



# **BIOLOGY**

# **BOOKS - ARIHANT NEET BIOLOGY (HINGLISH)**

# PLANTAE

Check Point 71

**1.** Which one of following is not a characteristic of members of kingdom - Plantae ?

A. Presence of chlorophyll

B. Presence of cellulosic cell wall

C. Alternation of generation

D. None of the above

# Answer: D

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2. In Endicher's classification group cormophyta includes

A. algae and lichens

B. plants with root, stems and leaves

C. algae

D. fungi

Answer: D



A. Cloeochaete

B. Hydrodictyon

C. Volvox

D. Spirogyra

Answer: A



4. Non-motile asexual spores formed in Vaucheria are

A. aplanospores

**B.** autospores

C. zoospores

D. hypnospores

# Answer: D

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5. Devil's Apron is a name given to

A. Volvox

B. Laminaria

C. Nostoc

D. Chlorella

Answer: B



6. Which one of following algae shows haplo-diplontic life

cycle ?

A. Spirogyra

**B.** Fucus

C. Volvox

D. Ectocarpus

Answer: D



**7.** The reserve food material of plants of class -Chlorophyceae is

A. starch

B. laminarian

C. glycogen

D. mannitol

Answer: A



8. Which class of algae has mannitol and laminarian as

reserve food material ?

A. Rhodophyceae

B. Chlorophyceae

C. Cyanophyceae

D. Phaeophyceae

Answer: D

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9. In which class of algae, the flagella are totally absent?

A. Phaeophyceae

- B. Rhodophyceae
- C. Chlorophyceae
- D. Cyanophyceae

# Answer: B

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10. Volvox belongs to the class

A. Chlorophyceae

- B. Cyanophyceae
- C. Rhodophyceae

D. Bacillariophyceae

# Answer: A



11. The Gracilaria algae belongs to class

A. Chlorophyceae

B. Rhodophyceae

C. Cyanophyceae

D. Bacillariophyceae

Answer: B



**12.** Which of the following is true for chloroplast of Spirogyra ?

A. It is ribbon - shaped

B. It is coiled (right-handed)

C. Its number varies from 20 - 32

D. Pyrenoids are absent in chloroplast

Answer: A



13. In Spirogyra

A. chloroplasts are 32 - 40

B. vegetative reproduction occur by fragmentation

C. conjugation forms hypnospores

D. asexual reproduction occurs by zoospores

## Answer: B

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14. Conjugation in Spirogyra involves

A. morpholoically similar gametes

B. physiologically similar gemetes

C. physiologically similar gametes

D. Both (a) and (c)

Answer: C



**15.** The plant body of Ulothrix remain attached to substratum through

A. roots

B. root hairs

C. scales

D. holdfast

Answer: D



16. Macrozoospores of Ulothrix are not

A. quadriflagellate

B. uninucleate

C. spherical

D. pear-shaped

Answer: C



17. The body of brown algae is differentiated into

A. holdfast

B. stipe

C. frond

D. All of these

# Answer: D

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18. An alga used as food by astronauts is

A. Anabaena

B. Nostoc

C. Synechococus

# D. Chlamydomonas

# Answer: C



# 19. Chlorellin is obtained from

A. Chlorella

B. fucus

C. cladophora

D. charales

Answer: A



20. Cephaleuros virescens is parasitic on

A. tea

B. coffee

C. wheat

D. potato

Answer: A





**1.** Who among the following is known as father of Bryology ?

A. Rober Braun

B. Hedwig

C. MOP lyenger

D. None of the these

Answer: B

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2. The body of bryophytes remain fixed to the substratum

by means of

A. scales

B. rhizoids

C. gemmae

D. Both (a) and (b)

# Answer: B

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3. Sexual reproduction in bryophytes is

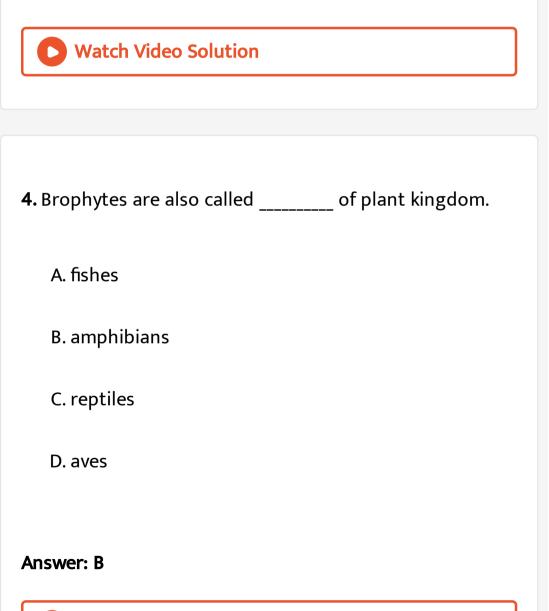
A. oogamous

B. isogamous

C. anisogamous

D. None of the above

#### Answer: A



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5. Which of the following in bryophytes is an adaptation

to water conditions?

A. Absence of true roots

B. Absence of vascular tissue

C. Movement of sperms

D. All of these

Answer: D



6. The largest bryophyte is

A. Riccia

B. Dowsonia

C. Marchantia

D. Megaceros

### Answer: B

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7. The members of class - Anthoceratopsida are popularly

known as

A. hornworts

B. mosses

C. liverworts

D. None of these

Answer: A

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8. The rhizoids of moss are

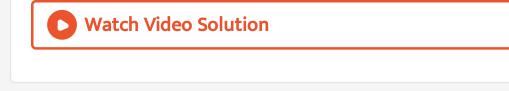
A. multicellular

B. branched

C. filamentous

D. Both (a) and (b)

Answer: D



9. The antherozoids of Funaria are

A. non- motile

B. biflagellated

C. multiflagellated

D. quadriflagellated

Answer: B



10. In archegonium of Funaria, the number of neck canal

cells are

A. 2

B. 3

C. 5

D.8 - 10

Answer: D



11. The central middle part of the moss capsule is sterile

and is known as

A. columella

B. operculum

C. apophysis

D. spore sac

Answer: A

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12. In moss sporophyte, which of the following is present?

A. Trabaculae

**B.** Peristome

C. Columella

D. All of these

Answer: D

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13. The sporophyte in Funaria is

A. the dominant and main phase of the plant body

B. differentiated into distinct foot, seta and capsule

C. parasite on the gametophyte

D. Both (b) and (c)

Answer: D

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14. Protonema is

A. a fossil pteridophyte

B. the juvenile phase of a moss gametophyte

C. a part of the sporophyte

D. None of the above

Answer: B



15. Which one of the following is an exclusive aquatic

species of Riccia?

A. R . fluitans

B. R .gangetica

C. R . discolor

D. All of these

# Answer: A

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16. Archegonia of Riccia have ..... neck canal cells .

A. 4-6

B.1 - 3

C.8 - 10

D. numerous

Answer: A



# 17. The sporophyte of Riccia

A. have foot

B. have setae

C. lack foot and setae both

D. None of the above

#### Answer: C



18. Which among the following is called peat moss?

A. Funaria

B. Sphagnum

C. Pellia

D. Porella

Answer: B



19. Due to which of the following, bryophytes and algae

resemble each other ?

A. Thalloid plant body

B. No roots

C. No vascular tissue

D. All of these

# Answer: D

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20. Bryophytes are different than algae in

A. having multicellular sporophytic generation

B. having no sporophyte

C. having zygotic meiosis

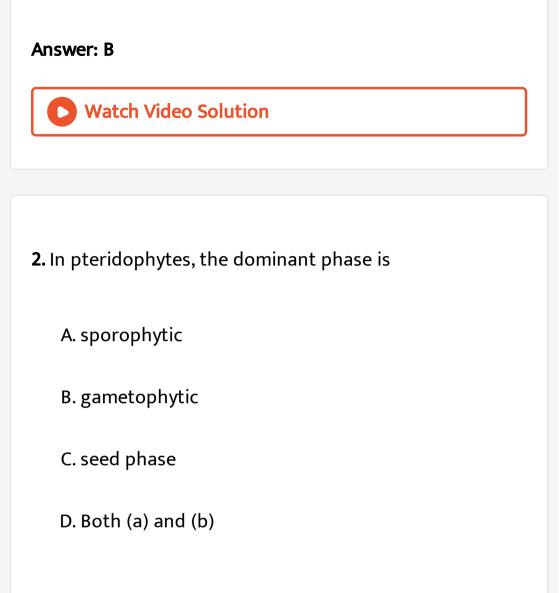
D. formation of embryo

### Answer: D

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- 1. Pteridophytes are
  - A. avascular and seeded
  - B. vascular and seedless
  - C. avascular and seedless
  - D. vascular and seeded



Answer: A



3. Adiantum is called walking fern because

A. it walks by itself

B. it is dispersed by walking animals

C. of its walking spores

D. it grows vegetatively by its leaf tip

Answer: D

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4. The leaves bearing sporangia are called

A. sporophytic

B. annulus

C. sporophylls

D. stomium

Answer: C

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5. Prothallus in the life cycle of pteridophyte represents

A. the gametophytic phase

B. the sporophytic phase

C. the neutral phase

D. no phase

**Answer: A** 



# 6. Antheridium of pteridophytes possess a jacket of

A. 3 cells

B. 4 cells

C. 6 cells

D. 1 cell

Answer: A



7. The process in which sporophyte directly develops into

gametophyte without spore production is

A. apospry

B. apogamy

C. sporogenesis

D. None of these

Answer: A

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8. The central core of axis, which includes the vascular

system is

A. annulus

B. stomium

C. stele

D. prothallus

### Answer: B

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9. Actinostele is not present in

A. Psilotum

B. Lycopodium serratum

C. Selaginella

# D. Asteroxylon

Answer: B

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10. What is true for siphonostele?

