

Subject : BIOLOGY Class: XIth

Date: **DPP No.: 3**

Topic :- Mineral Nutrition

Which of the following option shows correct co-relation between column I, II and III?

Column I	Column II	Column III
A. Calcium	I. Required	(i)Grey blot
	for ionic	on leaves
	balance	
B. Boron	II. Essential	(ii)Fruit-
	for	yield
	constitution	decreases
	of nucleic	/
	acid	
C.	III. Required	(iii)Red
Phosphorus	for	blot on
	absorption	leaves
	of calcium	16
D. Chlorine	IV. Required	(iv)Fruit-
	to active	size
	respiratory	diminishes
	enzym <mark>e</mark>	N. C.
E.	V. Required	(v)Young
Manganese	for synthesis	root tip
	of mitotic	begin to die
	spindle	

a) A-V-v, B-IV-iv, C-III-I, D-II-iii, E-I-ii

c) A-I-iv, B-II-v, C-III-iii, D-IV-I, E-V-ii

b) A-V-v, B-III-iii, C-II<mark>-iii,</mark> D-I-ii, E-IV-i

d) A-IV-iii, B-I-iv, C-V-v, D-III-ii, E-II-i

What does the given reaction shows? 2.

$$R_1$$
— C — $COO^- + R_2$ — C — COO^- — NH_3 O
Amino donor Amino acceptor

Choose the correct option

- a) Oxidative deamination
- c) Transamination
- In hydroponics, chelating agent is used to
 - a) Chelate metals

- b) Reductive amination
- d) Deamination

c) Provide non-stream conditions

- d) All of the above
- 4. The term 'outer space' represents ...A..., while 'inner space' represents ...B... with reference to absorption of minerals

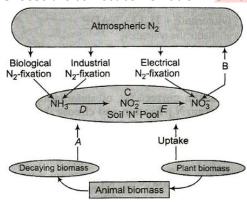
Identify A and B to complete the given statement

- a) A-cytoplasm and vacuole, B-intercellular space and cell
- b) A- intercellular space and cell wall, B- cytoplasm and vacuole
- c) A-cytoplasm, B-vacuole
- d) A-intercellular space, B-vacuole
- 5. Hydroponic tomatoes may not taste so fresh. Why?
- a) The tomatoes are really potatoes in disguise
- b) The tomatoes are supposed to be green and sour, it makes them healthier for humans

c) They are picked too soon

- d) They are not picked soon enough
- 6. Which of the following is used as a chelating agent in hydroponics?
 - a) EDTA
- b) Iron

- c) Nitrogen
- d) Copper
- 7. Identify the labels in the given flow diagram which links the major nitrogen pools Choose the correct combination from the options given below



- a) A-Nitrification, B-Ammonification, C-Nitrobacter, D-Nitrosomonas
- b) A-Ammonification, B-Denitrification, C-Nitrification, D-*Nitrosomonas*, E-*Nitrobacter*
- c) A-Denitrification, B-*Nitrobacter*, C-Nitrification, D-*Nitrosomonas*, E-Ammonification
- d) A-*Nitrobacter*, B-Denitrification, C-*Nitrosomonas*, D-Ammonification
- 8. Sulphur is an important nutrient for optimum growth and productivity in
 - a) Pulse crops
- b) Cereals
- c) Fibre crops
- d) Oilseed crops
- 9. Which of the following are reservoirs for phosphorus and nitrogen cycle respectively?
 - a) Atmosphere and bedrocks

b) Bedrocks and atmosphere

c) Consumers

- d) Atmosphere and producers
- 10. The organ in *Viscum* that absorb nutrients is known
 - a) Haustoria
- b) Rhizophore
- c) Roots
- d) None of these
- 11. Insectivorous plants live in a soil that is usually deficient in
 - a) Nitrate
- b) Chloride
- c) Potassium
- d) Magnesium

12. Humans is essential for plant growth because



- a) It is rich in nutrients and increases the water holding capacity of soil
- b) It increases aeration of soil
- c) It increases porocity of soil
- d) All of the above
- 13. Read the functions given below and identify the concerned nutrient
 - I. Activator of catalase
 - II. Important constituent of cytochrome
 - III. Important constituent of proteins involved in ETS
 - IV. Essential for chlorophyll synthesis
 - a) Mo

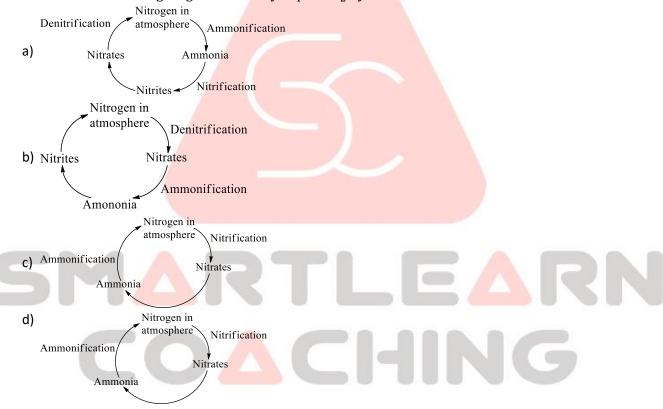
b) Fe

c) Cu

d) Ca

- 14. Nitrogen is present in the soil in the form of
 - I. Nitrates II. Ammonical salts
 - II. Nitrite IV. None of these
 - a) Only I
- b) Only III
- c) I and II
- d) Only IV

15. Which of the following diagram correctly depicts N₂-cycle?



- 16. The deficiencies of micronutrients not only affects growth of plants but also vital functions, such as photosynthetic and mitochondrial electron flow. Among the list given below, which group of three elements shall affect most, both photosynthetic and mitochondrial electron transport?
 - a) Cu, Mn and Fe
- b) Co. Ni and Mo
- c) Mn, Co and Ca
- d) Ca, K and Na
- 17. Which of the following is a bacterium involved in denitrification?
 - a) Nitrococcus
- b) Nitosomonas
- c) Pseudomonas
- d) Nitrobacter



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- 18. The major role of minor elements inside living organisms is to act as
 - a) Constituents
 - c) Cofactors of enzymes

- b) Binder of cell structure
- d) Building blocks of important amino acids
- 19. Which of the following is one of the component of ATP?
 - a) Potassium
- b) Phosphorus
- c) Magnesium
- d) Manganese

- 20. Hydroponics is a technique of growing plants in a
 - a) Soil solution
- b) Nutrient solution
- c) Both (a) and (b)
- d) None of the above



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