

India's Number 1 Education App

### BIOLOGY

# BOOKS - FULL MARKS BIOLOGY (TAMIL ENGLISH)

## PLANT KINGDOM

Textbook Evaluation Questions Solved Choose The Correct Answer 1. Which of the plant group has gametophyte

as a dominant phase?

A. Pteridophytes

B. Bryophytes

C. Gymnosperm

D. Angiosperm

Answer: B

2. Which of the following represent

gametophytic generation in pteridophytes?

A. Prothallus

B. Thallus

C. Cone

D. Rhizophore

Answer: A

**3.** The haploid number of chromosome for an Angiosperm is 14, the number of chromosome in its endosperm would be

B. 14

A. 7

C. 42

D. 28

#### Answer: C



4. Endosperm in Gymnosperm is formed

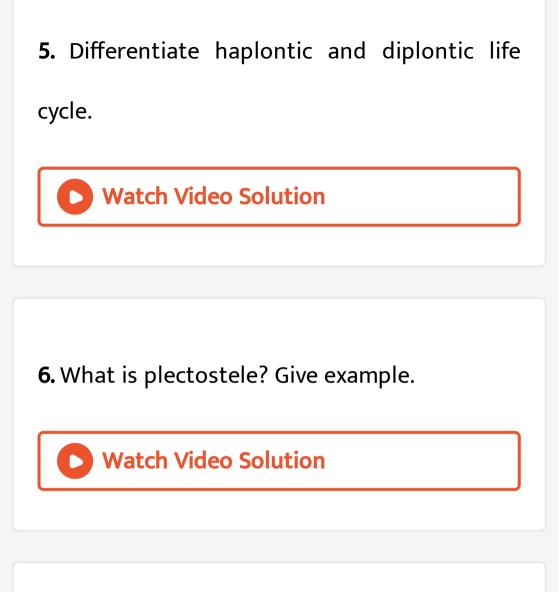
A. at the time of fertilization

B. before fertilization

C. after fertilization

D. along with the development of embryo

Answer: B



7. What do you infer from the term pycnoxylic?

#### 8. Mention two characters shared by

gymnosperms and angiosperms ?



#### 9. Do you think shape of chloroplast is unique

for algae. Justify your answer.



**10.** Do you agree with the statement 'Bryophytes need water' for fertilization'? Justify you answer.



#### **Entrance Examination Questions Solved**

**1.** Which of the following are found in extreme

saline conditions?

A. Archaebacteria

B. Eubacteria

C. Cyanobacteria

D. Mycobacteria

Answer: A

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2. Select the mismatch

A. Frankia Alnus

B. Rhodospirillum Mycorrhiza

C. Anabaena Nitrogen fixer

D. Rhizobium Alfalfa

Answer: B



**3.** Which among the following are the smallest living cells, known without a definite cell wall, pathogenic to plants as well as animals and can survive without oxygen?

- A. Bacillus
- B. Pseudomonas
- C. Mycoplasma
- D. Nostoc

Answer: C



**4.** Read the following statements (A to E) and select the option with all correct statements :

A. Mosses and Lichens are the first organisms

to colonise a bare rock.

B. Selaginella is a homosporous pteridophyte.

C. Coralloid roots in Cycas have VAM.

D. Main plant body in bryophytes is gametophytic, whereas in pteridophytes itis sporophytic.

E. In gymnosperms, male and female gametophytes are present within sporangia located on sporophyte.

A. B, C and E

B. A, C and D

C.B,C and D

D. A, D and E

Answer: D

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5. An example of colonial algae is

A. Chlorella

B. Volvox

C. Ulothrix

D. Spirogyra

#### Answer: B



**6.** Five Kingdom system of classification suggested by R.H. Whittaker is not based on

A. Presence or absence of a well defined

B. Mode of reproduction

C. Mode of nutrition

D. Complexity of body organisation

#### Answer: A

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#### 7. Mycorrhizae are the example of

