



BIOLOGY

BOOKS - MAXIMUM PUBLICATION

PLANT KINGDOM



1. Artificial system of classification is mainly based on

A. Vegetative characters

B. Androecium structures

C. habit and habitat

D. all of these

Answer: D



2. Fusion between morphologically alike gametes is

reffered to as

A. anaisogamy

B. isogamy

C. oogamy

D. sygamy

Answer: B

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3. Gametophytic generation is dominant in

A. bryophytes

- B. pteridophytes
- C. angiosperms
- D. gymnosperms

Answer: A



4. Mycorrhizal roots of are associated with

some fungal symbionts

A. cedrus

B. pinus

C. cycus

D. lichens

Answer: B

5. Haplontic life cycle generally occurs in

A. algae

B. pteridophytes

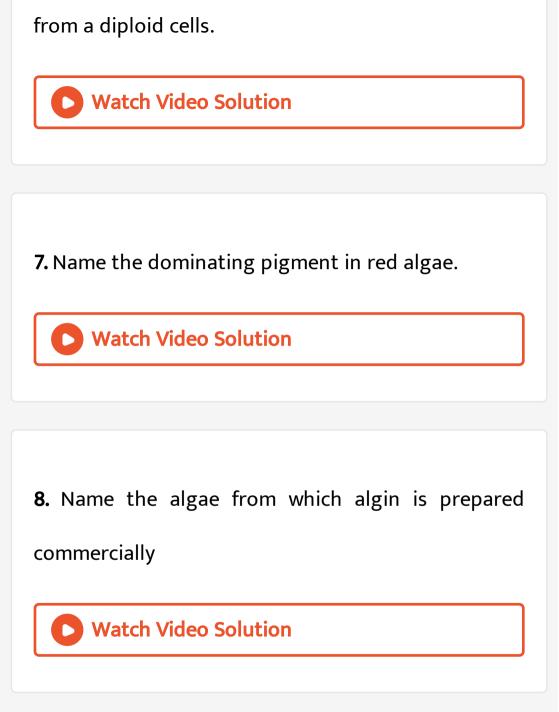
C. bryophytes

D. gymnosperms

Answer: A

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6. Name the type of cell division which produce four haploid cells with new combination of characters



9. Name the filamentous structure that appear in the

mosses due to the germination of spores.



10. Give an example of plant group which produce

seed but not fruit

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11. What is the genetic constitution of endosperm of

angiosperm





12. Fill in the blanks

(a) bryophtes-haplodiplontic

gymnosperms -



13. Fill in the blanks

(b) algin - brown algae

carrageen -



14. If chlorophyll b is for chlorophyceae, chlorophyll d

is for



15. Pick out the correct pairs of plant groups which

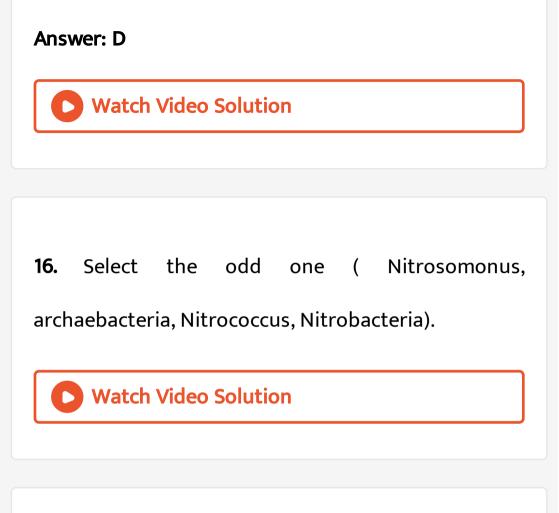
bearing archegonium

A. gymnosperm angiosperm

B. angiosperm bryophyta

C. bryophyta pteridophyta

D. pteridophyta gymnosperm



17. Majority of pteridophytas are homosporous i.e. they produce similar kind of spores. Give one example of a heterosporus pteridpphyte.



18. Archaebacteria, special type of bacteria, which are able to survive in extreme conditions what is the feature helping them for this ?



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19. Fill in the blanks: Fusion of protoplasm is called

plasmogamy. Fusion of 2 nuclei is called......



