



BIOLOGY

BOOKS - SARAS PUBLICATION

PLANT PHYSIOLOGY

Example

1. The overall goal of glycoysis , krebs cycle and the electron transport system is the formation of:

A. Nucleic acids

B. ATP in small stepwise units

C. ATP in one large oxidation reaction

D. Sugars

Answer:



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2. If the mean and the median pertaining to a certain character of a value , the following is most likely to occur:

A. a skewed curve

B. a normal distribution

C. a bi-modal distribution

D. a T-shaped curve

Answer:



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3. The first acceptor of electrons, from an excited chlorophyl molecule of photo systems II is

A. Quinone

B. Cytochrome

C. Iron - sulphur protein

D. Ferredoxin

Answer:



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4. All enzymes of TCA cycle are located in the mitochondrial matrix except one which is located in inner mitochondrial membranes in eukaryotes and in cytosol in prokaryotes. This enzymes is:

- A. succinate dehydrogenase
- B. lactate dehydrogenase
- C. isocitrate dehydrogenase
- D. malate dehydrogenase

Answer:



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5. Two cells A and B are contiguous. Cell A has osmotic pressure 10 atm, turgor pressure - 7 atm and diffusion-pressure deficit 3 atm. Cell B has osmotic pressure 8 atm, turgor pressure 3 atm and diffusion pressure deficit 5 atm . The result will be:

- A. Movement of water from Cell A to B
- B. Movement of water from Cell B to A
- C. No movement of water
- D. Equilibrium between the two

Answer:



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6. In the leaves of C_4 plants, malic acid formation during CO_2 fixation occurs in the cells of:

- A. Epidermis
- B. Mesophyll
- C. Bundle Sheath
- D. Phloem

Answer:



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7. Which one of the following elements is not an essential micronutrient for plant growth?

A. Ca

B. Mn

C. Zn

D. Cu

Answer:



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8. During the transmission of nerve impulse through a nerve fibre, the potential on the inner side of the plasma membrane has which type of electric charge?

A. First positive, then negative and again back to positive

B. First negative, then positive and again back to negative

C. First positive, then negative and continue to be negative

D. First negative, then positive and continue to be positive

Answer:



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9. A plant requires magnesium for:

A. Cell wall development

B. Holding cells together

C. Proteins synthesis

D. Chlorophyll synthesis

Answer:



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10. C_4 plants are more efficient in photosynthesis than C_3 plants due to

- A. The CO_2 compensation point is more
- B. CO_2 generated during photorespiration is trapped and recycled through PEP carboxylase
- C. The CO_2 efflux is not prevented
- D. They have more chloroplasts

Answer:



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11. Nitrogen fixation in root nodules of *Alnus* is brought about by:

A. *Bradyrhizobium*

B. *Clostridium*

C. *Frankia*

D. *Azorhizobium*

Answer:



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12. The rupture and fractionation do not usually occur in the water column in *vessel/tracheids* during the ascent of sap because of:

- A. lignified thick walls
- B. cohesion and adhesion
- C. weak gravitational pull
- D. transpiration pull

Answer:



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13. In the leaves of C_4 plants, malic acid formation during CO_2 fixation occurs in the cells of:

- A. Epidermal cells
- B. Mesophyll cells
- C. Bundle sheath
- D. Guard cells

Answer:



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14. The slow fate of the decomposition of fallen logs in nature is due to their:

- A. low moisture content
- B. poor nitrogen content
- C. anaerobic environment around them
- D. low cellulose content

Answer:



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15. Vacuole in a plant cell:

- A. is membrane - bound and contains storage proteins and lipids
- B. is membrane - bound and contains water and excretory substances
- C. lacks membrane and contains air
- D. lacks membrane and contains water and excretory substances

Answer:



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16. Which one of the following proved effective for biological control of nematodal disease in plants?

- A. *Pisolithus tinctorius*
- B. *Pseudomonas cepacia*
- C. *Gilocladium virens*
- D. *Paecilomyces lilacinus*

Answer:



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17. The chemiosmotic coupling hypothesis of oxidative phosphorylation proposes that adenosine triphosphate (ATP) is formed because:

A. high energy bonds are formed in mitochondrial proteins

B. ADP is pumped out of the matrix into the intermembrane space

C. a proton gradient forms across the inner membrane

D. there is a change in the permeability of the inner mitochondrial membrane toward Adenosine

diphosphate (ADP)

Answer:



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18. Which one is the wrong pairing for the disease and its causal organism ?

