Plant Kingdom

1. Plant Kingdom

Q1. _____ classification systems were based on evolutionary relationships between various organisms.

(A) Natural

(B) Artificial

(C) Phylogenetic

(D) Both (A) and (B)

Correct Answer: **(C)** Level: **Easy** Tagging:

Q2. _____ do not have free living gametophyte.

(A) Bryophytes

(B) Pteridophytes

(C) Gymnosperms

(D) both (B) and (C)

Correct Answer: **(C)** Level: **Easy** Tagging:

Q3. _____ do not have free living gametophyte.

(A) Bryophytes

(B) Pteridophytes

(C) Gymnosperms

(D) both (2) and (3)

Correct Answer: **(C)** Level: **Easy** Tagging: **Remembering**

Q4. 'Sanjeevanibooti' is

(A) Selaginella kraussiana

(B) Selaginella chrysocaculos

(C) Selaginella bryopteris

(D) None of the above

Correct Answer: **(C)** Level: **Easy** Tagging: **Remembering**

Q5. The largest somatic chromosome number, 1262 has been recorded in :

(A) a fern plant

(B) a fungus

(C) an insect

(D) a vertebrate animal

Correct Answer: **(A)** Level: **Easy** Tagging: **Remembering**

Q6. Which one of the following groups of organisms is of prokaryotes?

(A) Blue-green algae

(B) Red algae

(C) Brown algae

(D) Green algae

Correct Answer: **(A)** Level: **Easy** Tagging: **Remembering**

Q7. Match Column-I with Column-II and select the correct option from the codes given below.

	Column-I	Column-II
A.	Food	(i) Brown algae
B.	Agar	(ii) Porphyra, Laminaria
C.	Algin	(iii) Gelidium, Gracilaria
D.	Carrageenin	(iv) Red algae

(A) A-(ii), B-(iii), C-(i), D-(iv)

(B) A-(ii), B-(iii), C-(iv), D-(i)

(C) A-(iii), B-(ii), C-(iv), D-(i)

(D) A-(iii), B-(ii), C-(i), D-(iv)

Correct Answer: **(A)** Level: **Easy** Tagging:

Q8. A group of plants which are autotrophs, their sex organs are non-jacketed and whose zygotes secrete thick wall are called

(A) Phycophytes

(B) Lichens

(C) Bryophytes

(D) Thallophytes

Correct Answer: **(A)** Level: **Easy** Tagging: **Remembering**

Q9. A plant shows thallus level of organization. It shows rhizoids and is haploid. It needs water to complete 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

Correct Answer: **(D)** Level: **Easy** Tagging:

Q10. A protein rich blue-green alga is

(A) Chlorella

(B) Spirulina

(C) Spirogyra

(D) Ulothrix

Correct Answer: **(B)** Level: **Easy** Tagging: **Remembering**

Q11. 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 pteridophytes.

(D) A primitive structure formed after fertilization in pteridophytes.

Correct Answer: **(C)** Level: **Easy** Tagging:

Q12. A typical angiosperm anther is

(A) Bilobed

(B) Dithecous

(C) Both (a) and (b)

(D) Monothecous

Correct Answer: **(C)** Level: **Easy** Tagging: **Remembering**

Q13. A typical of angiospermic embryo sac is usually

(A) One celled

(B) Three celled

(C) Five celled

(D) Seven celled

Correct Answer: **(D)** Level: **Easy** Tagging: **Remembering**

Q14. About 90% of the total green algae is found in

(A) Marine environment

(B) Freshwater environment

(C) Rivers

(D) Terrestrical environment

Correct Answer: **(B)** Level: **Easy** Tagging: **Remembering**

Q15. Agar-agar is obtained from

(A) Chlorella

(B) Spirogyra

(C) Ulothrix

(D) Gelidium

Correct Answer: **(D)** Level: **Easy** Tagging: **Remembering**

Q16. Agarose is extracted from

(A) Sea weeds

(B) Blue-green algae

(C) Ephedra

(D) Sargassam

Correct Answer: **(A)** Level: **Easy** Tagging: **Remembering**

Q17. Algae are also found in association with

(A) Fungi

(B) Lichen

(C) Sloth bear

(D) Both (a) and (c)

Correct Answer: **(D)** Level: **Easy** Tagging: **Remembering**

Q18. Algae have cell wall made up of

(A) Cellulose, galactans and mannans

(B) Hemicelluloses, pectins and proteins

(C) Pectins, cellulose and proteins

(D) Cellulose, hemicelluloses and pectins

Correct Answer: **(A)** Level: **Easy** Tagging: **Remembering**

Q19. Alginic acid is found in the cell wall of

(A) Gigartina

(B) Laminaria

(C) Gelidium

(D) Scytonema

Correct Answer: **(B)** Level: **Easy** Tagging: **Remembering**

Q20. Angiosperms are also called

(A) Seed less plants

(B) Fruits less plants

(C) Flowering plants

(D) All of these

Correct Answer: **(C)** Level: **Easy** Tagging: **Remembering**

Q21. Angiosperms differ from gymnosperms in

(A) Seeds

(B) Fruits

(C) Male gametophyte

(D) Female gametophyte

Correct Answer: **(B)** Level: **Easy** Tagging: **Remembering**

Q22. Angiosperms differ from gymnosperms in having

(A) Fruits

(B) Cotyledon

(C) Tracheids

(D) Broad leaves

Correct Answer: **(A)** Level: **Easy** Tagging: **Remembering**

Q23. Artificial systems gave equal weightage to vegetative and sexual characteristics; this is not acceptable because often _____ characters are more easily affected by environment.

(A) vegetative

(B) sexual

(C) anatomical

(D) physiological

Correct Answer: **(A)** Level: **Easy** Tagging:

Q24. Blue-green algae has

(A) Chlorophyll-b

(B) Xanthophyll

(C) c phycocyanin

(D) Fucoxanthin

Correct Answer: **(C)** Level: **Easy** Tagging: **Remembering**

Q25. Chloroplast in Ulothrix is

(A) Stellate

(B) Cup-shaped

(C) Ribbon-shaped

(D) Girdle-shaped

Correct Answer: **(D)** Level: **Easy** Tagging: **Remembering**

Q26. Common example of red algae is

(A) Porphyra

(B) Gracilaria

(C) Ectocarpus

(D) both (A) and (B)

Correct Answer: **(D)** Level: **Easy** Tagging:

Q27. Coralloid roots of __ have symbiotic association with N_2 - fixing cyanobacteria.

(A) Pinus

(B) Cedrus

(C) Cycas

(D) Ginkgo

Correct Answer: **(C)** Level: **Easy** Tagging:

Q28. Father of Indian Bryology is

(A) Raj Kumar

(B) S R Kashyap

(C) Maheshwari

(D) Khurana

Correct Answer: **(B)** Level: **Easy** Tagging: **Remembering**

Q29. From which of the following algae, agar-agar is commercially extracted?

I. Gracilaria

II. Fucus

III. Sargassum

IV. Gelidium

V. Turbinaria

(A) III and V

(B) II and III

(C) IV and V

(D) I and IV

Correct Answer: **(D)** Level: **Easy** Tagging: **Remembering**

Q30. Fruits are mature

(A) Ovules

(B) Ovaries

(C) Flower

(D) Peduncles

Correct Answer: **(B)** Level: **Easy** Tagging: **Understanding**

Q31. Fruits are not found in gymnosperms because

(A) They are not seedless

(B) They are not pollinated

(C) They have no ovary

(D) Fertilization does not takes place

Correct Answer: **(C)** Level: **Easy** Tagging: **Understanding**

Q32. Funaria, Polytrichum and Sphagnum are the examples of

(A) Liverworts

(B) Ferns

(C) Mosses

(D) Pteridophytes

Correct Answer: **(C)** Level: **Easy** Tagging: **Understanding**

Q33. Fusion of two gametes which are dissimilar in size is termed

(A) Oogamy

(B) Isogamy

(C) Anisogamy

(D) Zoogamy

Correct Answer: **(C)** Level: **Easy** Tagging:

Q34. Gametophytic and sporophytic phases are independent in

(A) Pteridophytes

(B) Bryophytes

(C) Gymnosperms

(D) Phaeophytes

Correct Answer: **(A)** Level: **Easy** Tagging: **Analyzing**

Q35. Gametophytic generation is dominant stage in the life cycle of

(A) Pteridophytes

(B) Angiosperms

(C) Gymnosperms

(D) Bryophytes

Correct Answer: **(D)** Level: **Easy** Tagging: **Analyzing**

Q36. Gemmae are multicellular green structures for vegetative propagation. These are found inside gemma cups in

(A) Riccia capsule

(B) Marchantia thallus

(C) Funaria protonema

(D) Fern prothallus

Correct Answer: **(B)** Level: **Easy** Tagging:

Q37. Haplo-diplontic life cycle is found in

(A) bryophytes

(B) pteridophytes

(C) fungi

(D) both (A) and (B)

Correct Answer: **(D)** Level: **Easy** Tagging:

Q38. Holdfast, stipe and frond constitutes the plant body in case of –

(A) Rhodophyceae

(B) Chlorophyceae

(C) Phaeophyceae

(D) All of the above

Correct Answer: **(C)** Level: **Easy** Tagging:

Q39. Horse tails and ferns are belongs to

(A) Gymnosperms

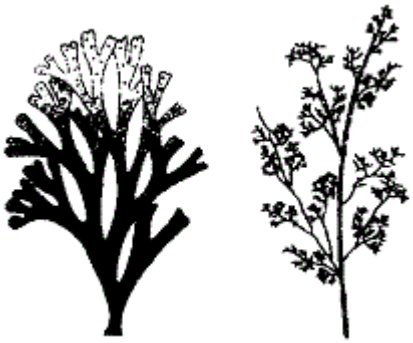
(B) Bryophytes

(C) Mosses

(D) Pteridophytes

Correct Answer: **(D)** Level: **Easy** Tagging: **Remembering**

Q40. Identify the given figures of algae and select the correct option.