20. Laminarin is a stored food in phyaeophyceae,

what is the stored food in Rhodophyceae



21. The essential element is present in the ring

structure of chlorophyll. which is the element?

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22. Observe the relationship between the words of

the first sentence and fill the second one.

Association of fungus with algae: Lichens

Association of fungus with roots of plants :.....



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24. Observe the relationship between the first two

terms and fill up the blanks

Zygote : Diploid nucleus
Endosperm :
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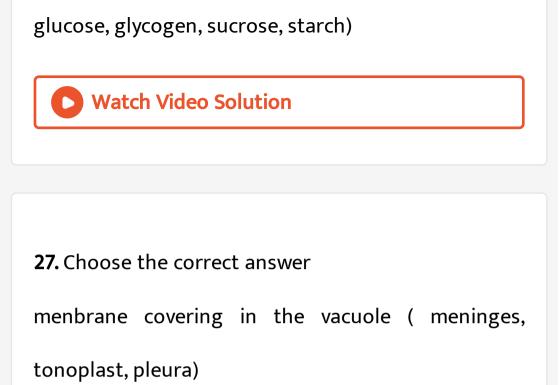
25. Pick the odd word out from the following and justify your ans.

Chlamaidomonus, Volvox, Laminaria, Chara

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26. Choose the correct answer

food materials in fungi is stored in the form of (



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28. Name the organisms which are not included in any of the kingdoms.

29. Name the plant group in which 'protonema' is present.

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30. The class of fungi known as imperfect fungi is				
Vatch Video Solution				

31. Observe the relationship between first two pairs and fill up the blanks.

Transpiration: Loss of water in the form of water

vapour.

..... Loss of water in the form of liquid.

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32. Fusion of two gamets which are dissimilar in size

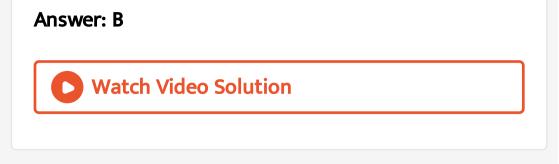
is termed as

A. Oogamy

B. Isogamy

C. Anisogamy

D. Zoogamy



33. Laminarin is a stored food in phyaeophyceae, what is the stored food in Rhodophyceae



34. A plant shows thallus level of organization. It shoes rhizoids and is haploid. It needs water to complete its life cycle because of the male gametes are motile. Identify the group in which it belongs to.

35. Bryophytes are considered as the amphibians of plant kingdom. They are the connecting link between aquatic and land plants. (a) Correlate the amphibian nature which form the connecting link character of bryophytes.



36. Name the gametophytae that is free living structure formed in pteridophytes.

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



38. Plants are generally autotrophic . Can you think

of certain plants that are partially heterotrophic?

39. Choose the correct pair .

A. Spirogyra- Algae

B. Shpagnum - Gymnosperm

C. Selagenella - Bryophyte

D. Funaria - Pteridophyte

Answer: A

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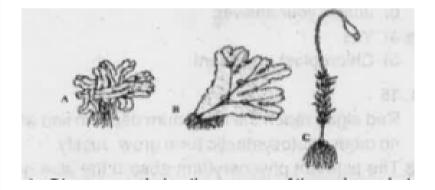
40. Diagrams of three bryophytes are given below

observe and give the names of these bryophytes.



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41. Diagrams of three bryophytes are given below Which of the three bryophytes is the most advanced?





42. observe the relationship between the first two terms and feel up the blanks

Kingdom fungi- multicellular decomposer, Kingdom

plantae-

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43. observe the relationship between the first two

terms and feel up the blanks

gymnosperms- Cone, Angiosperm- _____

44. Bryophytes are considered as the amphibians of plant kingdom. They are the connecting link between aquatic and land plants. (a) Correlate the amphibian nature which form the connecting link character of bryophytes.

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46. Match columns A and B A{ Chlamydomonas, Cycas, Selaginella, Sphagnum} B{ Moss, Pteridophytes, Algae, gymnosperms}

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47. analyse the given table and arrange the matter in an appropriate order.

