



BIOLOGY

BOOKS - MBD

Plant Kingdom

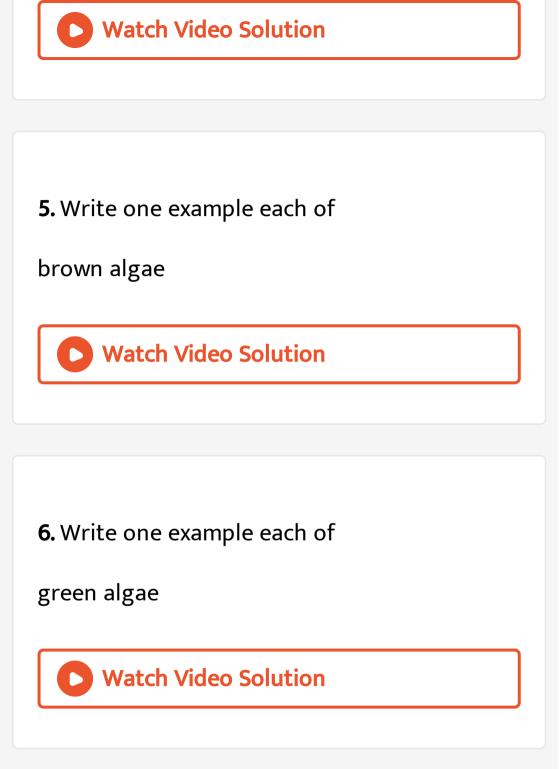


1. Who first gave the classification of plant

kingdom?

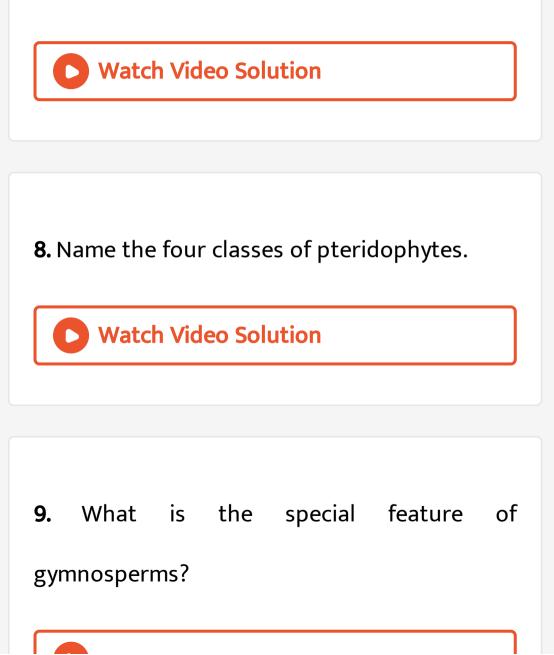


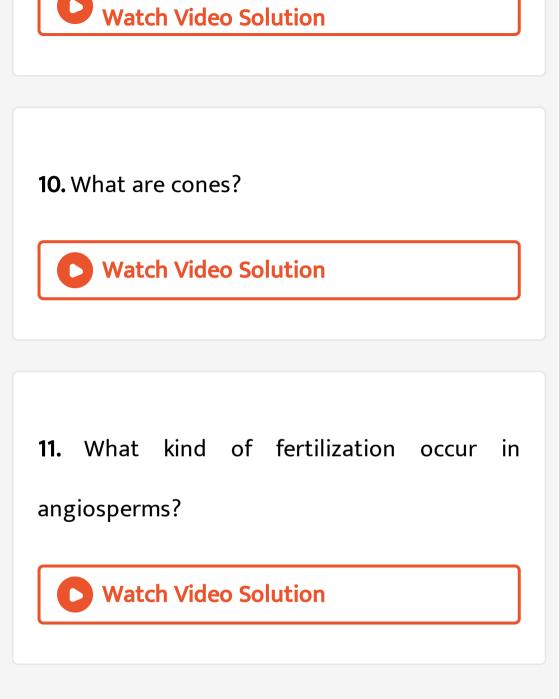
2. Name two subkingdoms of plant kingdom.
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3. Name the main groups of cryptogamme.
J. Name the main groups of cryptogamme.
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Watch video Solution
4. Write one example each of



7. Which is the dominant phase in the life cycle

of broyophytes?