(A) A:- Fucus B:- Polysiphonia

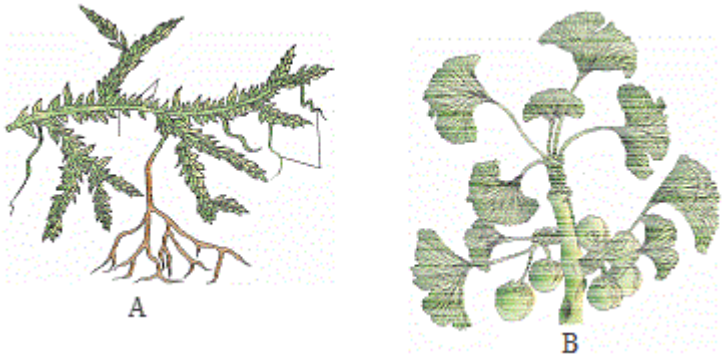
(B) A:- Dictyota B:- Polysiphonia

(C) A:- Dictyota B:- Porphyra

(D) A:- Porphyra B:- Polysiphonia

Correct Answer: **(B)** Level: **Easy** Tagging:

Q41. Identify the plants shown in figure and select the correct option.



(A) A:- Sphagnum B:- Dictyota

(B) A:- Selaginella B:- Ginkgo

(C) A:- Selaginella B:- Salvinia

(D) A:- Cycas B:- Ginkgo

Correct Answer: **(B)** Level: **Easy** Tagging:

Q42. In angiospermic fertilisation, one male gamete fuses with egg to form __A__, this event is called __B__Identify A and B and choose the correct option.

(A) A-endosperm; B-syngamy

(B) A-zygote; B-syngamy

(C) A-embryo; B-triple fusion

(D) A-endosperm; B-triple fusion

Correct Answer: **(B)** Level: **Easy** Tagging:

Q43. In gymnosperms ovules are borne on

(A) microsporophyll

(B) megasporophyll

(C) macrosporophyll

(D) Both (A) and (C)

Correct Answer: **(B)** Level: **Easy** Tagging:

Q44. In mosses the second gametophytic stage is leafy stage. Consider the following statements about leafy stage

I. Leafy stage is produced from the secondary protonema as a lateral bud

II. They consist of upright, slender axes bearing spirally arranged

(A) I, II and III

(B) I, III and IV

(C) II, III and IV

(D) I, II, III and IV

Correct Answer: **(D)** Level: **Easy** Tagging: **Understanding**

Q45. In pteridophytes, main plant body is a (i) which is (ii) into true roots, stem and leaves.
Fill the blanks in above statement and select the correct option.

(A) (i)-Sporophyte, (ii)-differentiated

(B) (i)-Sporophyte, (ii)-not differentiated

(C) (i)-Gametophyte, (ii)-differentiated

(D) (i)-Gametophyte, (ii)-not differentiated

Correct Answer: **(A)** Level: **Easy** Tagging:

Q46. In double fertilization, one male gamete fuses with the __(i)_ to form zygote and the other male gamete fuses with __(ii)__ to form primary endosperm nucleus.

(A) synergids (n), antipodals (n)

(B) egg (n), antipodals

(C) egg (n), secondary nucleus (2n)

(D) egg (n), synergids (n)

Correct Answer: **(C)** Level: **Easy** Tagging:

Q47. Major photosynthetic pigments in green algae are

(A) Chlorophyll a and b

(B) Chlorophyll a, c and fucoxanthin

(C) Chlorophyll a, d and phycoerythrin

(D) Chlorophyll A and C.

Correct Answer: **(A)** Level: **Easy** Tagging:

Q48. Natural system of classification was developed by

(A) Linnaeus

(B) Engler and Prantl

(C) Bentham and Hooker

(D) Aristotle

Correct Answer: **(C)** Level: **Easy** Tagging: **Remembering**

Q49. 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) Dicot

(C) Angiosperms

(D) Gymnosperms

Correct Answer: **(D)** Level: **Easy** Tagging: **Understanding**

Q50. Select the incorrect pair.

(A) Numerical taxonomy - All observable characteristics

(B) Cytotaxonomy - Cytological information

(C) Chemotaxonomy - Chromosome number and structure

(D) Cladistic taxonomy - Origin from a common ancestor

Correct Answer: **(C)** Level: **Easy** Tagging:

Q51. Select the incorrect statement regarding reproduction in Rhodophyceae.

(A) Asexual reproduction occurs by non-motile spores.

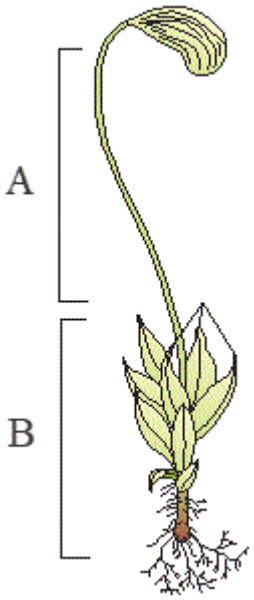
(B) Sexual reproduction occurs by motile gametes.

(C) Sexual reproduction is oogamous.

(D) Complex post-fertilization developmental events occur.

Correct Answer: **(B)** Level: **Easy** Tagging:

Q52. Select the option that correctly identifies A and B in the given figure.



(A) A:- Sporophyte B:- Gametophyte

(B) A:- Gametophyte B:- Sporophyte

(C) A:- Male shoot B:- Female shoot

(D) A:- Female shoot B:- Male shoot

Correct Answer: **(A)** Level: **Easy** Tagging:

Q53. The algae used in space research is

(A) Cephaleuros

(B) Gelidium

(C) Chlorella

(D) Gracilaria

Correct Answer: **(C)** Level: **Easy** Tagging: **Applying**

Q54. The first Division, which comes under kingdom-Plantae is

(A) Algae

(B) Fungi

(C) Cyanobacteria

(D) Blue-green algae

Correct Answer: **(A)** Level: **Easy** Tagging: **Remembering**

Q55. The giant Redwood tree (Sequoia sempervirens) is a/an

(A) Angiosperm

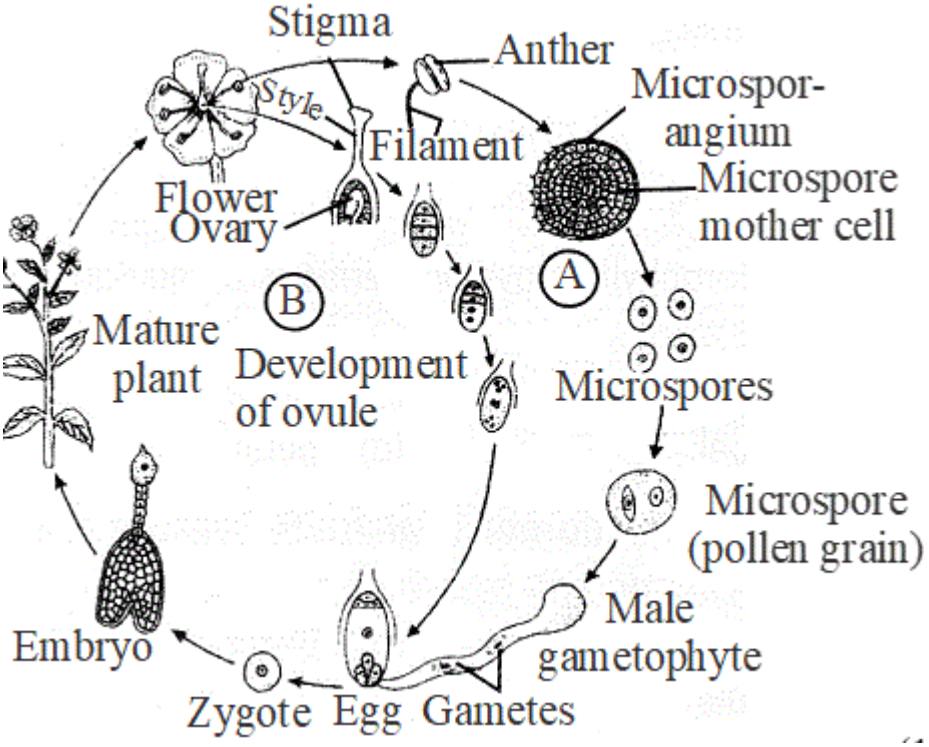
(B) Free fern

(C) Pteridophyte

(D) Gymnosperm

Correct Answer: **(D)** Level: **Easy** Tagging:

Q56. The given figure shows two phases, A and B of a typical angiospermic life cycle. Select the correct option regarding it.



(A) A-Gametophytic generation (n)
B-Sporophytic generation (2n)

(B) A-Sporophytic generation (2n)
B-Gametophytic generation (n)

(C) A-Sporophytic generation (2n)
B-Sporophytic generation (2n)

(D) A-Gametophytic generation (n)
B-Gametophytic generation (n)

Correct Answer: **(A)** Level: **Easy** Tagging:

Q57. The leaves of gymnosperms are well-adapted to withstand extremes of temperature, humidity and wind, because of which of the following features?

(A) Needle like leaves

(B) Thick cuticle

(C) Sunken stomata

(D) All of these

Correct Answer: **(D)** Level: **Easy** Tagging:

Q58. Ulothrix releases zoospore during

(A) Evening

(B) Morning

(C) Night

(D) Noon

Correct Answer: **(B)** Level: **Easy** Tagging: **Remembering**

Q59. Usually plant body of brown algae is differentiated into

(A) Holdfast and frond

(B) Stripe and holdfast

(C) Frond and stripe

(D) Holdfast, stipe and frond

Correct Answer: **(D)** Level: **Easy** Tagging: **Remembering**

Q60. Vessels and companion cells are characteristic of

(A) Angiosperm

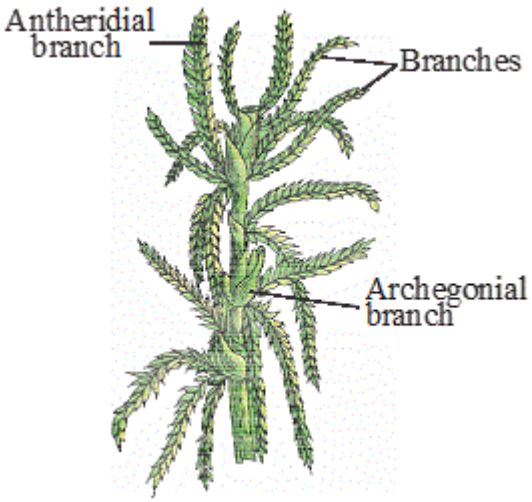
(B) Gymnosperm

(C) Pteridophyta

(D) Fern

Correct Answer: **(A)** Level: **Easy** Tagging: **Remembering**

Q61. Which of the following options correctly identifies the plant shown in figure and the group it belongs to?