A{ 1. Floridean starch, 2. flowers, 3. Sporophyil, 4.Cone} B{1. phycoerythrin, 2 Naked seed, 3. Prothallus,4. Fruit}, C{1. Gymnosperm, 2. Red algae,3.

Angiospems, 4. Fem}

48. Lichens are symbiotic association of Algae and

Fungi. What is symbiosis?

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49. Lichens are symbiotic association of Algae and

Fungi. What is symbiosis?



50. arrange the following plants in the table given

below (two members from each group) Riccia,

Spirogyra, Adiantum, Chlorella, Funaria, Cycas,

Nephrology,Pinus.



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51. the following is a list of plants. Arrange them in

the table given below.

Marchantia, Selaginella, Salvinia, Sunflower, Funaria,

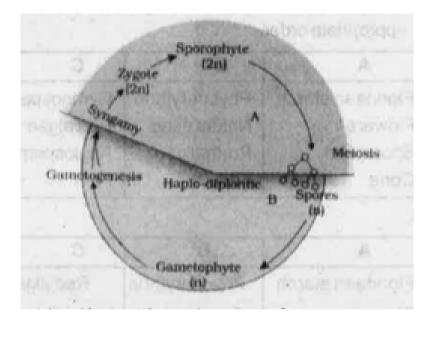
Pinus, Maize, Cycas.

Bryophyta	Pteridophyta	Gymnosperms	Angiosperms
8		A	



52. Identify the life cycle pattern. Cite two examples

of organism showing the above life cycle pattern?



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53. classical texonomy of organisms is mainly based on morphological characters. But modern texonomy

gives equal weightage of all characters.

name this new approach in modern texonomy.



54. classical texonomy of organisms is mainly based

on morphological characters. But modern texonomy

gives equal weightage of all characters.

name this new approach in modern texonomy.



55. A{ Sargassum, Byrophyte, ABA, Ribosomes, Anabaena} B{ Stomatal movement, Palade, N_2 fixation, Btown alga, Sphagnum}

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56. Pick aap the odd one

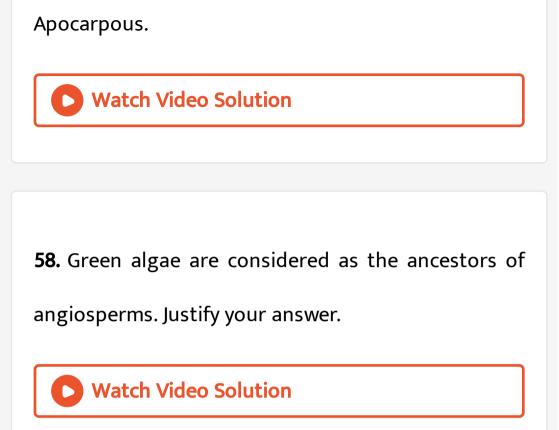
oscillatoria, Spirulina, Actinomycetes, Nostoc

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57. Pick up the odd one

Epipetalous, epiphyllous,

Monadelphous,



59. Green algae are considered as the ancestors of

angiosperms. Justify your answer.



60. red algae reach the maximum depth in sea where

no other photosynthetic form grow. justify.



61. During summer you cannot see the growth of

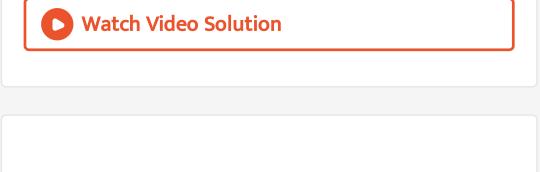
Funaria. what is the reason of this?



62. By observing the relationship between the first

pair, fill up the blanks.

Chlorophyceae: Starch: Rhodophyceae:.....



63. Match the following (Coloumn I with coloumn II)

Column I	Column II	
a. Chlamydomoņas	i. Moss	
b. Cycas	ii. Pteridophyte	
c. Selaginella	iii. Algae	
d. Sphagnum	iv. Gymnosperm	



64. observe the relationship between first two terms

and fill up the blanks,

 $Phycobiont: Algalpart \neq r$,

....:Fungalpart
eq r



65. observe the relationship between first two terms

and fill up the blanks,

 $Rhizopus: Phycomycetes, penicill \in :......$

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66. 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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67. analyse the given table and arrange the matter in an appropriate order.