A. It has pith

B. Adiantum and Marsilea siphonostele

C. Leaf gaps are absent

D. All of the above

Answer: D



**11.** When a plant produces two kind of spores the condition is known as

A. homospory

B. heterospory

C. apospory

D. sporogenesis

Answer: B



12. Which of the following is not a heterosporous genera

of pteridophytes ?

A. Selaginella

B. Isoetes

C. Marsilea

D. None of these

Answer: D

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13. Which of the following pteridophyte is a member of

tilicophyta?

A. Marsilea

B. Equisetum

C. Pteris

D. Both (a) and (c)

### Answer: D

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14. Vegetative reproduction in Dryopteris occurs by

A. adventitions buds

B. fragmentation in rhizome

C. bulbils

D. Both (a)and (b)

Answer: D



15. The kidney - shaped layer surrounding sori is called as

A. indusium

B. exine

C. intine

D. jacket

Answer: A



16. Antherozoids of Dryopteris are

A. non-flagellated

B. spirally - coiled

C. minute

D. irregularly coiled

Answer: B



17. Vegetative reproduction in Selaginella occur by

A. bulbils

B. tubers

C. fragmentation

D. All of these

### Answer: D

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18. The sporangia of Selaginella are aggregated in

A. atrobilus

B. gametophyte

C. prothallus

D. None of these

Answer: A

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**19.** The pteridophyte used in scouring and polishing of metals is

A. Equisetum

B. Azolla

C. Dryopteris

D. Adiantium

Answer: A



**20.** The pteridophyte used as a biofertiliser is

A. Pteris

B. Azolla

C. Marsilea

D. Pteridium

Answer: B



Check Point 7 4

1. Phanerogamae are

A. seed plants with evident sex organs

B. non-seed plants

C. non-seed plants with hidden sex organs

D. None of the above

Answer: A

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2. The smallest gymnosperm is

A. Zamia pigmaea

B. seqoia

C. Pine

D. Cedrus

Answer: A



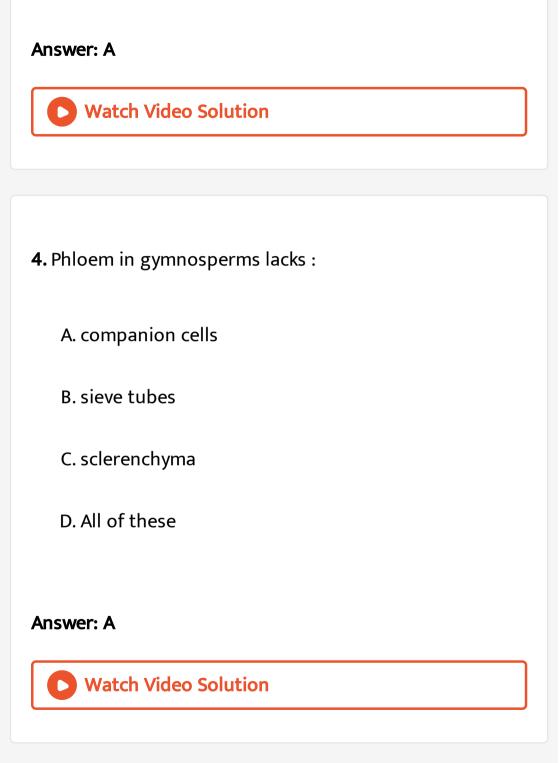
3. Xylen in gymnosperms is devoid of

A. vessels

B. tracheids

C. parenchyma

D. All of these



## 5. Gymnosperms lack

### A. ovule

B. archegonium

C. fruit

D. seed

Answer: C



6. Which gymnosperm show double fertilisation?

A. Cycas

B. Gnetum

C. Pinus

D. Ephedra

Answer: D

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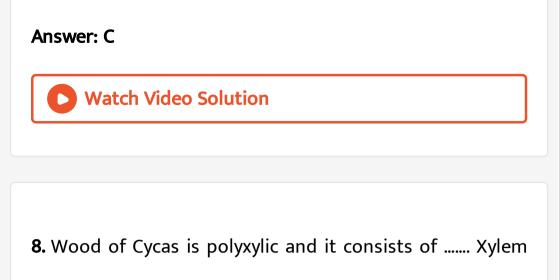
**7.** Which of the following is not a characteristic of coralloid roots ?

A. Apogeotropic

B. Bluish-green incolour

C. Unbranched

D. Presence of Anabaena



cylinders .

A. one

B. two

C. many

D. three

Answer: C

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9. Which one of the following is lacking in Cycas?

A. a well-organised flower

B. circinate vernation

C. scale and foliage like leaves

D. roots with blue-green algae

Answer: A

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10. Microsporophll of Cycas is

A. flat

B. wedge-shaped

C. triagular

D. All of these

Answer: D

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11. The first cell of male gametophytic generation in Cycas

is

A. microspore

B. megaspore

C. antherozoid

D. microsporangia

### Answer: A



12. Male gametes of Cycas are

A. small, biciliate and circular

B. small, uniciliate and circular

C. large, biciliate and reniform

D. large, multiciliated and top-shaped

#### Answer: C



**13.** How many prothalial cells are present in the microspore of Cycas, when it is ready to shed ?

A. One

B. Two

C. Three

D. Four

**Answer: A** 



**14.** Microspores of Pinus are shed at:

A. 3-cell stage

B. 2-cell stage

C. 1-cell stage

D. 4-cell stage

### Answer: D

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**15.** A drug called ephedrin, used in respiratory ailments is

extracted from

A. Pinus

B. Cedrus

C. Abies balsama

D. Ephedra

Answer: D

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Check Point 7 5

1. Monocots appeared on earth in

A. Jurassic period

B. Mesozoic era

C. Triassic period

D. Cambrian period

#### Answer: B



2. The roots of angiosperms develop from

A. radicle

B. plumule

C. cotyledon

D. All of these

Answer: A



3. The xylem of angiosperms consists of

A. tracheids only

B. companion cells

C. vessel only

D. both tracheids and vessels

Answer: D



4. The ovules of angiosperms are enclosed inside the

A. fruit

B. sporophyte

C. ovary

D. pollen grains

### Answer: C

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5. Endosperm of flowering plants is

A. 3n

B. 2n

C. 4n

D. n

#### Answer: A



6. A feature peculiar to angiosperms only is

A. presence of archegonia

B. vascular tissue

C. fruit formation

D. Anemophilly

Answer: C



**7.** Benthan and Hooker's system of classification is published in book

A. Genera plantarum

**B.** Species Plantarum

C. Phylum Plantarum

D. None of these

Answer: A



**8.** Classification proposed by Bentham and Hooker is mainly based on

A. genetical characters

B. external visible characters

C. phylogenetic characters

D. None of the above

Answer: B

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9. Bentham and Hooker classified dicots into

A. 7 series

B. 14 series

C. 16 series

D. 35 series

Answer: B

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**10.** Dicots usually have ...... vascular bundles.

A. open

B. scattered

C. closed

D. None of these

Answer: A



11. Monocots have been grouped in

A. 7 series

B.8 series

C. 14 series

D. 21 series

Answer: A

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12. Which of the following is monocotyledon?

A. Triticum

B. Oryza

C. Allium

D. All of these

Answer: D



13. Which characteristic is a similarity between

gymnosperms and angiosperms ?

- A. Phloem composition
- B. Flower
- C. Fruits
- D. Leaves, stem and roots

#### Answer: D

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14. Which character is common between the angiosperms

and gymnosperms?