- A. Black rust of wheat- *Puccinia graminis*
- B. Loose smut of wheat- *Ustilago nuda*
- C. Root - knot of vegetables- *Meloidogyne* sp
- D. Late blight of potato solani - *Alternaria*

Answer:



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19. Cyclic photophosphorylation results in the formation of:

- A. ATP and NADPH
- B. ATP , NADPH and O_2
- C. ATP
- D. NADPH

Answer:



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20. Stroma in the chloroplasts of higher plant contains:

A. Light - dependent reaction enzymes

B. Ribosomes

C. Chlorophyll

D. Light - independent reaction enzymes

Answer:



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21. Uric acid is the chief nitrogenous component of the excretory product of

A. Earthworm

B. Cockroach

C. Frog

D. Man

Answer:



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22. Guard cells help in:

A. Transpiration

B. Guttation

C. Fighting against infection

D. Production against grazing

Answer:



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23. Which one of the following pairs of food components in human reaches the stomach totally undigested?

A. Starch and fat

B. Fat and cellulose

C. Starch and cellulose

D. Protein and starch

Answer:



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24. Which one of the following structure between two adjacent cells is an effective transport pathway?

A. Plasmodesmata

B. Plastoquinones

C. Endoplasmic reticulum

D. Plasmalemma

Answer:



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25. An element playing important role in nitrogen fixation is:

A. Molybdenum

B. Copper

C. Manganese

D. Zinc

Answer:



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26. Which one of the following is not a micronutrient?

A. Molybdenum

B. Magnesium

C. Zinc

D. Boron

Answer:



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27. PGA as the first CO_2 fixation product was discovered in cells is an effective transport pathway?

- A. Bryophyte
- B. Gymnosperm
- C. Angiosperm
- D. Alga

Answer:



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28. Low Ca in the body fluid may be the cause of:

A. Tetany

B. Anaemia

C. Angina pectoris

D. Gout

Answer:



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29. Which one of the following pairs is incorrectly matched?

A. Glucagon - Beta cells (source)

B. Somatostatin- Delta cells (source)

C. Corpus luteum - Relaxin (secretion)

D. Insulin - Diabetes mellitus (disease)

Answer:



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30. Phototropic curvature is the result of uneven distribution of

A. Gibberellin

B. Phytochrome

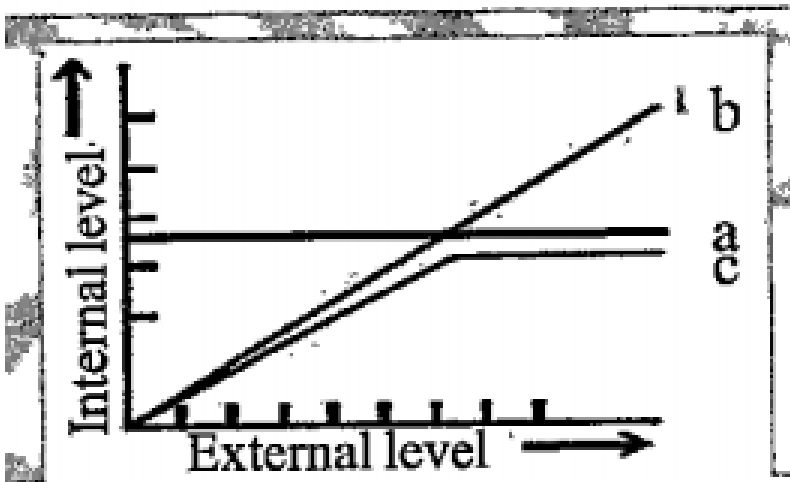
C. Cytokinins

D. Auxin

Answer:

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31. The figure given is a diagrammatic representation of response of organisms to abiotic factors. What do a, b and c represent respectively?



