



BIOLOGY

BOOKS - SARAS PUBLICATION

MORPHOLOGY

Exercise

1. Roots are

A. Descending, negatively geotropic,
positively phototropic

B. Descending, positively geotropic,
negatively phototropic

C. Ascending, positively geotropic,
negatively phototropic

D. Ascending, negatively geotropic,
positively phototropic

Answer:



Watch Video Solution

2. When the root is thick and fleshy, but does not take a definite shape, it said to be _____

- A. Nodulose root
- B. Tubercular root
- C. Moniliform root
- D. Flasciculated root

Answer:



Watch Video Solution

3. Example for negatively geotropic roots _____

A. Ipomoea, Dahlia

B. Asparagus, Ruellia

C. Vitis, Portulaca

D. Avicennia, Rhizophora

Answer:



Watch Video Solution

4. *Curcuma amada*, *Curcuma domestica*,
Asparagus, *Maranta* are example of ____

- A. Tuberous root
- B. Beaded root
- C. Moniliform root
- D. Nodulose root

Answer:



Watch Video Solution

5. Bryophyllum and Dioscorea are example for

- A. Foliar bud, apical bud
- B. Foliar bud, cauline bud
- C. Cauline bud, apical bud
- D. Cauline bud, foliar bud

Answer:



Watch Video Solution

6. Roots developed from parts of the plant other than radicle are called

- A. Taproots
- B. Fibrous roots
- C. Adventitious roots
- D. Nodular roots

Answer:



Watch Video Solution

7. Characteristic feature of marshy soil plant

- A. Conidiophore
- B. Pneumatophore
- C. Chlamydiophore
- D. Thallophore

Answer:



Watch Video Solution

8. Nodulated roots occur in

A. Pea

B. wheat

C. Mustard

D. Rice

Answer:



Watch Video Solution

9. Root cap takes part in

A. Formation of new cells

B. Absorption of water and minerals

C. Protection of root meristem

D. Storage of food

Answer:



Watch Video Solution

10. Bacteria found in root nodules of legumes are

A. Nitrocbacter

B. Nitrosomonas

C. Rhizobium

D. Azotobacter

Answer:



Watch Video Solution

11. Epiphytic roots occur in

A. Rhizobium

B. Trapa

C. Vanada

D. Asparagus

Answer:



Watch Video Solution

12. Arrangement of leaves on a stem branch is

A. Venation

B. Vernation

C. Inflorescence

D. Phyllotaxy

Answer:



Watch Video Solution

13. A modification of leaf is

A. Phyllode

B. Phylloclade

C. Cladode

D. Staminode

Answer:



Watch Video Solution

14. Sweet potato is a modification of

- A. Primary root
- B. Fibrous roots
- C. Tap root
- D. Adventitious root

Answer:



[Watch Video Solution](#)

15. Ptyxis is

- A. Arrangement of leaves on the stem
- B. Arrangement of leaves in the bud
- C. Folding of lamina in bud
- D. Both B and C

Answer:



[Watch Video Solution](#)

16. Opposite decussate phyllotaxy is present in

A. Banana

B. Calotropis

C. Grass

D. China rose

Answer:



Watch Video Solution

17. A swollen leaf base is called

A. Pulvinus

B. Lamina

C. Leaf sheath

D. Stipules

Answer:



Watch Video Solution

18. Petiole modified for photosynthesis is

- A. Cladode
- B. Phylloclade
- C. Phyllode
- D. Staminode

Answer:



Watch Video Solution

19. In musa, the venation is

- A. Unicostate reticulate
- B. Unicostate parallel
- C. Multicostate reticulate
- D. Multicostate paralle.