A. Presence of vessels

B. Presence of companion cells

- C. Nature of endosperm
- D. Siphonogamous fertilisation

### Answer: D

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15. Gymnosperms and angiosperms show resemblances in

many characteristics except

A. secondary growth

B. type of wood

C. differentiation of plant body

D. seed formation

### Answer: D



# Chapter Exercises A Taking It Together

1. The members of class - Phaeophyceae are

A. Dictyota

**B.** Ectocarpus

C. Ulothrix

D. Both (a) and (b)

#### Answer: C





2. Porphyra is a member of class

A. Phaeophyceae

B. Chlorophyceae

C. Rhodophyceae

D. None of these

Answer: C



3. In algae, aplanospores are produced during

A. favourable conditions

B. unfavourable conditions

C. Mild conditions

D. Both (a) and (b)

### Answer: B

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4. Spirogyra and Ulothrix are found in

A. marine water

B. both in sea and freshwater

C. freshwater

D. on soil

Answer: A



5. Redness of red sea is due to

A. red colour present in the sea

B. Chlamydomonas nivalis in sea water

C. red algae

D. All of the above

Answer: B



**6.** One of the algae can be used as food in the space flight. It is

A. Ulothrix

B. Spirogyra

C. Nostoc

D. Chlorella

Answer: D



7. The bryophyte of considerable economic importance is

# A. Marchantia

B. Funaria

C. Riccia

D. Sphagnum

## Answer: D

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8. Cycas revoluta is popularly known as

A. royal palm

B. fish tail palm

C. sago palm

D. date palm

## Answer: C



9. The plant, which has seeds but not fruits is

A. Cycas

B. Mangifera

C. guava

D. All of these

Answer: A

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10. The giant redwood tree (Sequoia sempervirens) is a/an

A. angiosperm

B. free fem

C. pteridophyte

D. gymnosperm

Answer: D



11. The classes of sub kingdom-Phanerogamae are

# A. dicotyledons

- B. gymnospermae
- C. monocotyledons
- D. All of these

## Answer: D

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12. Very small, non-motile, algal spores are

A. Autospores

B. aplanospores

C. macrozoospores

D. zoospore

Answer: A



13. Non-motile and thin walled spored of algae are known

as

A. macrospores

**B.** aplanospores

C. microspores

D. zygospores

**Answer: B** 



14. Fusion of two gametes which are dissimilar in size is

termed as

A. Ooogamy

B. Isogamy

C. Anisogamy

D. Zoogamy

Answer: C



15. Holdfast, stipe and frond constitute the plant body in

case of

A. Rhodophyceae

B. Chlorophyceae

C. Phaeophyceae

D. All of these

Answer: C

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**16.** One of the distinctive feature of Spirogyra is its

A. uninucleate condition

B. green colour

C. spiral chlorophasts

D. presence of pyrenoids

## Answer: C

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17. Which example given below is not related to vascular

plants?

A. Lycophytes

B. Pteridophytes

C. Seed plants

D. Bryophytes

Answer: D

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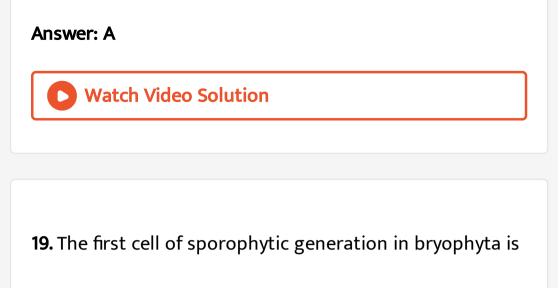
**18.** Which is the predominant phase in the life cycle of the bryophyte?

A. Gametophyte

B. Capsule

C. Seta

D. Sporophyte



A. spore

B. spore mother cell

C. zygote

D. protonema

Answer: C

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20. In bryophyta, simplest sporophyte occur in :-

A. Riccia

B. Marchantia

C. Funaria

D. Anthoceros

Answer: A



21. In mosses, haploid ..... directly produces buds that

grow into gametophores.

A. archegonia

B. antheridia

C. spores

D. protonema

Answer: D



22. Columella in moss capsule is

A. upper sterile part

B. middle sterile part

C. lower sterile part

D. lower fertile part

# Answer: B Watch Video Solution

- 23. Spores of Funaria represent
  - A. sexual propagules
  - B. gametes
  - C. gametophytic generation
  - D. sporophytic generation

## Answer: C



24. The columella in Funaria acts as a

A. generative tissue

B. conducting tissue

C. protecting tissue

D. fertile tissue

Answer: B



**25.** In which of the following, hygroscopic peristomal teeth are present ?

A. Funaria

B. Alternaria

C. Spirogyra

D. Rhizopus

Answer: A

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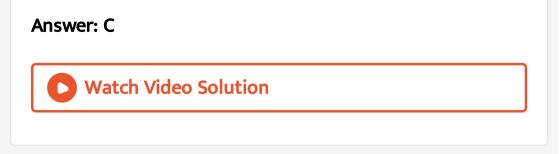
26. When moss spores germinate, they form

A. leafy gametophyte

B. capsule

C. protonema

D. rhizoids



27. Structures for dispersal of spores in bryophyta are :-

A. elaters

B. pseudoelaters

C. peristomeal teeth

D. All of these

Answer: D

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28. Strobilus is equivalent to

A. flower

B. fruit

C. mucellus

D. ovule

Answer: A



29. Stele in Selaginella is

A. Protrostele (haplostele)

B. dityostele

C. Plectostele

D. Siphonostele

Answer: A

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30. Sexual reproduction does not require water in

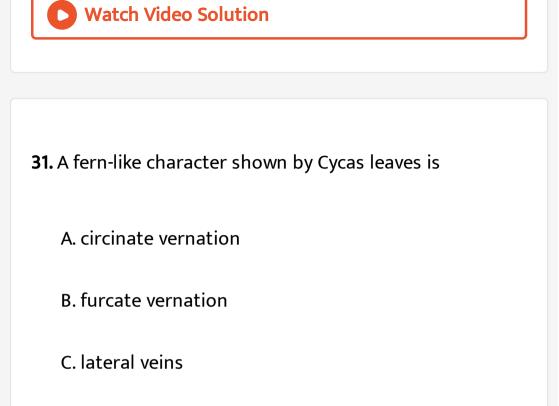
A. algae

B. bryophytes

C. pteridophytes

D. gymnosperms

Answer: D



D. All of these

Answer: A



32. Most of the gymnosperms have

A. antheridia

B. archegonia but no antheridia

C. only corpophore

D. neither antheridia nor archegonia

## Answer: B

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33. Haploid endosperm is present in

A. maize

B. coconut

C. Cycas

D. mustard

## Answer: C



34. The wood in Cycas consists of

A. tracheids only

B. vessels only

C. both equal

D. companion cell

Answer: A



35. Number of integuments in Cycas is

A. one

B. two

C. three

D. four

Answer: A



36. The embryo sac of an angiosperms is made up of

A. 8 cells

B. 7 cells and 8 nuclei

C. 8 nuclei

D. 7 cells and 7 nuclei

#### Answer: B

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37. In Bentham and Hooker's system of classification ,

main emphasis has been given to

A. embryological characters

B. reproductive characters

C. vegetative characters

D. Both (a) and (b)

## Answer: D

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38. The cell wall in Spirogyra is

A. 3 layered withn outermost mucilaginous layer

B. 3 layered with innermost mucilaginous layer

C. 2 layered with outer mucilaginous layer

D. 2 layered with inner mucilaginous layer

#### Answer: C



**39.** More common type of conjugation in Spirogyra is

A. terminal

B. indirect lateral

C. direct lateral

D. scalariform

Answer: D



**40.** In bryophyta, organs are referred to as "Leaf like' and 'Stem like' and not the true leaf and stem because:-

A. they lack vascular tissues

B. they are non-green

C. they are non-green

D. they do not function as leaf and stem

Answer: C

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**41.** The given figure represents the plant body of Funaria.

