doubtnut
India's Number 1 Education App

BIOLOGY

BOOKS - ARIHANT NEET BIOLOGY (HINGLISH)

PLANTAE

Check Point 7 1

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

Watch Video Solution

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

View Text Solution

3. Which of the following is a heterotrichous algae ?

A. Cloeochaete

B. Hydrodictyon

C. Volvox

D. Spirogyra

Answer: A

View Text Solution

4. Non-motile asexual spores formed in Vaucheria are

A. aplanospores

B. autospores

C. zoospores

D. hypnospores

Answer: D

View Text Solution

5. Devil's Apron is a name given to

A. Volvox

B. Laminaria

C. Nostoc

D. Chlorella

Answer: B

Watch Video Solution

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

A. Spirogyra

B. Fucus

C. Volvox

D. Ectocarpus

Answer: D

Watch Video Solution

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

A. starch

B. laminarian

C. glycogen

D. mannitol

Answer: A

Watch Video Solution

8. Which class of algae has mannitol and laminarian as reserve food material ?

A. Rhodophyceae

B. Chlorophyceae

C. Cyanophyceae

D. Phaeophyceae

Answer: D

Watch Video Solution

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

A. Phaeophyceae

B. Rhodophyceae

C. Chlorophyceae

D. Cyanophyceae

Answer: B

Watch Video Solution

10. Volvox belongs to the class

A. Chlorophyceae

B. Cyanophyceae

C. Rhodophyceae

D. Bacillariophyceae

Answer: A

Watch Video Solution

11. The Gracilaria algae belongs to class

A. Chlorophyceae

B. Rhodophyceae

C. Cyanophyceae

D. Bacillariophyceae

Answer: B

Watch Video Solution

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

Watch Video Solution

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

View Text Solution

14. Conjugation in Spirogyra involves

A. morpholoically similar gametes

B. physiologically similar gemetes

C. physiologically similar gametes

D. Both (a) and (c)

Answer: C

View Text Solution

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

A. roots

B. root hairs

C. scales

D. holdfast

Answer: D

Watch Video Solution

16. Macrozoospores of Ulothrix are not

A. quadriflagellate

B. uninucleate

C. spherical

D. pear-shaped

Answer: C

View Text Solution

17. The body of brown algae is differentiated into

A. holdfast

B. stipe

C. frond

D. All of these

Answer: D

Watch Video Solution

18. An alga used as food by astronauts is

A. Anabaena

B. Nostoc

C. Synechococus

D. Chlamydomonas

Answer: C

View Text Solution

19. Chlorellin is obtained from

A. Chlorella

B. fucus

C. cladophora

D. charales

Answer: A

Watch Video Solution

20. Cephaleuros virescens is parasitic on

A. tea

B. coffee

C. wheat

D. potato

Answer: A

View Text Solution

Check Point 7 2

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

Watch Video Solution

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

Watch Video Solution

3. Sexual reproduction in bryophytes is

A. oogamous

B. isogamous

C. anisogamous

D. None of the above

Answer: A

Watch Video Solution

4. Brophytes are also called _____ of plant kingdom.

A. fishes

B. amphibians

C. reptiles

D. aves

Answer: B

Watch Video Solution

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

Watch Video Solution

6. The largest bryophyte is

A. Riccia

B. Dowsonia

C. Marchantia

D. Megaceros

Answer: B

Watch Video Solution

7. The members of class - Anthoceratopsida are popularly known as

A. hornworts

B. mosses

C. liverworts

D. None of these

Answer: A

Watch Video Solution

8. The rhizoids of moss are

A. multicellular

B. branched

C. filamentous

D. Both (a) and (b)

Answer: D

Watch Video Solution

9. The antherozoids of Funaria are

A. non- motile

B. biflagellated

C. multiflagellated

D. quadriflagellated

Answer: B

Watch Video Solution

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

A. 2

B. 3

C. 5

D. $8 - 10$

Answer: D

Watch Video Solution

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

Watch Video Solution

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

A. Trabaculae

B. Peristome

C. Columella

D. All of these

Answer: D

View Text Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

A. $4-6$

B. $1-3$

C. $8-10$

D. numerous

Answer: A

Watch Video Solution