Answer:



Watch Video Solution

20. Lamina is reduced in

A. Xerophytes

B. Mesophytes

C. Hydrophytes

D. Halophytes

Answer:



Watch Video Solution

21. A leaf without petiole is

- A. Sessile
- B. Sub sessile
- C. Sub petiolate
- D. Petiolate

Answer:



Watch Video Solution

22. The Eyes of the potato tuber are

A. Axillary buds

B. Root buds

C. Flower buds

D. Shoot buds

Answer:



Watch Video Solution

23. Which one of the following is wrongly matched?

A. Onion-Bulb

B. Ginger-Rhizome

C. Penicillium-Conidia

D. yeast-Zoospores

Answer:



Watch Video Solution

24. An example of edible underground stem is

A. Carrot

B. Groundnut

C. Sweet potato

D. Potato

Answer:



Watch Video Solution

25. The general form of a plant is referred to as



Watch Video Solution

26. The unbranched trunk of plant is called_____



Watch Video Solution

27. The point from which leaf arises is called as

.....



Watch Video Solution

28. The region between two adjacent node

is _____



Watch Video Solution

29. All the leaves of a plant together are referred to as

A. Phyllode

B. Phyllome

C. Phylloclade

D. Phyllotaxy

Answer:



Watch Video Solution

30. The main stalk of a compound leaf is

A. Peduncle

B. Rachis

C. Pedicel

D. Stalk

Answer:



Watch Video Solution

31. The first formed leaves are called _____



Watch Video Solution

32. which of the following is not a stem modification?

A. Flattened structures of opuntia

B. Pitcher of Nepenthes

C. Thorns of citrus

D. Tendrils of cucumber

Answer:



Watch Video Solution

33. Stems modified into flat green organs performing the functions of leaves are known as

A. Scales

B. Cladodes

C. Phyllodes

D. Phylloclades

Answer:



[Watch Video Solution](#)

34. Occurrence of different types of leaves on the same plant is

A. Heterophylly

B. Heterotrophy

C. Heteronasty

D. Homophylly

Answer:



[Watch Video Solution](#)

35. Which of the following plant produces edible root?

A. *Brassica campestris*

B. *Raphanus sativus*

C. *Brassica oleracea*

D. *Erica sativa*

Answer:



Watch Video Solution

36. From which point of root, root hairs develop?

- A. Zone of elongation
- B. Zone of meristematic
- C. Zone of maturation
- D. Zone of root cap

Answer:



Watch Video Solution

37. Stem is very much reduced in _____

A. Tuberous root

B. Bulb

C. Corm

D. Rhizome

Answer:



Watch Video Solution

38. Primary root and its branches constitute

A. Adventitious root system

B. Tap root system

C. Fibrous root system

D. Seminal roots

Answer:



Watch Video Solution

39. Monocot plants are characterised by the presence of

A. Tap root

B. Fibrous roots

C. Annulated roots

D. Stilt roots

Answer:



Watch Video Solution

40. Which one of the following is a root modification?

A. Potato

B. Sweet potato

C. Ginger

D. Onion

Answer:



Watch Video Solution

41. Which one of the following root modification does not store food?

A. Tuberous

B. Napiform

C. Conical

D. Stilt

Answer:



Watch Video Solution

42. Which is not a product of root?

A. Sugar beet

B. Carrot

C. Radish

D. Potato

Answer:



Watch Video Solution

43. Prop roots of banyan tree are meant for

A. Respiration

B. Providing support

C. Absorption of Water

D. Retention of water

Answer:



Watch Video Solution

44. A fleshy root tapering at both ends

A. Fusiform

B. Napiform

C. Conical

D. Tuberous

Answer:



Watch Video Solution

45. In Bougainvillea thorns are the modification of

A. Adventitious root

B. Stem

C. Leaf

D. Stipules

Answer:



Watch Video Solution

46. Vegetative propagation in pisita occurs by

A. Stolon

B. Offset

C. Runner

D. Sucker

Answer:



Watch Video Solution

47. Match the column I with column II and select the correct option.

Column I	Column II
A. Rhizome	- i) Bryophyllum
B. Offset	- ii) Ginger
C. Sucker	- iii) Eichhornia
D. Leaf bud	- iv) Chrysanthemum



Watch Video Solution

48. Lateral appendages borne by the leaf base are called ____

A. Stipules

B. Scales

C. Leaf base

D. Pulvinus

Answer:



Watch Video Solution

49. Water is absorbed by

A. Root hair

B. Root cap

C. Root apex

D. Root pocket

Answer:



Watch Video Solution

50. Roots are poorly developed in

A. Hydrophytes

B. Mesophytes

C. Xerophytes

D. Halophytes

Answer:



Watch Video Solution

51. Root pocket pockets are present in

A. Mesophytes

B. Xerophytes

C. Hydrophytes

D. Epiphytes

Answer:



Watch Video Solution

52. Paripinnately compound leaf found in

A. Neem

B. Tamarind

C. Mimosa

D. Moringa.

Answer:



Watch Video Solution

53. Weak stemmed plants that spread over the surface of the ground without rooting at nodes is called

A. Climber

B. Lianas

C. Trailer

D. Tendrils

Answer:



Watch Video Solution

54. Sucking roots are found in

A. Parasitic plants

B. Epiphytic plants

C. Hydrophytic plants

D. Xerophytic plants

Answer:



Watch Video Solution

55. Ternate phyllotaxy means

A. Leaves attached at the terminal

B. Three leaves attached at each node

C. Four leaves attached at each node

D. Leaves attached spiral manner.

Answer:



Watch Video Solution

Example

1. Why lateral roots are endogenous?



Watch Video Solution

2. Write the similarities and differences between

1. Avicennia and Trapa
2. Radical buds and foliar buds
3. Phylloclade and cladode



Watch Video Solution

3. Write the differences between Banyan and silk cotton



Watch Video Solution

4. Write the similarities and differences between

Fusiform and Napiform root



Watch Video Solution

5. Write the differences between Avicennia and Trapa



Watch Video Solution

6. Write the differences between Banyan and silk cotton



Watch Video Solution

7. Write the differences between Fusiform and napiform



Watch Video Solution

8. How root climbers differ from stem climbers?



Watch Video Solution

9. Compare sympodial branching with monopodial branching.



Watch Video Solution

10. Compare pinnate unicostate venation and palmate multicostate venation.



Watch Video Solution

11. Define morphology.



Watch Video Solution

12. What is plant morphology ?



Watch Video Solution

13. Which components are to be studied to understand the vegetative morphology?



Watch Video Solution

14. Define reproductive morphology.



Watch Video Solution

15. Which components are to be studied to understand the vegetative morphology?



Watch Video Solution

16. How are plants classified based on the lifespan?



Watch Video Solution

17. What are geophytes?



Watch Video Solution

18. What are Shrubs? Give examples.



Watch Video Solution

19. What are climbers? Give examples.



Watch Video Solution

20. What are terrestrial plants? Give example.



Watch Video Solution

21. What are aquatic plants? Give examples.



Watch Video Solution

22. What are annuals? Give examples.



Watch Video Solution

23. What are emergent plants? Give examples.



Watch Video Solution

24. What are floating leaved aquatic plants?

Give examples.



Watch Video Solution

25. Write short notes on root cap.



Watch Video Solution

26. What do you mean by secondary functions of the roots?



Watch Video Solution

27. Mention the secondary functions of the roots.



Watch Video Solution

28. What are the storgae roots? Give examples



Watch Video Solution

29. What are the tuberous roots? Give examples.



Watch Video Solution

30. What are fasciculated roots? Give examples.



Watch Video Solution

31. Write short notes on nodulose roots.



Watch Video Solution

32. What are annulated roots? Give examples.



Watch Video Solution

33. Define apical meristem



Watch Video Solution

34. What is a leaf primordium?



Watch Video Solution

35. What are terminal buds?



Watch Video Solution

36. What is a lateral bud?



Watch Video Solution

37. What are extra axillary buds?



Watch Video Solution

38. What is an accessory bud?



Watch Video Solution

39. What are adventitious buds ? Give an example.



Watch Video Solution

40. What are radical buds? Give examples.



Watch Video Solution

41. plants produce foliar buds.