(A) Selaginella –Pteridophyte

(B) Sphagnum –Moss

(C) Sphagnum –Liverwort

(D) Funaria –Moss

Correct Answer: **(B)** Level: **Easy** Tagging:

Q62. Which one of the following plants is monoecious?

(A) Marchantia

(B) Pinus

(C) Cycas

(D) Papaya

Correct Answer: **(B)** Level: **Easy** Tagging: **Remembering**

Q63.

In the diagram given above, the algae have been labeled as 'A', 'B', 'C', 'D', and 'E'. These algae are respectively identified as

(A) Dictyota, Polysiphonia, Porphyra, Fucusand, Laminaria

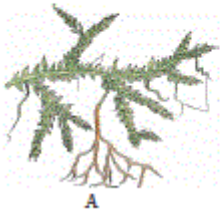
(B) Porphyra, Dictyota, Laminaria, Fucusand, Polysiphonia

(C) Dictyota, Polysiphonia, Porphyra, Laminariaand, Fucus

(D) Fucus, Porphyra, Dictyota, Polysiphoniaand, Laminaria

Correct Answer: **(C)** Level: **Moderate** Tagging: **Evaluating**

Identify the plants shown in figure and select the correct option.



Q64.

(A) (A) Sphagnum (B) Dictyota

(B) (A) Selaginella (B) Ginkgo

(C) (A) Selaginella (B) Salvinia

(D) (A) Cycas (B) Ginkgo

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Identify the given figures of algae and select the correct option.

Q65.

(A) (A) Fucus (B) Polysiphonia

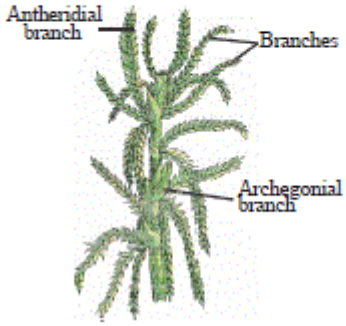
(B) (A) Dictyota (B) Polysiphonia

(C) (A) Dictyota (B) Porphyra

(D) (A) Porphyra (B) Polysiphonia

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Which of the following options correctly identifies the plant shown in figure and the group it belongs to?



Q66.

(A) Selaginella – Pteridophyte

(B) Sphagnum – Moss

(C) Sphagnum – Liverwort

(D) Funaria – Moss

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q67. Double fertilization is characteristic of :

(A) algae

(B) angiosperms

(C) gymnosperms

(D) pteridoophytes

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q68. The endosperm in gymnosperms is :

(A) haploid

(B) diploid

(C) triploid

(D) tetraploid

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q69. The endosperm in gymnosperms is :

(A) haploid

(B) diploid

(C) triploid

(D) tetraploid

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q70. Female gametophyte of angiosperms is mostly :

(A) 5-celled

(B) 6-celled

(C) 7-celled

(D) 8-celled

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q71. Match Column-I with Column-II and select the correct option from the codes given below.

Column-I	Column-II
A. Food	(i) Brown algae
B. Agar	(ii) Porphyra, Laminaria
C. Algin	(iii) Gelidium, Gracilaria
D. Carrageenin	(iv) Red algae

(A) A-(ii), B-(iii), C-(i), D-(iv)

(B) A-(ii), B-(iii), C-(iv), D-(i)

(C) A-(iii), B-(ii), C-(iv), D-(i)

(D) A-(iii), B-(ii), C-(i), D-(iv)

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q72. Vessels are found in

(A) all angiosperms and some gymnosperms

(B) most of angiosperms and few gymnosperms

(C) all angiosperms and few gymnosperms and some pteridophytes

(D) all pteridophytes

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q73. A biologist discovers an alga that is marine, multicellular, and lives at a depth reached only by blue light. This alga probably belongs to which group?

(A) red algae

(B) brown algae

(C) green algae

(D) dinoflagellates

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q74. A botanist discovers a new species of plant in a tropical rain forest. After observing its anatomy and life cycle, the following characteristics are noted: flagellated sperm, xylem with tracheids, separate gametophyte and sporophyte generations with the sporophyte dominant, and no seeds. This plant is probably most closely related to

(A) mosses

(B) charophytes

(C) ferns

(D) gymnosperms

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q75. A fern differs from a moss in having

(A) Swimming archegonia

(B) Swimming antherozoids

(C) Independent gametophytes

(D) Independent sporophytes

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q76. A gymnospermic leaf carries 16 chromosomes. The number of chromosomes in its endosperm is

(A) 24

(B) 16

(C) 12

(D) 8

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q77. A microsporophyll in Pinus has

(A) One microsporangium on the adaxial side

(B) One microsporangium on the abaxial side

(C) Two microsporangia on the abaxial side

(D) Two microsporangia on the adaxial side

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q78. A plant shows thallus level of organization. It shows rhizoids and is haploid. It needs water to complete 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

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q79. A protein rich green alga is

(A) Chlorella

(B) Spirulina

(C) Spirogyra

(D) Ulothrix

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q80. A ring of multiciliatezoogonidium is found in

(A) Ulothrix

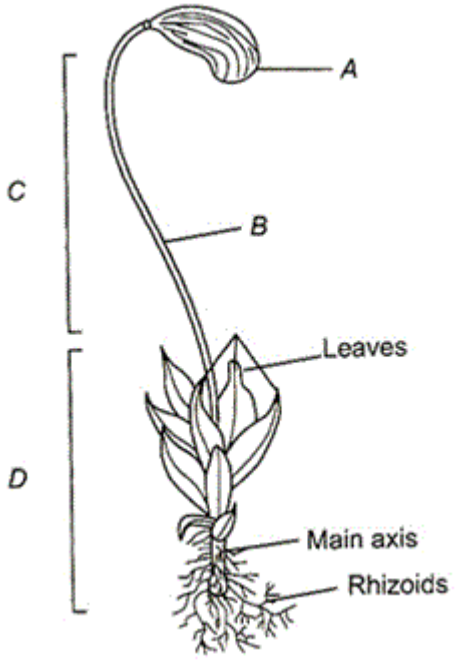
(B) Zygnema

(C) Oedogonium

(D) Chara

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q81. A,B,C and D in given figure represents



(A) A-Apophysis, B-Capsule, C-Sporophyte, D-Gametophyte

(B) A-Capsule, B-Seta, C-Sporophyte, D-Gametophyte

(C) A-Apophysis, B-Seta, C-Gametophyte, D-Sporophyte

(D) A-Apophysis, B-Capsule, C-Gametophyte, D-Sporophyte

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q82. Acetabularia is a

(A) Single-celled marine green alga

(B) Multicelled marine green alga

(C) Single-celled freshwater green alga

(D) Multicelled freshwater green alga

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q83. Algae include unicellular forms like …A…, filamentous like …B… and colonical forms like …C… . Here A, B and C refer to

(A) A-Chlamydomonas, B-Volvox, C-Ulothrix

(B) A-Ulothrix, B-Volvox, C-Chlamydomonas

(C) A-Volvox, B-Ulothrix, C-Chlamydomonas

(D) A-Chlamydomonas, B-Ulothrix, C-Volvox

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q84. An Angiospermic plant has 24 chromosomes in 'microspore mother cells'. The number of chromosome in its endosperm will be

(A) 12

(B) 24

(C) 36

(D) 48

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q85. Angiosperm double fertilization is so-called because it features the formation of

(A) two embryos from one egg and two sperm cells.

(B) one embryo from one egg fertilized by two sperm cells.

(C) two embryos from two sperm cells and two eggs.

(D) one embryo involving one sperm cell and of endosperm involving a second sperm cell.

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q86. Anisogamous means both gamete are

(A) Similar in size and non-motile

(B) Dissimilar in size

(C) Similar in size and motile

(D) Dissimilar in size and non-motile

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q87. Archegoniophore is present in

(A) Chara

(B) Adiantum

(C) Funaria

(D) Marchantia

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q88. Atleast a half of the total CO_2 fixation on earth is carried out by …A… through …B… . Here A and B refers to

(A) A-bryophytes, B-respiration

(B) A-algae, B-photosynthesis

(C) A-pteridophytes, B-photosynthesis

(D) A-fungi, B-respiration

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q89. Both heterospory and circinateptyxis occur in

(A) Dryoteris

(B) Pinus

(C) Cycas

(D) Funaria

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q90. Bryophytes are also called 'amphibians of the plant kingdom' because

(A) Water is essential for reproduction

(B) They are occur in only water

(C) These plants can live in soil but are dependent on water for sexual reproduction

(D) Water is essential for spore formation

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q91. Bryophytes include

(A) Liverworts and mosses

(B) Lycopods and mosses

(C) Lycopods and liverworts

(D) Liverworts and Volvox

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q92. Bryophytes mostly occur in

(A) Dry area

(B) Terrestrial area

(C) Humid, damp and shaded localities

(D) in water

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q93. Bryophytes resemble algae in the following aspect.

(A) Filamentous body, presence of vascular tissues and autotrophic nutrition

(B) Differentiation of plant body into root, stem and leaves and autotrophic nutrition

(C) Thallus like plant body, presence of roots and autotrophic nutrition

(D) Thallus like plant body, lack of vascular tissues and autotrophic nutrition

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q94. Buxbaumia aphylla is a classical example of

(A) Parasitic bryophyte

(B) Saprophytic bryophyte

(C) Symbiotic bryophyte

(D) Nitrogen fixing form

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q95. Characteristic of fern is

(A) Circinate venation

(B) Reticulate venation

(C) Parallel venation

(D) None of these

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q96. Chlamydomonas nivalis is responsible for

(A) Red snow

(B) Red rust of tea

(C) Yellow snow

(D) Brown snow

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q97. Chlamydomonas occurs in

(A) Freshwater

(B) Ponds and lake

(C) River

(D) Ocean

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q98. Chlamydomonas shows

(A) Isogamy

(B) Anisogamy

(C) Both (a) and (b)

(D) Oogamy

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q99. Chlamydomonas,Volvox,Ulothrix,Spirogyra and Chara are the examples of

(A) Class-Chlorophyceae (green algae)

(B) Class-Phaeophyceae (brown algae)

(C) Class-Rhodophyceae (red algae)

(D) Class-Cyanophyceae (blue-green algae) and Chlorphyceae

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q100. Chlorenchyma is known to develop in the

(A) Spore capsule of a moss

(B) Pollen tube of Pinus

(C) Cytoplasm of Chlorella

(D) Mycelium of a green mould such as Aspergillus

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q101. Chlorophyll-a, chlorophyll-d and phycoerythrin are characteristics of class

(A) Phaeophyceae

(B) Xanthophyceae

(C) Chlorophyceae

(D) Rhodophyceae

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q102. Chloroplasts, with pyrenoid like structures are found in the leaves of

(A) Funaria

(B) Cycas

(C) Selaginella

(D) Zea mays

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q103. Choose the correct statement about liverworts

I. In liverworts sexual reproduction occurs by the fusion of antherozoids and egg, which are produced in anthridium and archegonium, respectively

II. Both male and female sex organs may be present on sam

(A) I, II and III

(B) II, III and IV

(C) I, III and IV

(D) I, II, III and IV

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q104. Choose the correct statements about protonema

(A) Juvenile stage of moss is protonema

(B) It consists of slender, green, branching system of filaments

(C) Develops directly from a spore

(D) All of the above

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q105. Choose the correct statements for the sporophyte of bryophytes,

I. sporophyte is multicellular, not free living but attached to the gametophyte for nourishment from it

II. some cells of the sporophyte under go meiosis to produce haploid spores

(A) I and II

(B) I and III

(C) II and III

(D) I, II and III

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q106. Choose the correct statements.