A. Fungitasis

B. Amensalism

C. Antibiosis

D. Mutalism

#### Answer: D

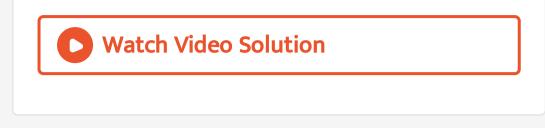


**8.** Which of the following shows coiled RNA strand and capsomeres?

A. Polio virus

- B. Tobacco mosaic virus
- C. Measles virus
- D. Retrovirus

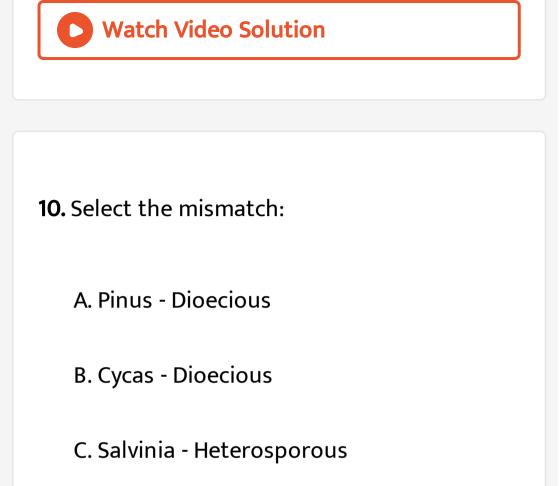
#### Answer: B



**9.** Viroids differ from viruses in having :

- A. DNA molecules with protein coat
- B. DNA molecules without protein coat
- C. RNA molecules with protein coat
- D. RNA molecules without protein coat

Answer: D



D. Equisetum - Homosporous

Answer: A



A. Haplontic, Diplontic

B. Diplontic, Haplodiplontic

C. Haplodiplontic, Diplontic

D. Haplodiplontic, Halplontic

Answer: C

#### 12. Zygote meiosis is characteristic of

A. Marchantia

**B.** Fucus

.....

C. Funaria

D. Chlamydomonas

#### Answer: D

**13.** Which of the following is correctly matched

for the product produced by them?

A. Acetobacter aceti : Antibiotics

B. Methanobacterium: Lactic acid

C. Penicillium notatum: Acetic acid

D. Saccharomyces cerevisiae: Ethanol

Answer: D

**14.** Which of the following components provides sticky character to the bacterial cell?

A. Cell wall

B. Nuclear membrane

C. Plasma membrane

D. Glycocalyx

Answer: D

15. Which of the following statements is wrong

for viroids?

A. They lack a protein coat

B. They are smaller than viruses

C. They causes infections

D. Their RNA is a high molecular weight

Answer: D

16. In bryophytes and pteridophytes, transport

of male gametes require...............

A. Wind

**B.** Insects

C. Birds

D. Water

Answer: D

17. How many organisms in the list below are autotrophs?
Lactobacillus, Nostoc, Chara, Nitrosomonas, Nitrobacter, Streptomyces, Saccharomyce
Trypanosoma, Porphyra, Wolffia

A. Four

B. Five

C. Six

D. Three

Answer: C



### 18. Which of the following would appear as the

#### pioneer organisms on bare rocks?

A. Lichens

**B.** Liverworts

C. Mosses

D. Green algae

#### Answer: A

A. Stamen and carpel on the same plant

B. Upper antheridium and lower oogonium

on the same plant

C. Upper oogonium and lower antheridium

on the same plant

D. Antheridiophore and archegoniophore

on the same plant

#### Answer: C



**20.** Read the following five statement (A-E) and answer as asked next to them (a) In Equisetum, the female gametophyte is retained on the parent sporophyte (b) In Ginkgo, male gametophyte is not independent (C) The sporophyte in Riccia is more developed

than that in Polytrichum

(d) Sexual reproduction in Volvox is isogamous

(e) The spores of slime moulds lack cell walls

How many of the above statement are correct?

A. Two

B. Three

C. Four

D. One

Answer: D

21. One of the major components of cell wall of

A. Chitin

B. Peptidoglycan

C. Cellulose

D. Hemicellulose

Answer: A

**22.** Which one of the following statements is wrong?

A. Cyanobacteria are also called blue-green

algae

- B. Golden algae are also called desmids
- C. Eubacteria are also called false bacteria
- D. Phycomycetes are also called algal fungi

Answer: C



**23.** Flagellated male gametes are present in all the three of which one of the following sets?

A. Riccia, Dryopteris and Cycas

B. Anthoceros, Funaria and Spirogyra

C. Zygnema, Saprolegnia and Hydrilla

D. Fucus, Marsilea and Calotropis

Answer: A

24. Ectophloic siphonostele is found in

- A. Adiantum and Cucurbitaceae
- B. Osmunda and Equisetum
- C. Marsilea and Botrychium
- D. Dicksonia and maiden hair fern

Answer: B



25. Which part of the tobacco plant is infected

by Meloidogyne incognita?

A. Flower

B. Leaf

C. Stem

D. Root

**Answer: D** 

**26.** Select the correct statement:

A. Gymnosperms are both homosporous

and heterosporous

B. Salvinia, Ginkgo and Pinus all are

gymnosperms

C. Sequoia is one of the tallest trees

D. The leaves of gymnosperms are not well

adapted to extremes of climate

Answer: C



**27.** Seed formation without fertilization in flowering plants involves the process of

A. Sporulation

B. Budding

C. Somatic hybridization

D. Apomixis

Answer: D

**28.** Chrysophytes, Euglenoids, Dinoflagellates and Slime moulds are included in the kingdom

A. Animalia

B. Monera

C. Protista

D. Fungi

Answer: B

**29.** \_\_\_\_\_ are the primitive prokaryotes responsible for the production of biogas from the dung of ruminant animals.