A{ 1. Floridean starch, 2. flowers, 3. Sporophyil, 4.
Cone} B{1. phycoerythrin, 2 Naked seed, 3. Prothallus,
4. Fruit}, C{1. Gymnosperm, 2. Red algae,3.

Angiospems, 4. Fem}

68. Complete the table using appropriate terms.

Plant group	Reserve	Pigment
	food	
Chlorophycea	ea	Chlorophyll
Rhodophyceae	Floridean	b
	starch	•
Phaeophyceae	C	b

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69. What is the basis of classification of algae?



70. Both gymnosperms and angiosperms bear seeds,

then why are they classified separately?



71. A plant shows thallus level of organization. It shoes rhizoids and is haploid. It needs water to complete its life cycle because of the male gametes are motile. Identify the group in which it belongs to.



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

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73. differentiate between the following.

Red algae & Brown algae

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74. differentiate between the following.

Live Worts & Mosses



75. differentiate between the following.

Homoeporous & Heterosporous

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76. differentiate between the following.

Syngamy & Triple fusion





77. The following is a list of Plants. Riccia, Chlorella, Salaginella, Adiantum, Chalamydomas, Sugarcane, Funaria, Gnetum, Ficus, Cycas. Categories this plans into algae, bryophytes,

pteridophytes, Gymnosperms and Angiosperms.

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78. some plants of cycas produces seeds, but not others.justify



79. What is mixotrophic mode of nutrition?

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80. Why seed plants are most successful of all land

plants?

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81. how bryophytes are advanced over algae?

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82. Differentiate between zoospore and zygote.

Watch Video Solution	Watch Video Solution	
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83. In which plant will you look for mycorrhiza and corolloid roots?

Also explain what these terms mean in pinus and

cycas.



84. why rhizoides are not called roots?

Match Mideo Colution



85. Both gymnosperms and angiosperms bear seeds,

then why are they classified separately?

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86. why are some bryophytes called liverworts?

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87. heterospory i.e formation of two types of spores-

microspores and megaspoores is characteristic

features in the life cycle of a few members of pteridophytes and all spermatophytes. do you think heterospory has some evolutionary significance in plant Kingdom.



88. Most algal genera show haplontic lifestyle. Name

an alga which is

(a) Haplo- diplontic

(b) Diplontic

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89. most algal genera show haplontic lifestyle. Name

an alga which is

Diplontic

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90. What is heterospory? Briefly comment on its

significance. Give two examples.

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91. The spores and gametes produced by some members of algae are non motile.

Do you agree with the above statement? Give reason



92. The spores and gametes produced by some members of algae are non motile.

Do you agree with the above statement? Give reason



93. Nature of spore development is different in bryophytes and pteridophytes.

(a) Give the common name of the structures arise

from sports.

(b) Identify these two



94. Nature of spore development is different in bryophytes and pteridophytes.

(a) Give the common name of the structures arise

from sports.

(b) Identify these two



95. Name the diploid and triploid products from in embryosac after fertilisation. What will be the fate of haploid structures that does not participate in fertilisation?



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96. Name the diploid and triploid products from in embryosac after fertilisation. What will be the fate of haploid structures that does not participate in fertilisation?



97. Identify the types of association in some members of gymnosperms. Name organisms forms in such associations.

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98. identify the life cycle shown by the bryophytes

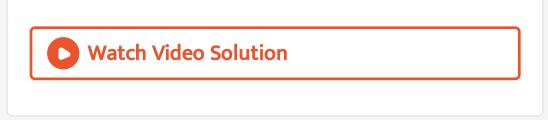
and gymnosperms.



99. mark the statement true or false

potato, Ginger, turmeric are underground stems.





100. mark the statement true or false

phyllotaxy is the pattern of arrangement of leaves

on the stem or branch.

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101. mark the statement true or false

a flower having only stamens or carpel is bisexual.

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102. mark the statement true or false

Calyx and corolla are reproductive organs.

