PG-CET-BOTANY

PRACTICE BITS ON "MINERAL NUTRITION"

1) Plants obtain mineral elements from **[1]**

1) Soil 2) Air, water 3) Air & Soil 4) Air, Water, soil

2) Ammonification means **[3]**

1) Conversion of Ammonia into Amino acids
2) Conversion of Nitrites & Nitrates into Ammonia
3) Conversion of Organic nitrogenous compounds into Ammonia
4) Conversion of N_2 into Ammonia

3) If by radiation all nitrogenase enzymes in Nature are inactivated then there will be no **[4]**

1) Fixation of atmospheric nitrogen in nature
2) Ammonification of legumes
3) Conversion of Nitrite into NH_3
4) Nitrogen Fixation in legumes

4) The microelement which is required for plants in larger amount in comparison to other microelement is **[1]**

1) Fe 2) Mo 3) Zn 4) Mn

5) The micro element which is required for plants in least quantity **[2]**

1) Cu 2) Mo 3) Ni 4) Zn

6) First stable product of biological Nitrogen fixation is **[3]**

1) NO_2 2) NO3 3) NH_3 4) NH_4

7) Usually synthesis of amino acids by Reductive amination & Transamination occur in /on **[2]**

1) Cytoplasm 2) Mitochondria 3) Ribosomes 4) RER.

8) Elements common in chlorophyll and ATP are **[1]**

1) C, H, O, N 2) C, H, O, N, P 3) C, H, O, N, Mg 4) C, H, O

9) Organism that fix atmospheric 'N' either in free living form or as symbiotic form is **[3]**

1) Rhizobium 2) Frankia 3) Nostoc 4) Bacillus

10) Ploidy of the nodular cells in legumes is **[4]**

1) n 2) 2n 3) 3n 4) 4n

11) Substrate for denitrification process is **[3]**

1) Ammonia 2) Ammonium ion 3) Nitrate ion 4) N_2

12) No of ATP required for the synthesis of 5 Ammonia molecules in legumes are **[2]**

1) 30 2)40 3) 80 4)50

13) Most common form of 'N' which is removed from the soil into plants is

I) N_2 2) NH_3 3) Nitrite 4) Nitrate **[4]**

14) α-KGA forms glutamic acid by **[3]**

1) Transamination 2) Transketolation

3) Reductive amination 4) Transphosphorylation

15) Plants incorporate absorbed ammonia immediately in this from **[2]**

1) Urea 2) Ureides 3) Amino group 4) Amino acids

16) The essential element required for the formation of root nodules in legume plants are **[4]**

1) B 2) Mg 3) S 4) All of these

17) Which anion is required for photolysis of water? **[2]**

1) Mn 2) Cl 3) Ca 4) All of these

18) Who gave the criteria of essentiality? **[3]**

1) Sachs 2) Hill 3) Arnon & stout 4) Black man

19) The plant ash is an indication of **[4]**

1) Organic matter of plant 2) All elements of plant

3) Essential elements of plant 4) Mineral elements of plants

20) "N" is not required for the synthesis of **[2]**

1) Proteins 2) Cellulose 3) DNA 4) Lecithin

21) Pungent smell of onion, garlic, cabbage and cauliflower is due to **[3]**

1) P 2) Mg 3) S 4) Cl

22) Find out the mis match **[1]**

1) Cu - plastoquinone 2) Ni - Urease
3) Zn - alcohol dehydrogenase 4) Mg – RuBisCO

23) Critical elements are **[2]**

1) C, H, O 2) N, P, K 3) Fe, Zn, Mn 4) K, Ca, Mg

24) Mg is not required for **[4]**

1) Synthesis of chlorophyll 2) Activator for hexokinase
3) Synthesis of DNA and RNA 4) Dissociation of ribosomal subunits

25) Pollen germination is induced by **[2]**

1) Mo 2) B 3) S 4) Zn

26) Which of the following is not a beneficial element? **[3]**

1) Sodium 2) Silicon 3) Sulphur 4) Selenium

27) Correct sequential order of steps in Nitrogen cycle are **[4]**

1) Ammonification, Nitrification, Denitrification, N_2-fixation, N_2- assimilation
2) N_2-assimilation, N_2-fixation, Ammonification, Nitrification, Denitrification
3) Nitrification, Denitrification, N_2- fixation, N_2-assimilation, Ammonification
4) N_2-fixation, N_2- assimilation, Ammonification, Nitrification, Denitrification

28) "S" is not a component in **[1]**

1) Lecithin 2) Methionine 3) Biotin 4) Cysteine

29) O_2 acts as a competitive inhibitor to **[3]**

1) N_2 2) Leg-Hb 3) Nitrogenase 4) NH_3

30) Leg-Haemoglobin is synthesized by **[4]**

1) Nitrogenase 2) Root hairs of legumes
3) Rhizobium 4) Cortical cells of legumes

ALL THE BEST

By
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