A. Halophiles

- B. Thermoacidophiles
- C. Methanogens
- D. Eubacteria

## Answer: C

- - A. triploid
  - B. tetraploid
  - C. haploid
  - D. diploid

Answer: C



2. Haplodiplontic life cycle is seen in .....

A. algae

B. gymnosperm

C. bryophytes

D. angiosperm

Answer: C

3. Which algae leads an endozoic life in Hydra?

A. Chlorella

B. Gracilaria

C. Ulothrix

D. Chlamydomonas

Answer: A

4. Study of algae is called ......

A. biology

B. mycology

C. bryology

D. phycology

Answer: D

5. Siliceous walls are present in ........

A. Chara

B. Chlanmydomonas

C. Dunaliella

D. Diatoms

Answer: D

6. In Chara, thallus is encrusted with .................

A. calcium carbonate

B. hydrogen sulphate

C. silica

D. ammonium carbonate

Answer: A

7. Pyrenoids are present in ......

A. mitochondrion

B. chloroplast

C. ribosomes

D. lysosomes

Answer: B

## 8. Type of vegetative reproduction seen in

ulothrix is ........

A. bulbils

B. fission

C. fragmentation

D. tubers

Answer: C

9. ..... are thin walled non-motile spores.

## A. Zoospores

- **B.** Akinetes
- C. Aplanospores
- D. Gemmae

### Answer: C



**10.** Fusion of either morphologically or physiologically dissimilar gametes is called as

A. isogamy

.....

B. anisogamy

C. syngamy

D. oogamy

Answer: B

11. According to Fritsch, the algae are classified

into ..... classes.

A. 10

B. 12

C. 11

D. 10

Answer: C

12. Photosynthetic part of the phaeophyceae

A. holdfast

B. stipes

C. lamina

D. fronds

Answer: D

13. A characteristic pigment of phaeophyceae

is ......

A. xanthophyle

B. carotenoid

C. fucoxanthin

D. chlorophyll

Answer: C

14. ..... is used as single cell protein.

A. Chlorella

B. Kelps

C. Chlamydomonas

D. Spirogyra

Answer: A



15. Gelidium belongs to ..... members.

A. Rhodophyceae

- B. Phaeophyceae
- C. Cyanophyceae
- D. Dinophyceae

Answer: A

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A. Chlorella

B. Chara

## C. Chondrus

D. Chlamydomonas

## Answer: C

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## 17. ..... are the amphibians of the plant

kingdom.

A. Pteridophytes

B. Algae

C. Gymnosperms

D. Bryophytes

## Answer: D

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## 18. Marchantia vegetativelypropagates by

A. tubers

## B. gemmae

## C. buds

D. brood bodies

## Answer: B

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19. Peat is obtained from ......

A. Anthoceros

B. Dendroceros

## C. Sphagnum

D. Funaria

## Answer: C

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# 20. ..... is a bryophyte used to cure

pulmonary tuberculosis.

A. Marchantia polymorpha

B. Polytrichum

# C. Sphagnum

D. Bryum

## Answer: A



## 

A. Protostele

- B. Siphonostele
- C. Adiantum

D. Selaginella

Answer: B

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# **22.** Which of the following pteridophyte is used as a biofertiliser ?

A. Marsilea

B. Pteridium

C. Pteris

D. Azolla

### Answer: D

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# **23.** Which of the following is naked seed producing plant?

A. Angiosperm

- B. Gymnosperm
- C. Pteridophytes

D. Bryophytes

Answer: B

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24. Amber is obtained from ......

A. Angiosperm

B. Gymnosperm

C. Pteridophytes

D. Bryophytes

#### Answer:



# **25.** Coralloid roots of cycas have symbiotic association with ......

A. Blue green algae

B. Mycorrhiza

C. Euglena

D. Rhizobium





# **26.** Pinus roots are in symbiotic relationship with ......

A. Blue green algae

B. Mycorrhiza

C. Euglena

D. Rhizobium





## **27.** Which is not a family of gymnospermae?

A. Lycopodia

- B. Cycadopsida
- C. Coniferopsida
- D. Gnetopsida

Answer: A



## 28. The endosperm of gymnosperm is

A. haploid

••••••

B. triploid

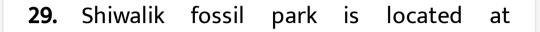
C. diploid

D. polyploidy

### Answer: A







A. Madhya Pradesh

.....