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103. mark the statement true or false

lamina is the green expanded part of leave with veins and veinlets.



104. mark the statement true or false

in racemose inflorescence, the main axis terminates

in the flower.



105. mark the statement true or false

Ovary in epigynous flower is superior.

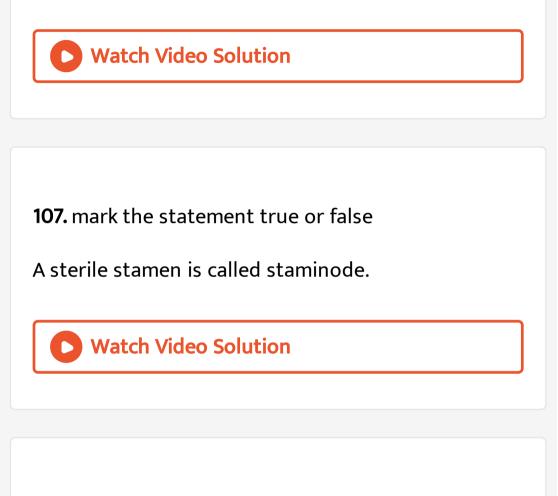


106. mark the statement true or false

if the margin of sepals or petals overlap one another

but not in particular direction, the aestivation is

called imbricate.



108. mark the statement true or false

the seed coat has two layers the outer testa and the

inner tegmen.





109. What is heterospory? Briefly comment on its

significance. Give two examples.

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110. What is heterospory? Briefly comment on its

significance. Give two examples.



111. 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 fern

gemma cell in Marchantia

meristem cell of monocot

ovum of a liverwort

zygote of a fern













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118. explain briefly with suitable example

Protonema



119. explain briefly with suitable example

Antheridium

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120. explain briefly with suitable example

Archegonium





121. explain briefly with suitable example

Diplontic

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122. explain briefly with suitable example

Sporophyll



123. based on relationship, fill in the blanks

 $Penicillium: \dots \dots :: A garicus: Basidio carp$

.....: Phae ophyceae :: CarraGeen : Rhod ophyceae

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124. based on relationship, fill in the blanks

 $Penicillium: \dots \dots :: A garicus: Basidio carp$

.....: Phae ophyceae:: CarraGeen: Rhodophyceae



125. A few statements regarding algae are given below. study name carefully and state true or false. if false make them correct.

Algae are thallophytes.



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126. A few statements regarding algae are given below. study name carefully and state true or false. if

false make them correct.

Volvox is red algae.



127. A few statements regarding algae are given below. study name carefully and state true or false. if false make them correct.

Algin is obtained from red algae.



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128. analyse the given table and arrange the matter in an appropriate order.

A{ 1. Floridean starch, 2. flowers, 3. Sporophyil, 4.
Cone} B{1. phycoerythrin, 2 Naked seed, 3. Prothallus,
4. Fruit}, C{1. Gymnosperm, 2. Red algae,3.
Angiospems, 4. Fem}



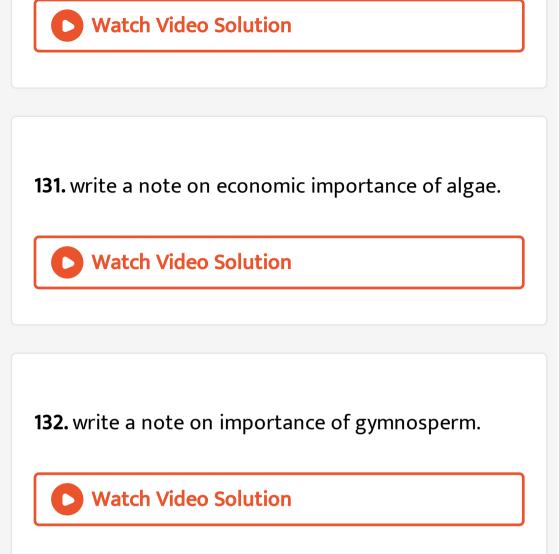
129. A few statements regarding algae are given below. study name carefully and state true or false. if false make them correct.

Volvox is red algae.



