

## PG-CET-BOTANY

### PRACTICE BITS ON “MINERAL NUTRITION” -2

- 1) Biological Nitrogen fixation is a [1]  
1) Reductive process      2) Oxidative process  
3) Exothermic process      4) Exergonic process
- 2) Most of the Biological Nitrogen fixers belong to [2]  
1) Archaeobacteria    2) Eubacteria    3) Actinomycetes    4) Fungi
- 3) Out of C, H, O, N which elements are mainly taken by plants from soil? [4]  
1) N, O    2) H, O    3) C, O    4) H, N
- 4) Main amino acid that transfer amino group in transamination reaction is [3]  
1)  $\alpha$ -KGA    2) Aspartic acid    3) Glutamic acid    4) Glutamine
- 5) High Energy yielding step in 'N' cycle is [4]  
1) 'N'- fixation    2) “N”-Assimilation    3) Ammonification    4) Nitrification
- 6) Find out the mis match [2]  
1) Die back in Citrus ----- Cu      2) Mottled leaf in Citrus ---- Mn  
3) Heart rot in Beet root – B      4) Whiptail in Cauliflower – Mo
- 7) The enzyme Urease involves in [2]  
1) Synthesis of Urea from  $\text{NH}_3$       2) Formation of  $\text{NH}_3$  from Urea  
3) Synthesis of Urea from Ureides      3) Synthesis of Ureides from Urea
- 8) The concentration of Ca in phloem in comparison to Xylem is [1]  
1) Low    2) High    3) Same    4) Constant
- 9) The absorption of “P” from soil by plants is assisted by [3]  
1) Rhizobium    2) Nostoc    3) Glomus    4) Anabaena
- 10) Nitrogenase is [4]  
1) a  $\text{O}_2$  resistant enzyme      2) found in root cells of legumes  
3) found in all Cyanobacteria    4) a Fe-Mo Protein
- 11) Deficiency symptoms of “N” & “Mg” are visible first in [1]  
1) Younger leaves      2) Older leaves  
3) Senescent parts of plant      4) Both 2 & 3
- 12) Which of the following is not a role played by potassium in plants? [3]  
1) Maintains anion-cation balance    2) Opening and closing of stomata  
3) Formation of middle lamellum    4) Maintains the turgidity of cells

- 13) Major role of micro elements in living system is to act as** [3]
- 1) Building blocks for biomolecules
  - 2) Components of hormones
  - 3) Co-factors for Enzymes
  - 4) Components of Co-enzymes
- 14) Find out the wrong match** [1]
- 1) Non-mineral micro elements--- C, H, O
  - 2) Critical elements----- N, P, K
  - 3) Frame work elements----- C, H, O
  - 4) Beneficial elements----- Na, Si, Se, Co
- 15) Mineral deficiency in plant is understood by observing** [4]
- 1) Morphological changes
  - 2) Changes in phases growth
  - 3) Disease symptoms
  - 4) All the above
- 16) Regarding plant nutrition, elements are classified as** [3]  
**macro or minor depending on**
- 1) Their availability in the soil
  - 2) Their relative quantity in the ash obtained after burning the plants
  - 3) The relative amounts required by the plants
  - 4) Their relative importance in plant growth
- 17) An element is said to be deficient in the soil when its concentration is** [2]
- 1) Critical
  - 2) less than critical
  - 3) more than critical
  - 4) None of these
- 18) Minerals are absorbed into the roots in the form of** [4]
- 1) Molecules
  - 2) Ions
  - 3) Salts
  - 4) Both 2 & 3
- 19) Pick up the false statement** [2]
- 1) All Frame work elements are Macro elements
  - 2) All Macro elements are Mineral elements
  - 3) All Critical elements are Macro elements
  - 4) All Micro elements are Mineral elements
- 20) The ion which is commonly found free in the cell is** [1]
- 1) Potassium
  - 2) Boron
  - 3) Sulphur
  - 4) Nitrogen
- 21) Sulphur containing amino acid is** [4]
- 1) Methionine
  - 2) Cysteine
  - 3) Cystine
  - 4) All of these
- 22) Enzyme catalysed reactions can be stopped by** [4]
- 1) Hg
  - 2) Cd
  - 3) Pb
  - 4) All of these

**23) Hydroponics is a method of culturing plants in the presence of [2]**

- 1) H<sub>2</sub>O only                      2) H<sub>2</sub>O and inorganic ions  
3) H<sub>2</sub>O and organic solutes    4) H<sub>2</sub>O and soil

**24) Sulphur Stabilizes the structure of protein by forming [3]**

- 1) Peptide bonds   2) Ester bonds   3) Di-sulphide bridges   4) Glycosidic bond

**25) Find out the incorrect match [3]**

- 1) No of elements present in a plant -----30-40
- 2) No of elements present in a plant kingdom-----60-70
- 3) No of macro mineral elements-----9
- 4) No of micro mineral elements-----8

**26) Which essential elements are available to plant from both soil and atmosphere? [2]**

- 1) C, H, O    2) C, H, O, N    3) C, H, O, N, P    4) C, H, O, N, P, S

**27) Plants absorb essential elements by** [4]

- 1) Facilitated diffusion    2) Active transport  
3) Diffusion                      4) All of these

**28) Nitrogen fixation means conversion of  $N_2$  into** [4]

- 1)  $\text{NH}_3$     2) Nitrite    3) Nitrite    4) All of these

**29) Which enzyme can break the Triple bond of  $N_2$ ? [3]**

- 1) Nitrate reductase    2) Nitrite reductase    3) Nitrogenase    4) All of these

**30) Conversion of Ammonium into organic nitrogenous compounds is known as [2]**

- 1) N<sub>2</sub>-fixation   2) N<sub>2</sub>- assimilation   3) Ammonification   4) Nitrification

## ALL THE BEST

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