**B. Himachal Pradesh** 

C. Rajmahal hills

D. Jharkhand

Answer: B

**30.** When does the angiosperm appeared on Earth ?

A. Devonian

B. Cambrian

C. Early cretaceous

D. Precambrian

Answer: C

**31.** Which is also called as vascular cryptogam?

A. Gymnosperms

B. Pteridophytes

C. Bryophytes

D. Algae

Answer: B

**32.** Which of the following is not a cryptogam?

A. Algae

B. Bryophytes

C. Pteridophyta

D. Angiospermae

Answer: D

**33.** .....is a halophytic algae.

A. Chlamydomonas nivalis

B. Dunaliella salina

C. Coleochaete

D. Volvox

Answer: B

**34.** Who is called as the Father of Indian Phycology?

A. M.O. Parthasarathy

B. Y. Bharadwaja

C. V.S. Sundaralingam

D. V. Desikachary

Answer: A

**35.** Wedge shaped modified branches developed by Sphacelaria are called as

A. Buds

B. Akinetes

C. Tubers

D. Bulbils

Answer: D

36. Pteridophytes were abundant in

the..... period.

A. Cambrian

B. Precambrian

C. Devonian

D. Cretaceous

Answer: C

37. Heterospory is originated in ................

A. Gymnosperms

B. Pteridophytes

C. Bryophytes

D. Algae

Answer: B

A. Cycas revoluta

B. Pinus roxburghii

C. Pinus insularis

D. Cedrus deodara

Answer: A

Additional Questions Solved Very Short Answer Type Questions

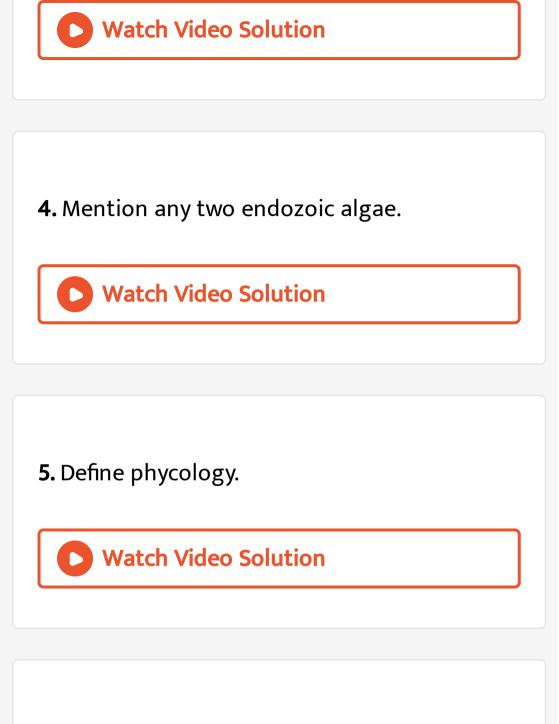
**1.** Whatr is alternation of generation?



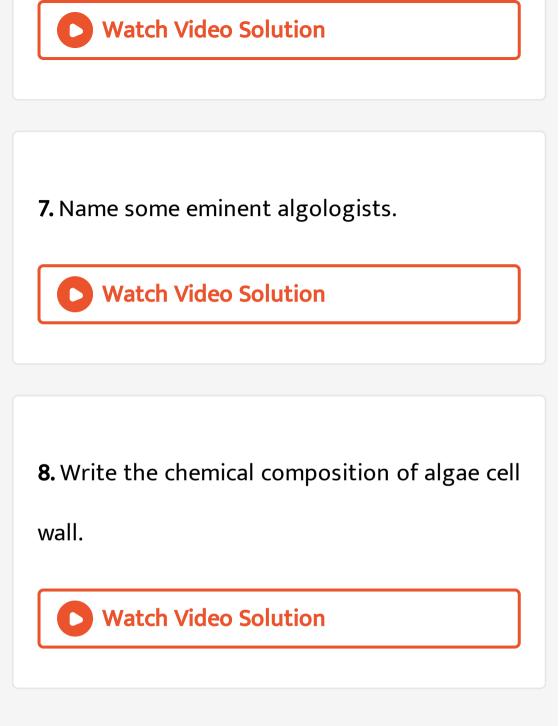
2. Name any two marine algae.

