Immune System: Practice Questions #1

1. An individual who has had chicken pox rarely gets the disease again. This situation is an example of
   A. biological control
   B. negative feedback
   C. active immunity
   D. passive immunity

2. One similarity between cell receptors and antibodies is that both
   A. are produced by nerve cells
   B. are highly specific in their actions
   C. slow the rates of chemical reactions
   D. are involved in digestion

3. If a human system fails to function properly, what is the most likely result?
   A. a stable rate of metabolism
   B. a disturbance in homeostasis
   C. a change in the method of cellular respiration
   D. a change in the function of DNA

4. The diagram below represents what can happen when homeostasis in an organism is threatened.

Which statement provides a possible explanation for these events?
   A. Antibiotics break down harmful substances by the process of digestion.
   B. Some specialized cells mark and other cells engulf microbes during immune reactions.
   C. Embryonic development of essential organs occurs during pregnancy.
   D. Cloning removes abnormal cells produced during differentiation.
5. Which statement does not describe an example of a feedback mechanism that maintains homeostasis?

A. The guard cells close the openings in leaves, preventing excess water loss from a plant.
B. White blood cells increase the production of antigens during an allergic reaction.
C. Increased physical activity increases heart rate in humans.
D. The pancreas releases insulin, helping humans to keep blood sugar levels stable.

6. Antibody molecules and receptor molecules are similar in that they both

A. control transport through the cell membrane
B. have a specific shape related to their specific function
C. remove wastes from the body
D. speed up chemical reactions in cells

7. A function of white blood cells is to

A. transport oxygen to body cells
B. produce hormones that regulate cell communication
C. carry glucose to body cells
D. protect the body against pathogens

8. Which activity would stimulate the human immune system to provide protection against an invasion by a microbe?

A. receiving antibiotic injections after surgery
B. choosing a well-balanced diet and following it throughout life
C. being vaccinated against chicken pox
D. receiving hormones contained in mother’s milk while nursing

9. Certain microbes, foreign tissues, and some cancerous cells can cause immune responses in the human body because all three contain

A. antigens
B. enzymes
C. fats
D. cytoplasm
10. Which statement best describes what will most likely happen when an individual receives a vaccination containing a weakened pathogen?

A. The ability to fight disease will increase due to antibodies received from the pathogen.
B. The ability to fight disease caused by the pathogen will increase due to antibody production.
C. The ability to produce antibodies will decrease after the vaccination.
D. The ability to resist most types of diseases will increase.

11. Vaccinations help prepare the body to fight invasions of a specific pathogen by

A. inhibiting antigen production
B. stimulating antibody production
C. inhibiting white blood cell production
D. stimulating red blood cell production

12. Worms that had been invaded by bacteria were eaten by a species of bird. Many of these birds died as a result. The most likely explanation for this is that the

A. bacteria interfered with normal life functions of the birds
B. disease that killed the birds was inherited
C. gene alterations in the bacterial cells killed the birds
D. birds produced antigens in response to the bacteria

13. The diagram below represents an event that occurs in the blood.

Which statement best describes this event?

A. Cell A is a white blood cell releasing antigens to destroy bacteria.
B. Cell A is a cancer cell produced by the immune system and it is helping to prevent disease.
C. Cell A is a white blood cell engulfing disease causing organisms.
D. Cell A is protecting bacteria so they can reproduce without being destroyed by predators.
14. Which condition would most likely result in a human body being unable to defend itself against pathogens and cancerous cells?

A. a genetic tendency toward a disorder such as diabetes  
B. a parasitic infestation of ringworm on the body  
C. the production of antibodies in response to an infection in the body  
D. the presence in the body of the virus that causes AIDS

15. Scientific studies have indicated that there is a higher percentage of allergies in babies fed formula containing cow’s milk than in breast-fed babies. Which statement represents a valid inference made from these studies?

A. Milk from cows causes allergic reactions in all infants.  
B. Breast feeding prevents all allergies from occurring.  
C. There is no relationship between drinking cow’s milk and having allergies.  
D. Breast milk most likely contains fewer substances that trigger allergies.
Answer Key: Practice Questions #1 Immune

1. C
2. B
3. B
4. B
5. B
6. B
7. D
8. C
9. A
10. B
11. B
12. A
13. C
14. D
15. D