17. The sporophyte of Riccia

A. have foot

B. have setae

C. lack foot and setae both

D. None of the above

Answer: C

Watch Video Solution

18. Which among the following is called peat moss ?

A. Funaria

B. Sphagnum

C. Pellia

D. Porella

Answer: B

Watch Video Solution

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

Watch Video Solution

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

View Text Solution

Check Point 7 3

1. Pteridophytes are

A. avascular and seeded

B. vascular and seedless

C. avascular and seedless

D. vascular and seeded

Answer: B

Watch Video Solution

2. In pteridophytes, the dominant phase is

A. sporophytic

B. gametophytic

C. seed phase

D. Both (a) and (b)

Answer: A

Watch Video Solution

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

Watch Video Solution

4. The leaves bearing sporangia are called

A. sporophytic

B. annulus

C. sporophylls

D. stomium

Answer: C

Watch Video Solution

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

Watch Video Solution

6. Antheridium of pteridophytes possess a jacket of

A. 3 cells

B. 4 cells

C. 6 cells

D. 1 cell

Answer: A

Watch Video Solution

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

Watch Video Solution

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

A. annulus

B. stomium

C. stele

D. prothallus

Answer: B

View Text Solution

9. Actinostele is not present in

A. Psilotum

B. Lycopodium serratum

C. Selaginella

D. Asteroxylon

Answer: B

View Text Solution

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

View Text Solution

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

A. homospory

B. heterospory

C. apospory

D. sporogenesis

Answer: B

Watch Video Solution

12. Which of the following is not a heterosporous genera of pteridophytes ?

A. Selaginella

B. Isoetes

C. Marsilea

D. None of these

Answer: D

Watch Video Solution

13. Which of the following pteridophyte is a member of tilicophyta ?

A. Marsilea

B. Equisetum

C. Pteris

D. Both (a) and (c)

Answer: D

Watch Video Solution

14. Vegetative reproduction in Dryopteris occurs by

A. adventitions buds

B. fragmentation in rhizome

C. bulbils

D. Both (a)and (b)

Answer: D

Watch Video Solution

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

A. indusium

B. exine

C. intine

D. jacket

Answer: A

Watch Video Solution

16. Antherozoids of Dryopteris are

A. non-flagellated

B. spirally - coiled

C. minute

D. irregularly coiled

Answer: B

Watch Video Solution

17. Vegetative reproduction in Selaginella occur by

A. bulbils

B. tubers

C. fragmentation

D. All of these

Answer: D

Watch Video Solution

18. The sporangia of Selaginella are aggregated in

A. atrobilus

B. gametophyte

C. prothallus

D. None of these

Answer: A

View Text Solution

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

A. Equisetum

B. Azolla

C. Dryopteris

D. Adiantium

Answer: A

Watch Video Solution

20. The pteridophyte used as a biofertiliser is

A. Pteris

B. Azolla

C. Marsilea

D. Pteridium

Answer: B

Watch Video Solution

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

Watch Video Solution

2. The smallest gymnosperm is

A. Zamia pigmaea

B. seqoia

C. Pine

D. Cedrus

Answer: A

Watch Video Solution

3. Xylen in gymnosperms is devoid of

A. vessels

B. tracheids

C. parenchyma

D. All of these

Answer: A

Watch Video Solution

4. Phloem in gymnosperms lacks :

A. companion cells

B. sieve tubes

C. sclerenchyma

D. All of these

Answer: A

Watch Video Solution

5. Gymnosperms lack

A. ovule

B. archegonium

C. fruit

D. seed

Answer: C

Watch Video Solution

6. Which gymnosperm show double fertilisation ?

A. Cycas

B. Gnetum

C. Pinus

D. Ephedra

Answer: D

Watch Video Solution

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

A. Apogeotropic

B. Bluish-green incolour

C. Unbranched

D. Presence of Anabaena

Answer: C

Watch Video Solution

8. Wood of Cycas is polyxylic and it consists of ..... Xylem cylinders .

A. one

B. two

C. many

D. three

Answer: C

View Text Solution

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

Watch Video Solution

10. Microsporophll of Cycas is

A. flat

B. wedge-shaped

C. triagular

D. All of these

Answer: D