A. a) conformer b) regulator c) partial.

B. a)regulator b)partial regulator c)conformer

C. a)partial regulator b)regulator c)conformer

D. a)regulator b)conformer c)partial regulator

Answer:



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32. One of the free - living anaerobic nitrogen -fixer is:

A. Beijernckia

B. Rhodospirillum

C. Rhizobium

D. Azotobacter

Answer:



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33. The common nitrogen-fixer in paddy fields is :

A. Rhizobium

B. Azospirillum

C. Oscillatoria

D. Frankia

Answer:

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34. Carrier ions like Na^+ facilitate the absorption of substances like:

- A. amino acids and glucose
- B. glucose and fatty acids
- C. fatty acids and glycerol
- D. fructose and some amino acids

Answer:

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35. The energy releasing metabolic process in plant is which substrate is oxidised without an external electron acceptor is called:

- A. Glycolysis
- B. Fermentation
- C. Aerobic respiration
- D. Photorespiration

Answer:



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36. C plants are more efficient in photosynthesis than

C_3 - plants due to:

A. Higher leaf area

B. Presence of larger number of chloroplasts in -the
leaf cells

C. Presence of thin cuticle

D. Lower rate of photorespiration

Answer:



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37. Important site for formation of glycoproteins and glycolipids is:

- A. Lysosome
- B. Vacuole
- C. Golgi apparatus
- D. Plastid

Answer:



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38. Which one of the following elements in plants, is not remobilised?

A. Sulphur

B. Phosphorus

C. Calcium

D. Potassium

Answer:



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39. In land plants the guard cells differ from other epidermal cells in having:

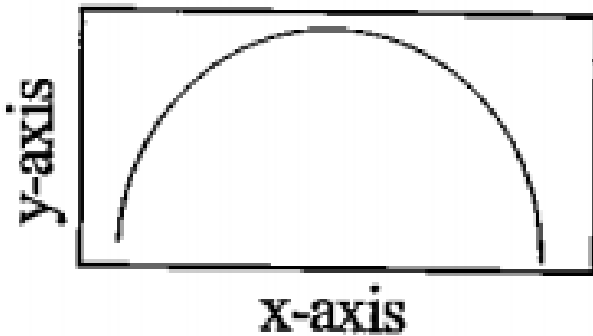
- A. Chloroplasts
- B. Cytoskeleton
- C. Mitochondria
- D. Endoplasmic reticulum

Answer:



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40. The curve given below show enzymatic activity with relation to three conditions (Ph, temperature and substrate concentration). What do the two axes (x and y) represent? x - axis, y - axis.

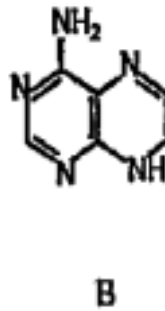
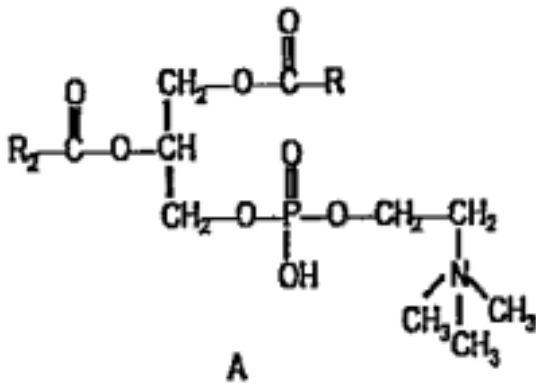


- A. Enzymatic activity Temperature
- B. Enzymatic activity - pH
- C. Temperature - Enzyme Activity
- D. Substrate concentration - Enzymatic Activity

Answer:

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41. Which one of the following structural formulae of two organic compounds is correctly identified along with its related function?



A. A: Lecithin - a component of cell membrane

B. B: Adenine - a nucleotide that makes up nucleic acids

C. A: Triglyceride - major source of energy

D. B: Uracil - a component of DNA

Answer:



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42. The initial step in the digestion of milk in humans is carried out by?

A. Trypsin

B. Pepsin

C. Rennin

D. Lipase

Answer:



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43. When a -neuron is in resting state i.e not conducting any impulse , the axonal membrane is:

A. Comparatively more permeable to K^+ ions and

nearly impermeable to Na^+ ions.

