

FBQ1: Phosphorylation is the synthesis of  
Answer: ATP

FBQ2: The pressure caused by the potential of water to continuously move into a cell from outside is called ----- pressure  
Answer: Osmotic

FBQ3: The counterpart of osmotic pressure from inside the cell is called ----- potential  
Answer: Osmotic

FBQ4: The pressure that causes water pressure to push the plasma membrane against the cell wall is called ----- pressure  
Answer: Turgor

FBQ5: When turgor is lost and cytoplasm shrinks away from cell wall, it is called \_\_\_\_\_.  
Answer: Plasmolysis

FBQ6: ..... are typically move by facilitated diffusion that involves co-transport with another solute  
Answer: Sugars

FBQ7: \_\_\_\_\_ Membranes allow the unrestricted movement of small molecules across the plasma membrane.  
Answer: Lipids

FBQ8: Scientists measure energy in calories (cal) or \_\_\_\_\_.  
Answer: Joules

FBQ9: A ..... is the amount of energy needed to move 1 kilogram through 1 metre with an acceleration of 1 metre per second.  
Answer: Joule

FBQ10: With the help of the enzyme pepsin, proteins can be changed to -----  
Answer: Polypeptides

FBQ11: The energy being used to do work is called ----- energy  
Answer: Kinetic

FBQ12: Exploding a knockout is one of the example of ----- energy  
Answer: Kinetic

FBQ13: What are epoxy resin sections stained with after being cut with a microtome?  
Answer: Toluidine blue

FBQ14: The two primary energy transformations in plants are ----- and cellular transportation  
Answer: Photosynthesis

FBQ15: ..... uses light energy to convert CO<sub>2</sub> and H<sub>2</sub>O to carbohydrates.  
Answer: Photosynthesis

FBQ16: The chemical reactions that transform energy in cells is collectively called  
Answer: Metabolism

FBQ17: The chlorophyll is found in oval-shaped structures called \_\_\_\_\_.  
Answer: Chloroplast

FBQ18: In plants, Extra nuclear DNA is found in  
Answer: Chloroplast

FBQ19: Plasma membrane is composed of Protein and -----  
Answer: Lipids

FBQ20: The kinetic energy of a compound is contained in its ----- bonds  
Answer: Chemical

FBQ21: Most energy transformations in organisms are involve chemical reactions called Oxidations and -----  
Answer: Reductions

FBQ22: ----- is the loss of electrons either alone or with hydrogen, from a molecule  
Answer: Oxidation

FBQ23: The sedimentation constant of ribosome is generally 70S and breaks up into two subunits whose sedimentation constants are  
Answer: 50S and 30S

FBQ24: Metabolism is the sum of the vast array of ----- and matter transformation in cells.  
Answer: Energy

FBQ 25: The sequence of electron carrier is known as the electron \_\_\_\_\_.  
Answer: transport chain

FBQ 26: The most common carotenoid is \_\_\_\_\_.  
Answer: beta carotene

FBQ 27: Phosphorylation is the synthesis of -----  
Answer: ATP

FBQ 28: \_\_\_ is the final product of glycolysis.  
Answer: pyruvic acid

FBQ 29: The chlorophyll is found in oval-shaped structures called \_\_\_\_.  
Answer: Chloroplast

FBQ 30: In plants chemical energy is used to make sugar in the \_\_\_\_.  
Answer: Stroma

FBQ 31: Vitamin A is a precursor of \_\_\_\_\_.  
Answer: Retinal

FBQ 32: Even in the presence of sunlight and water, photosynthesis cannot occur in the absence of \_\_\_\_\_.  
Answer: Carbon dioxide

FBQ 33: \_\_\_\_\_ discovered penicillin.  
Answer: Fleming

FBQ 34: ----- refer(s) to growing plants without soil  
Answer: Hydroponics

FBQ 35: The protons and electrons required to reduce  $\text{NADP}^+$  to  $\text{NADPH}_2$  come from  
Answer:  $\text{H}_2\text{O}$

MCQ 1: Nitrogen, phosphorus and sulphur are examples of  
Answer: Essential non-metallic elements

MCQ 2: Through enzyme pepsin, proteins can be changed to  
Answer: Polypeptides

MCQ 3: Which of the following organelles is surrounded by only one membrane?

