

Immunity WS # 1/Living Environment
Multiple Choice Section

Name _____

1. Which substances produced in the body are directly responsible for the rejection of a transplanted organ? (1.) antigens (2.) histamines (3.) antibodies (4.) excretions
2. The organ system in humans most directly involved in the production of antibodies in the immune reaction is the (1.) endocrine (2.) circulatory (3.) digestive (4.) excretory
3. Substances formed by the human body in response to foreign proteins entering the body are called (1.) antigens (2.) antibodies (3.) platelets (4.) red blood cells
4. Some white blood cells recognize _____ as foreign molecules. (1.) antibodies (2.) antigens (3.) allergies (4.) platelets
5. _____ are proteins formed by some white blood cells to destroy antigens.
(1.) Antibodies (2.) Antibiotics (3.) Allergies (4.) Platelets
6. A disease causing organism in the body is also known as a(n) (1.) antibody (2.) antihistamine (3.) hormone (4.) pathogen
7. The increase in specific antibodies in the blood after exposure to a pathogen characterizes which type of response (1.) reflex (2.) endocrine (hormone) (3.) voluntary (4.) immune
8. Which makes antibodies? (1.) red blood cells (2.) white blood cells (3.) platelets (4.) enzymes
9. Which may infect plants and animals and disrupt homeostasis causing disease? (1.) viruses (2.) fungi (3.) bacteria (4.) all of the previous things may do this
10. To replace burned skin, doctors can successfully transplant replacement skin taken from another part of the body of the burn victim. Which statement best explains why the transplanted skin is *not* rejected?
(1) The transplanted skin is damaged, making the immune system nonfunctional.
(2) The antigens of the replacement skin are the same as those of the damaged skin.
(3) Burn victims lose so much blood that white blood cells cannot cause an immune response.
(4) There is no blood supply to the skin, so mixing of antigens does not occur.
11. Antibody molecules and receptor molecules are similar in that they both
(1) control transport through the cell membrane
(2) have a specific shape related to their specific function
(3) remove wastes from the body (4) speed up chemical reactions in cells

12. Some diseases and their causes are listed below.

- A. Flu—influenza virus
- B. Lung cancer—smoking
- C. Cystic fibrosis—genes
- D. Dysentery—parasitic ameba

Which disease would individuals have the greatest difficulty preventing in themselves?

- (1) A (2) B (3) C (4) D

13. A function of white blood cells is to (1) transport oxygen to body cells

- (2) produce hormones that regulate cell communication
- (3) carry glucose to body cells (4) protect the body against pathogens

14. A characteristic shared by all enzymes, hormones, and antibodies is that their function is determined by the

- (1) shape of their molecules (2) DNA they contain
- (3) inorganic molecules they contain (4) organelles present in their structure

Completion Section

1. A chemical produced in response to an antigen is called a(n) _____.

2. Foreign substances in the body which stimulate an immunological response are called _____.

True/False Section: Indicate whether the statement is true or false. If the statement is false, change the bold print word or phrase in the statement to make the statement true.

1. **Antigens** produced by our white blood cells will remain in our body and have a memory to fight off subsequent invaders of the same kind.

2. A specific antibody can fight off **any kind of** antigen.

3. The **immune system** is designed to protect against pathogens such as microscopic organisms and foreign substances that arise from outside the body.

4. Our immune system normally protects from cancer cells that arise within our bodies due to the action of **red blood cells**.

5. Antigen-antibody responses are normally **non specific**.

6. Failure to maintain homeostasis will usually result in **good** health