12. What is heterospory? Write its significance.



13. Give reason for the following

Sexual reproduction is of oogamous type in

bryophytes.



In algae and fungi, plant body is thallus.



15. Give reason for the following

In red algae and blue green algae biliproteins

are present.

Cell wall of red algae protects from drying or

freezing on their exposure to air.



17. Give reason for the following

Male sex organs are called antheridia and

female sex organs are called archegonia in

Bryophytes.



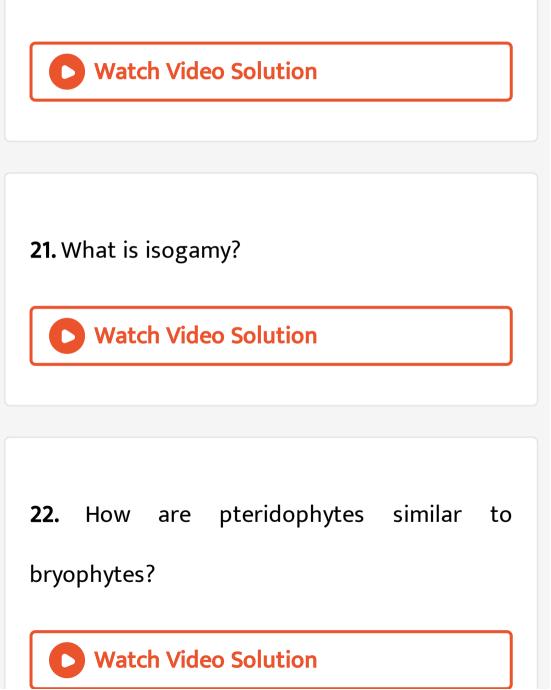
Chlamydomonas is motile.

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19. Name the male and female sex-organs in Funaria what type of sexual reproduction occurs in bryophytes.

20. What is type of food reserve in brown

algae?



23. Why are green algae look green?

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24. Name the structure from which

protronema develop in liverworts.

Seeds are enclosed by fruit wall or pericarp.

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26. Give reason for the following

Leaves in ferns are large, compound and of

megaphyllous type.

In Brassica, seeds are formed but it is not

placed in gymnosperms.



28. Give reason for the following

Life cycle is diplontic in angiosperms.



Double fertilization is present is angiosperms.

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30. Write the names of groups which show diplontic life cycle and having diploid sporophyte dominant phase.

In angiosperms, one of the male gametes fuses with egg to form zygote and second male gamete fuses with polar nuclei to form primary endosperm nucleus.

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32. How are vascular plants able to domainate

the planet?

33. What does syngamy and triple fusion represent?

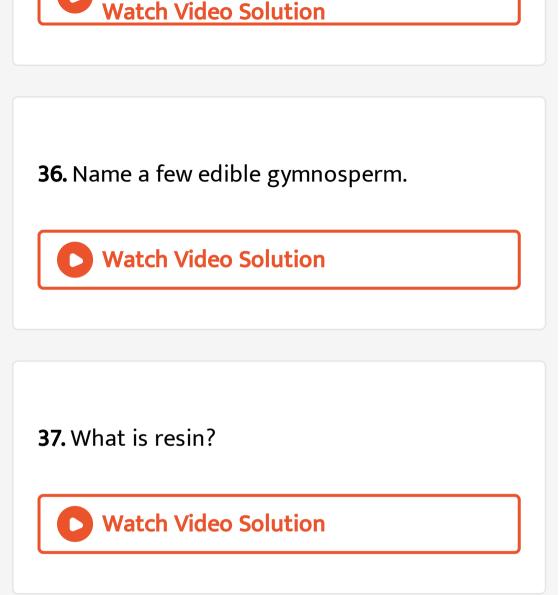
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34. Name any four monocots.