(A) Apophysis is the basal fertile part of the capsule in Funaria

(B) Apophysis is the apical sterile part of the microsporophyll in Cycas

(C) Apospory is the development of sporophyte from vegetative cells of the gametophyte

(D) Apogamy is the development of gametophyte from vegetative cells of the sporophyte

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q107. Choose the incorrect statement

(A) Double fertilisation is unique to gymnosperms and monocotyledons

(B) Sequoia, a gymnosperm, is one of the tallest trees

(C) Phaeophyceae members possess chlorophyll-a, c, carotenoids and xanthophylls

(D) Moss is a gametophyte, which consists of two stages namely, protonema stage and leafy stage

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q108. Choose the wrong pair

(A) Hepaticopsida - Marchantia

(B) Lycopsida - Selaginella

(C) Bryopsida - Anthoceros

(D) Pteropsida - Dryopteris

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q109. Classification done on the basis of cytological information, chromosome structure and their behavior, is known as

(A) Molecular classification

(B) Cytotaxonomy

(C) Chemotaxonomy

(D) Karyotaxonomy

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q110. Classification on the basis of all observed characters is known as

(A) Number and codes taxonomy

(B) Numerical taxonomy

(C) Countable taxonomy

(D) Numerical information taxonomy

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q111. Common characteristic between bryophytes and pteridophytes is

(A) Vascularization

(B) Terrestrial habit

(C) Water for fertilization

(D) Independent sporophyte

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q112. Common example of red algae is

(A) Porphyra

(B) Gracilaria

(C) Ectocarpus

(D) both (1) and (2)

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q113. Conifers differ from grasses in the

(A) Production of seeds from ovules

(B) Lack of xylem tracheids

(C) Absence of pollen tubes

(D) Formation of endosperm before fertilization

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q114. Consider the following statement regarding heterospory

I. Genera like Selaginella and Salvinia which produce two kinds of spores, macro (large) and micro (small) spores, are known as heterosporous

II. The megaspores and microspores germinate and giv

(A) I, II and III

(B) II, IV and V

(C) III, IV and V

(D) I, II, III, IV and V

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q115. Consider the following statements about brown algae

I. The largest kelps are Nereocystis and Macrocystis

II. Brown algae have gelatinous coating outside the, cellulosic cell wall called algin

III. Food obtained from Laminaria saccharina is known

(A) I and II

(B) I and III

(C) II and III

(D) I, II and III

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q116. 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 megasporangiu

(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

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q117. Consider the following statements regarding reproduction in class-Chloropyceae.
I. Asexual reproduction is mainly by flagellated zoospores produced in zoosporangia.
II. The sexual reproduction shows considerable variation in the type and formation

(A) Only I

(B) Only II

(C) I and II

(D) None of these

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q118. Consider the following statements
I. Agar, one of the commercial products obtained from Gelidium and Gracilaria are used to grow microbes and in preparations of ice-creams and jellies
II. Chlorella and Spirogyra are used in sewage disposal ponds

(A) I and II

(B) I and III

(C) II and III

(D) I, II and III

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q119. Consider the following statements
I. Hydropterides are only plant among the heterosporous pteridophytes that are leptosporangiate
II. Heterosporous pteridophytes were the first land flora of earth
III. The difference in size between microspore an

(A) I and II

(B) IV

(C) I, II and IV

(D) I, II, III and IV

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q120. Consider the following statements
I. In red algae vegetative reproduction takes place by fragmentation

II. In red algae the food is stored as floridean starch, which is very similar to amylopectin and glycogen is structure

III. Cell wall of red a

(A) I and II

(B) I and III

(C) II and III

(D) All of these

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q121. Consider the following statements

I. The liverworts grow usually in moist, shady habitats such as banks of streams, marshy ground, damp soil, bark of trees and deep in the woods

II. The leafy members of liverwort have tiny leaf-like appendages in tw

(A) I is true, II is false

(B) I is false, II is true

(C) I and II are true

(D) I and II are false

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q122. Consider the following statements

I. The plants have magnificent property of retaining water. They can with hold water two hundred times more than their own weight. Hence, they are widely used by gardeners to keep cut plant parts moist during transport

(A) Pogonatum

(B) Funaria

(C) Sphagnum

(D) Marchantia

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q123. Coralloid roots of Cycas are useful in

(A) N_2-fixation

(B) Absorption

(C) Transpiration

(D) Fixation

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q124. Corolloid roots are found in

(A) Bryophytes

(B) Pteridophytes

(C) Gymnosperms

(D) Angiosperms

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q125. Cycas circinalis is a source of

(A) Resin

(B) Timber

(C) Essential oil

(D) Starch

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q126. Cycas stem shows

(A) Porous wood

(B) Manoxylic wood

(C) Pycnoxylic wood

(D) Ring porous wood

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q127. Diatoms belong to which class?

(A) Phaeophyceae

(B) Bacillariophyceae

(C) Chlorophyceae

(D) Xanthophyceae

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q128. Dispersal of spores in fern takes place through

(A) Annulus

(B) Stomium

(C) Both (a) and (b)

(D) Indusium

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q129. Dominant generation in bryophytes is

(A) Capsule

(B) Sporophyte

(C) Gametophyte

(D) Seta

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q130. Double fertilisation is characteristic feature of

(A) Gymnosperms

(B) Angiosperms

(C) Monocoats

(D) Bryophytes

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q131. Double fertilisation occurs among

(A) Algae

(B) Bryophytes

(C) Angiosperms

(D) Gymnosperms

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q132. Dryopteris differs from Funaria in having

(A) An independent gametophyte

(B) An independent sporophyte

(C) Swimming antherozoids

(D) Archegonia

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q133. During development of embryo in archegonium of Bryophyta, its posterior part form protective embryo cover, which is called

(A) Calyptra

(B) Paraphysis

(C) Apophysis

(D) Hypophysis

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q134. Ectocarpus,Dictyota,Laminaria,Sargassum and Fucus belongs to the class

(A) Phaeophyceae

(B) Rhodophyceae

(C) Chlorophyceae

(D) Cynophyceae

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q135. Ectophloicsiphonostele is found in

(A) Adiantum and Cucurbitaceae

(B) Osmunda and Equisetum

(C) Marsilea and Botrychium

(D) Dicksonia and maiden hair fern

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q136. Eight nucleated female gametophyte is found in

(A) Bryophytes

(B) Gymnosperms

(C) Angiosperms

(D) Pteridophytes

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q137. Elater mechanism or spore dispersal is exhibited by

(A) Riccia

(B) Funaria

(C) Liverworts

(D) Marchantia

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q138. Endosperm formation begin with

(A) The establishment of the suspensor

(B) The fusion of the antipodals

(C) The fertilisation of the polar nuclei

(D) The syncytial development of the embryo

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q139. Eutrophication is the result of

(A) Bryophyte

(B) Algae and aquatic plants

(C) Gymnosperm

(D) Pteridophyte

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q140. External fertilization occurs in majority of

(A) Algae

(B) Fungi

(C) Liverworts

(D) Mosses

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q141. Female cone of Pinus is a

(A) Modified needles

(B) Modified long shoot

(C) Modified dwarf shoot

(D) Modified scale

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q142. Female reproductive part of bryophytes is

(A) Antheridium

(B) Oogonium

(C) Archegonium

(D) Sporangium

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q143. Fern gametophyte bears

(A) Archegonia

(B) Antheridia

(C) Sporangia

(D) Both (a) and (b)

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q144. Fern gametophyte shows …… nature.

(A) Homothallic

(B) Fragmentation

(C) Heterothallic

(D) None of these

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q145. Fern spores are usually

(A) Haploid

(B) Diploid

(C) Triploid

(D) Tetraploid

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q146. Fertilisation is the process of

(A) Transfer the pollen from anther to stigma

(B) Fusion of one male gamete with the egg

(C) Formation of seed from ovule

(D) Fusion of male nucleus with polar nuclei

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q147. First vascular plant is

(A) Thallophyta

(B) Bryophyta

(C) Pteridophyta

(D) Spermatophyta

Correct Answer: **(C)** Level: **Moderate** Tagging: **Applying**

Q148. Flagellated male gametes are present in all the three of which one of the following sets?

(A) Anthoceros,Funaria and Spirogyra

(B) Zygnema,Saprolegnia and Hydrilla

(C) Fucus,Marsilea and Calotropis

(D) Riccia,Dryopteris and Cycas

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q149. Floridian starch is reserve food in

(A) Rhodophyceae

(B) Phaeophyceae

(C) Chlorophyceae

(D) Xanthophyceae

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q150. Fusion of two gametes, which are dissimilar in size is termed as

(A) Oogamy

(B) Isogamy

(C) Anisogamy

(D) Zoogamy

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q151. Gametophyte is dominant stage in the life cycle of

(A) Bryophyta

(B) Pteridophyta

(C) Angiosperms

(D) Gymnosperms

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q152. Gametophyte is the dominant phase in the life cycle of

(A) Hibiscus

(B) Nephrolepis

(C) Cycas

(D) Riccia

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q153. Gemmae are multicellular green structures for vegetative propagation. These are found inside gemma cups in

(A) Riccia capsule

(B) Marchantia thallus

(C) Funaria protonema

(D) Fern prothallus

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q154. Green alga contains

(A) Chlorophyll-a and b

(B) Starch

(C) Carotenoid

(D) All of these

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q155. Green algae often differ from land plants in that some green algae

(A) are heterotrophs

(B) are unicellular

(C) have plastids

(D) have alternation of generations

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q156. Gymnosperms are

(A) Flowering plants

(B) Seed bearing plants

(C) Seedless flowering plants

(D) Fruit bearing plants

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q157. Gymnosperms lack fruits, why?

