

DPP

DAILY PRACTICE PROBLEMS

Class : XIth
Date :

Subject : BIOLOGY
DPP No. : 1

Topic :- Mineral Nutrition

- Enzyme nitrogenase is responsible for
 - Nitrification
 - Nitrogen fixation
 - Nitrite reduction
 - Nitrate reduction
- Nitrifying bacteria
 - Liberate ammonia
 - Change ammonia into ionic form
 - Oxidise ammonia to nitrate
 - Oxidise ammonia to nitrite
- Plants growing near the nuclear test sites take up and accumulate which of the following elements?
 - Gold
 - Selenium
 - Strontium
 - All of these
- Name the minerals responsible for maintaining cation-anion balance in the plant cells
 - K^+ and Fe^{+3}
 - Cl^- and K^+
 - Ca^{+2} and Mg^{+2}
 - Cl^- and Mg^{+2}
- What is the major function of air stone?
 - Remove CO_2 content from the nutrient solution
 - Dissolves O_2 in the nutrient solution
 - Increases the level of N_2 in the nutrient solutions
 - Removes O_2 from the nutrient solution
- In hydroponic vegetables, the pH preferred by most vegetable is slightly
 - Alkaline
 - Neutral
 - Acidic
 - Basic
- Which of the following are considered as the roles of iron (Fe) in plants?
 - Important constituent of cytochrome
 - Activator of catalase
 - Essential for chlorophyll synthesis
 Choose the correct option
 - Only I
 - Only III
 - Only II
 - All of these
- By applying which of the following practices, contamination of hydroponics plants can be reduced?
 - Change the medium every week
 - Do not use tools from the outdoor garden
 - Complete aeration in hydroponic tank
 - All of the above
- An essential element is that which
 - Improves health of the plant
 - Is irreplaceable and indispensable for growth of plants
 - Is found in plant ash
 - Is available in the soil
- Essential elements perform many functions which includes
 - Permeability of the cell membrane
 - Maintenance of osmotic concentration of the cell sap
 - Major constituents of macromolecules and coenzymes
 - Buffering action
 Choose the correct option

- a) Only III b) I and III c) Only I d) I, II and III
11. Which of the following metals causes harmful effects?
a) Lead b) Cobalt c) Uranium d) All of these
12. Nitrogen is mainly absorbed in the form of
a) Nitrate b) Nitrite c) Ammonium d) All of these
13. In the initial phase of minerals absorption ions are taken up
a) Slowly b) Rapidly c) Fluently d) Simultaneously
14. Which of the following is true regarding manganese toxicity in plants?
a) Induction deficiencies of iron, magnesium and calcium
b) Appearance of brown spots surrounded by chlorotic veins
c) Inhibition of Ca^{2+} ions translocation in the shoot apex
d) All of the above
15. Sulphur is found as a constituent in which of the following amino acids?
a) Cysteine b) Methionine c) Both (a) and (b) d) None of above
16. What is the key principle of the EBB and flow system in hydroponics?
a) It floods and drains periodically
b) It makes a tide flowing over the roots
c) It sprays a mist of nutrients on the roots
d) None of the above
17. Hydroponics has been successfully employed as a technique for which of the following vegetables?
a) Seedless cucumber b) Tomato c) Lettuce d) All of these
18. For the uptake of ions in the second phase of absorption of minerals, the pathway followed is called
a) Passive uptake b) Active uptake c) Neutral d) None of these
19. How many essential mineral elements have been discovered yet?
a) 17 b) 107 c) 110 d) 150
20. Which of the following is a rootless aquatic plant in which a portion of the leaf forms a tiny sac for trapping insects?
a) Nepenthes b) Drosera c) Utricularia d) Dionaea