NEW BRUNSWICK BIOLOGY 111-112 · UNIT E · 25 QUESTIONS

Maintaining Dynamic Equilibrium: Homeostasis, Digestive, Circulatory, Respiratory, and Immune Systems — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A heart rate rises from 70 beats per minute at rest to 120 beats per minute during exercise. The increase, in beats per minute, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A person breathes 15 times per minute at rest and 30 times per minute during exercise. The increase, in breaths per minute, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A vaccine works by**

A training the immune system to recognize a pathogen

B killing pathogens directly in blood, destroying every germ before it can cause any harm

C replacing white blood cells

D blocking all infection forever

Understand It with Pulse | Flag a mistake

4 **Antibodies are proteins that**

A kill all cells, including the body's own healthy cells, wherever they are found

B carry oxygen

C recognize and bind specific antigens

D digest food

Understand It with Pulse | Flag a mistake

5

Arteries carry blood

A toward the heart only

B only to the lungs

C only oxygenated blood always

D away from the heart

Understand It with Pulse | Flag a mistake

6

Bile helps digest fats by

A breaking large fat drops into smaller drops

B breaking protein into smaller pieces, the way it breaks down fats as well

C neutralizing acid in blood

D making enzymes

Understand It with Pulse | Flag a mistake

7 **Capillaries are thin walled vessels where**

A blood is pumped, pushed along by the heart with great force

B blood is stored only

C oxygen is made

D exchange with tissues occurs

Understand It with Pulse | Flag a mistake

8 **Fever is a rise in body temperature that can help fight**

A hunger

B thirst

C fatigue

D infection

Understand It with Pulse | Flag a mistake

9 **Glucagon raises blood glucose by signalling the liver to**

A release glucose

B store glucose only

C make insulin

D stop digestion

Understand It with Pulse | Flag a mistake

10 **Homeostasis is the maintenance of a**

A stable internal environment

B constant outside temperature

C fixed heart rate always

D single body system

Understand It with Pulse | Flag a mistake

11 **Insulin lowers blood glucose by helping cells**

A release glucose

B make glucose

C destroy glucose

D take up glucose

Understand It with Pulse | Flag a mistake

12 **Negative feedback works by**

A increasing a change further, pushing the body even farther away from normal

B reversing a change back toward normal

C stopping all change

D ignoring a change

Understand It with Pulse | Flag a mistake

13 **Oxygen enters the blood in the**

A trachea only, in the windpipe before the air reaches the lungs at all

B alveoli of the lungs

C heart

D diaphragm

Understand It with Pulse | Flag a mistake

14 **Positive feedback amplifies a change, for example during**

A temperature control

B blood glucose control

C childbirth contractions

D thirst control

Understand It with Pulse | Flag a mistake

15 **The diaphragm is a muscle that helps with**

A digestion

B blood clotting

C breathing

D hearing

Understand It with Pulse | Flag a mistake

16 **The digestive system breaks food into small molecules mainly in the**

A mouth only

B small intestine

C stomach only

D large intestine only

Understand It with Pulse | Flag a mistake

17 **The enzyme amylase breaks down**

A protein

B fat

C starch

D DNA

Understand It with Pulse | Flag a mistake

18 **The enzyme pepsin breaks down protein in the**

A mouth

B small intestine only

C large intestine

D stomach

Understand It with Pulse | Flag a mistake

19 **The heart pumps oxygenated blood to the body from the**

A right side only

B vena cava

C left side

D aorta only as deoxygenated

Understand It with Pulse | Flag a mistake

20 **The immune system defends the body against**

A nutrients

B pathogens

C oxygen

D hormones

Understand It with Pulse | Flag a mistake

21 **The large intestine mainly absorbs**

- A water
- B protein
- C starch
- D fat droplets

Understand It with Pulse | Flag a mistake

22 **A heart rate rises from 60 beats per minute at rest to 110 beats per minute during exercise. The increase, in beats per minute, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A person breathes 14 times per minute at rest and 28 times per minute during exercise. The increase, in breaths per minute, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A heart rate rises from 80 beats per minute at rest to 140 beats per minute during exercise. The increase, in beats per minute, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A person breathes 16 times per minute at rest and 32 times per minute during exercise. The increase, in breaths per minute, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 50
2. 15
3. A
4. C
5. D
6. A
7. D
8. D
9. A
10. A
11. D
12. B
13. B
14. C
15. C
16. B
17. C
18. D
19. C
20. B
21. A
22. 50
23. 14
24. 60
25. 16

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