(A) Seeds absent

(B) Ovule absent

(C) Ovary absent

(D) Ovary fused

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q158. Gymnosperms produce neither flower nor fruit because they do not possess

(A) Embryo

(B) Ovary

(C) Ovule

(D) Seed

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q159. Haplo-diplontic life cycle is followed by

(A) Bryophytes and pteridophytes

(B) Algae and bryophytes

(C) Angiosperm and gymnosperm

(D) Bryophytes and gymnosperm

Correct Answer: **(A)** Level: **Moderate** Tagging: **Analyzing**

Q160. Haplo-diplontic life cycle is found in

(A) bryophytes

(B) pteridophytes

(C) fungi

(D) both (1) and (2)

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q161. Haploid brown, hairlike, delicate unicellular outgrowths are

(A) Root hairs of gymnosperms

(B) Paraphysis of mosses

(C) Root nodules of pulses

(D) Rhizoids of fern plants

Correct Answer: **(D)** Level: **Moderate** Tagging: **Analyzing**

Q162. Haploid structure of Funaria is

(A) Calyptra

(B) Protonema

(C) Apophysis

(D) Operculum

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q163. Haplontic life cycle is followed by

(A) Algae

(B) Fungi

(C) Gymnosperms

(D) Angiosperms

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q164. Heterosporouspteridophytes always produce

(A) Monoecious gametophytes

(B) Dioecious gametophytes

(C) Homothallic gametophytes

(D) None of the above

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q165. Heterospory is the production of

(A) Sexual and asexual spores

(B) Large and small spores

(C) Haploid and diploid spores

(D) Diploid and tetraploid spores

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q166. Holdfast, stipe and frond constitutes the plant body in case of –

(A) Rhodophyceae

(B) Chlorophyceae

(C) Phaeophyceae

(D) All of the above

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q167. How have fruits contributed to the success of angiosperms?

(A) by nourishing the plants that make them

(B) by facilitating dispersal of seeds

(C) by attracting insects to the pollen inside

(D) by producing sperm and eggs inside a protective coat

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q168. How many pyrenoids are present in the members of class-Chlorophyceae?

(A) One

(B) Two

(C) One to many

(D) Pyrenoids are absent

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q169. Identify the alga known for a biological activity called bioluminescence.

(A) Spirogyra

(B) Chlorella

(C) Cyclotella

(D) Noctiluca

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q170. Identify the alga, which exhibits diplontic life cycle.

(A) Spirogyra

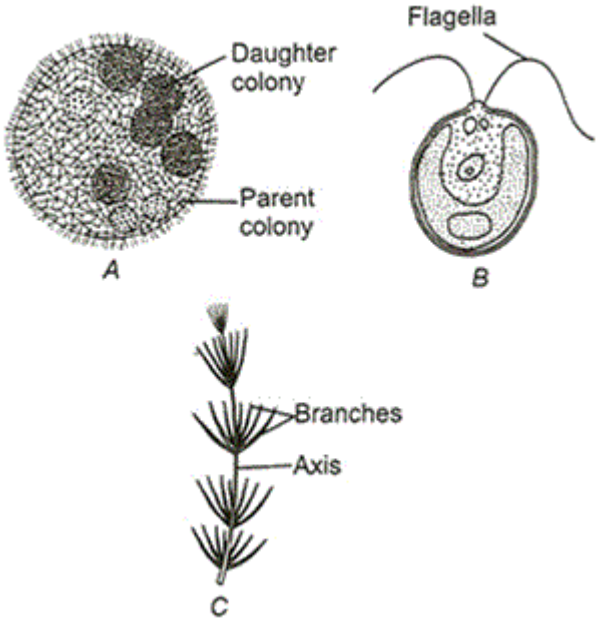
(B) Chlamydomonas

(C) Fucus

(D) Volvox

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q171. Identify the given figures of algae and select the correct option



(A) A-Chlamydomonas, B-Chara, C-Volvox

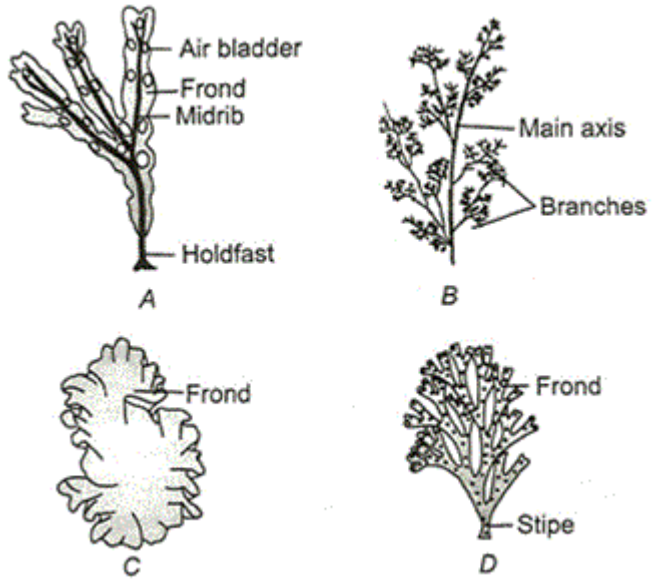
(B) A-Volvox, B-Chlamydomonas, C-Chara

(C) A-Chara, B-Laminaria, C-Volvox

(D) A-Porphyra, B-Polysiphonia, C-Fucus

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q172. Identify the given figures of algae and select the correct option



(A) A-Volvox, B-Chlamydomonas, C-Chara, D-Porphyra

(B) A-Fucus, B- Polysiphonia, C-Porphyra, D-Dictyota

(C) A-Fucus, B-Dictyota,, C-Porphyra, D-Polysiphonia

(D) A- Dictyota, B-Porphyra, C-Fucus, D-Polysiphonia

Correct Answer: **(B)** Level: **Moderate** Tagging: **Analyzing**

Q173. If a sporangium is derived from a single cell, it is called

(A) Leptosporangiate

(B) Eusporangiate

(C) Heterosporangiate

(D) Monosporangiate

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q174. If the chromosome number in the leaf of Funaria is 20, what will be the chromosome number in the spores?

(A) 10

(B) 40

(C) 20

(D) 5

Correct Answer: **(A)** Level: **Moderate** Tagging: **Analyzing**

Q175. If the leaf of Funaria has 5 chromosomes the primary protonema will have

(A) 10 chromosomes

(B) 5 chromosomes

(C) 15 chromosomes

(D) 20 chromosomes

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q176. In brown algae, brown colour is due to presence of

(A) Carotenoids

(B) Fucoxanthin

(C) Phycoerythrin

(D) Chlorophyll

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q177. In a monoecious plant

(A) Male and female sex organs are on different individuals

(B) Male and female gametes are of two morphologically distinct types

(C) Male and female sex organs are on the same individual

(D) All the stamens are fused to form one unit

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q178. In a moss, the sporophyte

(A) Is partially parasitic on the gametophyte

(B) Produces gametes that give rise to the gametophyte

(C) Arises from a spore produced from the gametophyte

(D) Manufactures food for itself, as well as for the gametophyte

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q179. In algae asexual reproduction occurs by the production of different types of spores. The most common type of spore is

(A) Aplanospore

(B) Endospore

(C) Zoospore

(D) Oospore

Correct Answer: **(C)** Level: **Moderate** Tagging: **Analyzing**

Q180. In algae, vegetative reproduction mainly takes place by

(A) Budding

(B) Akinetes

(C) Fragmentation

(D) Heterocyst

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q181. In angiospermic fertilisation, one male gamete fuses with egg to form __A__, this event is called __B__

Identify A and B and choose the correct option.

(A) A-endosperm; B-syngamy

(B) A-zygote; B-syngamy

(C) A-embryo; B-triple fusion

(D) A-endosperm; B-triple fusion

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q182. In angiospermic fertilisation, one male gamete fuses with egg to form …A… , this event is called … B… .

Identify A and B and choose the correct option

(A) A-endosperm; B-syngamy

(B) A-zygote; B-syngamy

(C) A-embryo; B-triple fusion

(D) A-endosperm; B-triple fusion

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q183. In angiosperms embryo sac consists of

(A) one egg cell

(B) two synergids

(C) three antipodal and two polar nuclei

(D) All of the above

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q184. In brown algae asexual reproduction takes place by

(A) Aplanospores (apple-shaped and non-motile)

(B) Biflagellate gametes (pear-shaped and have two unequal flagella)

(C) Endospores (round and have one flagella)

(D) Multifilagellate gametes and are sickle-shaped

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q185. In brown algae, food is stored in the form of

(A) Mannitol

(B) Laminarin starch

(C) Both (a) and (b)

(D) Algin

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q186. In bryophytes antheridium produces …A… and female sex organ archegonium produces …B… . Here A and B refer to

(A) A-uniflagellate antherozoids; B-two egg

(B) A-biflagellate antherozoids; B-one egg

(C) A-non-motile antherozoids; B-one egg

(D) A-non-motile antherozoids; B-two egg

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q187. In capsule of moss, shock absorbers are

(A) Trabeculae

(B) Peristome teeth

(C) Seta

(D) Annulus

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q188. In case of heteroporous pteridophyte the gametophyte is

(A) Always dioecious

(B) Monoecious

(C) May be monoecious or dioecious

(D) Vascular

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q189. In Chlamydomonas, the meiosis occurs in

(A) Gamete

(B) Zygote

(C) Sporogonium

(D) Zoospore

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q190. In comparition to pteridophyte, which one of the following algae exhibits diplontic life cycle?