Idenrtify A-D

(##ARH\_NEET\_BIO\_V01\_C07\_E02\_041\_Q01##) `

A.ABCDCapsuleSetaLeavesRhizoidsB.ABCDGametangiumNeckLiguleRootsC.ABCDCapsuleStemLeaf basesRhizodsD.ABCDIndusiumSetaLeaf budCorralloid roots

#### Answer: A



**42.** The ring of hygroscopic teeth around the mouth of dehiscent capsule in mosses is called

A. peristome

B. dependent

C. apophysis

D. trabeculae

Answer: A

**D** View Text Solution

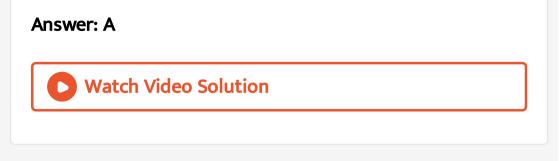
43. Protonema is

A. Haploid and is found in mosses

B. Diploid and is found in liverwords

C. Diploid and is found in pteridophytes

D. Haploid and is found in pteridophytes



**44.** Moss protonema resembles an algal filament but can be distinguished from the later in having

A. lacking chloroplast

B. oblique septa

C. cellulosic cell wall

D. coenocytic

Answer: B



**45.** Sphagnum is used as a packing material for transporting living plants bacause of its

A. acidic nature, it does not undergo decay

B. creeping capacity

C. water absorbing capacity

D. Both (a) and (c)

Answer: C



46. Evolution of seed habit first started in

A. thalloid bryophytes

B. Psilotum like ancestral pteridophytes

C. gymnosperms

D. mosses

Answer: B

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47. Gametophyte of pteridophyte is

A. short-lived, free - living and sexual organ bearing

B. heart-shaped, dependent on sporophyte and sex-

organ bearing

C. fibre-like and dependent on sporophyte

D. semiparasite on sporophyte

Answer: D

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48. Pollination drop in Cycas is

A. water drops

B. nucellus secretions

C. pollen clusters

D. None of these

Answer: B

**49.** In Cycas.

A. microsporangia and ovula are present in same sporophyll

B. micro and megasporophylls are present in same

cone

C. microspores and megaspore are present on

separate strobili

D. male cone and megasporophylls are born on the same plant

# Answer: C Watch Video Solution 50. In gymnosperms the pollination is A. anemophilous-Miscropylar

B. anemophilous-Stigmatic

C. entomophilous-Microphlar

D. entomophilous-Stigmatic

Answer: A

Watch Video Solution

**51.** If the diploid number of a flowring plant is 36. what would be the chromosome number in its endosperm

A. 36

B. 18

C. 54

D. 72

## Answer: C

Watch Video Solution

**52.** Chif merit of Bentham and Hooker's classification is that :-

concepts

B. It is a natural systems of classification of all groups

of plants

C. The description of the taxa are based on actual

observation of the specimen

D. It also considers the phylogenetic aspects

Answer: C



**53.** A plant shows thallus level of organization. It shows rhizoids and is haploid. It needs water to complte its life

cycle because the male gametes are motile. Identify the

group to which it belongs to

A. pteridophytes

B. gymnosperms

C. monocots

D. bryophytes

Answer: D



**54.** A feature of angiosperms shared with gymnosperms and lacking in other groups, i.e. algae, bryophytes and pteridophytes is A. vascular tissue

B. seed formation

C. thallus like plant body

D. presence of pigments

## Answer: B

Watch Video Solution

**55.** In which of the following groups would you place a plant which procues spores and embryos but lacks seeds and vascular tissue.

A. Bryophyte

**B.** Pteridophytes

C. Ferns

D. Algal

Answer: A



56. Which one of the following statements is not true for

Bryophyta?

A. They lack trachcids and sieve tubes

B. They are photosynthetic

C. Their zygote undergoes meiosis and then produces

the sporophyte

D. Their spores germinate producing gametophytes

Answer: C

**Watch Video Solution** 

**57.** How are gametes produced in broducing gametophytes?

A. By mitosis of gametophyte cells

B. By meiosis of gametophyte cells

C. By meiosis of sporophyte cells

D. By mitosis of spores

#### Answer: C



**58.** In bryophytes gametophyte is formed by

A. sporophyte give rise to gametophyte

B. zygote produces gametophyte on germination

C. spores give rise to gametophytic generation

D. formed by vascular tissue

#### Answer: C



59. Bryophytes are not tall plants due to

A. absence of meristem

B. absence of vascular tissues

C. presence of root system

D. All of these

Answer: B



60. Which of the following is true for the bryophytes ?

A. It is the only plant group that shows an alteration

of generation

B. Bryophytes exhibit extensive vascular tissue

C. The sporophyte (multicellular diploid) is the

dominant stage

D. The gametophte (multicellular haploid ) is the

dominant stage

Answer: D



61. An archegonium of Riccia has

A. 4-6 neck canal cells, 1 venter canal cell and one

oosphere

- B.13 neck canal cells, 2 venter canal cells and one oosphere
- C.8 neck canal cells, one venter canal cell and two

oospheres

D.6 neck canal calls, 2 venter canal cells and one

oosphere

Answer: A

Watch Video Solution

**62.** The product of conjugation in Spirogyra or fertilisation of Chlamydomonas is

A. zygospore

B. oospore

C. zoospore

D. carpospore

Answer: A

Watch Video Solution

**63.** Which of the following option depicts plants with flagellated male gametes ?

A. Zygnema, Pinus and Hydrilla

B. Fucus, Marsilea and Calotropis

C. Riccia, Dryopteris and Cycas

D. Anthoceros Funaria and Spirogyra

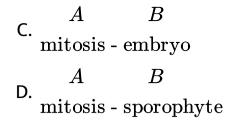
## Answer: C

View Text Solution

64. In gymnosperms , zygote undergoes ......A.... to form

.....В..... .

A.  $\frac{A}{\text{meiosis - sporophyte}}$ B.  $\frac{A}{\text{meiosis - spores}}$ 



#### Answer: C

Watch Video Solution

**65.** The gametophyte of pteridophyte grows in damp, moist and shady places because

A. they are limited and restricted to a narrow

geographical region

B. they need water for fertilisation of gametes

C. water is required for gamete formation

D. egg cell swims in water to reach to the antheridia

#### Answer: B



**66.** Common characteristics between bryophytes and pteridophytes is

A. vascularisation

B. terrestrial habit

C. need of water for fertilisation

D. independent sporophytes

Answer: C



67. Sex organs in pteridophytes are formed on the

A. multicellular sporophyte

B. specialised cells originating from sporophyte

C. photosynthetic, free-living gametophyte

D. parasitic gametophyte

Answer: C



**68.** Plants of this group are diploid and well adapted to extreme conditions. They grow bearing sporophylls in compact structures called cones. The group in reference is

A. monocots

B. dicots

C. pteridophytes

D. gymnosperms

Answer: D

Watch Video Solution

69. Siphonogamy along with zooidogamy is a feature of

A. Cycas

**B.** Pinus

C. Gnetum

D. Cedrus

Answer: A

**View Text Solution** 

70. Cycas and ferns resemble each other in possessing

A. siphonogamous fertilisation

B. presence of vessels and companion cells

C. endosperm and embryo formation

D. circinate ptyxis and ramenta

Answer: D

**View Text Solution** 

71. Which of the following is correct?

A. Bryophytes are vascular cryptogams

B. Pteridophytes are homogenous group of

tracheophytes

C. Cordaitales grow in gymnosperm forests

D. Gymnosperms are spermatophytes with naked

seeds

Answer: D

Watch Video Solution

**72.** Which of the following in not common to all phyla of vascular plants ?

A. The development of seeds

B. Alternation of generation

C. Dominance of sporophytic generation

D. Presence of roots

## Answer: A

**Watch Video Solution** 

73. In angiosperms the

A. gametophyte is prominent and the sporophyte is

dependent upon the gametophyte

B. sporophyte is prominent with the sporophyte and

gametophyte is prominent with the sporophyte and

gametophyte living independently

C. sporophyte is prominent and the gametophyte is

highly reduced

D. gametophyte is prominent and the sporophyte

stage has disappeared

Answer: C

**Vatch Video Solution** 

74. Sexual reproduction in liverworts takes place by

A. formation of sex organs always on the same thallus

B. formation of male and female sex organs always on

different thallus

C. sexual reproduction is absent

D. male and female sex organs may be present on

same or different thallus

Answer: D

Watch Video Solution

75. Which of the following is the correct statement?

A. No diploid structure is found in sporogonium of Riccia

B. Sporogonium of Riccia is golbular and undifferentiated

C. Sporogonium and spore mother cells of Riccia have

chloroplast

D. None of the above

Answer: B



**76.** Two statements are given consider them and choose the correct option.

Statement I Foot of moss sporophyte is a well organised

structure.

Statement II. In the capsule of moss, trabaculae connect

the hypodermis with the chlorenchymatous region.

A. Both the statements are true

B. Both the statements are false

C. Statement I is true and II is false

D. Statement II is true and I is false

#### Answer: C

View Text Solution

**77.** Which one of the following is the major difference

between mosses and ferns ?