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35. Name any four dicots.





38. Name the plant which yield ephedrine.
Write its use.
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39. Name the following :

Edible brown algae



40. Name the following :

Source of Iodine.

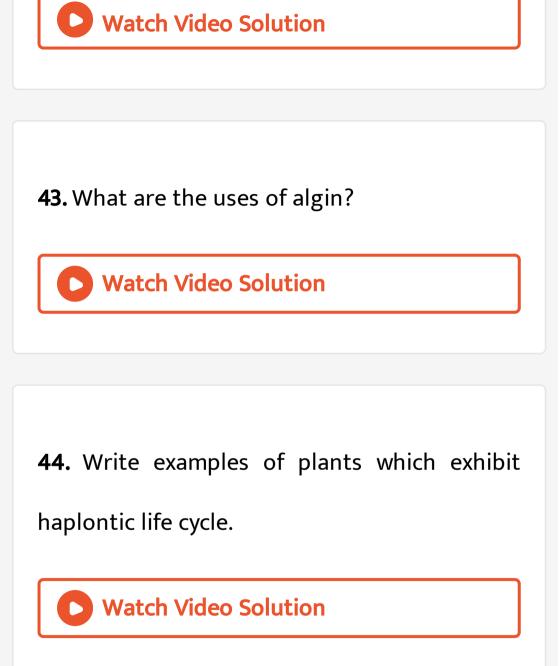
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41. Name the following :

Sources of alginic acid.



42. What is agar?



45. Name the doinant phase in the plant showing haplontic life cycle.Watch Video Solution

46. Write the names of groups which show diplontic life cycle and having diploid sporophyte dominant phase.



47. Pteridophytes demonstrate which type of

life cycle pattern.

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48. Which angiosperm grows underground as

a sapraphyte?

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49. Give the position of sex organs in fern.



50. Which pigment is responsible for brown

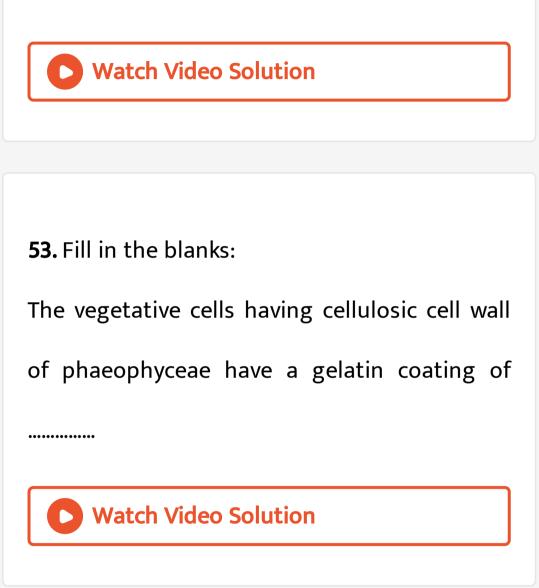
colour in brown alage?

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51. Which group of plants is called vascular

crytogams?

52. Name the smallest gymnosperm.



54. Fill in the blanks:

Sexual reproduction may be isogamous,

anisogamous or



55. Fill in the blanks:

Rhodophytes are commonly called



56. Fill in the blanks:

Common example of mosses are Funaria,

..... and



57. Fill in the blanks:

In gymnosperms the development of pollen

grain takes place with in.....

58. Fill in the blanks:

.....and kelps are haplodiplontic.



59. True or False

The sori bearing leaves of ferns are called sporophylls.

60. True or False

The fern is heterosporous.

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61. True or False

The fern is heterosporous.



62. True or False

The fern is heterosporous.

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63. True or False

Megaspore on germination produces female

gametophyte.

64. True or False

In Selaginella gametophyte is dominant

generation.