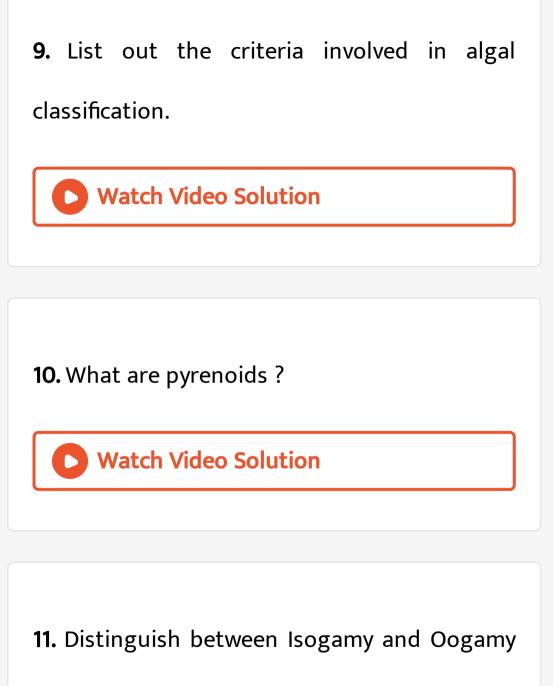


**3.** Name any two fresh water algae.

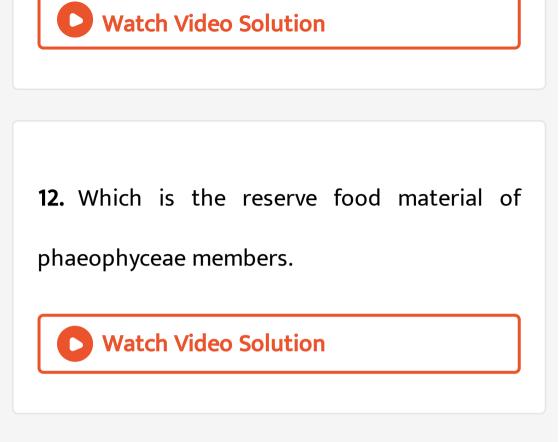


6. Define epiphytic algae with an example.





with example.



13. Name the sex organs seen in

Rhodophyceae.

14. Which is responsible for pigmentation of

Brown algae?



15. Mention any two algae members used in

Agar-Agar production.

16. Why Bryophytes are called amphibians of

plant kingdom ?

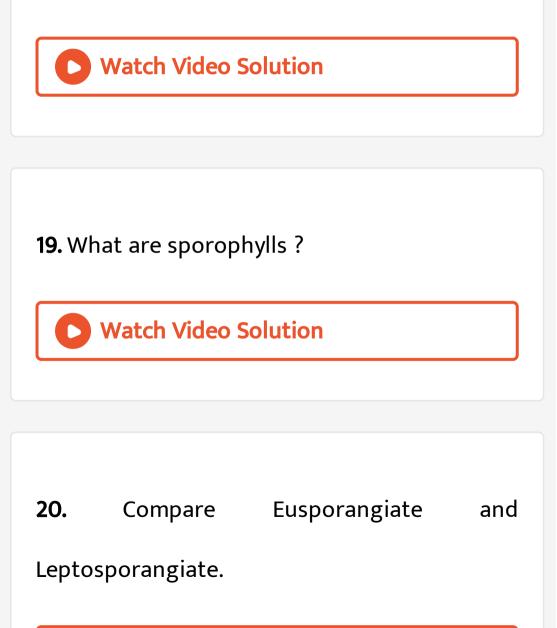
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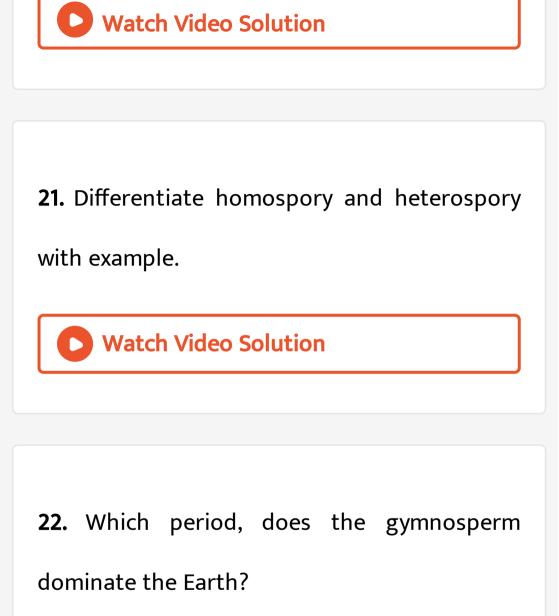
17. Why are bryophtes called non-vascular

cryuptogams?

18. Which type of sexual reproduction occurs

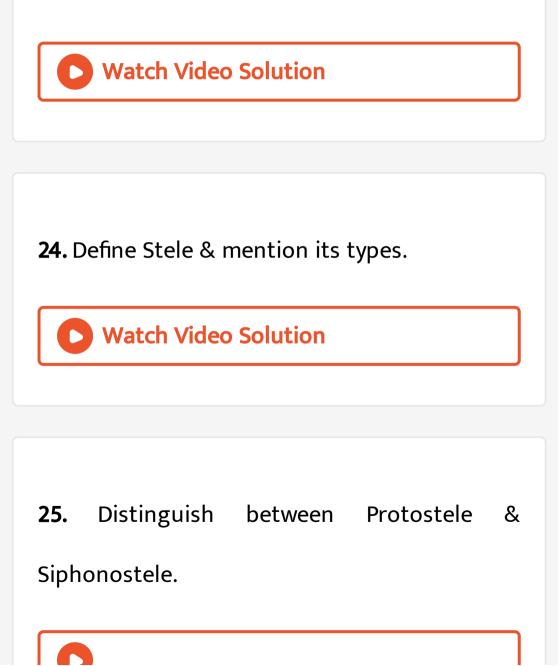
in Bryophytes. Name the male & female parts.