A. Ferns lack alternation of generation, while mosses

show the same

B. Mosses are facultative aerobes, while ferns are

obligate aerobes

C. Vascular bundles of ferns show xylem vessels, while

those of mosses lack it

D. Mosses require water for fertilisation while ferns

does not require water

Answer: C

Watch Video Solution

78. Prothallus of fern has

A. antheridia and archegonia on lower surface

B. antheridia and archegonia on upper surface

C. antheridia on upper surface and archegonia on

lower surface

D. antheridia on lower surface and archegonia on

upper surface

Answer: D



79. A prothallus is

A. a structure in pteridophytes formed before the

thallus develops

B. a sporophytic free-living structure formed in

pteridophytes

C. a gametophyte free - living structure formed in

pteriodophytes

D. a primitive structure formed after fertilisation in pteridophytes

Answer: A

**Watch Video Solution** 

**80.** Possible advantage of antheridia occurring on the under surface for fern prothallus is

A. protection from wind

- B. protection from wind
- C. easy diffusion of nutrients from prothallus
- D. accumulation of capillary water

# Answer: A

Watch Video Solution

**81.** Which of the following is correct regarding pteridophytes ?

A. Selaginella and Salvinia are heterosporous

B. Heterosporous pteridophytes have mega (large )

and micro (small ) spores

C. The development of zygote within gemale

gametophyte is the precursor to the seed habit

D. All of the above

Answer: D



**82.** Which of the following is not correct with reference to Seloginella

A. It is commonly distributed on hills plains

B. Some species are xerophytic

C. Vascular cylinder is protostelic

D. It is heteroporous

## Answer: A



**83.** Read the statements given below with respect to Riccia and choose the incorrect statements.

A. Most of the species are terrestrial except R. fluitans

that is aquatic

B. Scales of Riccia are unicellular

C. Neck of archegonium is made up of 4-6 neck canal

cells

D. Fertilisation requires presence of water

Answer: B

**Watch Video Solution** 

84. Choose the wrong pair

A. Hepaticopsida - Marchantia

B. Sporopyte - Columella

C. Bryopsida - Anthoceros

D. Riccia - Biflagellated antherozoids

# Answer: C



85. Which statement is incorrect for pteridophytes ?

A. Xylem tissue lack true vessels

B. Gametophyte of pteridophyte is autotrophic

C. Sperms of pteridophytes are non - motile

D. Pteridophytes exhibits hetermorphic alteration of

generation

Answer: C



**86.** Which of the following match pair is incorrect ?

A. Psilophyta - Tmesipteris

B. Lycophyta - Selaginella

C. Sphenophyta - Equisetum

D. Filicophyta - Psilotum

#### Answer: D

View Text Solution

87. What is common between Riccia, Selaginella and Pinus

A. Independent sporophyte

- B. Presence of archegonia
- C. Well -developed vascular tissue
- D. Independent gametophyte

#### Answer: B

Watch Video Solution

**88.** Which of the following is not a difference between Cycas and Pinus ?

A. In Cycas, entomophilly is seen, while in Pinus

anemophilly is seen

B. Cycas possess algal associations while Pinus is

symbiotically associated with some fungi

C. Wood in Cycas is manoxylic while in Pinus it is

pycnoxylic

D. Microspore of Cycas shed at 3 - cell atage while that

of Pinus at 4- cell stage

Answer: A

View Text Solution

**89.** How many of these organisms show haplo-diplontic life cycle ?

Sphagnum, Volvox , Ulothrix, Marchantia, Polytrihum, Pinus, Cedrus, Ectocarpus, Polysiphonia

A. Seven

B. Five

C. Four

D. Six

Answer: D

**Vatch Video Solution** 

90. How many of these feature are correct for gymnosperms?Heterosporous, Homosporous, Bisporangiate,

Zooidogamy, Entomophily, Siphonogamy, Roots with Mycorrhizae, Ramenta, Circinate, Vernation

A. Seven

B. Five

C. Six

D. Three

Answer: C



91. How many of these groups show zooidogamy?

Algae, Liverworts, Mosses, Ferns, Lycopods, Ginkgoales,

Conifers, Monocotyledonae, Dicotyledonae

A. Six

B. two

C. Five

D. Seven

Answer: A

View Text Solution

**92.** A microphyllous, heterosporous, pteridophyte belonging to sphenophyta and having ectophloic siphonostele is

A. Equisetum

B. Salvinia

C. Selaginella

D. Dryopteris

Answer: A



93. Choose the incorrect statement ?

A. Elaters of Marchantia are diploid

B. Air sacs in moss capsule act as shock sbsorbers

C. Polytrichum is called ad twisted moss

D. Apospory introduces polyploidy

## Answer: C



94. Bryophyte resemble algae due to

A. differentiation of plant body into root, stem, leaves

and heterotrophic mode of nutrition

B. thallus-like plant body , lack of vascular tissue,

absence of roots and autotrophic mode of nutrition

C. thallus-like plant body, presence of roots and

heteroterophic mode of nutrition

D. filamentous body, presence of vascular tissue and

autotrophic mode of nutrition

Answer: B

**Vatch Video Solution** 

**95.** Which one of the following is a primitive gymnosperm that produces motile sperms, bears ovulate and microsporangiate cones on different plants and has foul-smelling, fleshy seeds ?

A. Pinus

B. Cycas

C. Ginkgo

D. Gnetum

Answer: C



**96.** Which of the following is correct ?

- A. In Selaginella, sporangium develop from single superficial cell
- B. In Adiantum, sporangium develop from group of cells
- C. The axis of embryo is directed toward venter in

Equisetum

D. Selaginella show meroblastic embryo development

#### Answer: D

View Text Solution

Chapter Exercises B Medical Entrances Special Format Questions Statement Based Questions

1. Algae are characterised by the

I. lack of vascular tissues.

II. Lack of seeds.

III. Lack of seeds .

iv. Lack of differentiated plant body.

A. I and II

B. Only I

C. Only IV

D. I, II, III and IV

Answer: D



- 2. The characteristic features of bryophyte are
- I. dominant gametophytic plant body.
- II. Dominant sporophytic plant body.
- III. Requirement of water for fertilisation.
- IV. Lack of sterile sterile jacket around the sex organs.

A. Only I

B. I,II,and III

C. I and III

D. II and IV

Answer: C



- 3. The correct statements about bryophytes are
- I. the sperms are biflagellate.
- II. The female sex organ is archegonium.
- III. The bryophytes are heterosporous.
- IV. The body is divided into true roots, stems and leaves.

A. I and II

B. I and III

C. II and III

D. I, II and III

Answer: A



4. Gymnosperms are characterised by

- I. presence of naked seeds.
- II. Haploid endosperm.
- III. Herbs and annual life cycle.
- IV . Recently evolved plants.

A. Only I

B. I and III

C. I and II

D. Only III

Answer: C



5. Cycas shows

- I. sunken stomata.
- II. Presence of companion cells.
- III. Collateral and open vascular bundles.

IV. Xylem vessels.

A. II and III

B. Only IV

C. Only I

D. I and II

Answer: D



6. Consider the following statements regarding the major pigments and stored food in the different groups of algae and select the correct options given
(A) In chlorophyceae the stored food material is starch and the major pigments are chlorophyll-a and d
(B) In phaeopphyceae, laminarin is the stored food and major pigments are chlorophyll-a and b

(C) In rhodophyceae, floridean starch is the stored food and the major pigments are chlorophyll-a, d and phycoeythrin.

A. Only II

B. I and III

C. I and II

D. Only III

Answer: D



7. Consider the following statements regarding

bryophytes.

I. The first plant group to survive on the land was probably bryophyte.

II. The gemmae in Funaria are formed on the axis of rhizoids or leaves or protonema.

III. Funaria is monoerious.

Which of the following are correct statements ?

A. I and II

B. I and III

C. Only III

D. I, II and III

Answer: D

View Text Solution

8. Mosscs are ecologically important because

I. first organism to colonize bare rocks.

II. Decompose rocks making suitable for growth of higher

plant.

III. Form dense mats on soil.

IV. Reduce impact of falling rain and soil erosion.

A. Only I

B. Only II

C. III and II

D. All of these

Answer: D



9. Which of the following are correct about pteridophytes

?

- I. The sporophyte bear sporangia formed on sporophylls.
- II. They are frequently grown as ornamentals.
- III. They are the first terrestrial plants to forms seeds.
- IV . Vascular tissues are present in pteriodophytes.
- V. They do not form embryo .

A. V and IV

B. I, II and IV

C. III, IV and V

D. I and II

Answer: B



**10.** Consider the following statements.

I. The sporophyte in liverworts is more elaborate than that in mosses.

II. Funaria is heterosporous.

III. The life cycle in all seed bearing plants is diplotic.

IV. In Pinus male and female cones are borne on different trees.

Which two statements are incorrect ?