65. Give the technical terms used for the following:

Axis of fern leaf from which pinnae arise: also extension of petiole corresponding to midrib of entire leaf.



66. Give the technical terms used for the following:

The small scaly structures covering the rhizome and petiole in ferms for preventing desiccation.

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67. Give the technical terms used for the following:

Any protein spliting enzyme.

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68. Give the technical terms used for the following:

The outermost layer of corky tissue found in

woody stem.

69. Give the technical terms used for the following:

Any protein spliting enzyme.



70. What is the basis of classification of algae?



71. When and where does reduction division take place in the life cycle of a liverwort, a moss, a fern, a gymnosperm and an angiosperm?

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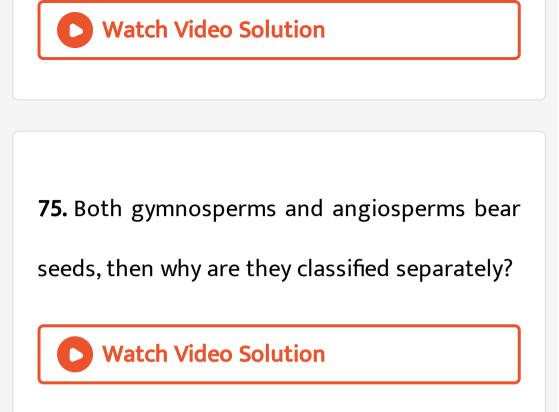
72. Name three groups of plants that bear archegonia. Briefly describe the life cycle of any one of them.

73. Mention the ploidy of the following: protonemal cell of a moss: primary endosperm nucleus in dicot, leaf cell of a moss, prothallus cell of a ferm: gemma cell in Marchantia, meristem cell of monocot, ovum of a liverwort, and zygote of a fern.

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74. Write a note on economic importance of

algae and gymnosperms.



76. What is heterospory? Briefly comment on

its significance. Give two examples.

77. Explain briefly the following terms with suitable examples: protonema
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78. Explain briefly the following terms with

suitable examples: antheridium

79. Explain briefly the following terms with

suitable examples: archegonium

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80. Explain briefly the following terms with suitable examples: diplontic

81. Explain briefly the following terms with

suitable examples: sporophyll

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82. Explain briefly the following terms with suitable examples: isogamy

83. Differentiate between the following: red

algae and brown algae

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84. Differentiate between the following

liverworts and moss



85. Differentiate between the following

homosporous and heteros-porous

pteridophytes



86. Differentiate between the following

syngamy and triple fusion.



87. How would you distinguish monocots and

dicots on the basis of three main characters?

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88. Match the following column I with Column

П

Column I (a) Chlamydomonas (i) Moss (b) Cycas (c) Selaginella (d) Selaginella (d) Sphagnum

Column II

(iv) Gymnosperm.

89. Write the general characters, classification

and examples gymnoperms.



90. Food is stored as Floridean starch in Rhodophyceae. Mannitol is the reserve food material of which group of algae?

91. Give an example

Haplontic life cycle.

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92. Give an example

Diplontic life cycle

93. Give an example

Haplo-diplontic life cycle.

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94. The plant body in higher plants is well differentiated and well developed. Roots are the organs used for the purpose of absorption. Which is the equivalent of roots in the less developed lower plants?

95. Most algal genera show haplontic life style.

Name alga which is

Haplo-diplontic



96. Most algal genera show haplontic life style.

Name alga which is

Diplontic.

97. In bryophytes male and female sex organs

are called...... and

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98. Why are bryophytes called as amphibians

of plant kingdom?

99. The male and female reproduction organs of serval pteridophytes and gymnos-perms are comparable to floral structures of angiosperms. Make an attempt to compare the various reproductive parts of pteridophytes and gymnosperms with reproductive structures of angiosperms.

100. Heterospory i.e. formation of two types of spores - microspores and megaspores is a characteristic feature in the life cycle of a few members of pteridophytes and all spermatophytes. Do you think heterospory has some evolutionary significance in plant kingdom?

