BIO30 · MANITOBA

BIO30
Practice Test

Unit A: Wellness and Homeostasis

25 Questions

Original practice test based on the Manitoba curriculum. Work through each question, then check your answers at the end.

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.

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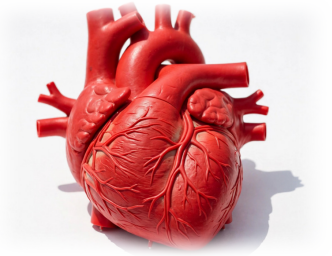

Question 1

A heart beats 65 times per minute. In 3 minutes it beats

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Question 2

A population of 30 doubles 4 times. Its final size is

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Question 3

An object of size 2 units seen at magnification 20 times has image size

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Question 4

10 grams of protein provide energy at 4 kilocalories per gram. The energy is, in kilocalories

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Question 5

One cell divides 4 times with no cell death. The number of cells is

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Question 6

A change in the genetic material of an organism is a

A) adaptation

B) variation

C) selection

D) mutation

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Question 7

A neutral solution has a pH of

A) 7

B) 0

C) 14

D) 1

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Question 8

An acid has a pH that is

A) equal to 7

B) greater than 7

C) equal to 14

D) less than 7

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Question 9

50 grams of fat provide energy at 9 kilocalories per gram. The energy is, in kilocalories

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Question 10

In a monohybrid cross of a heterozygous pea plant and a homozygous recessive pea plant, the percent of offspring described is

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Question 11

In a monohybrid cross of two heterozygous parents, the percent of offspring described is

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Question 12

The basic unit of life is the

A) organ

B) tissue

C) organism

D) cell

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Question 13

The control centre of the cell, holding genetic material, is the

A) mitochondrion

B) nucleus

C) chloroplast

D) membrane

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Question 14

The force that pulls objects toward Earth is

A) friction

B) gravity

C) magnetism

D) inertia

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Question 15

The gas plants absorb from the air for photosynthesis is

A) oxygen

B) carbon dioxide

C) nitrogen

D) hydrogen

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Question 16

The gas released by plants during photosynthesis is

A) carbon dioxide

B) nitrogen

C) oxygen

D) hydrogen

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Question 17

A heart beats 95 times per minute. In 5 minutes it beats

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Question 18

A population of 50 doubles 4 times. Its final size is

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Question 19

An object of size 8 units seen at magnification 40 times has image size

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Question 20

A serving of grilled chicken contains 40 grams of protein at 4 kilocalories per gram. The energy is, in kilocalories

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Question 21

One cell divides 3 times with no cell death. The number of cells is

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Question 22

A heart beats 85 times per minute. In 3 minutes it beats

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Question 23

A population of 10 doubles 4 times. Its final size is

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Question 24

An object of size 8 units seen at magnification 50 times has image size

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Question 25

A serving of eggs contains 20 grams of protein at 4 kilocalories per gram. The energy is, in kilocalories

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ANSWER KEY

1. 195
2. 480
3. 40
4. 40
5. 80
6. D
7. A
8. D
9. 450
10. 50
11. 75
12. D
13. B
14. B
15. B
16. C
17. 475
18. 800
19. 320
20. 160
21. 32
22. 255
23. 160
24. 400
25. 80

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