A. I and III

B. I and IV

C. II and III

D. only I

## Answer: D

**D** View Text Solution

**11.** Go through the statements given below with respect to ferns.

I. Dryopteris is found in cool temperate regions.

II. It consists of bipinnate leaves.

III. It consists of sessile sporangium.

IV . Antheridial jacket is made up of 5 cells, i.e. 3 ring cells,

1 cover - cell , 1 nurse cell.

Which of the following code correctly display false statements ?

A. I and II

B. I, III and IV

C. I, II and III

D. Only II

Answer: A



12. Selaginella a pteridophyte shows some advances towards the seed habit. Consider the following statement.
I. Development and retention of embryo inside megasporangium.

II. Homospory.

III. Formation of serveral megaspores within a megasporangium.

IV. Enhancement in the size of male gametophyte.

Choose the incorrect statements with regard to prerequisites for seed habit .

A. I and III

B. I and IV

C. II, III and IV

D. None of these

Answer: C



13. Read the following statement regarding male and

female structures of Cucas.

I. Microsporophyll of Cycas is flat and wedge-shaped.

II. Microspores of Cycas shed at 4 cell (2 vegetative cell

and 2 prothallial cell) stage.

III. Female plants of Cycas circinalis are raised by means of bulbils.

IV. The megasporangium of Cycas are large naked and orthotropous.

Choose the incorrect statemnts.

A. II and III

B. Only IV

C. Only II.

D. Only III





**14.** Following statements represent comparative account of Pinus and Cycas.

I. The whole plant body of boht the plants is sporophytic (2n).

II. Pollination in both the plants is carried out by the agency of insects.

III. Microspores of Cycas shed at 4- cell stage whereas that of Pinus shed at 3- cell stage.

IV. Megasporangium of Cycas is orthotropous whereas that of Pinus is circinotropous.

Choose the option having combination of all correct statements.

A. II, III and IV

B. II and III

C. Only IV

D. Only I

Answer: D

View Text Solution

15. In gymnosperms, male and female gametophyte

I. do not have independent free - living existence.

- II. Remain within the sporangia.
- III. May be born on same or different tree.
- IV. Undergo mitosis to produce gametes.

A. I and II

B. II and III

C. III and IV

D. All of these

#### Answer: D

View Text Solution

16. Which of the following are correct for conifers ?

I. Needle - like leaves to reduce surface area.

- II. Thick cuticle on leaves.
- III. Sunken stomata to reduce water loss.
- IV. The main plant body is gametophyte.

A. II and III

B. Only IV

C. Only I

D. I, II and III

Answer: D

Watch Video Solution

17. Which of the following is/are correct for gymnosperms

?

I. They are heterosporous.

II. They are the first vascular plants.

III. Possesses fruits.

IV. Require water for fertilisation.

A. Only I

B. I and II

C. II and III

D. I, II, III and IV

Answer: A



18. Which of the following statemetns is/are true?

I. Trimerous condition of floral whorl is characteristic of

dicotyledons.

II. Adiantum is also called walking fern.

III. In gymnosperms the vascular system consists of xylem

without vessels and phloem without companion cells.

IV. Riccia and Marchantia are liverworts.

A. II and IV

B. II, III and IV

C. I and III

D. Only IV

**Answer: B** 



Chapter Exercises B Medical Entrances Special Format Questions Match The Columns

# 1. Match the following Columns.

Column I	Column II
A. Liverworts	1. Funaria
B. Hornworts	2. Anthoceros
C. Mosses	3. Riccia
D. Gnetales	4. Ephedra

۸	A	B	C	D
А.	4	1	$C \ 2$	3
Р	A	B	C	D
Б.	3	1	$C \ 2$	4
c	A	B	C	D
C.	3	2	C1	4
			$C \ 3$	
ט.	2	1	3	4

#### Answer: C

Watch Video Solution

## 2. Match the following columns.

Column I	Column II
A. Protonema	1. Numerous neck canal cells in the capsule
B. Columella	2. Bryophyte of economic importance
C. Sphagnum	3. Haploid structrue of Funaira
D. Funaria	Middle sterile region in moss capsul

#### Answer: B

Watch Video Solution

## 3. Match the following Columns.

Column- IColumn- IIA. Cycadales1. Vesseles presentB. Cycadofilicales2. ZamiaC. Ginkgoales3. Extinct generaD.Gnetales4. single living species

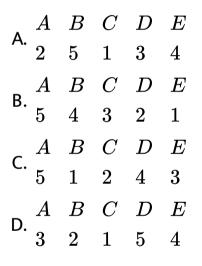
A.
$$A$$
 $B$  $C$  $D$  $2$  $3$  $4$  $1$  $B$ . $A$  $B$  $C$  $D$  $3$  $2$  $1$  $4$  $C$ . $A$  $B$  $C$  $D$  $4$  $2$  $3$  $1$  $D$ . $A$  $B$  $C$  $D$  $1$  $2$  $3$  $4$ 

#### Answer: A

View Text Solution

## 4. Match the following column with correct combination.

Column I	Column II
A Anthoceros	$1. \mathrm{Alga}$
B Adiantum	2.Hornwort
C Sargassum	3. Gametophyte
D Prothallus	4. Inferae
E Asterales	5. Walking fern



#### Answer: A

Watch Video Solution

# 5. Match the following Columns.

Column I	Column II
A. Largest ovules	1. Cannabis sativa
B. Cuscuta	3. Papaver sominiferum
C. Drosera	3. Cycas
D. Morphine	4 Carnivorous plant
E. Opium	5. Parasitic plant

^	A	B	C	D	E
А.	3	<b>5</b>	4	D1	2
Β.					
	1	3	2	4	5
C.	$A \ 3$	$B \ 2$	C1	D 5 D 3	$E \ 4$

## Answer: A

View Text Solution

**1.** Assertion Bryophytes are the amphibians of plant kingdom.

Reason They are found in swamps and the areas, where water and land meet.

A. Both Assertion and Reason are true and Reason is

the correct explanation of Assertion

B. Both Assertion and Reason are true, but Reason is

not the correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason is true

## Answer: A



**2.** Assertion The term 'Bryophyta ' was used first time by Brawn (1864).

Reason In bryophytes sex organs are non- stalked and unicellular.

A. Both Assertion and Reason are true and Reason is

the correct explanation of Assertion

B. Both Assertion and Reason are true, but Reason is

not the correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason is true

#### Answer: C



**3.** Assertion Bryophytes are also known as vascular cryptogams.

Reason Pteridophytes show heterospory.

A. Both Assertion and Reason are true and Reason is

the correct explanation of Assertion

B. Both Assertion and Reason are true, but Reason is

not the correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason is true

Answer: D

Watch Video Solution

**4.** Assertion: Mosses are evolved from algae.

Reason: Protonema of mosses is similar to some green algae.

A. Both Assertion and Reason are true and Reason is

the correct explanation of Assertion

B. Both Assertion and Reason are true, but Reason is

not the correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason is true

#### Answer: A

Watch Video Solution

5. Assertion Endosperm is haploid in gymnosperm.

Reason In Cycas, stem is usually branched.

A. Both Assertion and Reason are true and Reason is

the correct explanation of Assertion

B. Both Assertion and Reason are true, but Reason is

not the correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason is true

#### Answer: C

Watch Video Solution

6. Assertion The seeds fo gymnosperms are naked.

Reason Seed consists of three generations one within the

other.