B. Comparatively more permeable to Na^+ ions and

nearly impermeable to K^+ ions

C. Equally permeable to both Na^+ and K^+ ions

D. Impermeable to both Na^+ and K^+ ions

Answer:



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44. Which one of the following statements for pyramid of energy is incorrect , whereas the remaining three are correct?

A. It is upright in shape

B. Its base is broad

C. It shows energy content of different trophic level organisms

D. it is inverted in shape

Answer:

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45. Pheretima and its close relatives derive nourishment from

A. sugarcane roots

B. soil insects

C. decaying fallen leaves and soil organic matter

D. small pieces of fresh fallen leaves of maize, etc

Answer:



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46. A process that makes important difference between C_3 and C_4 plant is:

- A. Transpiration
- B. Glycolysis
- C. Photosynthesis
- D. Photorespiration

Answer:



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47. Best defined function of manganese (Mn) in green plants is

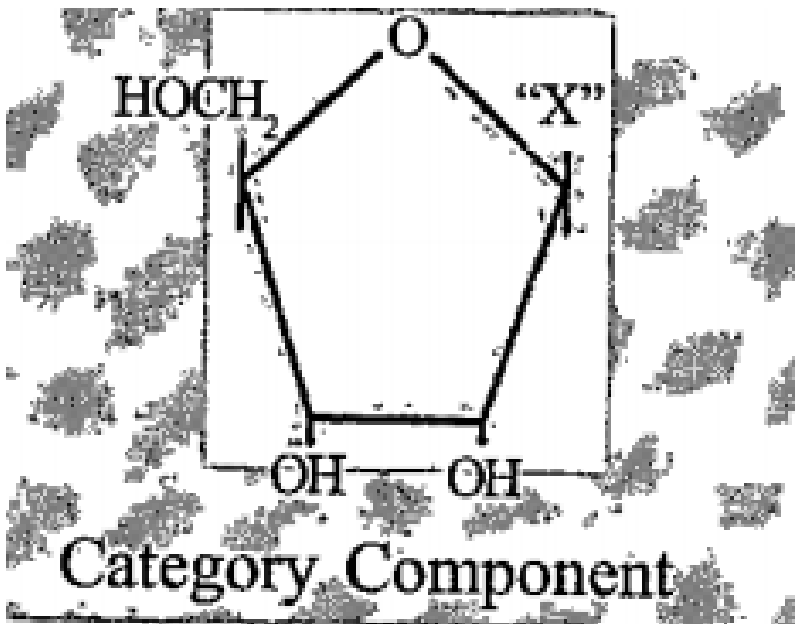
- A. Photolysis of water
- B. Calvin cycle
- C. Nitrogen fixation
- D. Water absorption

Answer:



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48. Given below is the diagrammatic representation of one of the categories of small molecular, weight organic compounds in the living tissues. Identify the category shown and the one blank component 'X' in it:



A. Cholesterol Guanine

B. Amino acid NH^2

C. Nucleotide Adenine

D. Nucleoside Uracil

Answer:



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49. Which one of the following microbes forms symbiotic association with plants and helps them in their nutrition?

A. Azotobacter

B. Aspergillus

C. Glomus

D. Trichoderma

Answer:



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50. Which one single organism or the pair of organism is correctly assigned to its or their named taxonomic group:

A. Paramecium and Plasmodium belong to the same kingdom as that of Penicillium

B. Lichen is a composite organism formed from the symbiotic association of an algae and a protozoan

C. Yeast used in making bread and beer is a fungus

D. Nostoc and Anabaena are examples of protista

Answer:

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51. Water containing cavities in vascular bundles are found in:

A. Sunflower

B. Maize

C. Cycas

D. Pinus

Answer:



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52. Lenticles are involved in:

A. Transpiration

B. Gaseous exchange

C. Food transport

D. Photosynthesis

Answer:



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53. Transition state structure of the substrate formed during an enzymatic reaction is:

- A. Transient but stable
- B. Permanent but unstable
- C. Transient and unstable
- D. Permanent and stable

Answer:



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54. A phosphoglyceride is always made up of:

- A. Only a saturated' fatty acid esterified to a glycerol molecule to which a phosphate group is also attached
- B. Only an unsaturated fatty acid esterified to a glycerol molecule to which a phosphate group is also attached