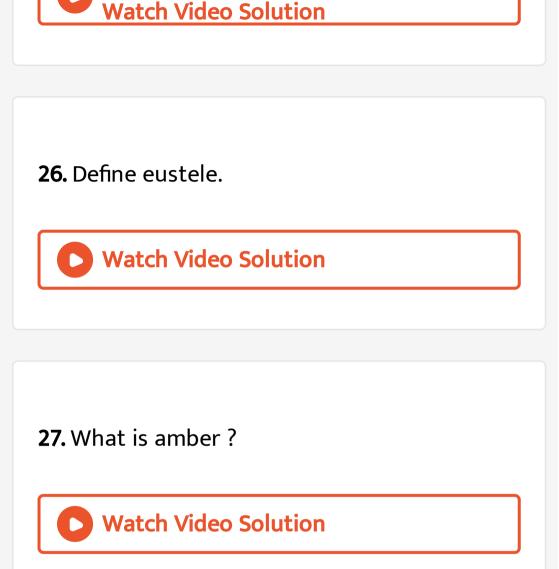


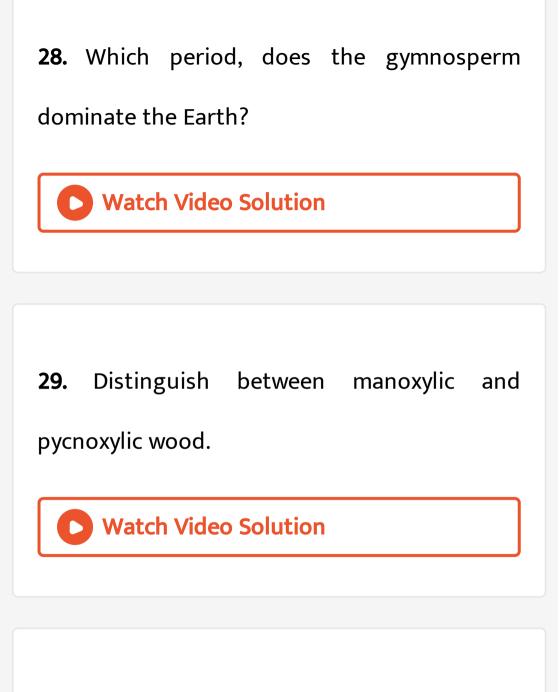


23. List out the ways of vegetative propagation

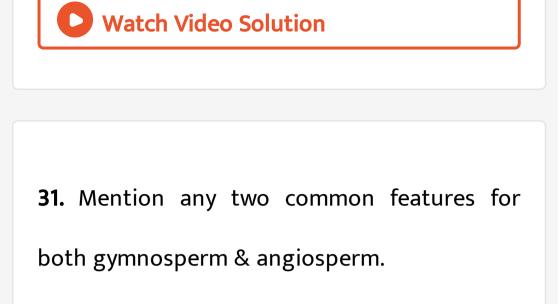
by Pteridophytes.







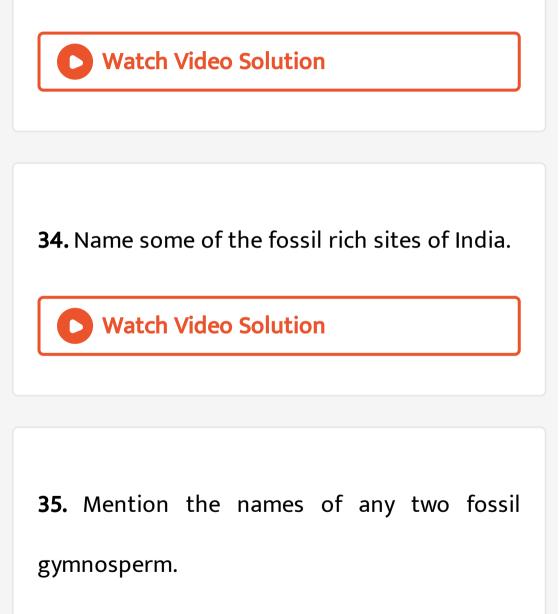
30. Define Siphonogamous condition.



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**32.** What is Canada Balsam?

