CH1 TEST

Which system regulates the acid-base balance of the blood?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | The urinary system. |  |
| The passing of blood through the body is part of which body function?   |  |  |  | | --- | --- | --- | | **Correct Answer:** | Movement. |  | | | | | |

The spleen is usually found in which abdominopelvic region?

**Correct Answer:** Left hypochondriac region.

Correct The mediastinum houses which of the following structures?

**Correct Answer:** Trachea.

The thymus gland is part of which of the following?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | The endocrine system. |  |

Which of the following statements is/are FALSE?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | The arms are medial to the chest AND the navel is deep to the breastbone (sternum). |  |

The correct anatomical position does NOT include which of the following positions?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Palms facing backwards. |  |

When standing in the correct anatomical position, the feet are \_\_\_\_\_\_\_\_ to the knees.

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Distal |  |

Which system complements the circulatory system and involves the spleen?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | The lymphatic system. |  |

Which of the following statements regarding responsiveness, or irritability, is FALSE?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Because nerve cells are slightly irritable and communicate rapidly with each other via hormones, the nervous system bears the major responsibility for responsiveness. |  |

The anatomical term meaning close to the point of attachment of a limb to the body trunk is:

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | proximal. |  |

The anatomical term meaning farther from the point of attachment of a limb to the body trunk is:

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | distal. |  |

Which of the following statements regarding homeostatic control mechanisms is/are true?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | The control center determines the set point at which a variable is to be maintained, analyzes the information it receives, and then determines the appropriate response or course of action. |  |

Which of the following best illustrates the increasing levels of complexity?  
(1) Cells; (2) Organs; (3) Organelles; (4) Organism; (5) Tissues; (6) Organ systems

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | 3, 1, 5, 2, 6, 4. |  |

The cheeks are \_\_\_\_ to the tongue.

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Lateral |  |

Which of the following statements regarding feedback mechanisms is/are FALSE?

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| --- | --- | --- |
| **Correct Answer:** | Blood clotting is an example of a typical negative feedback mechanism. |  |

When the body is subject to physical trauma, such as in an automobile accident, which organs are the most vulnerable to injury (homeostatic imbalance)?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Abdominal organs in the abdominal cavity. |  |

The axillary region is in the:

|  |  |
| --- | --- |
| **Correct Answer:** | armpit. |

Metabolism is:

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | a broad term that refers to all the chemical reactions that occur in the body. |  |
|  |  |  |

Which of the following is NOT an anterior body landmark?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Olecranal. |  |

If you wish to make a drawing of a section through the human body that showed the heart and both of the lungs, your section could be in which of the following planes?  
(1) Frontal (coronal); (2) Transverse; (3) Sagittal

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | 1 and 2. |  |

The thoracic body cavity:

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | is the superior cavity in the ventral cavity. |  |

Which of these is found in the dorsal body cavity?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Brain. |  |

**CH2 Test**

Which of the following statements regarding isotopes is TRUE?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Isotopes have the same number of protons and electrons, but differ in the number of neutrons they contain AND the chemical properties of all of an element's isotopes are exactly the same. |  |

Which type of bond is an important intramolecular bond, which helps to bind different parts of the same molecule together into a special 3-dimensional shape?

|  |  |
| --- | --- |
| **Correct Answer:** | Hydrogen bond. |

A positive ion has

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | lost an electron. |  |

The conversion of sucrose to glucose and fructose is accomplished by which type of reaction?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Hydrolysis. |  |

Most of the reactions that take place for the body to repair damaged tissues are classified as which of the following type of chemical reaction?

**Correct Answer:** Synthesis.

Which bases are found in RNA?

**Correct Answer:** Adenine, uracil, guanine, and cytosine.

What is the difference between glucose, sucrose, and glycogen?

**Correct Answer:** The number of saccharide molecules varies.

The most abundant inorganic compound found in the human body is

**Correct Answer:** water.

Which of the substances listed below is an organic compound?

**Correct Answer:** Nucleic acid.

Disaccharides are formed by which type of reaction?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Dehydration synthesis. |  |

A cell's energy requirements are met by releasing bond energy from certain high-energy phosphate-bonds. The break-down of one of the compounds listed below provides an abundant, readily available source of energy. This compound is

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | adenosine triphosphate (ATP). |  |

If the DNA molecule resembles a twisted ladder, which chemical units form the sides of the ladder?

|  |  |
| --- | --- |
| **Correct Answer:** | Alternating deoxyribose sugar and phosphate groups. |

Proteins are made up of many:

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | amino acid molecules. |  |

The more acidic a solution is

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | the more hydrogen ions (H+) ions it contains. |  |

When a substance, that is dissolved in water, releases hydrogen ions (H+) in detectable amounts, and tends to lower the pH of the resulting solution, that substance is termed a(n):

**Correct Answer**: acid.

When dissolved in body fluids, salts easily separate into their ions. What is this process called?

**Correct Answer**: Dissociation.

Which of the following accurately describes enzymes?

**Correct Answer**: They are organic catalysts.

Which of the following is a disaccharide?

**Correct Answer**: Lactose.

Which of the following is a polysaccharide?

|  |  |  |  |
| --- | --- | --- | --- |
| **Correct Answer**: Starch.  All of the following are true about the importance of water, an inorganic compound, in the body EXCEPT:   |  |  |  | | --- | --- | --- | | **Correct Answer:** | Water is an excellent solvent because it is nonpolar. |  | |

Nucleotides, the building blocks of nucleic acids, are made up of

|  |  |
| --- | --- |
| **Correct Answer:** | a nitrogen-containing base, a pentose sugar, and a phosphate group. |

What bonds are formed when electrons are shared equally?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Nonpolar covalent bonds. |  |

The salts of many metal elements are commonly found in the body, but the most plentiful salts are those containing:

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | calcium and phosphorus. |  |

The activation by ATP of contractile proteins in muscle cells is an example of which type of ATP-driven cellular work?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Mechanical work. |  |

Which of the following are composed of two types of building blocks: fatty acids and glycerol?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Neutral fats or triglycerides. |  |

Which of the following contains amino acids?

|  |  |
| --- | --- |
| **Correct Answer:** | Antibodies. |

Glycogen → Glucose is an example of which pattern of chemical reaction?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Decomposition reaction. |  |

Which of the following is NOT true about matter?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Liquids have neither a definite shape nor a definite volume. |  |

Which of the following statements is/are TRUE regarding the "rule of eights" in chemical reactivity?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Atoms interact in such a way that they will have eight electrons in their valence shell. |  |

Which of the following is NOT true about proteins?

|  |  |  |
| --- | --- | --- |
| **Correct Answer:** | Proteins account for about 10 percent of the organic matter in the body. |  |

Which of the following is NOT true of carbohydrates?

|  |  |
| --- | --- |
| **Your Answer:** | A glucose molecule is a polysaccharide stored by the liver. |