101. How far does Selaginella one of the few

living members of lycopodiales

(pteridophytes) fall short of seed habit.

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102. Each plant or group of plants has some phylogenetic significance in relation to evolution. Cycas, one of the few living members of gymonsperms is called as the 'relic of past'. Can you establish a phylogenetic relationship of Cycas with any other group of

plants that justifies the above statement?



103. The heterosporous pteridophytes show

certain characteristic, which are precursor to

the seed habit in gymnosperms. Explain.



104. Comment on the life cycle and nature of a

fern prothallus.

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105. How do gymnosperms and angiosperms

differ from each other ?

106. In which plant will you look for mycorrhiza and corolloid roots? Also explain what these terms mean.



107. Gametophyte is a dominant phase in the

life cycle of a bryophyte. Explain.



108. With the help of a schematic diagram describe the haplo-diptonic life cycle pattern of a plant group.



109. Lichen is usually cited as an example of 'symbiosis' in plants where an algal and a fungal species live together for their mutual benefit. Which of the following will happen if algal and fungal partners are separated from each other ?

A. Both will survive and grow normally and

independent from each other.

B. Both will die

C. Algal component will survive while the

fungal component will die.

D. Fungal component will survive while

algal partner will die.



110. Explain why sexual reproduction in angiosperms is said to take place through double fertilization and triple fusion. Also draw a labellel diagram of embryo sac to exaplin the phenomena.



111. Draw labelled diagrams of

Female nd male thallus of a liverwort

(marchentia)



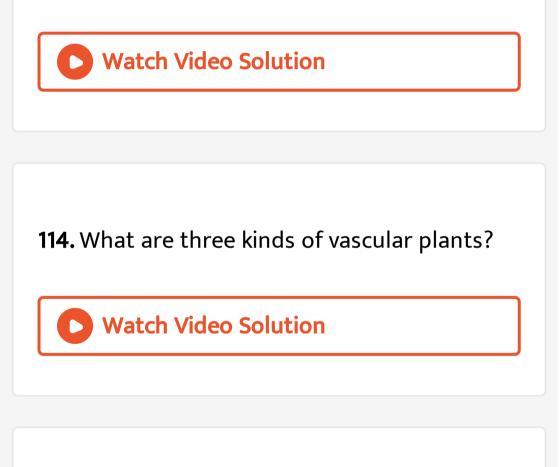
112. Draw labelled diagrams of

Gametophyte and sporophyte of Funaria.



113. Draw labelled diagrams of

Alternation of generation in Angiosperms.



115. What does the term 'angiosperms' mean?

116. Give the scientific name of the following

an alga with ribbon-shaped chloroplasts



117. Give the scientific name of the following

structure formed by the germinated fern

spore.



118. Give the scientific name of the following

Megasporangium of seed plant.



119. Why plant body of Dryopteris is called sporophyte?

120. How many cotyledons are present in Pinus

embryo?

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121. What is the genetic constitution of

endosperm in angiosperms?

122. What is the advantage of fruit habit in

angiospermic plant?

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123. Give technical terms for each of the following:

