

# GRADE 8 REVISION (3)

## CHAPTER # 14 HOMEOSTASIS

(0610/21 October/November 2016)

1. When the blood glucose concentration is low, which hormone is released and which organ releases it?

	hormone	organ
A	glucagon	liver
<input checked="" type="radio"/> B	glucagon	pancreas
C	insulin	liver
D	insulin	pancreas

(0610/21 October/November 2017)

2. What is the most important function of sweating?

- A to remove excess heat from the body
- B to remove excess salts from the body
- C to remove excess urea from the body
- D to remove excess water from the body

(0610/21 October/November 2015)

3. Why do mammals sweat?

- A to cool the body
- B to lose water vapour through the skin surface
- C to release energy through the oxidation of glucose
- D to remove glucose from the blood

(0610/21 October/November 2014)

4.

The table shows a student's water losses on a cool day.

	water loss / cm <sup>3</sup>
in urine	1500
in faeces	100
in expired air	400
in sweat	800
total	2800

On a hot day the student's water intake was the same as on the cool day.

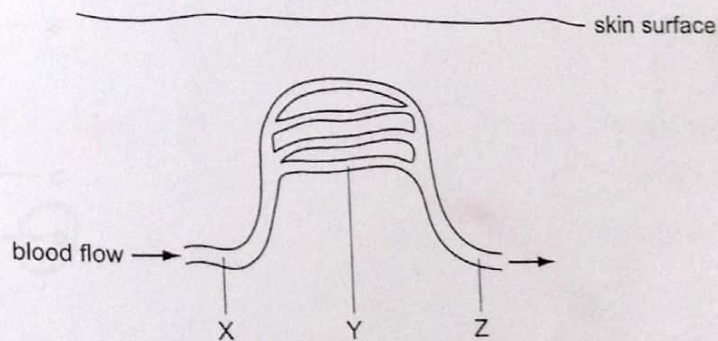
On the hot day, which water losses would increase and which would decrease?

	increase	decrease
A	in sweat	in expired air
<b>B</b>	in sweat	in urine
C	in urine	in faeces
D	in urine	in sweat

(0610/21 October/November 2013)

5.

The diagram shows some blood vessels near the surface of the skin.



If vasoconstriction occurs at X, what happens to the blood flow at Y and Z?

	Y	Z
<b>A</b>	decreases	decreases
B	decreases	stays constant
C	increases	increases
D	increases	stays constant

6.

How does sweating cool the body?

- A Sweating causes vasodilation.
- B Sweating decreases the water content of the blood.
- C Urea and salt are lost from the body in sweat.
- D Water in sweat evaporates from the skin.

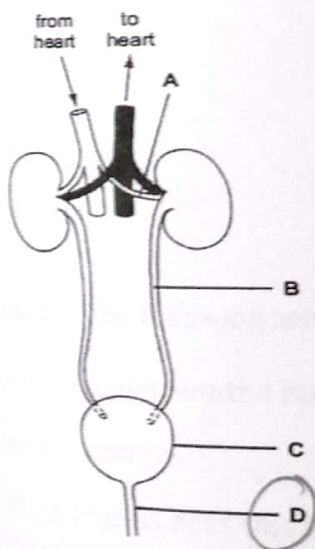


4. During a long-distance race, the body temperature of an athlete begins to rise.  
Which changes occur to help return the body temperature to normal? May/June 2005

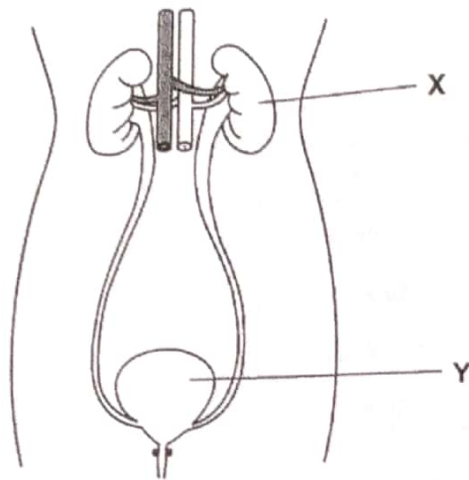
	sweating	blood vessels in the skin
A	decreases	constrict
B	decreases	dilate
C	increases	constrict
<b>D</b>	increases	dilate

5. The diagram shows structures associated with the human urinary system.

Which structure is the urethra?( May/June 2004)



6. The diagram shows some of the structures found in the human abdomen.



What type of structures are X and Y?

	X	Y
<b>A</b>	organ	organ
<b>B</b>	organ	organ system
<b>C</b>	organ system	tissue
<b>D</b>	tissue	organ system

7. What is an example of homeostasis? May/June 2007

A breathing in oxygen

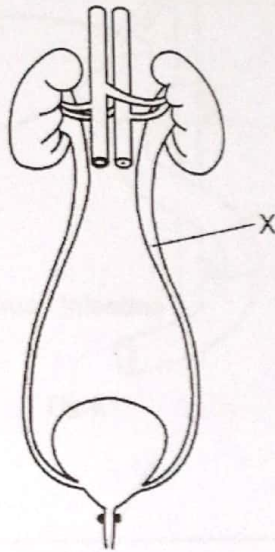
**B regulating blood glucose**

C removing undigested food through the anus

D urinating to empty the bladder

17. May/June 2012.

The diagram shows the human urinary system.



Which substance is **not** found in the liquid at X in a healthy person?

- A glucose
- B salt
- C toxins
- D urea

18. Read the following sentence. May/June 2012.

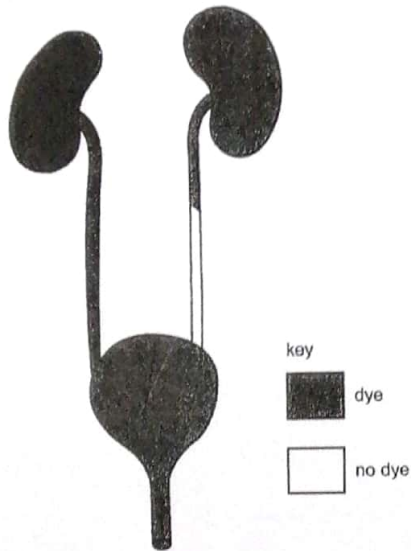
In order to prevent the human body from losing heat, the arterioles supplying the skin become narrow.

Which process does this sentence describe?

- A constriction
- B shivering
- C sweating
- D vasodilation



21. A patient has dye injected into the blood supply to his kidneys. The dye appears in his excretory system as shown.



Which part is blocked?

- A one kidney
- B one ureter**
- C the bladder
- D the urethra

22. October/November 2004

How do sweat glands and blood vessels near the skin surface respond when body temperature rises above normal?

	sweat glands	blood vessels near the skin surface
A	decreased activity	constriction
B	decreased activity	dilation
C	increased activity	constriction
<b>D</b>	increased activity	<b>dilation</b>