

Cortex

(b) What substance goes through the part labeled C?

Urine

(c) State any two function of the kidney that are similar to those of a skin.

(iii) **Removal of urea**

(iv) **Remove excess water**

9. (a) Which organ removes urine from the body?

Kidney

(b) To which body system does the organ that removes urine from the body?

Excretory system

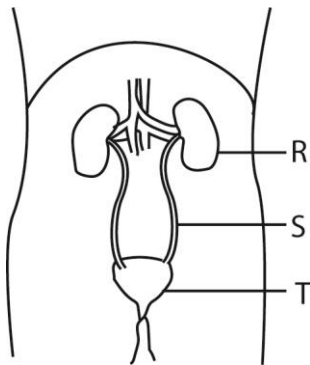
(c) Where does urine collect before it is removed from the body?

Urinary bladder

(d) Name one substance found in urine.

Urea, water, uric acid, salts

The diagram below is of human urinary system. Study and use it to answer the questions that follow



(a) Name the parts marked S and T

(iii) **S - Ureter**

(iv) **T – urinary bladder**

(b) What is the function of the part marked R?

Regulates body water

Removes urea and ammonia form blood

Controls pH of blood

(c) Give any one disease that affects the above system

Bilharzia

Kidney stones

Kidney cancer

10. Use the diagram X and Y below to answer the questions that follow.



(e) Name the organ shown in diagram X.

Kidney

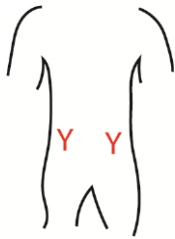
(f) What is the function of the organ shown in diagram X?

To remove waste metabolic products from the blood

To regulate amount of water in the body

To regulate body pH

(g) Mark on the drawing Y the position of the organ shown in drawing X.



(h) Name another organ in a mammal that carries out a similar function as the organ shown in the drawing X.

lungs

skin

11. What system is responsible for the removal of waste materials from our bodies?

Excretory system