

Brett Robbins Academic Consulting

Biology 20 Practice Test

Unit 4: Human Systems

10 Questions

Original practice questions written to the Alberta curriculum, in the style of past diploma examinations. Work through each question, then check your answers with the key at the end.

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, contact Brett for clarification.

Question 1

Most of the chemical digestion and absorption of nutrients in the human digestive system occurs in the

- A) Stomach
- B) Small intestine
- C) Large intestine
- D) Liver

Question 2

The enzyme in saliva that begins the chemical digestion of starch in the mouth is

- A) Pepsin
- B) Lipase
- C) Salivary amylase
- D) Trypsin

Question 3

In the respiratory system, gas exchange between the air and the blood occurs in the

- A) Alveoli
- B) Bronchi
- C) Trachea
- D) Diaphragm

Question 4

Which blood vessel carries oxygen-rich blood from the heart to the rest of the body?

- A) Pulmonary artery
- B) Vena cava
- C) Pulmonary vein
- D) Aorta

Question 5

The number of chambers in the human heart is ____.

Question 6

The function of the epiglottis during swallowing is to

- A) Produce mucus that traps dust and bacteria
- B) Secrete enzymes into the small intestine
- C) Cover the opening of the trachea so food does not enter the airway
- D) Move food through the esophagus by peristalsis

Question 7

During inhalation, the diaphragm

- A) Contracts, increasing the volume of the chest cavity
- B) Relaxes, decreasing the volume of the chest cavity
- C) Contracts, decreasing the volume of the chest cavity
- D) Relaxes, forcing air out of the lungs

Question 8

A drop of blood returning from the body passes through the following structures of the heart.

1 Aorta 2 Right atrium 3 Left ventricle 4 Right ventricle

The order in which the blood passes through these structures, from first to last, is ____.

Record your answer as a four-digit number.

Question 9

Bile, which helps in the digestion of fats, is stored in the

- | | |
|-------------|--------------------|
| A) Liver | B) Gallbladder |
| C) Pancreas | D) Small intestine |

Question 10

In a nephron, the filtration of blood under pressure occurs in the

- A) Proximal tubule
- B) Loop of Henle
- C) Collecting duct
- D) Glomerulus

Answer Key

- | | | |
|------|---------|-------|
| 1. B | 5. 4 | 9. B |
| 2. C | 6. C | 10. D |
| 3. A | 7. A | |
| 4. D | 8. 2431 | |

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