

Root ,Stem & Leaf

1. **Tap root develops from** ()
1. Embryonal axis 2. Radicle 3. Dicotyledons 4. Plumule
2. **Origin of lateral roots and root hairs respectively is** ()
1. Exogenous & Endogenous 2. Endogenous & Exogenous
3. Endogenous & Endogenous 4. Exogenous & Exogenous
3. **In aquatic plants root caps are replaced by** ()
1. Root pockets 2. Root hairs 3. Dead tissue 4. Air bubbles
4. **Roots with symbiotic association are seen in** ()
1. *Rhizobium* 2. *Arachis* 3. *Cuscuta* 4. *Avicennia*
5. **Green coloured roots are seen** ()
1. *Rhizobium* 2. *Taeniophyllum* 3. *Vanda* 4. *Rafflesia*
6. **Assimilatory roots that absorbs water from atmosphere in vapour form are seen in** ()
1) *Taeniophyllum* 2) *Cuscuta* 3) *Viscum* 4) *Vanda*
7. **Roots absorb both food & water from the stem in** ()
1) *Cuscuta* 2) *Vanda* 3) *Striga* 4) *Viscum*
8. **Root hairs are** ()
1) Multicellular 2) Unicellular 3) Acellular 4) Bicellular
9. **Plant growing in saline marshy soils** ()
1) *Avicennia* 2) *Pistia* 3) *Eichornia* 4) *Asparagus*
10. **In Dicots root system is** ()
1) Adventitious 2) Fibrous 3) Tap root 4) Tap root & adventitious
11. **True statement among the following** ()
1) Velamin roots are living 2) Velamin roots are tap roots
3) In *Cuscuta* velamin roots are present 4) Velamin roots attaches to soil.
12. **Incorrect statement regarding region of meristematic activity** ()
- I. It is the region between region of maturation and region of elongation
II. The cells proximal to this region undergo rapid elongation.
III. This region absorbs water and minerals from the soil
IV. Cells of this region are very small and divide repeatedly
1. I & II 2. II & III 3. I & III 4. III & IV

13. **True statement regarding Asparagus** ()
- I. A bunch of roots develop at the base of the stem
 II. Mechanism for starch storage is also developed
 III. A single tuberous root is present
 IV. Seeds show two cotyledons
- 1) I & II 2) II & III 3) III & IV 4) IV & I
14. **Among the list of plants given here how many of them show root modifications- carrot, *Monstera*, turnip, *Asparagus*, *Curcuma*, zamikhand, *Opuntia*, *Dioscoria*, banyan, *Pistia*, banana, pineapple, strawberry, *Vanda*** ()
1. Seven 2. Eight 3. Twelve 4. Six
15. **Leafless plant that depends entirely on the metabolism of its roots** ()
- 1) *Cuscuta* 2) *Asparagus* 3) *Taeniophyllum* 4) *Rhizophora*
16. **Root modifications that perform two functions** ()
- I. Roots of *Taeniophyllum* II. Velamen roots of *Vanda*
 III. Haustorial roots *Cuscuta* IV. Roots of Fabaceae
- 1) I & II 2) II & III 3) III & IV 4) IV & I
17. **True statement among the following** ()
- 1) In *Oryza* length of all the roots is more or less same
 2) In *Vanda* all the roots are of same length
 3) Roots on aerial stems develop from axillary buds
 4) All roots in all the plants help in anchorage
18. **Brace or stilt roots help in** ()
1. Anchorage 2. Reproduction 3. Storage 4. Breathing
19. **Roots that grow negatively geotropic are seen in** ()
1. *Viscum* 2. *Avicennia* 3. *Dolichos* 4. *Vanda*
20. **Scientific name of sweet potato is** ()
1. *Dahlia* 2. *Balanophora* 3. *Arachis* 4. *Ipomea batatus*