**33.** What do you mean by 'form genera'?



36. Which group of plants dominate the Earth

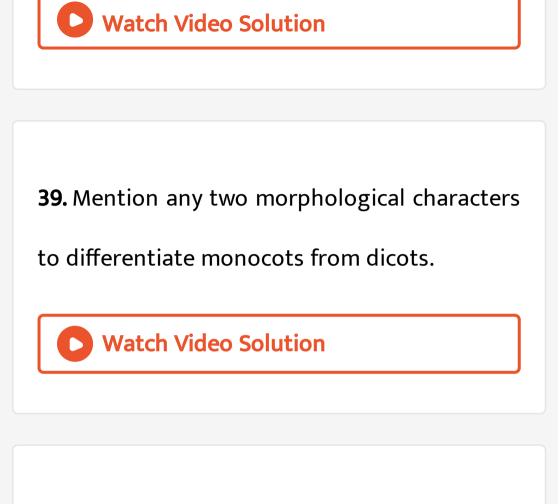
today? Define it.



## **37.** What is an open vascular bundle?



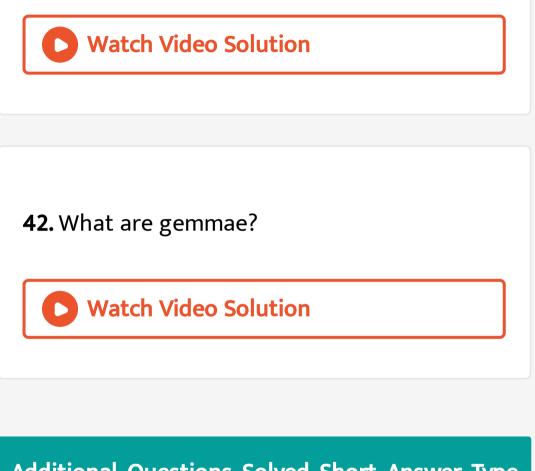
38. What is a closed vascular bundle?



## **40.** Name the two divisions of spermatophyta?



41. What are brood bodies?



Additional Questions Solved Short Answer Type Questions 1. What are cryptogam? Mention its division.



In which group of plants we can observe
 Haplodiplontic life cycle? Draw a diagram of
 Haplodiplontic life cycle.



3. Name the 3 types of life cycles seen in plants?
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4. Where can we see cryophytic & halophytic

algae? Give example.

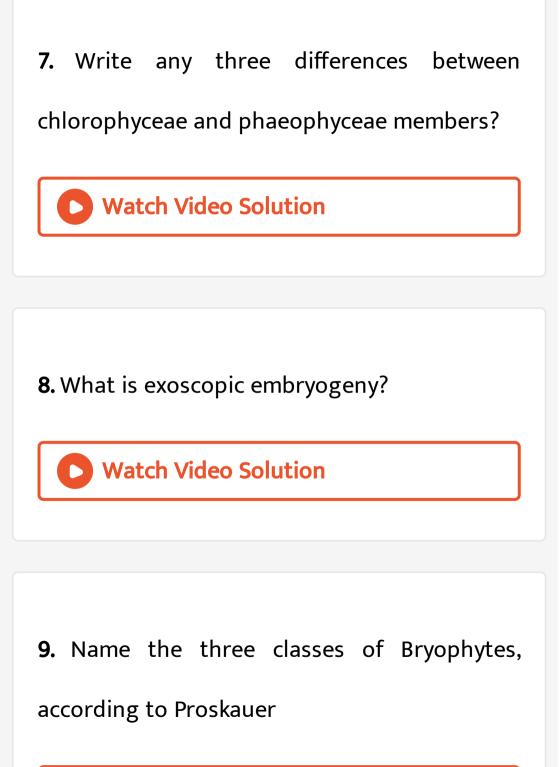


5. List out the various types of vegetative reproduction seen in algae.
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6. List out the various asexual spores

produced by algae.







**10.** How peat is obtained? Write its economic

value.

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11. Mention any three Pteridophytes and their

economic value.



12. How the vascular plants dominate the

Earth?



**13.** Name the three classes of gymnosperms.



14. Write any five Economic importance of

Gymnosperm.





15. Draw illustrations to bring out anatomical

difference between

(a) Monocot root and dicot root

(b) Monocot stem and dicot stem

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Additional Questions Solved Long Answer Type Questions 1. Explain in detail about the various life cycle

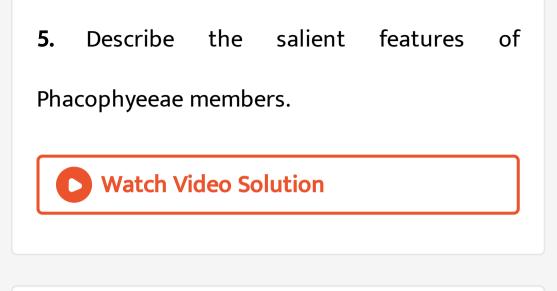
patterns in plants.