The fusion product of all the contents of two

gametangia

124. Give technical terms for each of the following:

The megasporangium of gymnosperms and

sngiosperms



125. Give technical terms for each of the following:

The sorus of an angiosperm which produces

microspores

126. Give technical terms for each of the following:

Non-vascular amphibians of the plant kingdom

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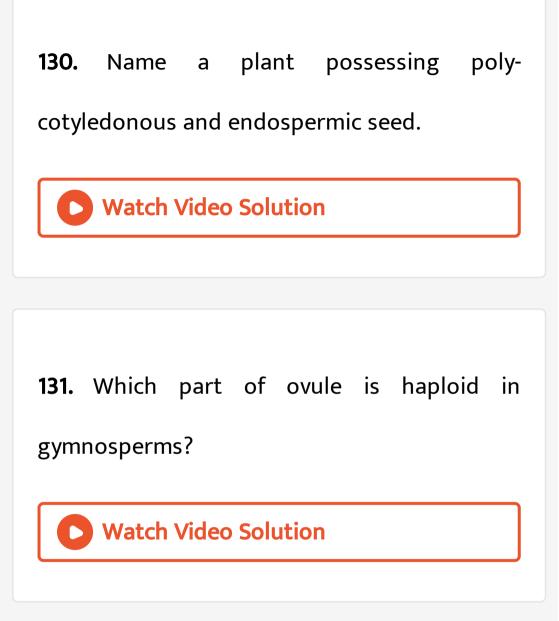
127. Give technical terms for each of the following:

A mature fertilized ovary.

128. What are rhizoids?

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129. Which term is used for spore bearing leaves?



132. Which angiosperm grows underground as

a sapraphyte?

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133. To which group Araucaria belongs?

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134. List a few general characters of plant kingdom.



135. What is the site of origin of multicellular

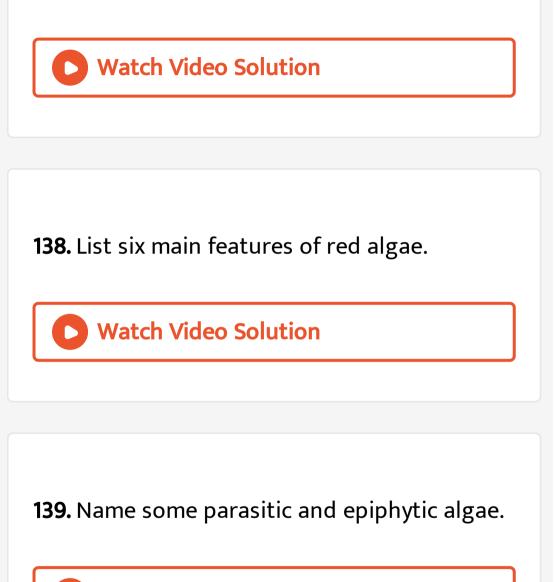
plant life?

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136. Distinguish between Cryptogamae and

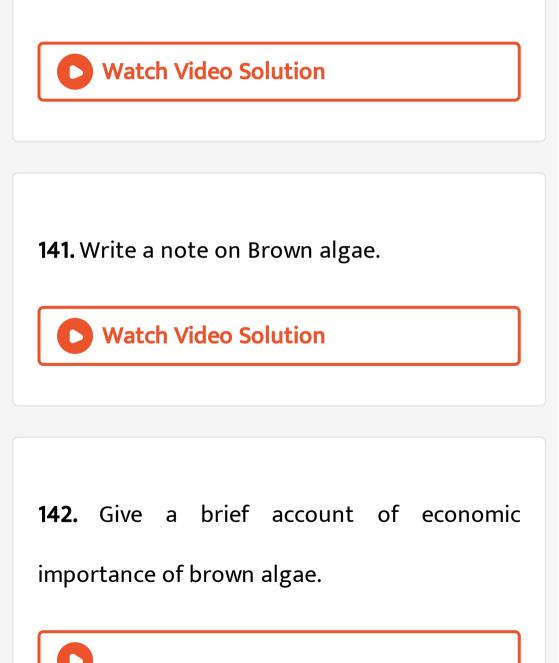
Phanerogamae.

137. List the distinguishing features of algae.



140. Make a diagrammatic sketch of life cycle

of a red algal plant.