C. A saturated or unsaturated fatty acid esterified to a glycerol molecule to which a phosphate group is also attached

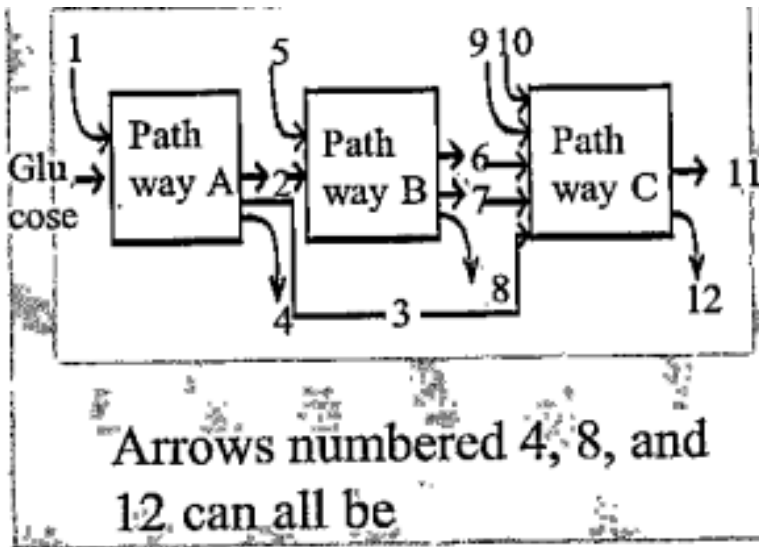
D. A saturated or unsaturated fatty acid esterified to a phosphate group which is also attached to a glycerol molecule

Answer:

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55. The three boxes in this diagram represent the three major biosynthetic pathways in aerobic

respiration . Arrows numbered 4,8,and 12 can all be:



A. NADH

B. ATP

C. H_2O

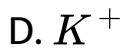
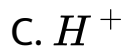
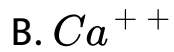
D. $FAD +$ or $FADH_2$

Answer:



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56. The abundant intracellular cation is



Answer:



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57. The first stable product of fixation of atmospheric nitrogen in leguminous plants is.....



B. Ammonia



D. Glutamate

Answer:



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58. Which one of the following is not used for exsitu plant conservation?

- A. Field gene banks
- B. Seed banks
- C. Shifting cultivation
- D. Botanical Gardens

Answer:



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59. Macro molecule chitin is:

- A. Nitrogen containing polysaccharide
- B. Phosphorus containing polysaccharide
- C. Sulphur containing polysaccharide
- D. Simple polysaccharide

Answer:



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60. In plant breeding programmes, the entire collection (of plants/seeds) having all the diverse alleles for all genes in a given crop is called:

- A. Selection of superior recombinants

B. Cross - hybridisation among the selected parents

C. Evaluation and selection of parents

D. Germplasm collection

Answer:



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61. The plant body is thalloid in:

A. Funaria

B. Sphagnum

C. Salvinia

D. Marchantia

Answer:



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62. Specialized cells for fixing atmospheric nitrogen in

Nostoc are:

A. Akinetes

B. Heterocysts

C. Hormogonia

D. Nodules

Answer:



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63. Which one of the following type of plastids does not contain stored food material?

A. Amyloplasts

B. Chromoplasts

C. Elaioplasts

D. Aleuroplasts

Answer:



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64. Which two distinct microbial processes are responsible for release of fixed' nitrogen as dinitrogen gas (N_2) to the atmosphere?

A. Anaerobic ammonium oxidation, and denitrification

B. Aerobic nitrate oxidation, and nitrite reduction

C. Decomposition of organic nitrogen, and conversion of dinitrogen to ammonium compounds

D. Enteric fermentation in cattle, and nitrogen fixation by Rhizobium in root nodules of legumes

Answer:



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65. Which of the following best illustrates FEEDBACK in development?

A. As tissue (X) develops, it secretes something that slows down the growth of tissue (Y).

B. Tissue (X) secretes RNA which changes the development of tissue (Y)

C. As tissue (X) develops, it secretes enzymes that inhibit the development of tissue (Y)

D. As tissue (x) develops, it secretes something that induces tissue (Y) to develop

Answer:

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66. Which enzymes are likely to act on the baked potatoes eaten by a man , starting from the mouth and as it moves down the alimentary canal?

