

QB365 Question Bank Software Study Materials

Bio - Botany - Mineral Nutrition 50 Important 1 Marks Questions With Answers (Book Back and Creative)

11th Standard

Biology

Total Marks : 50

Multiple Choice Question

50 x 1 = 50

1) Identify correct match.

1. Die back disease of citrus	(i) Mo
2. Whip tail disease	(ii) Zn
3. Brown heart of turnip	(iii) Cu
4. Little leaf	(iv) B

(a) 1(iii) 2(ii) 3(iv) 4(i) **(b) 1(iii) 2(i) 3(iv) 4(ii)** (c) 1(i) 2(iii) 3(ii) 4(iv) (d) 1(iii) 2(iv) 3(ii) 4(i)

2) If a plant is provided with all mineral nutrients but, Mn concentration is increased, what will be the deficiency?

(a) Mn prevent the uptake of Fe, Mg but not Ca (b) Mn increase the uptake of Fe, Mg and Ca
(c) Only increase the uptake of Ca (d) Prevent the uptake Fe, Mg, and Ca

3) The element which is not remobilized?

(a) Phosphorous (b) Potassium **(c) Calcium** (d) Nitrogen

4) Match the correct combination.

	Minerals		Role
A	Molybdenum	1	Chlorophyll
B	Zinc	2	Methionine
C	Magnesium	3	Auxin
D	Sulphur	4	Nitrogenase

(a)

A	B	C	D
1	3	4	2

 (b)

A	B	C	D
2	1	3	4

**(c)

A	B	C	D
4	3	1	2

A	B	C	D
4	2	1	3

5) Identify the correct statement

- Sulphur is essential for amino acids Cystine and Methionine
- Low level of N, K, S and Mo affect the cell division
- Non-leguminous plant Alnus which contain bacterium Frankia
- Denitrification carried out by nitrosomonas and nitrobacter.

(a) I, II are correct **(b) I, II, III are correct** (c) I only correct (d) all are correct

6) Which chelating agent found in soil are produced by bacteria?

(a) Siderophores (b) EDTA (c) Auxin (d) Leghaemoglobin

7) Plants deficient of element zinc, shows its effect on the biosynthesis of plant growth hormone _____

(a) Auxin (b) Cytokinin (c) Ethylene (d) Abscisic acid

8) Which group of plants can grow in nitrogen deficient soil?

(a) Lichen (b) Gymnosperms (c) Bryophytes **(d) Insectivorous plants**

9) The major portion of the dry weight of plant comprises of _____

(a) Nitrogen, phosphorous and potassium (b) Calcium, magnesium & Sulphur (c) Carbon, nitrogen and hydrogen

(d) Carbon, hydrogen & oxygen

10) Identify Wrongly matched pair.

(I) Calcium	Mitotic spindle formation and mitotic cell divisions
(ii) Manganese	Photolysis of water
(iii) Potassium	Stomatal movement
(iv) Zinc	Synthesis of cytokinin
(v) Magnesium	Binding of Thylakoids

(a) i and ii **(b) iv and v** (c) iv and i (d) v and ii

11) The macro nutrient which is an essential component of all organic compounds yet not obtained by plants from soil is _____

(a) Nitrogen **(b) Carbon** (c) Phosphorous (d) Magnesium

12) Match the following and choose the correct combination from the options given Column I and Column II.

Column I	Column II
a) Potassium	1. Constituent of ferredoxin
b) Sulphur	2. Involved in stomatal movement
c) Molybdenum	3. Needed in the synthesis of auxin
d) Zinc	4. Components of nitrogenase

(a) a-2, b-I, c-4, d-3 (b) a-I, b-2, c-3, d-4 (c) a-4 ,b-3 ,c-2 ,d-I (d) a-I ,b-3 ,c-4 ,d-2

13) _____ is not a unclassified mineral

(a) Sodium (b) Cobalt (c) Silicon **(d) Boron**

14) _____ is a mineral required greatest amount by plants.

(a) P (b) K **(c) N** (d) Mg

15) The term Hydroponis was coined by _____

(a) Hoagland **(b) Goerick** (c) Knop (d) Arnon

16) Coralloid Roots are seen in _____

(a) Cycas (b) Legume (c) Alnus (d) Lichens

17) _____ is a saprophyte.

(a) Monotropa (b) Cycas (c) Anabaena (d) Cuscuta

18) A free living anaerobic Nitrogen fixing bacteria _____

(a) Azolla (b) Klebsiella **(c) Clostridium** (d) Frankia

19) In families like Cyperaceae, Equisetaceae etc the element _____ plays a special role.

(a) Mo (b) Zn **(c) Si** (d) Mg

20) _____ is an activator for RUBP Carboxylase and PEP Carboxylase.

(a) Manganese **(b) Magnesium** (c) Zinc (d) Chlorine

21) The mineral playing a key role in osmotic potential maintenance is _____

(a) Nitrogen **(b) Potassium** (c) Phosphorous (d) Nickel

22) The enzyme _____ is a constituent of urease and dehydrogenase.

(a) Molybdenum (b) Boron **(c) Nickel** (d) Zinc

23) _____ is a component of plastocyanin.