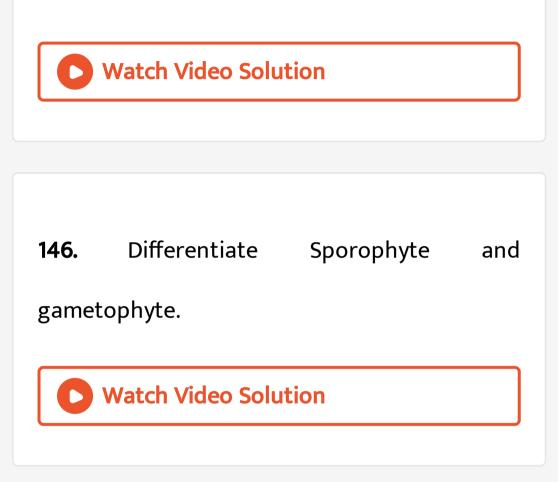
143. Draw well labelled diagram of cell structure of chlamydomonas, ulothrix and sprirogyra.

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144. Describe various forms of asexual

reproduction in algae.

145. How do the red algae prepare their food?



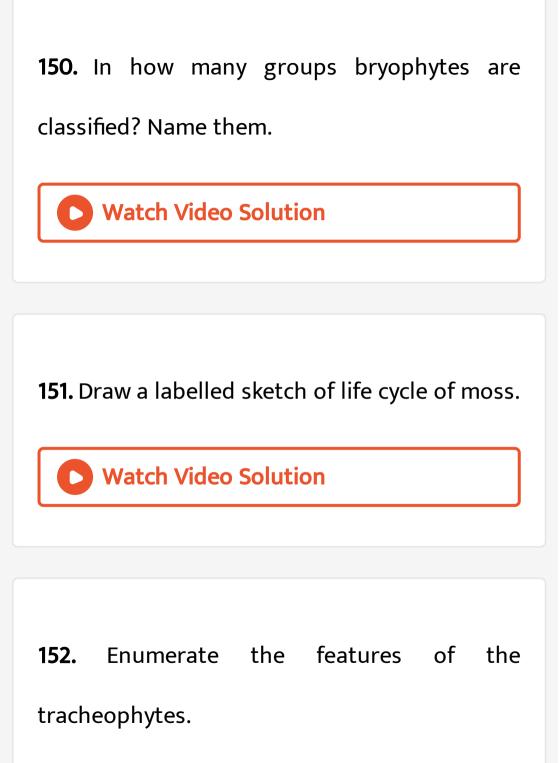
147. Explain what is alternation of generation.

148. Why are mosses found in humid and moist area?



149. Write typical features of broyophytes.





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153. List a few characters reponsible for survival of vascular plants.

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154. Classify the tracheophytes into

subdivisions.



pteridophytes.



156. Differentiate prothallus and thallus.

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157. Give graphic life cycle of a fern.

158. What is heterospory? Write its significance.

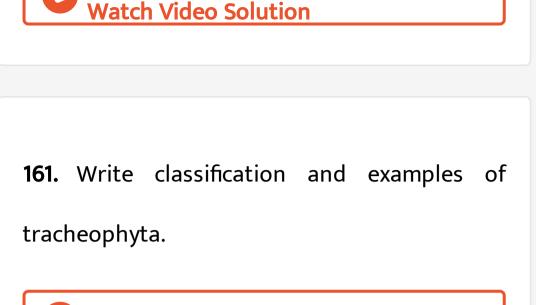
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159. Write short note on club moss.

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160. Write short note on Sphenopsida.





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162. Write a note on Sporophyll.

163. Which of the gymnosperms and angiosperms are ancient?
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164. Why are conifers succesful in the colder

zones of the north?



165. What characters of seed plants make them specially adapted to life on land ?
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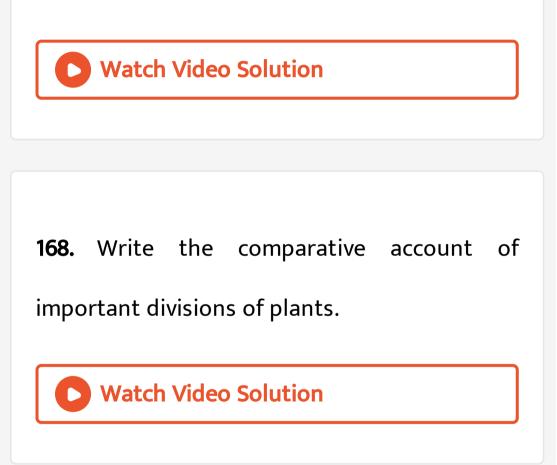
166. What are annual, biennial and perennial

plants? Give example of each group.