A. Both Assertion and Reason are true and Reason is

the correct explanation of Assertion

B. Both Assertion and Reason are true, but Reason is

not the correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason is true

Answer: B

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Chapter Exercises C Medical Entrances Gallery

1. Which of the following statements is wrong?

A. Algae increase the level of dissolved oxygen in the

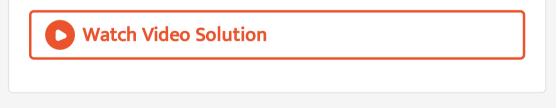
immediate environment

B. Algin is obtained form red algae and carrageenan

from brown algae

- C. Agar- agar is obtained from Gelidium and Gracilaria
- D. Laminaria and Sargassum are used as food

#### Answer: B



**2.** Conifers are adapted to tolerate extreme environmental conditions because of

A. broad hard leaves

- B. superfcial stomata
- C. thick cuticle
- D. the presence of vessels

# Answer: C

Watch Video Solution

3. In bryophytes and and pteridophytes, transport of male

gametes requires

A. insects

B. birds

C. water

D. wind

Answer: C

**Watch Video Solution** 

4. Select the correct statement.

A. Salvinia, Ginkgo and Pinus all are gymnosperms

B. Sequoia is one of the tallest trees

C. The leaves of gymnosperms are not well- adapted to

extremes of climate

heterosporous

Answer: B

Watch Video Solution

5. No vessels are found in the wood of

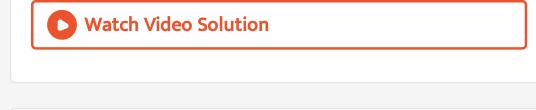
A. pine

B. eucalyptus

C. teak

D. sheesham

Answer: A



6. The main plant of Funaria is

A. sporophytic

B. gametophytic

C. vegetative

D. carposporophytic

### Answer: D



7. Which is not correct about Funaria.

A. Sporophyte is semiparasite on the gametophyte

- B. Spores are produced by outer endothelial cells
- C. The spores germinate to produce primary

protonema

D. There are two neck canal cells in the archegounium

Answer: D



8. Read the following five statements (A to E) and select

the option with all correct statement

(A) Mosses and Lichens are the first organisms to colonise

a bare rock.

(B) Seloginella is a homopourous pteridophyte.

(C) Coralloid roots in Cycas have VAM.

(D) Main plant body in bryophytes is gametophytic whereas in pteridophytes it is sporophytic.

(E) In Gymnoperms, male and female gametophytes are present within sporangla located on sporophyte.

A. I, III and IV

B. II, III and IV

C. I, IV and V

D. II, III and V

Answer: C

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**9.** In which of the following, gametophyte is not independent in free living ?

A. Funaria

B. Marchantia

C. Pteris

D. Pinus

Answer: D

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10. Which one of the following statements is wrong?

A. Algin and carrageenan are products of algae

Gracilaria

C. Chlorella and Spirulina are used as space food

D. Mannitol is stored food in Rhodophyceae

# Answer: D

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**11.** Which of the following is responsible for peat formation?

A. Marchantia

B. Riccia

C. Funaria

D. Sphagmum

Answer: D

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**12.** Male gametophyte with least number of cells is present in

A. Pteris

B. Funaria

C. Lilium

D. Pinus

# Answer: C



13. Match the organism in Column I with the contents in

Column II.

Column I

### Column II

- A. Gracilaria 1. Biflagellate
- B. Ectocarpus 2. El
- C. Marchantia 3.
- D. Cycas
- Elaters Biflagellate antherozoids
- 4. Carpogonium
- 5. Multiciliated male gametes

A.
$$A$$
 $B$  $C$  $D$ 1435B. $A$  $B$  $C$  $D$ 4125C. $A$  $B$  $C$  $D$ 4 $2$  $3$  $1$ D. $A$  $B$  $C$  $D$ 

### Answer: B

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14. Bryophytes are

A. archegoniatae, trachcophytic , embryophytic

B. archegoniatae, tracheophytic, non - embryophytic

C. archegoniatae, atracheophytic, embryophytic

D. non - archegoniatae, atracheophytic, embryophytic.

Answer: C

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15. Which one of the following is the group of vascular

plants ?

A. Thallophyta

B. Bryophyta

C. Pteridophyta

D. Spermatophyta

Answer: C

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**16.** Which of the following groups of algae belongs to class Rhodophyceae ?

A. Laminaria, Fucus, Porphyro, Volvox

B. Gelidium, Porpyra, Dictyota, Fucus

C. Gracilaria, Gelidium, Porphyra, Polysiphonia

D. Volvox ,Spirogyra , Ulthrix , Sargassum

### Answer: C

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17. Ectocarpus shows

A. haplontic life cycle

B. diplontic life cycle

C. haplo - diplontic life cycle

D. diplontic - haplontic life cycle

## Answer: C



**18.** Which of the following are heterosporous pteridophytes

I. Lycopodium II. Selaginella III. Equisetum IV. Salvinia

A. I and II

B. II and III

C. III and IV

D. II and IV

## Answer: D



**19.** Choose the correct statements.

A. bryophytes can live in soil, but are dependent on

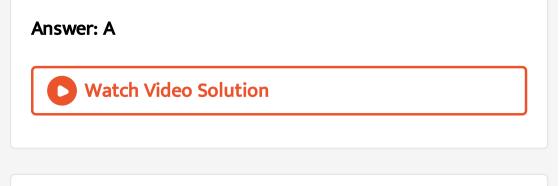
water for sexual reprodiuction

- B. the sex organs in bryophytes are unicellular
- C. in bryophyte the main plant body is a gametophyte,

which is differentiated into true root, stem and

leaves

D. common example of liverwort is Polytrichum



20. Mosses and liverworts are members of

A. gametophytes

B. chlorophytes

C. bryophytes

D. pteridophytes

Answer: C



21. Marchantia is considered heterothallic because it is

A. heterogametic

B. bisexual

C. monoecious

D. dioecious

Answer: D

**O** Watch Video Solution

22. The life cyclic of algae such as Spirogyra is

A. haplontic

B. diplontic

C. haplo - diplontic

D. diplo - haplontic

Answer: A

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23. Which one of the following shows isogamy with non-

flagellated gametes

A. Sargassum

**B.** Ectocarpus

C. Ulothrix

D. Spirogyra

# Answer: D



**24.** Match the column I and II and choose the correct combination from the options given

	Column-I		Column-II
(a)	Green alga	(i)	Dictyota
(b)	Brown alga	(ii)	Porphyra
(c)	Red alga	(iii)	Spirogyra

A.
 
$$A$$
 $B$ 
 $C$ 

 3
 2
 1

 B.
  $A$ 
 $B$ 
 $C$ 

 3
 1
 2

 C.
  $A$ 
 $B$ 
 $C$ 

 2
 3
 1

 D.
  $A$ 
 $B$ 
 $C$ 

 1
 2
  $3$ 

## Answer: B

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**25.** The presence of pyrenoid is characteristic feature of class

A. Phaeophyceae

B. Chlorophyceae

C. Rhodophyceae

D. Poaceae

Answer: B



**26.** An alga which can be employed as food for humna being is

A. Ulothrix

B. Chlorella

C. Spirogyra

D. Polysiphonia

Answer: B



27. Food is stored in the form of mannitol in the class of

algae

A. Rhodophyceae

B. Phaeophyceae

C. Chlorophyceae

D. Poaceae

Answer: B

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28. Monoecious plant of Chara shows occurrence of

A. antheridiophore and archegoniphore on the same

plant

B. stamen and carpel on the same plant

C. upper antheridium and lower oogonium on the

same plant

D. upper oogonium and lower antheridium on the

same plant.

Answer: D

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29. Fruits are not found in gymnosperms plants because

A. they are seedless

B. they are not pollinated

C. they have no ovary

D. fertilisation does not takes place

### Answer: C



30. Pinus belongs to the class

A. Gnetopsida

B. Cycadopsida

C. Coniferopsida

D. Sphenopsida

Answer: C



**31.** Non mitole greatly thickened asexual spore in Chlamydomonas is known as

A. carpospores

B. aplanospores

C. akinetes

D. hypnospores

Answer: D



**32.** Algae which form motile colony is

A. Volvox

B. Nostoc

C. Spirogyra

D. Chlamydomonas

# Answer: A

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**33.** Which one of the following is an example of chlorophyllous thallophyte

A. Volvariella

B. Spirogyra

C. Nephrolepis

D. Gnetum

Answer: B

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34. Alginic acid is found in the cell wall of

A. Gigartina

B. Laminaria

C. Gelidium

D. Scytonema

**Answer: B** 



- 35. Select the wrong statement
  - A. Isogametes are similar in structure, function and

behaviour

B. Anisogametes differ either in structure, function

and behaviour

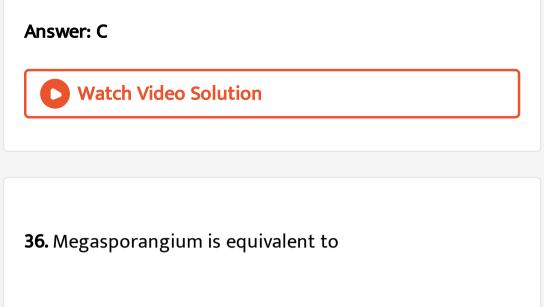
C. In oogamous reproduction female gamele is smaller

and motile, while male gamete is larger and non-

motile

D. Chlamydomonas exhibits both isogamy and

anisogamy and Fucus shows oogamy



A. fruit

B. nucellus

C. ovule

D. embryo sac

Answer: C

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**37.** The dominant generation in pteridophytes is

A. sporophytic

B. gametophytic

C. zygotic

D. None of these

Answer: A

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38. In bryophytes, the sporophytic phase is represented

by

A. spores

B. antheridium

C. spore mother cell

D. egg

Answer: C

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**39.** Which of the following is not the feature of gymnosperms

A. Parallel venation

B. Perennial plants

C. Distinct branches (long and short branches)

D. Xylem with vessels

## Answer: D



40. Which of the following is true about bryophytes

A. They are thalloid

B. They contain chlorophast

C. They possess archegonia

D. All of the above

Answer: D



**41.** Gametophytic and sporophytic phases are independent in

A. pteridophytes

B. bryophytes

C. gymnosperms

D. phaeophytes

Answer: A



**42.** Which of the following is/are grouped under phanerogams

A. Angiosperms

B. Gymnosperms

C. Pteridophytes

D. Both (a) and (b)

Answer: D

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**43.** Which of the following group of plants are generally called amphibians of plant kingdom ?