Watch Video Solution

42. Define cauline buds



Watch Video Solution

43. Bryophyllum and Dioscorea are example for



Watch Video Solution

44. What are the different types of stem?



Watch Video Solution

45. What is decurrent stem?



Watch Video Solution

46. What do you mean by caudex ?



Watch Video Solution

47. Define culum. Give examples.



Watch Video Solution

48. Give the names of the different aerial modification of stem.



Watch Video Solution

49. What are thorn climbers? Give examples.



Watch Video Solution

50. What is a thorn? Give examples



Watch Video Solution

51. Name the underground modifications of stem

A. Bulb

B. Rhizome

C. Corn

D. Tuber

Answer:



Watch Video Solution

52. What is a pseudobulb ?



Watch Video Solution

53. How are stems classified on the basis of growth pattern?



Watch Video Solution

54. What do you mean by indeterminate growth?



Watch Video Solution

55. Define determinate growth.



Watch Video Solution

56. What is a leaf base ?



Watch Video Solution

57. What is pulvinus ?



Watch Video Solution

58. What is a ligule?



Watch Video Solution

59. What are stipels ?



Watch Video Solution

60. What do you mean by venation?



Watch Video Solution

61. Define parallel venation.



Watch Video Solution

62. What is pinnately parallel venation?



Watch Video Solution

63. Define phyllotaxy. Mention its types.



Watch Video Solution

64. What is the significance of phyllotaxy?



Watch Video Solution

65. What is orthostichies?



Watch Video Solution

66. What is alternate spiral phyllotaxy?



Watch Video Solution

67. What is alternate distichous phyllotaxy?



Watch Video Solution

68. Define opposite phyllotaxy.



Watch Video Solution

69. Opposite decussate phyllotaxy is present in



Watch Video Solution

70. Define ternate phyllotaxy.



Watch Video Solution

71. What is a leaf type?



Watch Video Solution

72. What is a simple leaf? Give example.



Watch Video Solution

73. What is a leaflet?



Watch Video Solution

74. What is a unipinnately compound leaf?

Give examples.



