
(D) None of above

Ans A

Diff Medium

Page 22

28 position describes a position in a limb that is nearer to the point of attachment or the trunk of the body

(A) Proximal

(B) Distal

(C) Medial

(D) Lateral

Ans A

Diff Hard

Page 25

29. A plane is surface that passes through the body.

(A) Two dimensional

(B) Three dimensional

(C) Imaginary two dimensional

(D) Imaginary three dimensional

Ans C

Diff Hard

Page 25

30. The is the largest cavity in the body

(A) Abdominopelvic cavity

(B) Thoracic cavity

(C) Cranial cavity

(D) Spinal cavity

Ans A

Diff Hard

Page 27

2. The Chemical Level of Organization

1. Human chemistry includes

(A) Organic molecules

(B) Elements

(C) Biochemical

(D) All of above

Ans D Diff Easy Page 42

2. In glucose, there are always six carbon and six oxygen units for everyhydrogen units.

- (A) Three
- (B) Six
- (C) Twelve
- (D) Eighteen

Ans C Diff Medium Page 43

3. The percentage of potassium in human body is

- (A) 0.2
- (B) 0.3
- (C) 0.4
- (D) 0.5

Ans C Diff Medium Page 43

4. Uranium (U), is referred to as a heavy metal and it contains.....neutrons

- (A) 238
- (B) 92
- (C) 146
- (D) 240

Ans C Diff Medium Page 44

5. The number of protons and neutrons

- (A) May be equal for some elements
- (B) Are equal for all elements
- (C) Both of above
- (D) None of above

Ans A Diff Medium Page 45

6. An isotope is one of the different forms of an element, distinguished from one another by different numbers of

- (A) Electrons
- (B) Protons

- (C) Neutrons
- (D) All of above

Ans C Diff Easy Page 46

7. Excessive exposure to radioactive isotopes can cause

- (A) Damage of human cells
- (B) Birth defects
- (C) Cancer
- (D) All of above

Ans D Diff Hard Page 46

8. If you take a look at the periodic table of the elements, you will notice that hydrogen and helium are placed alone on either sides of the top row; they are the only elements that have

- (A) One electron shells
- (B) Two electron shells
- (C) Three electron shells
- (D) Four electron shells

Ans A Diff Medium Page 47

9. The most common example of in the natural world occurs between molecules of water

- (A) Ionic bonding
- (B) Covalent bonding
- (C) Hydrogen bonding
- (D) All of above

Ans C Diff Hard Page 53

10..... is the energy of position, or the energy matter possesses because of the positioning or structure of its components.

- (A) Kinetic energy
- (B) Chemical energy
- (C) Potential energy
- (D) None of above

Ans C Diff Easy Page 54

11. The full spectrum of is referred to as the electromagnetic spectrum.

- (A) Radiant energy
- (B) Electrical energy
- (C) Mechanical energy
- (D) None of above

Ans A

Diff Medium

Page 55

12. An exchange reaction is a chemical reaction in which both synthesis and decomposition occur, chemical bonds are both formed and broken, and chemical energy is

- (A) Absorbed
- (B) Stored
- (C) Released
- (D) All of above

Ans D

Diff Hard

Page 56

13. The most important catalysts in the human body are

- (A) Enzymes
- (B) Proteins
- (C) Lipids
- (D) Carbohydrates

Ans A

Diff Easy

Page 57

14. An inorganic compound is a substance that does not contain

- (A) Carbon
- (B) Hydrogen
- (C) Both of above
- (D) None of the above

Ans C

Diff Medium

Page 58

15. In the bloodstream of humans, glucose concentration is usually measured in milligram (mg) per deciliter (dL), and in a healthy adult averages about

- (A) 10 mg/dL
- (B) 100 mg/d

(C) 1000 mg/dL

(D) None of above

Ans B

Diff Hard

Page 59

16. A buffer is a solution of a

(A) Weak acid and its conjugate base

(B) Strong acid and its conjugate base

(C) Weak base and its conjugate acid

(D) Strong base and its conjugate acid

Ans A

Diff Hard

Page 63

16. Which of the following can cause respiratory alkalosis?

(A) Lung disease

(B) Aspirin overdose

(C) Shock

(D) All of above

Ans D

Diff Medium

Page 64

17. Which of the following functional groups is involved in dehydration synthesis and hydrolysis reactions?

(A) Carboxylic group

(B) Hydroxyl group

(C) Methyl group

(D) Phosphate group

Ans B

Diff Hard

Page 65

18. A triglyceride is one of the most common dietary, and the type found most abundantly in body tissues

(A) Lipid groups

(B) Carbohydrate groups

(C) Carbohydrate groups

(D) All of above

Ans A

Diff Medium

Page 69

19are compounds in which the hydrophobic triglycerides are packaged in protein envelopes for transport in body fluids.