(A) Volvox

(B) Chara

(C) Polysiphonia

(D) Focus

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q191. In Cycas stem, open vascular bundle is characterized by

(A) Phloem being sandwitched between xylem

(B) Cambium present in between xylem and phloem

(C) Xylem being sandwithced between phloem

(D) Xylem and phloem occurring on different radii

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q192. In Cycas, diploxylic vascular bundles are found in

(A) Stem

(B) Root

(C) Leaflet

(D) Rachis and leaflet

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q193. In ferns and mosses, movement of antherozoids towards female component is called

(A) Phototaxis

(B) Chemotaxis

(C) Hydrotropism

(D) Thigmotropism

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q194. In flowering plants meiosis occurs at the time of

(A) Formation of buds

(B) Germination of seed

(C) Formation of root primordia

(D) Formation of pollen grains

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q195. In Funaria, the stomata are found on

(A) Foot

(B) Seta

(C) Capsule

(D) All of these

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q196. In green algae vegetative reproduction takes place by

(A) Fragmentation

(B) Different types of spores

(C) Both (a) and (b)

(D) Conidia

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q197. In gymnosperm the microspores develop into a male gametophyte generation which

(A) Is highly reduced and confined to only a limited number of cells

(B) Is highly developed

(C) Has an independent life

(D) Both (a) and (c)

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q198. In gymnosperm, the leaves are well-adapted to withstand extremes of temperature, humidity and wind. What are the xeric characters in conifers?

(A) Needle-like leaves

(B) Thick cuticle

(C) Sunken stomata

(D) All of these

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q199. In gymnosperm, the multicellular female gametophyte is retained with in

(A) Microsporangium

(B) Megasporangium

(C) Male gametophyte

(D) Archegonia

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q200. In gymnosperms one of the megaspores develops into multicellular structure called multicellular …… that bears two or more archegonia

(A) Male gametophyte

(B) Female gamete

(C) Female gametophyte

(D) Male gamete

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q201. In gymnosperms ovules are borne on

(A) microsporophyll

(B) megasporophyll

(C) macrosporophyll

(D) Both (1) and (3)

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q202. In gymnosperms the development of grains take place with in the

(A) Megasporangia

(B) Microsporangia

(C) Male gametophyte

(D) Female gametophyte

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q203. In gymnosperms the development of pollen grains take place with in the

(A) megasporangia

(B) microsporangia

(C) male gametophyte

(D) female gametophyte

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q204. In gymnosperms the reduced gametophyte is called

(A) Endospore

(B) Pollen grain

(C) Ovule

(D) Aplanospore

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q205. In gymnosperms, during pollination pollen grains are released from the microsporangium and transferred to

(A) Opening of the ovule

(B) Archegonia

(C) Ovary

(D) Stigma

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q206. In gymnosperms, pollination takes place by

(A) Water

(B) Air

(C) Insects

(D) Animals

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q207. In gymnosperms, the ovule is naked because

(A) Ovary wall is absent

(B) Integuments are absent

(C) Perianth is absent

(D) Nucellus is absent

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q208. In gymnosperms, the seeds are naked because they lack

(A) Integument

(B) Nucellus

(C) Pericarp

(D) Perianth

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q209. In life cycles with an alternation of generations, multicellular haploid forms alternate with

(A) unicellular haploid forms.

(B) unicellular diploid forms.

(C) multicellular haploid forms.

(D) multicellular diploid forms.

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q210. In mosses vegetative reproduction takes place by

(A) Fragmentation and budding in the secondary protonema

(B) Gemmae formation and endospore formation

(C) Gemmae and tubers formation

(D) Protonema

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q211. In Pinus, male cone bears a large number of

(A) Ligules

(B) Anthers

(C) Microsporophylls

(D) Megasporophylls

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q212. In Pinus, the endosperm is

(A) Haploid

(B) Diploid

(C) Triploid

(D) Tetraploid

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q213. In Pinus, the third tier of embryonal cells formed below is known as

(A) Rosette tier

(B) Suspensor tier

(C) Embryonal tier

(D) Free-nuclear tier

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q214. In pteridophytes, main plant body is a (i) which is (ii) into true roots, stem and leaves.
Fill the blanks in above statement and select the correct option.

(A) (i)-Sporophyte, (ii)-differentiated

(B) (i)-Sporophyte, (ii)-not differentiated

(C) (i)-Gametophyte, (ii)-differentiated

(D) (i)-Gametophyte, (ii)-not differentiated

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q215. In pteridophytes, prothallus produces –

(A) sporangia

(B) antheridia and archegonia

(C) vascular tissues

(D) root, stem and leaf.

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q216. In pteridophytes, spores germinate to give rise to inconspicuous, small multicellular, free living, photosynthetic, thalloid gametophyte called

(A) Protonema

(B) Prothallus

(C) Archegonia

(D) Ovule

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q217. In Selaginella, trabeculae are the modification of

(A) Epidermal cells

(B) Cortical cells

(C) Endodermal cells

(D) Pericycle cells

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q218. In some pteridophytes, sporophyll form distinct compact structures called ...A... in ...B... and ...C... Here A, B and C refers to

(A) A-sporocarp, B-Pogonatum, C-Selaginella

(B) A-spikelet, B-Riccia, C-Marchentia

(C) A-strobilus, B-Selaginella, C-Equisetum

(D) A-spike, B-Fern, C-Salvinia

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q219. In Spirogyra,

(A) Filaments in which lateral conjugation occur are homothallic

(B) Filaments in which sealariform conjugation occur are homothallic

(C) Filaments in which lateral conjugation occur are heterothallic

(D) A sexual reproduction occurs by zoospores

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q220. In the life cycle of mosses, the gametophyte has two stages (A and B). These stages can be called

(A) A-Protonema; B-Leafy stage

(B) A-Protonema; B-Sporogonium

(C) A-Sporophyte; B-Gametophyte

(D) A-Zygote; B-Spore mother cell

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q221. In the prothallus of a vascular cryptogam, the antherozoids and eggs mature at different times. As a result

(A) There is no change in success rate of fertilization

(B) There is high degree of sterility

(C) One can conclude that the plant is apomictic

(D) Self-fertilization is prevented

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q222. In Ulothrix, meiosis occurs in

(A) Gamete

(B) Zygospore

(C) Zoospore

(D) Thallus

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q223. In which group of the following would you place the plants having vascular tissue and lacking seeds?

(A) Algae

(B) Fungi

(C) Bryophytes

(D) Pteridophytes

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q224. In which of the following features, Cycas resembles with angiosperms?

(A) Presence of vessels

(B) Circinatevernation

(C) Dichotomously branched leaves

(D) Pollen tube is the carrier of male gametes

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q225. In which of the following, all listed genera belong to the same class of algae?

(A) Chara,Fucus,Polysiphonia

(B) Volvox,Spirogyra,Chlamydomonas

(C) Porphyra,Ectocarpus,Ulothrix

(D) Sargassum,Laminaria,Gracillaria

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q226. In which of the following, pyrenoids are present?

(A) Marchantia

(B) Riccia

(C) Anthoceros

(D) All of these

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q227. In which way, mosses affects the quality of soil?

(A) Prevents soil erosion

(B) Add nutrients to the soil

(C) Promotes soil degradation

(D) They do no affects soil in any way

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q228. Incipient nucleus is found in

(A) Myxophyceae

(B) Phaeophyceae

(C) Rhodophyceae

(D) Chlorophyceae

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q229. Incorrect character of brown alga is

(A) Chlorophyll-a and b present

(B) They remain attached

(C) Chlorophyll-a and c present

(D) Presence of fucoxanthin

Correct Answer: **(A)** Level: **Moderate** Tagging: **Analyzing**

Q230. Indusium is found in

(A) Algae

(B) Ferns

(C) Moss

(D) Cycas

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q231. Kelp (branched form) and Sargassam (filamentous form) belongs to

(A) Green algae

(B) Brown algae

(C) Red algae

(D) Blue-green algae

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q232. Kingdom-Plantae includes

(A) Algae, bryophytes and pteridophytes

(B) Algae, bryophytes, pteridophytes, gymnosperms and angiosperms

(C) Algae, fungi, peteridophytes, gymnosperms and angiosperms

(D) Algae, pteridophytes, gymnosperms and angiosperms

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q233. Laminarin and manitol of class-Phaeophyceae (brown algae) are

(A) Proteins

(B) Complex carbohydrates

(C) Lipoproteins

(D) Fat

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q234. Leaf in young condition in fern is called

(A) Scale leaf

(B) Sporophyll

(C) Circinateptyxis

(D) None of these

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q235. Living fossil is

(A) Ginkgo biloba

(B) Gnetum ulva

(C) Pinus roxburghii

(D) Cycas revoluta

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q236. Major photosynthetic pigments in green algae are

(A) Chlorophyll a and b

(B) Chlorophyll a, c and fucoxanthin

(C) Chlorophyll a, d and phycoerythrin

(D) Chlorophyll a and c.

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q237. Male and female gametophytes are independent and free-living in

(A) Mustard

(B) Castor

(C) Pinus

(D) Sphagnum

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q238. Male gametes in angiosperms are formed by the division of –

(A) microspore

(B) generative cell

(C) vegetative cell

(D) microspore mother cell

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q239. Male sex organs in an angiospermic flower is

(A) Stamen

(B) Pistil

(C) Carpel

(D) Shoot

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q240. Mannitol is the stored food in

(A) Chara

(B) Porphyra

(C) Fucus

(D) Gracillaria

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q241. Megasporophyll is the term used in gymnosperm to denote

(A) Carpel

(B) Leaves

(C) Female cone

(D) Stamens

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q242. Megasporophyll of Cycas is equivalent to

(A) Stamen

(B) Sepal

(C) Petal

(D) Carpel

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q243. Members of class-Rhodophyceae are known as red algae due to the presence of red pigment

(A) r-phycoerythrin

(B) r-xanthophyll

(C) Phycoerythrin

(D) Fucoxanthin

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q244. Microsporangia in gymnosperm are produced

(A) On the middle portion of microsporophyll

(B) On the lowerside of microsporophyll

(C) On the middle portion of megasporophyll

(D) At the extreme tip of microsporophyll

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q245. Microsporangia of Cycas occur over microsporophyll

(A) Laterally

(B) Abaxially

(C) Adaxially

(D) Marginally

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q246. Moss spore germinate to form

(A) Sporophyte

(B) Protonema

(C) Seta

(D) Capsule

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q247. Mosses (along with lichen) are of great ecological importance because

(A) They colonise on barren rocks and decompose rock

(B) Its contribution to prevent soil erosion

(C) Its contribution in ecological succession

(D) All of the above

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q248. Mosses and ferns are found in moist and shady places because both

(A) Require presence of water for fertilization

(B) Do not need sunlight for photosynthesis

(C) Depend for their nutrition on microorganisms, which can survive only at low temperature

(D) Cannot compete with sun-loving plants

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q249. Mosses are

(A) Green

(B) Leafy

(C) Upright and radial in symmetry

(D) All of the above

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q250. Mosses are attached to substratum by