A. salivary maltase - carboxypeptidase-trypsinogen

B.

Pancreaticamylase – salivaryamylase – lipases

C. `disacrides- maltase - lipases - nucleases

D. `Salivary amylase - pancreatic amylase -
disaccharides

Answer:



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67. When man eats fish which feeds on zooplankton which have eaten small plants, the producer in the chan is:

A. Zooplankton

B. Small plants

C. Fish

D. Man

Answer:



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68. Tracheids differ from other treachery elements in

A. Having casparian strips

B. Being imperforate

C. Lacking nucleus

D. Being lignified

Answer:



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69. Deficiency symptoms of nitrogen and potassium are visible first in

A. Senescence leaves

B. Young leaves

C. Roots

D. Buds

Answer:



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70. In which one of the following processes CO_2 is not released?

- A. Aerobic respiration in plants
- B. Aerobic respiration in animals
- C. Alcoholic fermentation
- D. Lactate fermentation

Answer:



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71. Anoxygenic photosynthesis is characteristic of

- A. Rhodospirillum
- B. Spirogyra
- C. Chlamydomonas
- D. Ulva

Answer:



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72. Select the option which is not correct with respect to enzyme action-

A. Substrate binds with enzyme at its active site

B. Addition of lot of succinate does not reverse the inhibition of succinic dehydrogenase by malonate

C. A non-competitive inhibitor binds the enzyme at a site distinct from that which binds the substrate

D. Malonate is competitive inhibitor of succinic dehydrogenase

Answer:



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73. Which one of the following is a non-reducing carbohydrate?

A. Maltose

B. Sucrose

C. Lactose

D. Ribose 5-phosphate

Answer:



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74. In which of the following gametophyte is not independent free living:

A. Funaria

B. Marchantia

C. Pteris

D. Pinus

Answer:



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75. Transpiration and root pressure cause water to rise in plants by

- A. Pulling it upward
- B. Pulling and pushing it, respectively
- C. Pushing it upward
- D. Pushing and pulling it, respectively

Answer:



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76. Minerals known to be required in large amounts for plant distinct from that which binds the substrate growth include:

- A. Phosphorous, potassium, sulphur, calcium
- B. Calcium, magnesium, manganese, copper
- C. Potassium, phosphorus, selenium, boron
- D. Magnesium, sulphur, iron, zinc

Answer:



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77. What case a green plant exposed to the light on only one side to bend towardsthe sourceof light as it grows?

A. Green plants need light to perform photosynthesis

B. Green plants seek because they are phototropic

C. Light stimulates plant cells on the lighted side to grow faster

D. Auxin accumulates on the shaded side, stimulating greater cell elongation there

Answer:



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78. In a ring girdled plant:

- A. The shoot dies first
- B. The root dies first
- C. The shoot and root die together
- D. Neither root nor shoot will die

Answer:



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79. Typical growth curve in plants is:

- A. Sigmoid
- B. Linear
- C. Stair-steps shaped
- D. Parabolic

Answer:

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80. Which one gives the most valid and recent explanation for stomatal movements?

- A. Transpiration
- B. Potassium influx and efflux
- C. Starch hydrolysis
- D. Guard cell photosynthesis

Answer:



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81. The chitinous exoskeleton of arthropods is formed by the polymerisation of,

- A. D - glucosamine
- B. N-acetyl glucosamine

C. lipoglycans

D. keratin sulphate and chondroitin sulphate

Answer:



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82. A column of water within xylem vessels of tall trees does not break under its weight because of:

A. Tensile strength of water

B. Lignification of xylem vessels

C. Positive root pressure

D. Dissolved sugars in water

Answer:



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83. Chromatophores takes part in:

A. Growth

B. Movement

C. Respiration

D. Photosynthesis

Answer:



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84. The oxygen evolved during photosynthesis comes from water molecules . Which one the following pair of elements is involved in this reaction?

