

BIOLOGY

HOMOEOSTASIS

Total Marks: 25

Duration: 0 hours, 20 minutes

Instructions to test takers

1. Answer all the questions in this paper
2. All the answers for the questions in this paper will be found on **Study Star** (www.studystar.me)
3. Using the answers on the website, mark yourself truthfully and carefully.

Turn this page, time yourself and begin the test

Section A [10 marks]

1. Which of the following is a correct importance of homeostasis?
 - a. Control of heat levels in the body
 - b. Control of thinking capacity in the brain
 - c. Control of sugar levels in the blood
2. Which hormone is produced when there is too much glucose in the body?
 - a. Adrenaline
 - b. Insulin
 - c. Glucagon
3. When it is too hot, what happens to the erector muscle?
 - a. Contracts
 - b. Relaxes
 - c. Flattens
4. When it is too cold the liver _____
 - a. Increases the rate of metabolism of macromolecules
 - b. Decreases the rate of metabolism of macromolecules
 - c. Produces bile
5. Which of the following is not an organ of homeostasis?
 - a. Brain
 - b. Heart
 - c. Lungs
6. When there is too much water in the blood, ADH _____
 - a. Is produced
 - b. Is not produced
 - c. Is transported to the liver
7. ADH makes the blood capillaries _____
 - a. More permeable to water
 - b. Less permeable to water
 - c. contract
8. When is glucagon released?
 - a. When there is too much glucose in the blood
 - b. When there is too little glucose in the blood
 - c. When there is too much water in the blood

9. The sweat glands become more active when _____

- a. It is too cold
- b. It is normal
- c. It is too hot

10. What happens to the erector muscle and sweat glands on a hot day?

	Erector muscle	Sweat glands
a.	Contracts	Becomes more active
b.	Relaxes	Becomes less active
c.	Relaxes	Becomes more active

Section B [5 marks]

11. When there is too much glucose in the body, what detects and signals the pancreas?
12. The process of controlling water levels in the blood is called _____
13. The process of controlling temperature levels in the blood is called _____
14. What is the normal body temperature of a human being?
15. What hormone is secreted when there is too little glucose in the blood?

Section C [10 marks]

16. State three organs of homeostasis. [3]
17. State three changes that occur when it is too hot. [3]
18. State two importance(s) of homeostasis [2]
19. Define homeostasis [1]
20. ADH is released when? [1]



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