Answer: Micro-bodies

MCQ 4: Sugars made in leaves are transported through

Answer: Phloem tissues

MCQ 5: Light absorbed by chlorophyll is converted into

Answer: chemical energy

MCQ 6: Carbon dioxide (CO<sub>2</sub>) taken in night is stored in form of

Answer: chemical energy

MCQ 7: Packets of light energy are known as -----

Answer: Photons

MCQ 8: Energy is stored in chemical bonds such as those in sugar, starch and

Answer: Fats

MCQ 9: Energy is stored in chemical bonds such as those in sugar, starch and

Answer: Fats

MCQ 10: IR is absorbed by water and

Answer: carbon dioxide

MCQ 11: In most plants, carbohydrates move largely as entirely as

Answer: Sucrose

MCQ 12: Due to chemical energy, water and carbon dioxide are converted into

Answer: Carbohydrates

MCQ 13: The green colour of leaves is due to solar chemical factories called

Answer: Chloroplasts

MCQ 14: The main difference between an animal and a plant cell is that

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Answer: Animal cell lack rigid cell wall

MCQ 15: Extra nuclear DNA is found in

Answer: Chloroplast

MCQ 16: Mitochondria was first seen by \_\_\_\_\_

Answer: Altmann

MCQ 17: Plasma membrane is composed of

Answer: Protein and Lipids

MCQ 18: Cellular organelles containing hydrolytic enzymes are called

Answer: Lysosomes

MCQ 19: Ribosomes are responsible for ----- in the cell

Answer: Protein synthesis

MCQ 20: Food is converted to energy in ----- of the cell

Answer: Mitochondria

MCQ 21: The Chlorophyll of bacteria is called

Answer: Bacteriochlorophylls

MCQ 22: An essential component of chlorophyll molecule is

Answer: Magnesium

MCQ 23: Facilitation of entry of CO<sub>2</sub> into the leaf is done through stomata as well as through water film on the ----- cells

Answer: spongy mesophyll

MCQ 24: Noncyclic photophosphorylation involve which of the following photosystems? I. photosystem I, II. photosystem II  
Answer: I and II

MCQ25: In some microorganisms, the source of protons and electrons is \_\_\_\_\_.  
Answer: Hydrogen sulphide

MCQ 26: Cork is useful in making stoppers for wine bottle because:  
Answer: Suberized tissues inhibit water loss

MCQ 27: Many metabolic functions in a cell occur in/on the \_\_\_\_\_.  
Answer: membranes

MCQ28: Which of the following statements is not true of enzymes?  
Answer: they increase the energy of activation of reactions

MCQ 29: Directly linked pigments to photosynthetic electron transport are \_\_\_\_\_.  
Answer: Chlorophylls

MCQ 30: Directly linked pigments to photosynthetic electron transport are \_\_\_\_\_.  
Answer: Chlorophylls

MCQ 31: In dark reaction, ----- are required for the reduction of CO<sub>2</sub> to carbohydrates  
Answer: ATP and NADPH<sub>2</sub>

MCQ 32: Microtubules are made of two types of globular proteins namely ----- tubulin  
Answer: Alpha and beta

MCQ 33: Photosynthetic pigments other than chlorophyll are called \_\_\_\_\_.  
Answer: Accessory pigments

MCQ 34: Which of the following enzymes catalyzes the breakdown of hydrogen peroxide?  
Answer: Catalase

MCQ 35: The region of ER that is encrusted with ribosomes is the -----  
Answer: rough ER