- (a) Nickel (b) Boron (c) Potassium **(d) Copper**
- 24) _____ is not caused due to copper deficiency.
- (a) Die back of citrus **(b) Internal cork of apple** (c) Reclamation disease of cereals (d) Exanthema
- 25) Whip tail disease of cauliflower is due to deficiency of _____
- (a) B (b) Zn **(c) Mo** (d) Cl
- 26) Identify the wrong statement.
- i) Hydroponics was developed by David Durger.
 ii) It is called soilless culture.
 iii) plants are grown in nutrient solution.
 iv) Nutrients are sprayed over the roots.
- (a) i and iii (b) i, ii and iii **(c) i and iv** (d) All the four
- 27) _____ is a free living Nitrogen fixing fungi.
- (a) Anabaena **(b) Pullularia** (c) Chlorobium (d) Mucor
- 28) _____ is a saprophytic angiosperm.
- (a) Monotropa** (b) Alnus (c) Cuscuta (d) Viscum
- 29) _____ is a not a parasite.
- (a) Loraathus (b) Santalum album (c) Viscum **(d) Viscum**
- 30) _____ is the main amino acid from which other amino acids are synthesized.
- (a) Glutamic acid** (b) Valine (c) Cysteine (d) Methionine
- 31) Carbon, hydrogen and oxygen are called as _____ elements are required in _____.
- (a) Essential (b) Non-essential **(c) Skeletal** (d) Structural
- 32) _____ is essential for pest resistance, prevent water lodging and aids cell wall formation in Equisetaceae (Equisetum), Cyperaceae and Gramineae.
- (a) Calcium (b) Phosphorus (c) Cobalt **(d) Silicon**
- 33) _____ plays a key role in maintaining osmotic potential of the cell.
- (a) Potassium** (b) Magnesium (c) Phosphorus (d) Nitrogen
- 34) Find the mismatch pair:
- (a) Boron - translocation of sugars (b) Molybdenum - Nitrogen metabolism (c) Zinc - Biosynthesis of auxin
(d) Chlorine - cofactor for enzyme urease
- 35) The term Hydroponis was coined by _____.
- (a) Hoagland **(b) Goerick** (c) Knop (d) Arnon
- 36) A membrane bound bacterium is formed inside the nodule and is called _____.
- (a) Bacteroid** (b) Bacterioloa (c) Bacter (d) None of these
- 37) _____ from bacteria and _____ from host plant promotes cell division and leads to nodule formation.
- (a) Auxin and Cytokinin (b) Gibberelin and Auxin **(c) Cytokinin and Auxin** (d) Cytokinin and Ethylene
- 38) Match the following:

A) Viscum	i) Partial root parasite
-----------	--------------------------

B) Santalum album	ii) Mycorrhizae
C) Pinus	iii) Insectivorous
D) Rhizobium	iv) Partial stem parasite
E) Utricularia	v) Symbiotic

(a) A-i, B-iv, C-iii, D-ii, E-v (b) A-iii, B-ii, C-iv, D-i, E-v (c) A-v, B-iii, C-i, D-iv, E-ii **(d) A-iv, B-i, C-ii, D-v, E-iii**

- 39) Curled leaf margin occurs because of the deficiency of _____ minerals.
 (a) Sulphur (b) Phosphorus **(c) Potassium** (d) Calcium
- 40) The appearance of brown spots surrounded by chlorotic veins is the symptoms of _____.
(a) Manganese toxicity (b) Aluminium toxicity (c) Potassium toxicity (d) Calcium toxicity
- 41) _____ is an activator of alcohol dehydrogenase.
 (a) Mg^{2+} **(b) Zn^{2+}** (c) Mo (d) K^+
- 42) _____ is used in the synthesis of cell wall, particularly as calcium pectate in the middle lamella.
 (a) Potassium (b) Boron (c) Zinc **(d) Calcium**
- 43) Nitrate is converted back to nitrogen gas in the process of _____.
 (a) Ammonification (b) Nitrification **(c) Denitrification** (d) Nitrogen cycle
- 44) The example for free living nitrogen fixing aerobic bacteria is _____.
(a) Azotobacter (b) Rhodospirillum (c) Anabaena (d) Nostoc
- 45) _____ produces nitrogen fixing nodules on the roots of non-leguminous plants.
 (a) Rhizobium **(b) Frankia** (c) Beijernickia (d) Anabaena
- 46) The process of conversion of NO_2^- , $NO_3^- \rightarrow NH_3 \rightarrow N_2$ is called _____ and is carried out by _____.
 (a) Nitrification, Nitrosomonas **(b) Denitrification, Pseudomonas** (c) Nitrate assimilation, Nitrobacter
 (d) Ammonification
- 47) 'Reclamation' and 'little leaf' disease are caused by deficiency of _____.
 (a) Zn and Mo **(b) Cu and Zn** (c) Cu and B (d) Mn and Cu
- 48) The first stable product of fixation of atmospheric nitrogen in leguminous plants is _____.
(a) Ammonia (b) Glutamate (c) NO_3^- (d) NO_2^-
- 49) During biological nitrogen fixation, inactivation of nitrogenase by oxygen poisoning is prevented by _____.
 (a) Cytochrome **(b) leghaemoglobin** (c) Xanthophyll (d) Carotene
- 50) Which one of the following is an amide involved in nitrogen assimilation by plants?
 (a) Glutamase (b) Alanine **(c) Asparagine** (d) Serine