

Mineral Nutrition NEET Question

1. Which of the following elements is the binding component of ribosomes?

- a) Cu
- b) Mn
- c) Cl
- d) Mg

Answer: d

2. Which of the following micronutrients is used in metabolism of urea?

- a) Ni
- b) Cu
- c) Mn
- d) Mo

Answer: a

3. Which of the following element's deficiency leads to grey speck of oats?

- a) Mn
- b) Mo
- c) B
- d) Zn

Answer: a

4. Which of the following element's deficiency leads to Exanthema in Citrus?

- a) P
- b) Cu
- c) B
- d) Zn

Answer: b

5. Which of the following element's deficiency leads to rosette growth of plant?

- a) P

- b) Mo
- c) B
- d) Zn

Answer: d

6. Which of the element is beneficial but not essential?

- a) Ca
- b) Mo
- c) Na
- d) Zn

Answer: c

7. Which of the following elements are required in less than 10 mmole Kg-1?

- a) C
- b) H
- c) S
- d) B

Answer: d

8. Which of the following plants is not grown by hydroponics?

- a) Tomato
- b) Seedless cucumber
- c) Lettuce
- d) Pumpkin

Answer: d

9. Which of the following is not a function of chlorine?

- a) Water splitting reaction
- b) Anion-cation balance
- c) Pollen germination
- d) Determination of solute concentration

Answer: c

10. Which of the following elements will not cause delay flowering due to its less concentration?

- a) K
- b) Mo
- c) S
- d) N

Answer: a

11. Which of the following vitamins contain Sulphur?

- a) Ascorbic acid
- b) Biotin
- c) Cobalamin
- d) Retinol

Answer: b

12. Which of the following element activates enzyme catalase?

- a) Na
- b) Co
- c) Fe
- d) Si

Answer: c

13. Which of the following elements is an essential element?

- a) Na
- b) Co
- c) Fe
- d) Si

Answer: c

14. Which of the following elements is a macronutrient?

- a) Cu
- b) Mn
- c) Cl

d) Mg

Answer: d

15. Which of the following macronutrients is used in fertilizers?

a) N

b) O

c) P

d) K

Answer: d

16. Nitrogen is not taken up by plants in _____ form.

a) N₂

b) NO₃⁻

c) NO₂⁻

d) NH₄⁺

Answer: a

17. Hydroponics was demonstrated by?

a) Julius Von Sachs

b) Hoagland

c) Arnon

d) M. Calvin

Answer: a

18. Which of the following roles is not a criterion for essentiality of an element?

a) In its absence, plants do not set seeds

b) Irreplaceable by another element

c) Indirectly involved in the metabolism of the plant

d) Absolutely necessary for metabolism

Answer: c

19. Any mineral ion concentration that reduces that dry wt. of tissues by 10% is called as _____

- a) critical concentration
- b) toxic concentration
- c) beneficial concentration
- d) optimum concentration

Answer: b

20. Which of the following statements is wrong about manganese toxicity?

- a) Appearance of brown spots surrounded by chlorotic veins
- b) Deficiency of Iron
- c) Deficiency of Calcium
- d) Excess of Magnesium

Answer: d

21. Which of the following is not a function of soil?

- a) It holds water
- b) It supplies air to roots
- c) It acts as a matrix that destabilizes the plant
- d) It harbors nitrogen fixing bacteria

Answer: c

22. Minerals are transported through _____ along the _____ stream of water.

- a) xylem, descending
- b) phloem, descending
- c) xylem, ascending
- d) phloem, ascending

Answer: c

23. Which of the following elements do not get translocated to younger parts?

- a) N
- b) P
- c) K
- d) Ca

Answer: d

24. Statement A: Minerals are present in the soil in the form of charged particles.

Statement B: Concentration of minerals is lower in root than in soil.

- a) Both the statements are true
- b) Both the statements are false
- c) Statement A is true but Statement B is false
- d) Statement B is true but Statement A is false

Answer: c

25. Statement A: The outward movement is influx.

Statement B: The inward movement is efflux.

- a) Both the statements are true
- b) Both the statements are false
- c) Statement A is true but Statement B is false
- d) Statement B is true but Statement A is false

Answer: a

26. Statement A: The process of absorption of minerals is divided into 2 phases.

Statement B: One phase of absorption is passive while the other is active.