View Text Solution

11. The first cell of male gametophytic generation in Cycas is

A. microspore

B. megaspore

C. antherozoid

D. microsporangia

Answer: A

Watch Video Solution

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

Watch Video Solution

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

View Text Solution

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

Watch Video Solution

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

A. Pinus

B. Cedrus

C. Abies balsama

D. Ephedra

Answer: D

Watch Video Solution

Check Point 7 5

1. Monocots appeared on earth in

A. Jurassic period

B. Mesozoic era

C. Triassic period

D. Cambrian period

Answer: B

Watch Video Solution

2. The roots of angiosperms develop from

A. radicle

B. plumule

C. cotyledon

D. All of these

Answer: A

Watch Video Solution

3. The xylem of angiosperms consists of

A. tracheids only

B. companion cells

C. vessel only

D. both tracheids and vessels

Answer: D

Watch Video Solution

4. The ovules of angiosperms are enclosed inside the

A. fruit

B. sporophyte

C. ovary

D. pollen grains

Answer: C

Watch Video Solution

5. Endosperm of flowering plants is

A. 3n

B. 2n

C. 4n

D. n

Answer: A

Watch Video Solution

6. A feature peculiar to angiosperms only is

A. presence of archegonia

B. vascular tissue

C. fruit formation

D. Anemophilly

Answer: C

Watch Video Solution

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

 Watch Video Solution

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

Watch Video Solution

9. Bentham and Hooker classified dicots into

A. 7 series

B. 14 series

C. 16 series

D. 35 series

Answer: B

Watch Video Solution

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

A. open

B. scattered

C. closed

D. None of these

Answer: A

Watch Video Solution

11. Monocots have been grouped in

A. 7 series

B. 8 series

C. 14 series

D. 21 series

Answer: A

View Text Solution

12. Which of the following is monocotyledon ?

A. Triticum

B. Oryza

C. Allium

D. All of these

Answer: D

Watch Video Solution

13. Which characteristic is a similarity between gymnosperms and angiosperms ?

A. Phloem composition

B. Flower

C. Fruits

D. Leaves, stem and roots

Answer: D

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

2. Porphyra is a member of class

A. Phaeophyceae

B. Chlorophyceae

C. Rhodophyceae

D. None of these

Answer: C

Watch Video Solution

3. In algae, aplanospores are produced during

A. favourable conditions

B. unfavourable conditions

C. Mild conditions

D. Both (a) and (b)

Answer: B

Watch Video Solution

4. Spirogyra and Ulothrix are found in

A. marine water

B. both in sea and freshwater

C. freshwater

D. on soil

Answer: A

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

7. The bryophyte of considerable economic importance is

A. Marchantia

B. Funaria

C. Riccia

D. Sphagnum

Answer: D

Watch Video Solution

8. Cycas revoluta is popularly known as

A. royal palm

B. fish tail palm

C. sago palm

D. date palm

Answer: C

Watch Video Solution

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

A. Cycas

B. Mangifera

C. guava

D. All of these

Answer: A

Watch Video Solution

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

A. angiosperm

B. free fem

C. pteridophyte

D. gymnosperm

Answer: D

Watch Video Solution

11. The classes of sub kingdom-Phanerogamae are

A. dicotyledons

B. gymnospermae

C. monocotyledons

D. All of these

Answer: D

Watch Video Solution

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

Watch Video Solution

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

A. Ooogamy

B. Isogamy

C. Anisogamy

D. Zoogamy

Answer: C

Watch Video Solution

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

A. Rhodophyceae

B. Chlorophyceae

C. Phaeophyceae

D. All of these

Answer: C

Watch Video Solution

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

Watch Video Solution

17. Which example given below is not related to vascular plants?

A. Lycophytes

B. Pteridophytes

C. Seed plants

D. Bryophytes

Answer: D

Watch Video Solution

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

A. Gametophyte

B. Capsule

C. Seta

D. Sporophyte

Answer: A

Watch Video Solution