Watch Video Solution

75. Define decomposed leaf with examples.



Watch Video Solution

76. What is a palmately compound leaf? Give examples.



Watch Video Solution

77. What is an unifoliate palmately compound leaf? Give examples.



Watch Video Solution

78. What is a bifoliolate palmately compound leaf? Give examples.



Watch Video Solution

79. What is a trifoliolate palmately compound leaf? Give examples.



Watch Video Solution

80. What is a quadrifoliolate palmately compound leaf? Give examples.



Watch Video Solution

81. What is a multifoliolate palmately compound leaf?



Watch Video Solution

82. Define craspedodromous venation.



Watch Video Solution

83. Define actinodromous venation.



Watch Video Solution

84. Define palinactinodromous venation.



Watch Video Solution

85. Define flabellate venation.



Watch Video Solution

86. Define campylodromous venation.



Watch Video Solution

87. Define anadromous venation



Watch Video Solution

88. Define foliage leaves.



Watch Video Solution

89. Define cotyledons



Watch Video Solution

90. Define cataphylls



Watch Video Solution

91. Define floral leaves



Watch Video Solution

92. Define hypsophylls



Watch Video Solution

93. Define reclinate ptyxis. Give example.



Watch Video Solution

94. Define conduplicate ptyxis.



Watch Video Solution

95. Define plicate or plaited ptyxis



Watch Video Solution

96. Define circinate ptyxis.



Watch Video Solution

97. What do you mean by convolute ptyxis?



Watch Video Solution

98. Define involute ptyxis. Give examples.



Watch Video Solution

99. What is crumpled ptyxis? Give example.



Watch Video Solution

100. How are leaves classified based on their duration?



Watch Video Solution

101. Define cauducuous leaves.



Watch Video Solution

102. Describe deciduous leaves with examples.



Watch Video Solution

103. Describe evergreen leaves with examples.



Watch Video Solution

104. What are marcescent leaves?



Watch Video Solution

105. How are leaves classified based on symmetry?



Watch Video Solution

106. Give a brief account of isobilateral leaves



Watch Video Solution

107. What is a centric leaf?



Watch Video Solution

108. Define ptyxis.



Watch Video Solution

109. What do you mean by hetrophyllly?



Watch Video Solution

110. What are lianas? Give examples.



Watch Video Solution

111. What are annuals? Give examples.



Watch Video Solution

112. What are perennials? Give examples.



Watch Video Solution

113. Classify the terrestrial plants based on their adaptation.



Watch Video Solution

114. How are aquatic plants classified based on the environmental adaptation?



Watch Video Solution

115. What are angiosperms?



Watch Video Solution

116. What are the characteristic features of root?



Watch Video Solution

117. Which are the three zone in the root based on the meristematic activity?



Watch Video Solution

118. What are the main parts of a root?



Watch Video Solution

119. Describe meristematic zone.



Watch Video Solution

120. Describe zone of elongation.



Watch Video Solution

121. Describe zone of maturation.



Watch Video Solution

122. Describe fibrous root system.



Watch Video Solution

123. Compare the tap root and fibrous root systems.



Watch Video Solution

124. How is adventitious root system different from fibrous root system.



Watch Video Solution

125. Describe adventitious root with examples.



Watch Video Solution

126. Write short notes on conical root



Watch Video Solution

127. Describe fusiform roots with examples.



Watch Video Solution

128. What are napiform roots? Give examples.



Watch Video Solution

129. What are breathing roots? Give examples.



Watch Video Solution

130. What are moniliform roots? Give examples.



Watch Video Solution

131. What are the different types of storage roots?



Watch Video Solution

132. Give the names of adventitious roots meant for mechanical support.



Watch Video Solution

133. Give the names of adventitious roots meant for mechanical support.



Watch Video Solution

134. What are prop roots ? Give an example.



Watch Video Solution

135. Define stilt roots with example.



Watch Video Solution

136. What are foliar roots? Give examples.



Watch Video Solution

137. What are sucking roots? Give examples.



Watch Video Solution

138. What are bulbils ?



Watch Video Solution

139. Describe the variation in the formation of bulbils.



Watch Video Solution

140. What is an excurrent stem?



Watch Video Solution

141. What are creepers? Give examples.



Watch Video Solution

142. What are trailers? Give examples.



Watch Video Solution

143. What is a prostrate trailer? Give examples.



Watch Video Solution

144. Describe decumbent trailer with examples.



Watch Video Solution

145. Define diffuse trailer. Give examples.



Watch Video Solution

146. Describe root climbers with examples?



Watch Video Solution

147. What are climbers? Give examples.



Watch Video Solution

148. Explain lianas with examples



Watch Video Solution

149. What are tendril climbers? Give examples.



Watch Video Solution

150. Is cladode a stem or a leaf. Justify.



Watch Video Solution

151. Differentiate Phylloclade and Phyllode.



Watch Video Solution

152. Give an account of the sub - aerial stem modification



Watch Video Solution

153. Explain runners with examples.



Watch Video Solution

154. How is root stock different from roots?



Watch Video Solution

155. Describe corm with examples.



Watch Video Solution

156. Define rhizome



Watch Video Solution

157. Describe tuber with examples.



Watch Video Solution

158. What is stem branching? What are the two main types of branching?



Watch Video Solution

159. Which are the primary functions of leaves?



Watch Video Solution

160. Which are the secondary functions of leaves?



Watch Video Solution

161. What do you mean by sheathing leaf base?



Watch Video Solution

162. What is a petiole?



Watch Video Solution

163. What are stipules ? State its functions.



Watch Video Solution

164. Explain briefly reticulate venation.



Watch Video Solution

165. What is pinnately reticulate venation?

Give examples.