- A. Manganese and Potassium
- B. Magnesium and Molybdenum
- C. Magnesium and Chlorine
- D. Manganese and Chlorine

Answer:



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85. Industrial melanism is an example of:

- A. Natural selection
- B. Mutation
- C. Neo Lamarckism
- D. Neo Darwinism

Answer:



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86. Photosynthesis the light independent reactions take place at:

A. Photosystem - 1

B. Photosystem - II

C. Stromal matrix

D. Thylakoid lumen

Answer:



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87. In which of the following both pairs have correct combination?

A. Gaseous nutrient cycle Carbon and sulphur

Sedimentary nutrient cycle - Nitrogen and

Phosphorus

B. Gaseous nutrient cycle Nitrogen and sulphur

Sedimentary nutrient cycle - Carbon and

Phosphorus

C. Gaseous nutrient cycle Sulphur and Phosphorous

Sedimentary nutrient cycle - Carbon and

Nitrogen

D. Gaseous nutrient cycle Carbon and Nitrogen

Sedimentary nutrient cycle - Sulphur and

phosphorus

Answer:





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88. Auxin can be bioassayed by:

A. Hydroponics

B. Potometer

C. Lettuce hypocotyl elongation

D. Avena coleoptile curvature

Answer:



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89. Which of the following pairs of hormones are not antagonistic (having opposite effects) to each other?

A. Relaxin - inhibin

B. Parathormone - calcitonin

C. Insulin - Glucagon

D. Aldosterone - Atrial Natriuretic Factor

Answer:



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90. Emerson's enhancement effect and Red drop have been instrumental in the discovery of

- A. Oxidative phosphorylation
- B. Photophosphorylation and non - cyclic electron transport
- C. Two photosystems operating simultaneously
- D. Photophosphorylation and cyclic electron transport

Answer:



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91. When does the growth rate of a population following the logistic model equal zero? The logistic

model is given as
$$D \frac{dn}{dt} = Rn \left[\frac{1 - N}{K} \right]$$

- A. when death rate is greater than birth rate
- B. when N / K is exactly one
- C. when N nears the carrying capacity of the habitat
- D. when N / K equals zero

Answer:



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92. Which of the following is required as inducer(s) for the expression of Lac operon?

A. lactose and galactose

B. glucose

C. galactose

D. lactose

Answer:



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93. Specialised epidermal cells surrounding the guard cells are called:

A. Lenticels

B. Complementary cells

C. Subsidiary cells

D. Bulliform cells

Answer:



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94. A typical fat molecule is made up of:

A. Three glycerol and three fatty acid molecules

B. Three glycerol molecules and one fatty acid molecule

C. One glycerol and three fatty acid molecules

D. One glycerol and one fatty acid molecule

Answer:



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95. Water vapour comes out from the plant leaf through the stomatal opening. Through the same stomatal opening carbon dioxide diffuses into the plant during photosynthesis. Reason out the above statements using one of the following options:

- A. One process occurs during day time, and other at night
- B. Both processes cannot happen simultaneously
- C. Both processes can happen together because the diffusion coefficient of water and CO_2 is different.
- D. The above processes happen only during night time

Answer:



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96. Which one of the following statements is wrong?

- A. Glycine is a sulphur containing amino acid
- B. Sucrose is a disaccharide
- C. Cellulose is a polysaccharide
- D. Uracil is a pyrimidine

Answer:



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97. In a chloroplast the highest number of protons are found in:

- A. Antennae complex
- B. Stroma
- C. Lumen of thylakoids
- D. Inter membrane space

Answer:



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98. In which of the following, all three are macronutrients?

- A. Nitrogen, potassium, phosphorus
- B. Boron, zinc, manganese

C. Iron, copper, molybdenum

D. Molybdenum, magnesium, manganese

Answer:



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99. Following are the two statements regarding the origin of life: The earliest organisms that appeared on the earth were non-green and presumably anaerobes. The first autotrophic organisms were the chemoautotrophs that never released oxygen. Of the above statements which one of the following options is correct?

- A. Both (a) and (b) are false
- B. (a) is correct but (b) is false
- C. (b) is correct but (a) is false
- D. Both (a) and (b) are correct

Answer:

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100. Depletion of which gas in the atmosphere can lead to an increased incidence of skin cancer?