19. The first cell of sporophytic generation in bryophyta is

A. spore

B. spore mother cell

C. zygote

D. protonema

Answer: C

Watch Video Solution

20. In bryophyta, simplest sporophyte occur in :-

A. Riccia

B. Marchantia

C. Funaria

D. Anthoceros

Answer: A

Watch Video Solution

21. In mosses, haploid ..... directly produces buds that grow into gametophores.

A. archegonia

B. antheridia

C. spores

D. protonema

Answer: D

Watch Video Solution

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

Watch Video Solution

24. The columella in Funaria acts as a

A. generative tissue

B. conducting tissue

C. protecting tissue

D. fertile tissue

Answer: B

Watch Video Solution

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

A. Funaria

B. Alternaria

C. Spirogyra

D. Rhizopus

Answer: A

View Text Solution

26. When moss spores germinate, they form

A. leafy gametophyte

B. capsule

C. protonema

D. rhizoids

Answer: C

Watch Video Solution

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

A. elaters

B. pseudoelaters

C. peristomeal teeth

D. All of these

Answer: D

Watch Video Solution

28. Strobilus is equivalent to

A. flower

B. fruit

C. mucellus

D. ovule

Answer: A

Watch Video Solution

29. Stele in Selaginella is

A. Protrostele (haplostele)

B. dityostele

C. Plectostele

D. Siphonostele

Answer: A

Watch Video Solution

30. Sexual reproduction does not require water in

A. algae

B. bryophytes

C. pteridophytes

D. gymnosperms

Answer: D

Watch Video Solution

31. A fern-like character shown by Cycas leaves is

A. circinate vernation

B. furcate vernation

C. lateral veins

D. All of these

Answer: A

View Text Solution

32. Most of the gymnosperms have

A. antheridia

B. archegonia but no antheridia

C. only corpophore

D. neither antheridia nor archegonia

Answer: B

Watch Video Solution

33. Haploid endosperm is present in

A. maize

B. coconut

C. Cycas

D. mustard

Answer: C

Watch Video Solution

34. The wood in Cycas consists of

A. tracheids only

B. vessels only

C. both equal

D. companion cell

Answer: A

View Text Solution

35. Number of integuments in Cycas is

A. one

B. two

C. three

D. four

Answer: A

View Text Solution

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

Watch Video Solution

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

View Text Solution

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

Watch Video Solution

39. More common type of conjugation in Spirogyra is

A. terminal

B. indirect lateral

C. direct lateral

D. scalariform

Answer: D

Watch Video Solution

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

Watch Video Solution

41. The given figure represents the plant body of Funaria. Idenrtify A-D

(##ARH_NEET_BIO_V01_C07_E02_041_Q01##) `

A. $\begin{matrix} A & B & C & D \\ \text{Capsule} & \text{Seta} & \text{Leaves} & \text{Rhizoids} \end{matrix}$

B. $\begin{matrix} A & B & C & D \\ \text{Gametangium} & \text{Neck} & \text{Ligule} & \text{Roots} \end{matrix}$

C. $\begin{matrix} A & B & C & D \\ \text{Capsule} & \text{Stem} & \text{Leaf bases} & \text{Rhizods} \end{matrix}$

D. $\begin{matrix} A & B & C & D \\ \text{Indusium} & \text{Seta} & \text{Leaf bud} & \text{Corralloid roots} \end{matrix}$

Answer: A

View Text Solution

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

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

Answer: A

Watch Video Solution

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

View Text Solution

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

Watch Video Solution

46. Evolution of seed habit first started in

A. thalloid bryophytes

B. Psilotum like ancestral pteridophytes

C. gymnosperms

D. mosses

Answer: B

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

Watch Video Solution

48. Pollination drop in Cycas is

A. water drops

B. nucellus secretions

C. pollen clusters

D. None of these

Answer: B

Watch Video Solution

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 :-

A. It is a system mostly based on evalutionary 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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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 .....B..... .