130. A few statements regarding algae are given below. study name carefully and state true or false. if false make them correct.

green algae possess chlorophyll a.



133. Match the following.

Prothallus	Mosses
Synergid	Strobilus
Protonema	Gametophyte
Spoprophyll	Egg apparatus



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134. Observe the relationship between the words of

the first sentence and fill the second one.

Association of fungus with algae: Lichens

Association of fungus with roots of plants :.....



135. Give reasons: The process of fertilization in angiosperm is double fertilization.



136. In Bryophytes, the dominant phase in the life cycle is the the gametophyte plant. However in pteridophytes the main plant body is a sporophyte. How can we easily differentiate between the the sporophytes in bryophytes and pteridophytes.

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137. Liverworts undergo asexual reproduction by the formation of specialised structures called 'gemmae'.What is the speciality of this structure?

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138. Majority of pteridophytas are homosporous i.e. they produce similar kind of spores. Give one example of a heterosporus pteridpphyte.



139. Most pteridophytes are homosporous but there are exceptions. 'Heterospory is a precursor to seed habit'. Point out any one common character found in heterospory and seed habit.



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140. Even though algae are primary producers on aquatic ecosystems, man is benefited by algae in a variety of ways. Write any four points in favour of this statement.



141. Double fertilization is an event unique to angiosperms'. Mention the two fusions in the event.

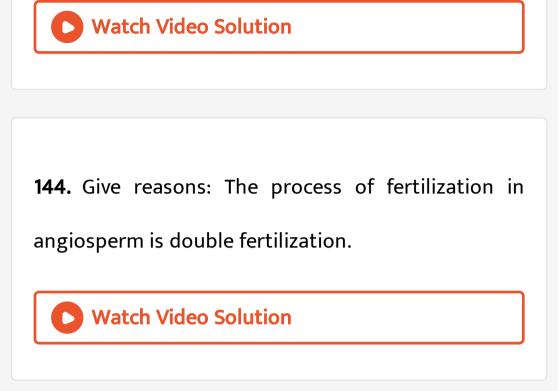
142. Double fertilization is an event unique to angiosperms' . Name the products obtained as a result of these fusions.



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143. Give reasons for the following. Bryophytes are

called amphibians of plant Kingdom.



145. Complete the given table of algal divisions and

their main characteristics by filling 'a', 'b', 'c' and 'd' .

Chlorophyceae	Chlorophyll-a, b	(a)
Phaeophyceae	Chlorophyll-a, c and (b)	Laminarin Mannitol
(c)	Chlorophyll-a, b & Phycoerythrin	(d)

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146. Write any two distinguishing features of the the

algal class Rhodophyceae.



147. In which plant will you look for mycorrhiza and corolloid roots?

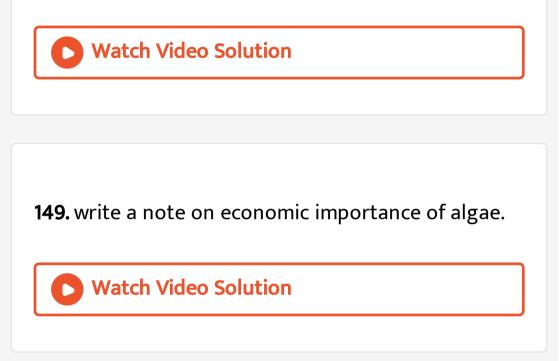
Also explain what these terms mean in pinus and

cycas.

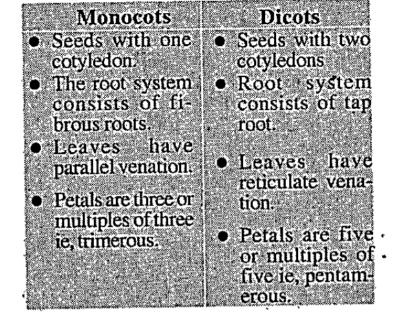
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148. Give reasons: The process of fertilization in

angiosperm is double fertilization.