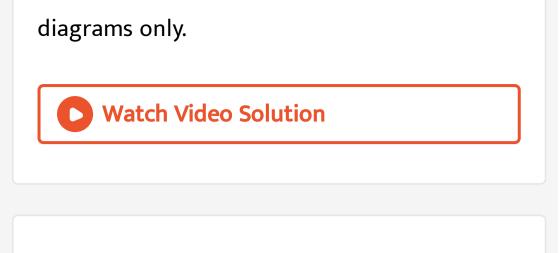
167. What kind of life cycle pattern is shown by

bryophytes and pteridophytes?



169. Give differences between bryophyta and tracheophyta. Watch Video Solution **170.** Write the characters of angiosperms. Watch Video Solution

171. Show the differences berween sexual organs of gymnosperms and angiosperm with



172. Graphic outline chart of classification of

plant kingdom. Give examples.

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173. How red algae can remain alive in deep

sea?



174. Why is the plant body of an alga called a thallus? Name any two unicellular green algae which are placed in the plant kingdom instead of the Kingdom-Protista.



175. Why the stem-like and leaf -like structures

of a moss plant are not called stem and

leaves?





176. Explain why gymnosperms fail to produce

fruits?



177. Explain why only ferns are often firstr

plants to appear after a forest fire?



1. Write examples of plants which exhibit

haplontic life cycle.

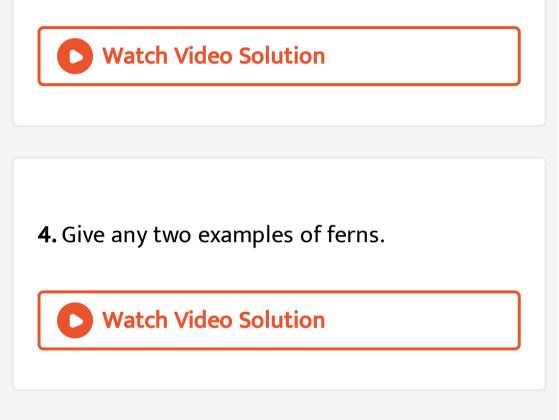
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2. Give an example

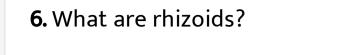
Haplo-diplontic life cycle.

3. In bryophytes male and female sex organs

are called...... and



5. Where do mosses grow?



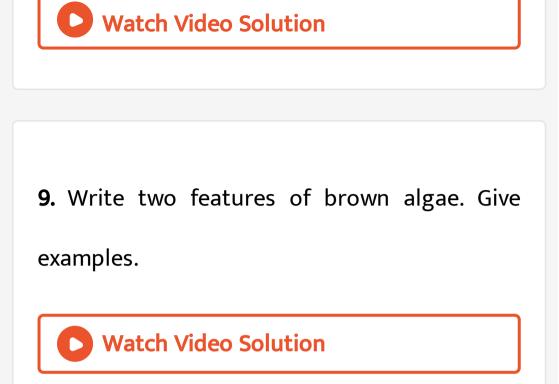


7. Why are bryophytes called as amphibians of

plant kingdom?

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8. In how many groups bryophytes are classified? Name them.



10. Comment on the life cycle and nature of a

fern prothallus.

11. Distinguish between Cryptogamae and

Phanerogamae.





13. Explain gymnosperm plants are more advanced than fern plants.

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14. Explain why sexual reproduction in angiosperms is said to take place through double fertilization and triple fusion. Also draw a labellel diagram of embryo sac to exaplin the phenomena.



15. Write a note on economic importance of

algae and gymnosperms.