

Bajaj College of Science, Wardha

Practice Sheet During Lockdown

B.Sc II Sem II

Subject: Botany

Write Short Notes on:

1. General characters of Psilopsida
2. Distinguishing characters of Sphenopsida
3. Distinguishing characters of Lycopsidea
4. General characters of Pteropsida
5. Classification of Pteridophytes with distinguishing features of each Class
6. Apogamy and apospory
7. Stellar system in pteridophytes
8. Heterospory and seed habit in *Selaginella*
9. Sporophytic generation of *Equisetum*
10. Structure of Strobilus or mature sporangium of *Equisetum*
11. Sex organs of *Equisetum*
12. Alternation of generation in *Equisetum*
13. Vegetative reproduction in *Selaginella*
14. External structure and anatomy of Strobilus in *Selaginella*
15. Gametophytic generation of *Selaginella*
16. Alternation of generation in *Selaginella*
17. Anatomical features of Leaf, stem, root and rhizophore of *Selaginella*
18. Geological time scale
19. Define fossils. Describe the conditions for fossilization.
20. Molecule by molecule replacement theory.
21. Infiltration theory.
22. Impression.
23. Compression.
24. Petrification.
25. *Glossopteris*
26. *Scutum*
27. *Cycadeoidea* morphology

28. *Cycadeoidea* stem
29. Male flower of *Cycadeoidea*.
30. General characters of Gymnosperms
31. Classification of Gymnosperms by Stewart, 1982
32. Economic Importance of Gymnosperms
33. Characteristic features of *Pinus*
34. Male cone in *Pinus*
35. Female cone in *Pinus*
36. Life cycle of *Pinus*
37. Characteristic feature of *Gnetum*
38. Life cycle of *Gnetum*
39. Male flower of *Gnetum*
40. Affinities of Gymnosperms with Pteridophytes (Similarities and Differences)
41. Affinities of Gymnosperms with Angiosperms (Similarities and Differences)
42. Describe the diversity in plant habits
43. Define Root System in plants. What are the different types of roots?
44. Modifications of Tap Root
45. Modifications of Adventitious Root
46. Modifications of Root for storage of Food
47. Modification of Adventitious root for Mechanical support
48. Characteristics and functions of stem.
49. Describe types of stem
50. Different forms of stem
51. Underground modifications of stem
52. Sub-aerial modifications of stem
53. Aerial modifications of stem
54. Types of venation
55. Define Phyllotaxy. What are the types of phyllotaxy?
56. Types of Leaves
57. Function of Leaves
58. Modifications of leaves
59. Types of stipules
60. Racemose inflorescence.
61. Cymose inflorescence.

62. Special type of inflorescence.
63. Flower as modified shoot.
64. Insertion of floral whorls.
65. Structure of calyx.
66. Structure of corolla.
67. Structure of androecium.
68. Structure of gynoecium.
69. Types of placentation.
70. Structure of seed.
71. Types of seeds.
72. Classification of fruits.
73. Simple types of fruits.
74. Aggregate types of fruits.
75. Composite types of fruits.
76. What is laboratory record? Describe various reasons to maintain laboratory records.
77. Types of tables and figures
78. Imaging of tissue specimens and application of scale bars
79. Art of field photography
80. Numbers, units and abbreviations used in scientific writing
81. What is reference? Describe types and structures of references with examples.
82. PowerPoint presentation
83. Poster presentation
84. Scientific writing and ethics
85. What is copyright?
86. Academic misconduct or plagiarism

Write in two or three lines (Diagrams not necessary):

Strobilus or strobili

Carinal canal

Valecular canal

Xerophytic features of Equisetum stem

Elaters of Equisetum

Heterophyllum
Ligules
Glossopodium
Rhizophore
Antheridium
Archegonium
Stele
Protostele
Polystele
Dictyostele
Haplostele
Actinostele
Plectostele
Siphonostele
Ectophloic siphonostele
Amphiphloic siphonostele
Paleobotany
Fossils
Fossilization
Paleozoic
Azoic
Cenozoic
Permian
Jurassic
Pennsylvanian
Oligocene
Pliocene
Cambrian
Leaf bases
Mucilage canal
Bisporangiate
Stobili
Benettitales
Synangium

Spur of *Pinus*

Needle of *Pinus*

What are branches of Limited growth in *Pinus*

Uses of *Pinus* wood

Morphological features of *Gnetum*

Gnetum is often confused as an Angiosperm. Explain

Ovule of *Pinus*

Seed dispersal in *Pinus*.

Pollen grain of *Pinus*.

T.S. ovule of *Gnetum*

Seed structure in *Gnetum*

Pollen structure of *Gnetum*

Define Annual Plants

Define Biennial Plants

What are Perennial Plants?

What is Tap Root?

What is Adventitious Root?

Epiphytic Roots

Pneumatophores

Conical Root

Fusiform Root

Prop Roots

Define Phyllotaxy.

Define Petiole

Simple Leaf

Compound Leaf

Reticulate Venation

Parallel Venation

What is a stem?

Rhizome

Bulb

Corm

Tuber

Runner

Shape of stem
Phylloclade
What is a stipule/
Insectivorous leaves
Leaflet hooks
Storage leaves
Leaf spines
Leaf tendrils
Basepetal
Catkin
Spadix
Spikelet
Corymb
Polychasial cyme
Biparous cyme
Solitary
Helicoids
Scorpoid
Hypanthodium
Verticillaster
Cyathium
Modified shoot
Persistent calyx
Petalloid calyx
Campanulate
Tubular
Pappus
Cruciform
Bilabiate
Imbricate
Quincuncial
Adhesion
Cohesion
Epipetalous

Anther lobe
Dorsifixed
Didynamous
Tetradynamous
Monoadelphous
Polyadelphous
Syngenaceous
Synandrous
Actinomorphic
Zygomorphic
Apetalous
Hypogynous
Perigynous
Epigynous
Androphore
Gynophores
Gynandrophore
Pentacarpellary
Marginal placentation
Superficial placentation
Parietal placentation
Seed coat
Endosperm
Dispersal
Achene
Sorosus
Samara
Ectepio of follicle
Poster
Plagiarism
Table
Scale bar
Tissue imaging