150. How would you distinguish monocots from dicots?



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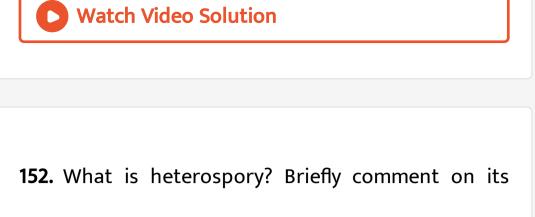
151. Match the following (Coloumn I with coloumn II)

Column I

- a. Chlamydomonas
- b. Cycas
- c. Selaginella
- d. Sphagnum

Column II

- i. Moss
- ii. Pteridophyte
- iii. Algae
- iv. Gymnosperm



significance. Give two examples.



153. Both gymnosperms and angiosperms bear

seeds, then why are they classified separately?



154. What is the basis of classification of algae?



155. differentiate between the following.

Red algae & Brown algae

A. chlorophyll a

B. fucoxanthin

C. floridean starch

D. phycoerythrin

Answer: (b)

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156. Heterospory is first noticed in

A. gymnosperm

B. pteridophytes

C. gymnosperm

D. ferns

Answer: (b)

D View Text Solution

157. Mycorrhizal roots of are associated with

some fungal symbionts

A. ferns

B. pinus

C. cycas

D. potytrichum

Answer: (b)

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158. Which one of the following belongs to brown

algae

A. polysiphonia

B. ectocarpus

C. ulothrix

D. volvox

Answer: (b)

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159. Sexual reproduction of bryophytes involves the

production of

A. sperms

B. biflagellate antherozoids

C. antheroids

D. cilliate antherozooids

Answer: (b)

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160. The asexual reproductive structures occurs in

bryophytes are

A. zoospores

B. gemmae

C. fronds

D. rhizoids

Answer: (b)

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161. Protonema stage occurs when

A. spore of bryophytes germinate

B. seed germinates

C. spore of ferns germinate

D. none of the above

Answer: (a)



162. The product of triple fusion in the flowering

plants is?

Zygote

PEN

Perisperm

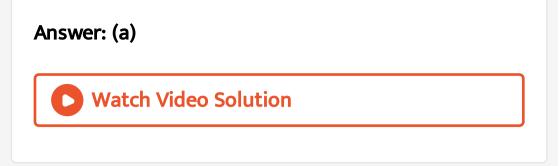
Nucellus

A. angiosperm

B. pteridophytes

C. gymnosperm

D. ferns



163. The life cycle occurs in ectocarpus is

A. haplontic

B. haplodiplontic

C. diplontic

D. none of the above

Answer: (b)



164. Prothallus is

A. photosynthetic gametophyte

B. photosynthetic sporophyte

C. non photosynthetic gametophyte

D. non photosynthetic sporophyte

Answer: (a)



165. Phylogenetic system of classification was given by

A. embryological characters

B. evolutionary characters

C. morphological characters

D. floral characters

Answer: (b)



166. Classification based on cytological information,

chromosome number etc. called

A. chemotaxonomy

B. cytotaxonomy

C. numerical taxonomy

D. cytogenetics

Answer: (b)



167. In which of the following groups would you place plants having vascular tissue but lacking seeds

A. pteridophytes

B. gymnosperms

C. angiosperms

D. bryophytes

Answer: (a)



168. Life cycle found in pteridophytes

A. haplontic

B. diplontic

C. haplo-diplontic

D. either haplontic or diplontic

Answer: (c)

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169. Fucoxanthin is the chief pigment in

A. red algae

B. brown algae

C. green algae

D. blue green algae

Answer: (b)

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170. Algae which grow on animal and also occur on shells of molluscs or other invertebrates are called

A. parasitic

B. epiphytic

C. epizoic

D. coenbia

Answer: (c)

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171. Xylem of gymnosperm lack

A. tracheids

B. vessels

C. both a and b

D. fibres

Answer: (b)



172. Pyrenoids are present in

A. angiosperms

B. gymnosperms

C. algae

D. pteridophytes

Answer: (c)



173. The first plants to appear after forest fire are the

ferns this is because of the survival of their

A. fronds

B. rhizome

C. spores

D. both a and c

Answer: (b)



174. The endosperm of gymnosperm is

A. diploid

B. triploid

C. tetraploid

D. haploid

Answer: (d)

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