A. Algae

B. Gymnosperms

C. bryophytes

D. Pteridophytes

# Answer: C

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44. The cell wall of algae is chemically composed of

A. hemicellulose, pectins and proteins

B. cellulose, galactans and mannans

C. pectin, cellulose and proteins

D. chitin

Answer: B



45. Dispersal of spores in ferm takes place through

A. annulus

B. stomium

C. indusium

D. Both (a) and (b)

Answer: D

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46. Botanical name of peat moss is

A. Sphagnum

B. Funaria

C. Anthoceros

D. Polytrichum

Answer: A



47. Spore of Funaria, on germination gives rise to

A. protonema

B. embryo

C. antheridia

D. archegonia

# Answer: A

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**48.** The plants having vascular tissue , but lacking seeds are placed under

A. algae

B. bryophytes

C. pteridophytes

D. gymnosperms

Answer: C

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**49.** A prokaryotic autotrophic nitrogen fixing symbiont is

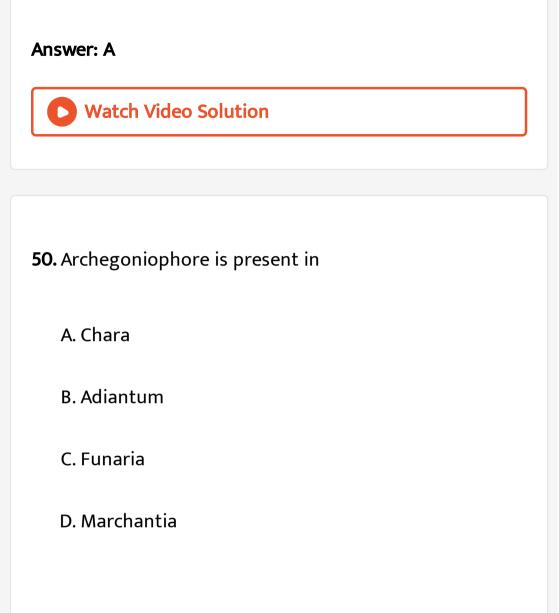
found in

A. Cycas

B. Cicer

C. Pisum

D. Alnus



Answer: D



**51.** The type of pollination in Cycas is

A. entomophily

B. hydrophily

C. anemophily

D. malacophily

Answer: C

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52. Both heterospory and circinate ptyxis do not occur in

A. Dryopteris

**B.** Pinus

C. Cycas

D. Funaria

Answer: D

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53. Gametophyte is dominant stage in the life cycle of

A. bryophyta

B. pteridophyta

C. angiosperms

D. gymnosperms

Answer: A



# 54. Select the correctly matched ones.

- I. Phaeophyceae Mannitol
- II. Rhodophyceae –
- III. Chlorophyceae
- *IV.* Rhodophyceae
- Non-motile gametes
- r-phycoerythrin

Dictyota

A. I, II and III

B. II, III and IV

C. I and III

D. I and IV

Answer: D

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55. Vegetative reproduction in Funaria takes place by

A. primary protonema

B. gemmae

C. secondary protonema

D. All of these

Answer: D

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56. Seed habit is linked to

A. homospory

B. heterospory

C. parthenogenesis

D. parthenocarpy

Answer: B



57. Iodine is found in algae

A. Ulva

B. Ulothrix

C. Chlorella

D. Laminaria

# Answer: D Watch Video Solution

58. Fern gametophyta shows ...... Nature.

A. homothallic

B. fragmentation

C. heterothallic

D. None of these

Answer: A



**59.** Which of the following statements is wrong about bryophytes?

A. Fertilisation takes place in the presence of water

B. Gemetophytic phase is dominant in life cycle

C. Sporophyte is physiologically dependent on

gametophyte

D. Zygote undergoes meiosis to produce sporophyte

**Answer: D** 

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60. Spirogyral lateral conjugation takes place in

A. heterosporous species

- B. homosporous species
- C. heterothallic species
- D. homothallic species

# Answer: D

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**61.** In Cycas, pollination occurs at ...... Celled stage.

A. one

B. two

C. three

D. four

## Answer: C



62. Consider the following statements regarding gymnosperms and choose the correct option
I. In gymnosperms, the male and female gametophytes have an independent existence
II. The multicellular female gametophyte is retained within the megasporangium
III. All gymnosperms are heterosporous.
Of these statements :

A. I and II are true, but III is false

B. I and III are true, but II is false

C. II and III are false, but I is true

D. II and III are true, but I is false

## Answer: D

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63. In Funaria, the stomata are found in

A. foot

B. seta

C. capsule

D. All of these

## Answer: C



64. The smallest angiospermic flower is

A. Wolffia

B. Ranunculus

C. Rafflesia

D. Stellaria

Answer: A



**65.** In moss capsule, dispersal of spores takes place through

A. peristomial teeth

B. annulus

C. calyptra

D. operculum

Answer: A



66. Fem spores are usually

A. haploid

B. diploid

C. triploid

D. tetraploid

# Answer: A

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67. A ferm differs from a moss in having

A. swimming archegonia

B. swimming antherozoids

C. independent gametophytes

D. independent sporophytes

Answer: D



**68.** Assertion: Chlorella could serve as a potential source of food and energy. Reason: When dried, chlorella has 15% protein 45% fat, 10% carbohydrate, 20% fibre, and 10% minerlas and vitamins.

A. Both Assertion and Reason are true and Reason is the correct explanation of the Assertion B. Both Assertion and Reason are true, but Reason is

not the correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Both Assertion and Reason are false

#### Answer: A

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69. Antherozoids of Dryopteris are

A. multiciliated and coiled

B. multiciliated and sickle- shaped

C. biciliated and coiled

D. biciliated and sickle- shaped

## Answer: A



70. Which of the following is an algal parasite ?

A. Volvox

**B.** Ulothrix

C. Porphyra

D. Cephaleuros

Answer: D



**71.** Agar-Agar is obtained from

A. Chlorella

B. Spirogyra

C. Ulothrix

D. Gelidium

Answer: D



72. In which of the following features, Cycas resembles

with angiosperms ?

- A. Presence of vessels
- B. Circinate venation
- C. Dichotomously branched leaves
- D. Pollen tube is the carrier of male gametes

# Answer: D

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73. Club moss' belongs to

A. algae

B. Pteridophyta

C. fungi

# D. Bryophyta

## Answer: B



# 74. Coralloid root is the feature of

A. Cycas

B. Mosses

C. Pinus

D. Selaginella

Answer: A



**75.** Female reproductive part of bryophytes is

A. antheridium

B. oogonium

C. archegonium

D. sporangium

Answer: C



**76.** Moss protonema can be differentiated from filamentous alga in

A. long rhizoids

B. coenocytic nature

C. oblique septa

D. absence of chloroplast

# Answer: C

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# 77. Spore dissemination in some liverworts is aided by

A. elaters

B. indusium

C. calyptra

D. peristome teeth

Answer: A



**78.** In the prothallus of a vascular cryptogam, the antherozoids and egg mature and different time As a result.

A. there is no change in success rate of fertilisation

B. there is high degree of sterility

C. one can conclude that the plant is apomictic

D. self - fertilisation is prevented

# Answer: D

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79. In gymnosperms the pollen chamber represents

- A. a cell in the pollen grain, in which the sperms are formed
- B. a cavity in the ovule , in which pollen grains are stored after pollination
- C. an opening in the megagametophyte through, which the pollen tube approaches an egg

D. the microsporangium, in which pollen grains

develop

Answer: B

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**80.** Bryophytes are called amphibians of plant kingdom because

A. their reproductive phase requires water

B. their sex organs are multicellular and jacketed

C. they have tracheids

D. All of the above

# Answer: A