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2. Write a note on diversified thallus

organisation seen in algae with examples.

3. Deseribe the various types of sexual reproduction observed in algae. Watch Video Solution Describe the salient features of 4. Chlorophyceae members. Watch Video Solution



6. Write down the characteristic features of

Rhodophyceae.



7. Write a note on economic importance of

algae and gymnosperms.



**8.** List out the general characterstics of Bryophytes.



9. Write the general characteristic features of

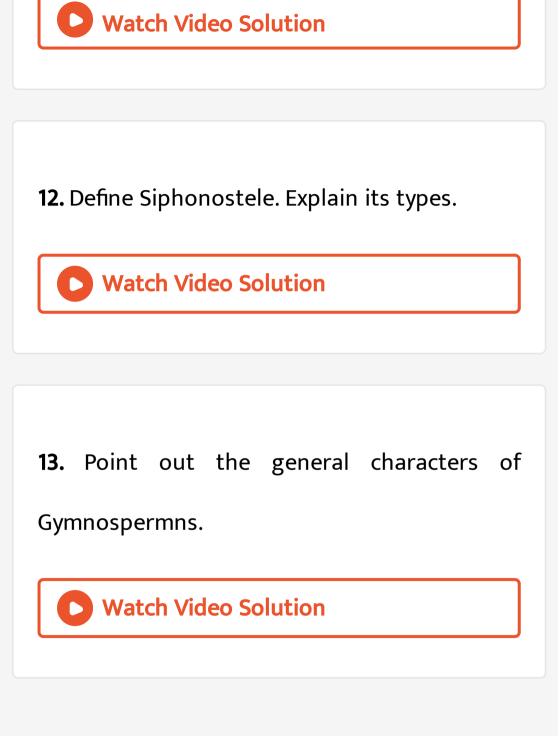
Pteridophytes.

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**10.** Tabulate the economic importance of Pteridophyte.

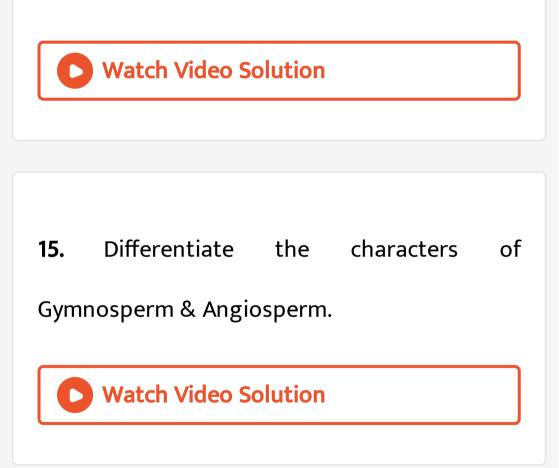
**O** Watch Video Solution

11. What is protostele? Explain its types.



14. Mention any two common features for

both gymnosperm & angiosperm.



16. Write any five Economic importance of

Gymnosperm.

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17. Give an account of the salient features of

Angisperms.





Monocotyledons.

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## Additional Questions Solved Higher Order Thinking Skills Hots

1. State which were the first true land plants?

Mention two Characteristics features of these

plants.



2. Give a comparative account of the following:

(a) Marchantia and Marsilea (b) Cycas and rose



3. Why are angiosperms so called? In which

structures do the seeds develop?

4. Name the gymnosperms that are exception

with regard to vascular tissue.

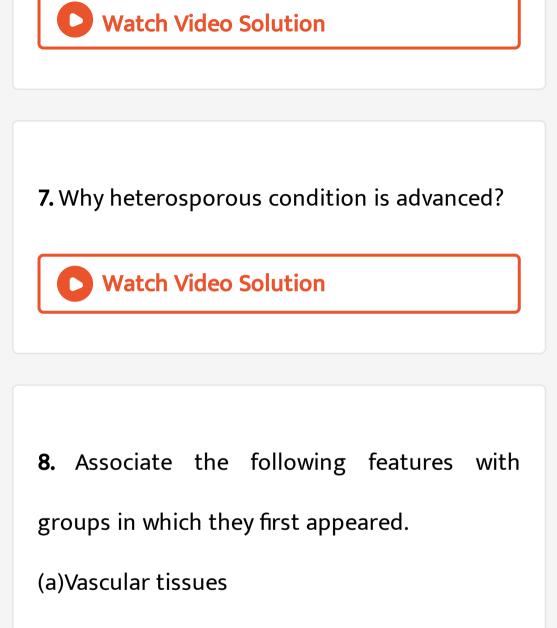


5. Both gymnosperms and angiosperms bear

seeds, then why are they classified separately?



6. Bryophytes maintain soil texture- comment.



(b) Seeds inside fruits

(c) Heterospore production