- a) Both the statements are true
- b) Both the statements are false
- c) Statement A is true but Statement B is false
- d) Statement B is true but Statement A is false

Answer: a

27. Where do plants obtain most of their carbon and oxygen?

- a) From nitrates in the soil
- b) From ammonia in the soil
- c) From nitrogen in the atmosphere
- d) From carbon dioxide in the atmosphere

Answer: d

28. Why can't all minerals be passively absorbed through the roots?

- a) They are present in the soil as charged particles
- b) The concentration of minerals in the soil is very high
- c) Minerals can never be transported
- d) Roots only absorb water

Answer: a

29. How do most minerals enter the root?

- a) Through guttation
- b) Through transpiration
- c) Through Active absorption
- d) Through passive absorption

Answer: c

30. What are transport proteins?

- a) They are restriction points
- b) They are control points
- c) They are not present in plants
- d) These proteins are present in animals and absent in plants

Answer: b

31. After active or passive absorption of all the mineral elements, how are minerals further transported?

- a) Transported through guttation
- b) Not transported at all
- c) Through the transpiration stream
- d) Through remobilisation

Answer: c

32. Which of the following is not a chief sink for the mineral elements?

- a) Young leaves
- b) Developing flower

- c) Old leaves
- d) Developing seeds

Answer: c

33. Where does the unloading of mineral ions occur in the plants?

- a) At the root endings
- b) At the stem endings
- c) At the root hair cells
- d) At the fine vein endings

Answer: d

34. Generally, from which of the following parts of the plants, the minerals are remobilised?

- a) Senescent parts
- b) Growing parts of the plant
- c) Younger leaves
- d) Dead tissues

Answer: a

35. Which of the following element is not remobilised?

- a) Phosphorous
- b) Sulphur
- c) Nitrogen
- d) Calcium

Answer: d

36. How do most of the nitrogen travels in the plants?

- a) As ammonia
- b) As nitrates
- c) As inorganic ions
- d) As nitrogen gas

Answer: c

37. Which of the following carbohydrates acts as food for the plants?

- a) Glucose
- b) Sucrose
- c) Mannose
- d) Lactose

Answer: b

38. What is understood by the term sink in the plants?

- a) The part that needs the food
- b) The part that synthesises the food
- c) The part that is going to die
- d) The part that is going to fall

Answer: a

39. What is the direction of food in the phloem?

- a) Bi-directional
- b) Unidirectional
- c) Tri-directional
- d) Non-directional

Answer: a

40. Which of the following is not a pool for nitrogen cycle?

- a) Atmosphere
- b) Ocean
- c) Soil
- d) Biomass

Answer: b

41. Statement A: Legume–bacteria relationship is an example of symbiotic biological nitrogen fixation.

Statement B: The association is represented by formation of root knots.

- a) Both the statements are true
- b) Both the statements are false
- c) Statement A is true but Statement B is false

d) Statement B is true but Statement A is false

Answer: c

42. Which is the first stable product of nitrogen fixation?

- a) N_2
- b) NH_3
- c) NH_4^+
- d) NO_3^-

Answer: b

43. Which organism is capable of carrying out denitrification?

- a) Nitrosomonas
- b) Beijerinckia
- c) Pseudomonas
- d) Nitrobacter

Answer: c

44. Statement A: Nodule formation involves a direct interaction between Rhizobium and leaves of host plant.

Statement B: The differentiation of cortical and pericycle cells lead to nodule formation.

- a) Both the statements are true
- b) Both the statements are false
- c) Statement A is true but Statement B is false
- d) Statement B is true but Statement A is false

Answer: b

45. The form of nitrogen absorbed by plants is _____

- a) NO_2^-
- b) N_2O
- c) NH_3
- d) NO

Answer: a

46. The process under which nitrogen and hydrogen combine to form ammonia under high temperature and pressure conditions is called as _____

- a) biological N₂ fixation
- b) natural N₂ fixation
- c) electrical N₂ fixation
- d) industrial N₂ fixation

Answer: d

47. Which microbe is capable of fixing nitrogen in non-leguminous plants?

- a) Bacillus
- b) Beijerinckia
- c) Anabaena
- d) Frankia

Answer: d

48. Statement A: At physiological pH, NH₃ is protonated to form NH₄⁺ ion.

Statement B: The NH₄⁺ ion is further converted to another form in order to be accumulated.

- a) Both the statements are true
- b) Both the statements are false
- c) Statement A is true but Statement B is false
- d) Statement B is true but Statement A is false

Answer: a

49. Statement A: Nodule that arises from root hair cells contains enzyme nitrogenase.

Statement B: The nodule gets its pink color from nitrogenase.

- a) Both the statements are true
- b) Both the statements are false
- c) Statement A is true but Statement B is false
- d) Statement B is true but Statement A is false

Answer: c

50. Statement A: In reductive amination, NH₄⁺ reacts with α -ketoglutaric acid to form asparagine.

Statement B: The process takes place in presence of glutamate dehydrogenase.

- a) Both the statements are true
- b) Both the statements are false
- c) Statement A is true but Statement B is false
- d) Statement B is true but Statement A is false

Answer: d

51. Which enzyme catalyses the process of transamination?

- a) Lipase
- b) Nitrogenase
- c) Transaminase
- d) Glutamate dehydrogenase

Answer: c

52. Amides are transported to other parts of the plant through _____

- a) phloem parenchyma
- b) phloem companion cells
- c) xylem vessels
- d) phloem fibre

Answer: c