A. $\underset{\text{meiosis}}{A}$ - $\underset{\text{sporophyte}}{B}$

B. $\underset{\text{meiosis}}{A}$ - $\underset{\text{spores}}{B}$

C. $\begin{matrix} A & B \\ \text{mitosis} & \text{embryo} \end{matrix}$

D. $\begin{matrix} A & B \\ \text{mitosis} & \text{sporophyte} \end{matrix}$

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

Watch Video Solution

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

Watch Video Solution

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

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

View Text Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch 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

View Text Solution

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

View Text Solution

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

Watch Video Solution

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

Watch 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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

View Text Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

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

View Text Solution

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

View Text Solution

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

Answer: A

View Text Solution

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

Watch Video Solution

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

Watch Video Solution

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

A. $\begin{matrix} A & B & C & D \\ 4 & 1 & 2 & 3 \end{matrix}$

B. $\begin{matrix} A & B & C & D \\ 3 & 1 & 2 & 4 \end{matrix}$

C. $\begin{matrix} A & B & C & D \\ 3 & 2 & 1 & 4 \end{matrix}$

D. $\begin{matrix} A & B & C & D \\ 2 & 1 & 3 & 4 \end{matrix}$

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

A. $\begin{matrix} A & B & C & D \\ 1 & 2 & 3 & 4 \end{matrix}$

B. $\begin{matrix} A & B & C & D \\ 3 & 4 & 2 & 1 \end{matrix}$

C. $\begin{matrix} A & B & C & D \\ 1 & 2 & 4 & 3 \end{matrix}$

D. $\begin{matrix} A & B & C & D \\ 3 & 2 & 1 & 4 \end{matrix}$

Answer: B

Watch Video Solution

3. Match the following Columns.

Column- I	Column- II
A. Cycadales	1. Vesseles present
B. Cycadofilicales	2. *Zamia*
C. Ginkgoales	3. Extinct genera
D. Gnetales	4. 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. Alga
B Adiantum	2.Hornwort
C Sargassum	3. Gametophyte
D Prothallus	4. Inferae
E Asterales	5. Walking fern

A. $\begin{matrix} A & B & C & D & E \\ 2 & 5 & 1 & 3 & 4 \end{matrix}$

B. $\begin{matrix} A & B & C & D & E \\ 5 & 4 & 3 & 2 & 1 \end{matrix}$

C. $\begin{matrix} A & B & C & D & E \\ 5 & 1 & 2 & 4 & 3 \end{matrix}$

D. $\begin{matrix} A & B & C & D & E \\ 3 & 2 & 1 & 5 & 4 \end{matrix}$

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.

A	B	C	D	E
3	5	4	1	2

B.

A	B	C	D	E
1	3	2	4	5

C.

A	B	C	D	E
3	2	1	5	4

D.

A	B	C	D	E
4	2	1	3	5

Answer: A

View Text Solution

Chapter Exercises B Medical Entrances Special Format Questions Assertion And Reason

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

D. Gymnosperms are both homosporous and 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

Watch Video Solution

6. The main plant of Funaria is

A. sporophytic

B. gametophytic

C. vegetative

D. carposporophytic

Answer: D

View Text Solution

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

Watch Video Solution

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

 Watch Video Solution

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

A. Funaria

B. Marchantia

C. Pteris

D. Pinus

Answer: D

Watch Video Solution

10. Which one of the following statements is wrong ?

A. Algin and carrageenan are products of algae

B. Agar - agar is obtained drom Gelidium and Gracilaria

C. Chlorella and Spirulina are used as space food

D. Mannitol is stored food in Rhodophyceae

Answer: D

Watch Video Solution

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

A. Marchantia

B. Riccia

C. Funaria

D. Sphagmum

Answer: D

Watch Video Solution

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

A. Pteris

B. Funaria

C. Lilium

D. Pinus

Answer: C

Watch Video Solution

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

	Column I		Column II
$A.$	Gracilaria	1.	Biflagellate
$B.$	Ectocarpus	2.	Elaters
$C.$	Marchantia	3.	Biflagellate antherozoids
$D.$	Cycas	4.	Carpogonium
		5.	Multiciliated male gametes

A.