21. Lowermost branches with single elongated internode helping in vegetative propagation in ()
 1) *Pistia* 2) *Jasminum* 3) *Oxalis* 4) *Chrysanthemum*
22. Stem modifications in *Oxalis* ()
 1) Aerial 2) Underground 3) Aerial & sub aerial 4) Only sub aerial
23. Identify the correct pair from the following ()
 1. Potato- stem tuber 2. *Amorphophallus*- corm 3. *Oxalis*- sucker 4. *Nerium*- Offset
24. Axillary buds in underground stems are protected by ()
 1) Soil 2) Stipules 3) Scaly leaves 4) Epidermis
25. Underground stem that grows parallel to the surface is seen in ()
 1) *Oxalis* 2) Strawberry 3) *Curcuma* 4) *Solanum*
26. True statement regarding rhizome is ()
 I. Rhizomes grow parallel to the surface
 II. Only scaly leaves are seen.
 III. Roots are produced at basal part.
 1) Only I 2) Only II 3) I & II 4) II & III
27. The branches of limited growth that perform photosynthesis are called as()
 1. Assimilatory branch 2. Suckers 3. Stolon 4. Cladophylls
28. A scaly bulb enclosed in white skinny tunic in ()
 1) *Allium cepa* 2) *Allium sativum* 3) *Lilium candidum* 4) *Scilla indica*
29. Adventitious roots are produced at the point of contact in ()
 1) Runners 2) Stolons 3) Suckers 4) Offset
30. Offsets present in ()
 1) *Opuntia* 2) *Solanum* 3) *Dioscorea* 4) *Pistia*
31. Leaf apex can modify into ()
 A) Spine B) Tendril C) Phyllode D) Thorn
 1. A & B 2. B & C 3. C & D 4. A, B & C
32. Phyllode is modification of
 1. Leaf 2. Petiole 3. Stem 4. Branch
33. Photosynthetic appendage in *Pisum* is/are ()
 1) All leaf lets 2) Lower leaflets 3) Entire Leaf 4) Lower leaflets and stipules

34. **In *Allium*** ()
1) Petiole is modified 2) Venation is parallel
3) Venation is reticulate 4) Two cotyledon are present
35. **Assertion (A) : In *Pisum* stipules are persistent.** ()
Reason(R) : In *Pisum*, plant depends partly on stipules for photosynthesis.
1) Both A and R are correct and R is the correct explanation of A.
2) Both A and R are correct but R is not the correct explanation of A.
3) A is correct, R is false
4) A is false, R is correct
36. **Three modifications in a leaf is seen in** ()
A) *Allium* B) *Bryophyllum* C) *Opuntia* D) *Nepenthes*
1. A & B 2. B & C 3. C & D 4. D
37. **In opposite phyllotaxy** ()
1) Always two rows of leaves are present 2) Sometimes four rows are seen
3) More than four rows are also possible 4) Only one row of leaves
38. **Venation in *Oryza sativa* is** ()
1) Multicostate parallel 2) Unicostate parallel
3) Multicostate reticulate 4) Unicostate reticulate
39. **Only spines are present at a node in** ()
1) *Acacia* 2) *Opuntia* 3) *Citrus* 4) *Parkinsonia*
40. **Assertion (A) : Scaly leaves are xerophytic adaptation.** ()
Reason (R) : Scaly leaves cannot perform photosynthesis.
1) Both A and R are correct and R is the correct explanation of A.
2) Both A and R are correct but R is not the correct explanation of A.
3) A is correct, R is false
4) A is false, R is correct
41. **Plant that climbs with the help of petiole is** ()
A) *Nepenthes* B) *Cucurbita* C) *Dolichos* D) *Pisum*
1. A & B 2. Only A 3. A, B & D 4. A, B, C & D
42. **Epiphyllous buds are present in** ()
1) *Bulbophyllum* 2) *Opuntia*
3) *Bryophyllum* 4) *Dioscorea*