Watch Video Solution

166. Describe alternate phyllotaxy.



Watch Video Solution

167. Draw a flow chart showing the phyllotaxy of leaves?



Watch Video Solution

168. What is opposite superposed phyllotaxy?

Give examples.



Watch Video Solution

169. Describe whorled phyllotaxy with examples.



Watch Video Solution

170. What do you mean by leaf mosaic?



Watch Video Solution

171. What is a compound leaf? Give examples.



Watch Video Solution

172. What is a pinnately compound leaf?



Watch Video Solution

173. What is a paripinnately compound leaf?

Give examples.



Watch Video Solution

174. What is an imparipinnately compound leaf? Give examples.



Watch Video Solution

175. What is a bipinnately compound leaf?



Watch Video Solution

176. What is a tripinnately compound leaf?



Watch Video Solution

177. What are the different types of palmately compound leaf?



Watch Video Solution

178. Name the major types of venation based on the modern classification by Hickey (1973) and Wolf (1975).



Watch Video Solution

179. What are leaf tendrils? Give one example.



Watch Video Solution

180. Give the names of the different leaf modifications.



Watch Video Solution

181. Describe leaf hooks with examples



Watch Video Solution

182. Explain leaf spines with examples.



Watch Video Solution

183. Describe leaf prickles with examples.



Watch Video Solution

184. Example storage leaves with examples.



Watch Video Solution

185. Describe phyllode with examples



Watch Video Solution

186. Describe pitchers with examples.



Watch Video Solution

187. Write short notes on bladders.



Watch Video Solution

188. What are the different types of ptyxis?



Watch Video Solution

189. Write short notes on dorsiventral leaf.



Watch Video Solution

190. Write short notes on heterophylly in aquatic plants.



Watch Video Solution

191. Comment on the heterophylly in terrestrial plants.



Watch Video Solution

192. Study of morphology is important in taxonomy. Why?



Watch Video Solution

193. Write short notes on the root system



Watch Video Solution

194. Give a brief account on tap root system.



Watch Video Solution

195. Draw a flow chart depicting the various types of root modification.



Watch Video Solution

196. Describe root climbers with examples?



Watch Video Solution

197. What are buttress roots?



Watch Video Solution

198. What are epiphytic roots?



Watch Video Solution

199. Photosynthetic roots are seen in :



Watch Video Solution

200. Write the characteristic features of the stem.



Watch Video Solution

201. Mention any four secondary functions of the stem.



Watch Video Solution

202. What are the salient features of buds?



Watch Video Solution

203. Draw the flow chart of stem modification.



Watch Video Solution

204. What are climbers? Give examples.



Watch Video Solution

205. Describe stem climbers with examples.



Watch Video Solution

206. Phylloclade is a specialised stem seen in xerophytes. Justify.



Watch Video Solution

207. What is a stolon? Give examples.



Watch Video Solution

208. Explain sucker with examples



Watch Video Solution

209. Give a brief account of offset with examples.



Watch Video Solution

210. Describe root stocks with examples



Watch Video Solution

211. Describe bulb with examples



Watch Video Solution

212. Write note on leaves?



Watch Video Solution

213. What is lamina



Watch Video Solution

214. Write short notes on palmately reticulate venation. Give examples.



Watch Video Solution

215. Explain palmately parallel venation



[Watch Video Solution](#)

216. Draw a flowchart showing the classification of leaves based on the number of segments.



[Watch Video Solution](#)

217. Give a short account of floral leaves



[Watch Video Solution](#)