A	B	C	D
1	4	3	5

B.

A	B	C	D
4	1	2	5

C.

A	B	C	D
4	2	3	1

D.

A	B	C	D
4	5	2	1

Answer: B

View Text Solution

14. Bryophytes are

A. archegoniatae, trachcophytic , embryophytic

B. archegoniatae, tracheophytic , non - embryophytic

C. archegoniatae, atracheophytic, embryophytic

D. non - archegoniatae, atracheophytic, embryophytic.

Answer: C

Watch Video Solution

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

A. Thallophyta

B. Bryophyta

C. Pteridophyta

D. Spermatophyta

Answer: C

Watch Video Solution

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

Watch Video Solution

17. Ectocarpus shows

A. haplontic life cycle

B. diplontic life cycle

C. haplo - diplontic life cycle

D. diplontic - haplontic life cycle

Answer: C

Watch Video Solution

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

Watch Video Solution

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

Answer: A

Watch Video Solution

20. Mosses and liverworts are members of

A. gametophytes

B. chlorophytes

C. bryophytes

D. pteridophytes

Answer: C

Watch Video Solution

21. Marchantia is considered heterothallic because it is

A. heterogametic

B. bisexual

C. monoecious

D. dioecious

Answer: D

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

Watch Video Solution

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

A. Sargassum

B. Ectocarpus

C. Ulothrix

D. Spirogyra

Answer: D

Watch Video Solution

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. $\begin{matrix} A & B & C \\ 3 & 2 & 1 \end{matrix}$

