

UNIT 2: STRUCTURAL ORGANIZATION IN PLANTS AND ANIMALS

CHAPTER 5: MORPHOLOGY OF FLOWERING PLANTS

ONE MARK QUESTIONS:

1. Define morphology.(K)
2. What is tap root system?(K)
3. What is fibrous root system?(K)
4. What are adventitious roots?(K)
5. Define venation.(K)
6. Define inflorescence.(K)
7. What is a flower?(K)
8. Define aestivation in angiosperms.(K)
9. Define placentation.(K)
10. What is a fruit?(K)
11. What is primary root?(K)
12. Mention the function of root hairs. (K)
13. In which group of plants primary root is short lived and replaced by large number of roots.(U)
14. In which region of the root cells are small, thin walled with dense protoplasm.(U)
15. What is a node?(K)
16. What are internodes?(K)
17. What are stem tendrils? (K)
18. Mention the function of tendrils.(A)
19. Pneumatophores are found only in swampy areas. Why? (U)
20. Give an example of the stem which performs photosynthesis.(A)
21. Define leaf. (K)
22. What do you call a swollen leaf base? (U)
23. What is phyllotaxy? (k)
24. Which part of the plant gets modified in Venus fly trap? (K)
25. Name the plant from which Colchicine is extracted. (S)
26. What is simple leaf? (K)
27. What is compound leaf?(K)
28. Define lamina or leaf blade.(K)
29. Which type of phyllotaxy is present in *Calotropis*? (U)
30. In Australian acacia which part is modified for synthesis of food.(U)
31. Define hypogynous flower.(K)
32. Define epigynous flower.(K)
33. Define perigynous flower.(K)
34. What is a staminode?(K)
35. Name the condition when stamens are attached to the petals.(U)
36. Which type of phyllotaxy is present in *Alstonia*?(U)
37. Define gamopetalous.(K)
38. Define polypetalous. (K)

39. Give an example for epiphyllous flower. (K)
40. What is parthenocarpic fruit?(K)
41. What is Coleoptile? (K)
42. Define Coleorhizae. (K)
43. What is apocarpous condition? (K)
44. What is syncarpous condition? (K)
45. Define bracteate.(K)
46. Define ebracteate.(K)
47. What leads to formation of primary root?(U)
48. Which region of root produces root hairs? (k)
49. Give an example for modified adventitious root which stores food.(U)
50. What are pneumatophores? (K)
51. Name the plant which produces pneumatophores. (K)
52. Define actinomorphic condition.(K)
53. Name the family which has perianth as floral whorl.(K)
54. Which is the potato family?(K)
55. Name the thimble like structure which covers root apex.(K)
56. Which is the most important vegetative organ for photosynthesis?(K)
57. Define zygomorphic flower.(K)
58. Define epiphyllous. (K)
59. Define valvate aestivation. (K)
60. Define imbricate aestivation.(K)
61. Define twisted aestivation. (K)
62. Define vexillary aestivation.(K)
63. What is aleurone layer?(K)
64. What do you call the cotyledon of a monocot seed? (K)
65. Name the layer which separates endosperm and embryo in monocots.(K)

TWO MARKS QUESTIONS:

66. What is modification of root? Give an example of prop roots and stilt roots. (K)
67. Mention the characteristic features of stem.(K)
68. Draw a neat labeled showing parts of a leaf.(S)
69. Write any four functions of stem. (K)
70. Mention the functions of veins in leaves. (K)
71. Differentiate a simple leaf from compound leaf. (U)
72. List the economically important plants of family Solanaceae (K)
73. List the economically important plants of family Fabaceae(K)
74. List the economically important plants of family Liliaceae(K)
75. Differentiate between pinnately compound leaf and palmately compound leaf. (U)
76. Differentiate between apocarpous and syncarpous ovary.(U)
77. Differentiate between epipetalous and epiphyllous condition. (U)
78. Mention two major types of inflorescence.(K)
79. Name the accessory organs of the flower.(K)
80. Differentiate between gamosepalous and polysepalous.(U)
81. Differentiate between polyandrous and adelphy.(U)
82. Name the two layers of seed coat.(K)
83. Sketch and label a dicotyledonous seed.(S)

84. Mention the four types of aestivation in plants.(K)
85. Define valvate aestivation. Give an example. (A)
86. Define imbricate aestivation. Give an example. (A)
87. Define twisted aestivation. Give an example. (A)
88. Define vexillary aestivation. Give an example. (A)

THREE MARKS QUESTIONS:

89. Define- a) Trimerous b) Bracteate c) epipetalous (K)
90. Define- a) Monadelphous b) Diadelphous c) Polyadelphous (K)
91. Mention the regions of root tip. (A)
92. Write the floral characters of family Fabaceae.
93. Write the floral characters of family Solanaceae.
94. Write the floral characters of family Liliaceae.
95. Name the family to which the following plants belong to a) *Sesbania* b) *Belladonna* c) *Asparagus* (K)
96. Explain the structure of a drupe. (U)
97. Name the three wall layers of a fruit. (K)
98. What is venation? Mention the types of venation.(K)
99. Explain three different types of phyllotaxy. (U)
100. How do various leaf modifications help plants?(U)
101. Describe the arrangement of floral members in relation to their insertion on thalamus. (U)
102. Mention any three modifications of stem with example. (A)
103. Write a note on symmetry of flower. (U)
104. Draw a floral diagram of family Fabaceae.(S)
105. Draw a floral diagram of family Solanaceae.(S)
106. Draw a floral diagram of family Liliaceae.(S)

FIVE MARKS QUESTIONS:

107. With the help of labelled diagram explain the different regions of root tip. (S)
108. Explain the structure of a dicotyledonous seed. (U)
109. Draw a neat labelled diagram to show different parts of a flowering plant.(S)
110. Write a note on modifications of stem.(U)
111. With the help of labelled diagram explain structure of leaf. (S)
112. Explain the different types of aestivation with relevant diagrams. Mention one example for each type.(U)
113. Write the semi technical description of a typical flowering plant.(S)
114. Describe various types of placentation found in flowering plants with suitable diagrams. (U)
115. What is a flower? Describe the four whorls of a flower. (U)
116. With the help of labelled diagram explain monocotyledonous seed.(S)
117. Write any five salient features of family Fabaceae . (K)
118. Write any five salient features of family Solanaceae . (K)
119. Write any five salient features of family Liliaceae. (K)