(A) Roots

(B) Capsule

(C) Rhizoids

(D) Main axis

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q251. Most algal genera are haplontic some of them such as …A…, …B… and …C… are haplo-diplontic. Here A, B and C refers to

(A) A-Ectocarpus, B-Polysiphonia, C-Kelps

(B) A-Volvox, B-Spirogyra, C-Kelps

(C) A-Spirogyra, B-Polysiphonia, C-Ectocarpus

(D) A-Volvox, B-Kelps, C-Ectocarpus

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q252. Non-motile, greatly thickened, asexual spore in Chlamydomonas is

(A) Carpospores

(B) Akinetes

(C) Aplanospores

(D) Hypnospores

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q253. Nostoc fixes dinitrogen in symbiotic association with the following

I. Alnus

II. Gunnera

III. Anthoceros

IV. Casuarina

(A) I and II

(B) II and III

(C) I and III

(D) I and IV

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q254. Number of meiosis for formation of 64 zygotes in angiosperm is 80 but in gymnosperms number of meiosis for formation of 64 zygotes will

(A) 40

(B) 80

(C) 160

(D) 20

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q255. Number of peristomial teeth in moss is

(A) 16 + 16

(B) 16 + 32

(C) 8 + 16

(D) 32 + 32

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q256. Oil is reserve food in

(A) Chlamydomonas

(B) Oedogonium

(C) Vaucheria

(D) Chara

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q257. Oogamous type of fusion is found in

(A) Volvox and Fucus

(B) Chlamydomonas

(C) Spirogyra

(D) All of these

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q258. Peat moss is

(A) Funaria

(B) Fern

(C) Algae

(D) Sphagnum

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q259. People recovering from long illness are often advised to include the alga Spirulina in their diet because it

(A) Makes the food easy to digest

(B) Is rich in proteins

(C) Has antibiotic properties

(D) Restores the intestinal microflora

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q260. Photosynthetic pigments of class-Rhodophyceae (red algae) are

(A) Chlorophyll-a, b

(B) Chlorophyll-a, c

(C) Chlorophyll-a, d

(D) Chlorophyll-a, c and d

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q261. Phylogenetic system of classification is also known as

(A) Artificial system of classification

(B) Hutchinson’s system of classification

(C) Natural system of classification

(D) Whittaker system of classification

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q262. Phylogenetic system of classification is based upon

(A) Evolutionary relationship of organism

(B) Cytological information

(C) Structural embryology

(D) All of the above

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q263. Phylogenetic system of classification was given by

(A) Engler and Prantl

(B) Aristotle

(C) Linnaeus

(D) Bentham and Hooker

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q264. Plants forming spores but lacking seed and vascular tissue are

(A) Gymnosperms

(B) Angiosperms

(C) Bryophytes

(D) Pteridophytes

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q265. Plants have ….. in their life cycle

(A) Asexual generations only

(B) Sexual generations only

(C) Alternation of generations

(D) Haplontic generations only

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q266. Plants which are shorter than trees and have a bushy appearance are called

(A) Short trees

(B) Shrubs

(C) Bushes

(D) Sporophytes

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q267. Pollen grains in Pinus are

(A) Monosaccate

(B) Bisaccate

(C) Trisaccate

(D) Nonsaccate

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q268. Pollen sac in Cycas is called

(A) Megasporophyll

(B) Megasporangium

(C) Microsporophyll

(D) Microsporangium

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q269. Pollen tube carries

(A) Two male gametes

(B) One male gamete

(C) Three sperms

(D) Four sperms

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q270. Prothallus of the fern produces

(A) Spores

(B) Gametes

(C) Both (a) and (b)

(D) Cones

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q271. Protonema is the juvenile filamentous state in the life cycle of

(A) Funaria

(B) Riccia

(C) Marchantia

(D) Laminaria

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q272. Protonema is the stage in the life cycle of

(A) Cycas

(B) Funaria

(C) Selaginella

(D) Mucor

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q273. Pteridophytes differ from bryophytes in the

(A) Motility of sperms

(B) Vasculature

(C) Archegonia

(D) Alternation of generation

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q274. Pteridophytes mostly occur in

(A) Cool, damp and shady places

(B) Hot and sunny places

(C) Dry and humid areas

(D) In water

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q275. Pyrenoids are made up of

(A) Core of starch surrounded by sheath of protein

(B) Core of protein surrounded by fatty sheath

(C) Proteinaceous centre and starchy sheath

(D) Core of nucleic acid surrounded by protein sheath

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q276. Pyrenoids are present in the ….. in most of the green algae

(A) Chloroplast

(B) Ribosome

(C) Plastids

(D) Chromoplast

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q277. Ramenta is the characteristic of

(A) Marchantia

(B) Funaria

(C) Dryopteris

(D) None of these

Correct Answer: **(C)** Level: **Moderate** Tagging: **Applying**

Q278. Read carefully the following statements about pteridophytes

I. They are called vascular cryptogams

II. They produce spores rather than seeds

IIII. They are used for medicinal purposes

IV. They are used as soil binders

V. They are frequently

(A) I, II and V

(B) II, IV and V

(C) II, III, IV and V

(D) I, II, III, IV and V

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q279. Read carefully the following statements

I. Funaria possesses unicellular and unbranched rhizoids

II. Gemmae are asexual buds, which originate from small receptacles called gemma cups

III. The Sphagnum plants have magnificent property of retaining

(A) I, II and III

(B) I, III and IV

(C) II, III and IV

(D) I, II, III and IV

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q280. Read the following statements and identify the correct options given

I. Angiosperms range in size from microscopic Wolffia to tall trees of Eucalyptus.

II. In angiosperms, the seeds are enclosed by fruits.

III. Double fertilisation is an event unique to angiosperms.

IV. In angiosperms, each cell of an embryo sac is diploid.

V. In angiosperms, the zygote develops into an endosperm.

(A) I, II and IV

(B) I, II and V

(C) I, II and III

(D) II, III and IV

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q281. Read the given statements about algae and select the correct option.

(i) Plant body is thalloid.

(ii) Largely aquatic.

(iii) Reproduction by vegetative, asexual & sexual methods.

(iv) Chlamydomonas, Volvox, Ulothrix are the multicellular algae.

(A) Statements (i) and (ii) are true

(B) Statements (ii) and (iii) are true

(C) Statements (i), (ii) and (iii) are true

(D) All statements are true

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q282. Reproductive parts of an angiospermic plant are

(A) Stamen

(B) Pistil

(C) Both (a) and (b)

(D) Shoot

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q283. Resin duct of gymnospermous stem is an example of

(A) Lysigenous cavity

(B) Lysogenous cavity

(C) Schizogenous cavity

(D) Schizolysigenous cavity

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q284. Retort cells occur in

(A) Funaria

(B) Pogonatum

(C) Porella

(D) Sphagnum

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q285. Roots is some gymnospermic genera have fungal association in the form of …A… in …B…. Here, A and B refers to

(A) A-mycorrhiza; B-Pinus

(B) A-mycorrhiza; B-Cycas

(C) A-lichen; B-Pinus

(D) A-lichen; B-Cycas

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q286. Saprophytes belonging to angiosperms are known as

(A) humus plants

(B) organic plants

(C) facultative saprophytes

(D) obligate saprophytes

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q287. Select the correct sequential arrangement of reproductive structures for pteridophytes

(A) Sporophyll → Strobilli → Sporangia → Spore mother cell → Spores

(B) Strobilli → Sporophyll → Sporangia → Spores

(C) Spores → Sporophyll → Sporangia → Strobili

(D) Spores → Sporangia → Sporophyll → Strobili

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q288. Select the correct statements.

(A) Absorption of water by seeds and dry wood are examples of facilitated diffusion

(B) The apoplast is the system of interconnected protoplasts

(C) Pinus seeds cannot germinate and establish without the presence of mycorrhizae

(D) The translocation in phloem is unidirectional, whereas in the xylem it is bidirectional

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q289. 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

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q290. Select the incorrect statement regarding reproduction in Rhodophyceae.

(A) Asexual reproduction occurs by nonmotile spores.

(B) Sexual reproduction occurs by motile gametes.

(C) Sexual reproduction is oogamous.

(D) Complex post-fertilization developmental events occur.

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q291. Sexual reproduction in Spirogyra is an advanced feature because it shows

(A) Morphologically differentiated sex organs

(B) Physiologically differentiated sex organs

(C) Different sizes of motile sex organs

(D) Same size of motile sex organs

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q292. Smallest flowering plant is

(A) Ginkgo

(B) Wolffia

(C) Tulip

(D) Sweet bay

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q293. Sperm of Cycas is

(A) Multiflagellated and very large

(B) Small and biflagellated

(C) Multiflagellated and small

(D) Large and biflagellated

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q294. Sphagnum a moss, is used as a packing material for transporting living materials because of its

(A) Water holding capacity

(B) Creeping capacity

(C) Alkaline nature as it does not undergo decay

(D) All of the above

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q295. Spirogyra, Volvox and Chlamydomonas shows

(A) haplontic life cycle

(B) diplontic life cycle

(C) haplo-diplontic life cycle

(D) diplobiontic life cycle

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q296. Spirogyra,Volvox and Chlamydomonas shows

(A) Haplontic life cycle

(B) Diplontic life cycle

(C) Haplo-diplontic life cycle

(D) Diplobiontic life cycle

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q297. Spore dissemination in some liverworts is aided by

(A) Elaters

(B) Indusium

(C) Calyptras

(D) Peristome teeth

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q298. Spore of Funaria on germination gives rise to

(A) Protonema

(B) Sporophyte

(C) Prothallus

(D) Capsule

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q299. Spore of Funaria on germination produces

(A) Protonema

(B) Antheridia

(C) Archegonia

(D) Vegetative body

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q300. Spores with chloroplast is present in

(A) Selaginella

(B) Equisetum

(C) Puccinia

(D) Rhizopus

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q301. Sporophylls can be found in which of the following?

(A) mosses

(B) liverworts

(C) hornworts

(D) pteridophytes

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q302. Sporophyte of fern produces

(A) Pollen grains

(B) Spores

(C) Seeds

(D) Gametes

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q303. Sterile part of Cycas microsporophyll is

(A) Apophysis

(B) Sporophore

(C) Middle part

(D) Lower part

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q304. Tea and coffee are affected by

(A) Phytophthora

(B) Cephaleuros

(C) Herviella

(D) Albugo candida

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q305. The alga rich in protein is

(A) Chlorella

(B) Ulothrix

(C) Laminaria

(D) Nostoc

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q306. The body structure of green algae may be

(A) Colonial

(B) Unicellular

(C) Filamentous

(D) All of these

Correct Answer: **(D)** Level: **Moderate** Tagging: **Analyzing**

Q307. The bryophytes are divided into

(A) Mosses and liverworts

(B) Ferns and liverworts

(C) Mosses and horse tails

(D) Ferns and horse tails

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q308. The characteristic features of bryophytes are

I. main plant body is gametophytic

II. main plant body is sporophytic

III. requirement of water for fertilisation

Which of the statements given above are correct?