B. $\begin{matrix} A & B & C \\ 3 & 1 & 2 \end{matrix}$

C. $\begin{matrix} A & B & C \\ 2 & 3 & 1 \end{matrix}$

D. $\begin{matrix} A & B & C \\ 1 & 2 & 3 \end{matrix}$

Answer: B

Watch Video Solution

25. The presence of pyrenoid is characteristic feature of class

A. Phaeophyceae

B. Chlorophyceae

C. Rhodophyceae

D. Poaceae

Answer: B

Watch Video Solution

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

A. Ulothrix

B. Chlorella

C. Spirogyra

D. Polysiphonia

Answer: B

Watch Video Solution

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

A. Rhodophyceae

B. Phaeophyceae

C. Chlorophyceae

D. Poaceae

Answer: B

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

30. Pinus belongs to the class

A. Gnetopsida

B. Cycadopsida

C. Coniferopsida

D. Sphenopsida

Answer: C

Watch Video Solution

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

A. carpospores

B. aplanospores

C. akinetes

D. hypnospores

Answer: D

Watch Video Solution

32. Algae which form motile colony is

A. Volvox

B. Nostoc

C. Spirogyra

D. Chlamydomonas

Answer: A

Watch Video Solution

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

A. Volvariella

B. Spirogyra

C. Nephrolepis

D. Gnetum

Answer: B

Watch Video Solution

34. Alginic acid is found in the cell wall of

A. Gigartina

B. Laminaria

C. Gelidium

D. Scytonema

Answer: B

Watch Video Solution

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

Answer: C

Watch Video Solution

36. Megasporangium is equivalent to

A. fruit

B. nucellus

C. ovule

D. embryo sac

Answer: C

Watch Video Solution

37. The dominant generation in pteridophytes is

A. sporophytic

B. gametophytic

C. zygotic

D. None of these

Answer: A

Watch Video Solution

38. In bryophytes, the sporophytic phase is represented by

A. spores

B. antheridium

C. spore mother cell

D. egg

Answer: C

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

Watch Video Solution

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

Watch Video Solution

41. Gametophytic and sporophytic phases are independent in

A. pteridophytes

B. bryophytes

C. gymnosperms

D. phaeophytes

Answer: A

Watch Video Solution

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

A. Angiosperms

B. Gymnosperms

C. Pteridophytes

D. Both (a) and (b)

Answer: D

Watch Video Solution

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

Watch Video Solution

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

View Text Solution

45. Dispersal of spores in ferm takes place through

A. annulus

B. stomium

C. indusium

D. Both (a) and (b)

Answer: D

Watch Video Solution

46. Botanical name of peat moss is

A. Sphagnum

B. Funaria

C. Anthoceros

D. Polytrichum

Answer: A

Watch Video Solution

47. Spore of Funaria, on germination gives rise to

A. protonema

B. embryo

C. antheridia

D. archegonia

Answer: A

Watch Video Solution

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

A. algae

B. bryophytes

C. pteridophytes

D. gymnosperms

Answer: C

Watch Video Solution

49. A prokaryotic autotrophic nitrogen fixing symbiont is found in

A. Cycas

B. Cicer

C. Pisum

D. Alnus

Answer: A

Watch Video Solution

50. Archegoniophore is present in

A. Chara

B. Adiantum

C. Funaria

D. Marchantia

Answer: D

Watch Video Solution

51. The type of pollination in Cycas is

A. entomophily

B. hydrophily

C. anemophily

D. malacophily

Answer: C

Watch Video Solution

52. Both heterospory and circinate ptyxis do not occur in

A. Dryopteris

B. Pinus

C. Cycas

D. Funaria

Answer: D

View Text Solution

53. Gametophyte is dominant stage in the life cycle of

A. bryophyta

B. pteridophyta

C. angiosperms

D. gymnosperms

Answer: A

Watch Video Solution

54. Select the correctly matched ones.

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

A. I, II and III

B. II, III and IV

C. I and III

D. I and IV

Answer: D

Watch Video Solution

55. Vegetative reproduction in Funaria takes place by

A. primary protonema

B. gemmae

C. secondary protonema

D. All of these

Answer: D

Watch Video Solution

56. Seed habit is linked to

A. homospory

B. heterospory

C. parthenogenesis

D. parthenocarpy

Answer: B

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

60. Spirogyral lateral conjugation takes place in

A. heterosporous species

B. homosporous species

C. heterothallic species

D. homothallic species

Answer: D

View Text Solution

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

Watch Video Solution

63. In Funaria, the stomata are found in

A. foot

B. seta

C. capsule

D. All of these

Answer: C

Watch Video Solution

64. The smallest angiospermic flower is

A. Wolffia

B. Ranunculus

C. Rafflesia

D. Stellaria

Answer: A

Watch Video Solution

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

A. peristomial teeth

B. annulus

C. calyptra

D. operculum

Answer: A

Watch Video Solution

66. Fem spores are usually

A. haploid

B. diploid

C. triploid

D. tetraploid

Answer: A

Watch Video Solution

67. A ferm differs from a moss in having

A. swimming archegonia

B. swimming antherozoids

C. independent gametophytes

D. independent sporophytes

Answer: D

Watch Video Solution

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

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

Watch Video Solution

70. Which of the following is an algal parasite ?

A. Volvox

B. Ulothrix

C. Porphyra

D. Cephaleuros

Answer: D

Watch Video Solution

71. Agar-Agar is obtained from

A. Chlorella

B. Spirogyra

C. Ulothrix

D. Gelidium

Answer: D

Watch Video Solution

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

Watch Video Solution

73. Club moss' belongs to

A. algae

B. Pteridophyta

C. fungi

D. Bryophyta

Answer: B

Watch Video Solution

74. Coralloid root is the feature of

A. Cycas

B. Mosses

C. Pinus

D. Selaginella

Answer: A

Watch Video Solution

75. Female reproductive part of bryophytes is

A. antheridium

B. oogonium

C. archegonium

D. sporangium

Answer: C

Watch Video Solution

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

Watch Video Solution

77. Spore dissemination in some liverworts is aided by

A. elaters

B. indusium

C. calyptra

D. peristome teeth

Answer: A

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution

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

Watch Video Solution