- A. Methane
- B. Nitrous oxide

C. Ozone

D. Ammonia

Answer:



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101. A true breeding plant is:

A. near homozygous and produces offspring of its own kind

B. always homozygous recessive in its genetic constitution

C. one that is able to breed on its own

D. produced due to cross pollination among
unrelated plants

Answer:



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102. The label of a herbarium sheet does not carry
information on:

A. Local names

B. height of the plant

C. date of collection

D. name of collector

Answer:



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103. The balloon - shaped structures called tyloses?-

A. Are extensions of xylem parenchyma cells into vessels

B. Are linked to the ascent of sap through xylem vessels

C. Originate in the lumen of vessels

D. Characterize the sapwood

Answer:



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104. Which of the following biomolecules is common to breakdown of fats , carbohydrates and proteins?

A. Pyruvic acid

B. Acetyl CoA

C. Glucose - 6 - phosphate

D. Fructose1,6- biphosphate

Answer:



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105. The process which makes major difference between C_3 and C_4 plant is :

- A. Photorespiration
- B. Respiration
- C. Glycolysis
- D. Calvin cycle

Answer:



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106. Match column I with column II and select the correct option using the codes given below:

Column - I	Column - II
(a) Citric acid	(i) Trichoderma
(b) Cyclosporin A	(ii) Clostridium
(c) Statins	(iii) Aspergillus
(d) Butyric acid	(iv) Monascus

- A. a)-(i), b) -(iv), c)-(ii), d)-(iii)
- B. a)-(iii), b) -(iv), c)-(i), d)-(ii)
- C. a)-(iii), b)-(i), c) -(ii) ,d)-(iv)
- D. a)-(iii) ,b) -(i), c)-(iv), d) -(ii)

Answer:



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107. Oxidative phosphorylation is:

- A. Addition of phosphate group to ATP
- B. Formation of ATP by energy released from electrons removed during substrate oxidation
- C. Formation of ATP by transfer of phosphate group from a substrate to ADP
- D. Oxidation of phosphate group in ATP

Answer:



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108. Which of the following describes the given graph correctly ?.

- A. Endothermic reaction with energy A in absence of enzyme and B in presence of enzyme
- B. Exothermic reaction with energy A in. absence of enzyme and B in presence of enzyme
- C. Endothermic reaction with energy A in presence of enzyme and B in absence of enzyme
- D. Exothermic reaction with energy A in presence of enzyme and B in absence of enzyme

Answer:



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109. Name the ion responsible for unmasking of active sites for cross-bridge activity during muscle contraction

A. Sodium

B. Potassium

C. Calcium

D. Magnesium

Answer:



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110. Lungs do not collapse between breaths and some air always remains in the lungs which can never be expelled because:

- A. There is a positive intrapleural pressure
- B. Pressure in the lungs is higher than the atmospheric pressure
- C. There is a negative pressure in the lungs
- D. There is a negative intrapleural pressure pulling at the lung walls

Answer:



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111. Which one of the Following statements is correct, with reference to enzymes?

A. Holoenzyme = Apoenzyme + Coenzyme

B. Coenzyme = Apoenzyme + Holoenzyme

C. Holoenzyme = Coenzyme + Co - factor

D. Apoenzyme = Holoenzyme + Coenzyme

Answer:



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112. A symptote is a logistic growthcurve is obtained when:

A. $K = N$

B. $K > N$

C. $K < N$

D. The value of 'r' approaches zero

Answer:



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113. Which of the following facilitates opening of stomatal aperture?

A. Decrease in turgidity of guard cells

B. Radial orientation of cellulose microfibrils in the cell wall of guard cells

C. Longitudinal orientation of cellulose microfibrils in the cell wall of guard cells

D. Contraction of outer wall of guard cells

Answer:



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114. Which statement is wrong for Krebs cycle ?

- A. There is one point in the cycle where FAD^+ is reduced to $FADH^2$
- B. During conversion of succinyl CoA to succinic acid, a molectde of GTP is synthesised
- C. The cycle starts with condensation of acetyl group (acetyl CoA) with pyruvic acid to yield citric acid
- D. There are three points in the cycle where NAD^+ is reduced to $NADH + H^+$

Answer:



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115. Phosphoenol pyruvate (PEP) is the primary CO_2 acceptor in _____

- A. C_4 plants
- B. C_2 plants
- C. C_3 and C_4 plants
- D. C_3 plants

Answer:



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