- (A) Glycolipids
- (B) Fatty acids
- (C) Lipoproteins
- (D) All of above

Ans C

Diff Hard

Page 70

20. One reason that the omega-3 fatty acids found in fish are beneficial is that they stimulate the production of certain that help regulate aspects of blood pressure and inflammation, and thereby reduce the risk for heart disease

- (A) Prostaglandins
- (B) Sterols
- (C) Phospholipids
- (D) All of above

Ans A

Diff Hard

Page 71

21. Proteins include the keratin in the epidermis of skin that protects

- (A) Collagen
- (B) Underlying tissues
- (C) Both of above
- (D) None of above

Ans C

Diff Medium

Page 72

22. If a particular essential amino acid is not available in sufficient quantities in the amino acid pool, however, synthesis of proteins containing it can

- (A) Slow
- (B) Cease
- (C) Increase
- (D) A and B

Ans D

Diff hard

Page 73

23. In protein shapes, the most common secondary structure is a spiral called

- (A) An alpha-helix

- (B) Beta-pelated sheet
- (C) Both of above
- (D) None of above

Ans C

Diff Hard

Page 74

24. A nucleotide is one of a class of organic compounds composed of

- (A) One or more phosphate groups
- (B) A pentose sugar
- (C) A nitrogen containing base
- (D) All of above

Ans D

Diff Medium

Page 76

25. A is a nitrogen-containing molecule with a double ring structure, which accommodates several nitrogen atoms.

- (A) Purine
- (B) Pyrimidine
- (C) Both of above
- (D) None of above

Ans A

Diff Easy

Page 76

26. Humans have almostgenes in their DNA, locked up in the 46 chromosomes inside the nucleus of each cell (except red blood cells which lose their nuclei during development).

- (A) 10000
- (B) 12000
- (C) 20000
- (D) 22000

Ans D

Diff Medium

Page 77

27. The nucleotide adenosine triphosphate (ATP), is composed of

- (A) Ribose sugar
- (B) An adenine base
- (C) Three phosphate groups
- (D) All of above

Ans D Diff Hard Page 77

28. ATP is classified as a

- (A) High energy compound
- (B) Low energy compound
- (C) Medium energy compound
- (D) None of above

Ans A Diff Medium Page 77

29. Which of the following bases is found in RNA only?

- (A) Cytosine
- (B) Thymine
- (C) Uracil
- (D) All of above

Ans C Diff Hard Page 76

30. Any given enzyme catalyzes

- (A) One type of reaction
- (B) Two types of reactions
- (C) Three types of reactions
- (D) Multiple type reactions

Ans A Diff Medium Page 75

3. The Cellular Level of Organization

1. Primary responsibility of each cell is to contribute to

- (A) Homeostasis
- (B) Reproduction
- (C) Sustainability
- (D) Protection

Ans A Diff Easy Page 88

2. An amphipathic molecule is one that contains

- (A) Hydrophilic region
- (B) Hydrophobic region
- (C) Both of above
- (D) None of above

Ans C Diff Easy Page 88

3. The phospholipid bilayer consists of two adjacent sheets of phospholipids, arranged

- (A) Tail to tail
- (B) Head to tail
- (C) Head to head
- (D) Head to tail

Ans A Diff Easy Page 89

4. is the movement of substances across the membrane without the expenditure of cellular energy.

- (A) Passive transport
- (B) Active transport
- (C) Both of above
- (D) None of above

Ans A Diff Easy Page 91

5. is the movement of particles from an area of higher concentration to an area of lower concentration

- (A) Active transport
- (B) Passive transport
- (C) Diffusion
- (D) Concentration gradient

Ans C Diff Medium Page 91

6. Facilitated diffusion of substances crossing the cell (plasma) membrane takes place with the help of

- (A) Channel proteins
- (B) Carrier proteins

- (C) Both of above
- (D) None of above

Ans C Diff Medium Page 92

7brings fluid containing dissolved substances into a cell through membrane vesicles.

- (A) Endocytosis
- (B) Phagocytosis
- (C) Pinocytosis
- (D) All of above

Ans C Diff Medium Page 95

8. Cells of the stomach and pancreas produce and secrete digestive enzymes through

- (A) Endocytosis
- (B) Exocytosis
- (C) Both of above
- (D) None of above

Ans B Diff Medium Page 95

9. Cystic fibrosis (CF) is a genetic disease well known for its damage to the

- (A) Lungs
- (B) Liver
- (C) Pancreas
- (D) All of above

Ans D Diff Medium Page 95

10. Which of the following is organelle of the endomembrane system?

- (A) Endoplasmic reticulum
- (B) Golgi apparatus
- (C) Vesicles
- (D) All of above

Ans D Diff Hard Page 98

11. One of the main functions of the smooth endoplasmic reticulum is in the synthesis of

- (A) Lipids