(A) I and II

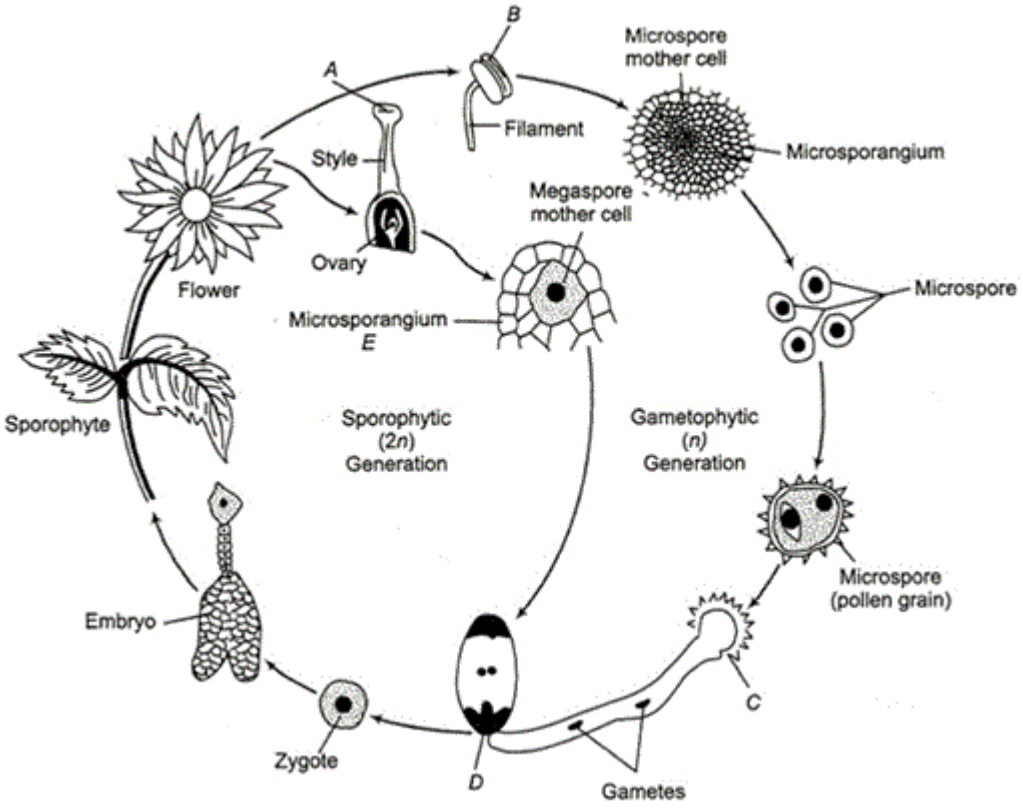
(B) I and III

(C) II and III

(D) I, II and III

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q309. The diagram represents the life cycle of angiosperm. Choose the correct combination of labelling



(A) A-Anther, B-Stigma, C-egg, D-Male gametophyte, E-ovule

(B) A-Ovule, B-Stigma, C- Male gametophyte, D- Anther, E-Egg

(C) A-Male gametophyte, B-Stigma, C-Anther, D-Egg, E-ovule

(D) A-Stigma, B- Anther, C- Male gametophyte, D-Egg, E-ovule

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q310. The embryo sac of angiosperms contains

(A) 3 celled egg apparatus, 3 antipodal cell and 2 polar nuclei.

(B) 2 celled egg apparatus, 3 antipodal cell and 2 polar nuclei.

(C) 3 celled egg apparatus, 2 antipodal cell and I polar nuclei.

(D) 3 celled egg apparatus, 1 antipodal cell and 2 polar nuclei.

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q311. The endosperm in angiosperms develops from

(A) Zygote

(B) Secondary nucleus

(C) Chalazal polar nucleus

(D) Micropylar polar nucleus

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q312. The female sex organ in Funaria is

(A) antheridium

(B) paraphysis

(C) archegonium

(D) oogonium.

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q313. The gametophyte of moss is

(A) Seta

(B) Capsule

(C) Zygote

(D) Protonema

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q314. The giant red wood tree (Sequoia) is a/an

(A) Angiosperm

(B) Fern

(C) Pteridophyte

(D) Gymnosperm

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q315. The giant Redwood tree (Sequoia sempervirens) is a/an

(A) Angiosperm

(B) Free fern

(C) Pteridophyte

(D) Gymnosperm

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q316. The heterosporous pteridophytes are

(A) Lycopodium and Pteris

(B) Selaginella and Psilotum

(C) Selaginella and Salvinia

(D) Dryopteris and Adiantum

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q317. The kidney-shaped covering of sorus in Dryopteris, is called

(A) Placenta

(B) Ramentum

(C) Sporophyll

(D) Indusium

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q318. The leaves in pteridophytes are small as in

(A) Volvox

(B) Marsilia

(C) Selaginella

(D) Azolla

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q319. The leaves of gymnosperms are welladapted to withstand extremes of temperature, humidity and wind, because of which of the following features?

(A) Needle like leaves

(B) Thick cuticle

(C) Sunken stomata

(D) All of these

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q320. The main plant body in pteridophyte is

(A) Sporophyte (2n) which is differentiated into root, stem and leaf

(B) Sporophyte having no root, stem and leaf

(C) Gametophyte (n) which is differentiated into root, stem and leaf

(D) Gametophyte having no root, stem and leaf

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q321. The members of brown algae have

(A) Chlorophyll-a, chlorophyll-b, xanthophylls

(B) Chlorophyll-a, chlorophyll-c, xanthophylls and carotenoids

(C) Fucoxanthin and xanthophylls

(D) Chlorophyll-a and xanthophylls

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q322. The members of Chlorophyceae are usually green due to the dominance of pigments

(A) Chlorophyll-a

(B) Chlorophyll-b

(C) Chlorophyll-a and b

(D) Chlorophyll-c

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q323. The members of Chlorophyceae usually have a rigid cell wall made up of

(A) Cellulose (outer layer) and algin (inner layer)

(B) Pectose (inner layer) and peptidoglycan (outer layer)

(C) Cellulose (inner layer) and pectose (outer layer)

(D) Chitin (inner layer) and pectose (outer layer)

Correct Answer: **(C)** Level: **Moderate** Tagging: **Analyzing**

Q324. The moss plant is

(A) Sometimes gametophyte and sometimes sporophyte

(B) Predominantly gametophyte with sporophyte attached to it

(C) Gametophyte

(D) Sporophyte

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q325. The name gymnosperm was given by

(A) Hooker

(B) Linnaeus

(C) Theophrastus

(D) Endlicher

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q326. The number of prothallial cells in male gametophyte of Pinus is

(A) 2

(B) 1

(C) 3

(D) 0

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q327. The only living fossil, known by the name of 'maiden hair tree' is

(A) Thuja

(B) Pinus

(C) Ginkgo

(D) Araucaria

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q328. The peculiar feature of Marchantia palmata is

(A) Absence of gemma cup

(B) Presence of androgynous receptacles

(C) Absence of eaters

(D) All of the above

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q329. The plant body of bryophytes are thallus like, prostrate or erect and attached to substratum with the help of

(A) Unicellular or multicellular roots

(B) Unicellular or multicellular rhizoids

(C) Multicellular roots

(D) Unicellular roots

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q330. The plant body of bryophytes is

(A) More differentiated than that of algae

(B) Equally differentiated to that of algae

(C) Less differentiated than that of algae

(D) Is not differentiated at all

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q331. The protonema is a stage in the life cycle of

(A) Riccia

(B) Funaria

(C) All bryophytes

(D) Pinus

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q332. The site of photosynthesis in blue-green algae is

(A) Chromatophores

(B) Mitochondria

(C) Chloroplast

(D) Root hair

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q333. The tallest pteridophyte is

(A) Alsophila

(B) Azolla

(C) Adiantum

(D) Cyathea

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q334. The thallus of Volvox is called

(A) Trichome

(B) Coenobium

(C) Coenocytes

(D) Parenchymatous

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q335. The type of pollination in Cycas is

(A) Entomophily

(B) Hydrophily

(C) Anemophily

(D) Malacophily

Correct Answer: **(C)** Level: **Moderate** Tagging: **Analyzing**

Q336. Top-shaped multiciliate male gametes and the mature seed, which bears only one embryo with two cotyledons, are characteristic features of

(A) Polypetalous angiosperms

(B) Gamopetalous angiosperms

(C) Conifers

(D) Cycads

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q337. Tracheophyta consists of

(A) Bryophytes only

(B) Pteridophytes only

(C) Gymnosperms and angiosperms

(D) Both (b) and (c)

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q338. Transfusion tissue is present in the leaves of

(A) Dryopteris

(B) Cycas

(C) Pinus

(D) Both (b) and (c)

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q339. Two very distinst generations are found in the life cycle of

(A) Bacteria

(B) Spirogyra

(C) Volvox

(D) Ferns

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q340. Vasculature is poorly developed, pith has mucilage canals, parenchyma and medullary rays are abundant in

(A) Cycas

(B) Pinus

(C) Selaginella

(D) Funaria

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q341. Vegetative reproduction in Cycas occurs by

(A) Bulbils

(B) Sporophylls

(C) Fission

(D) Scale leaves

Correct Answer: **(A)** Level: **Moderate** Tagging: **Understanding**

Q342. Water bloom is generally caused by

(A) Green algae

(B) Blue-green algae

(C) Bacteria

(D) Hydrilla

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q343. When a produces two kind of spores, the condition is known as

(A) Homospory

(B) Heterospory

(C) Apospory

(D) Sporogenesis

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q344. When moss spores germinate, the form

(A) Leafy gametophyte

(B) Capsule

(C) Protonema

(D) Rhizoids

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q345. Which class of algae have chlorophyll a, d, phycoerythrin and lack flagella

(A) Cyanophyceae

(B) Rhodophyceae

(C) Phaeophyceae

(D) Chlorophyceae

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q346. Which green alga shows heterotrichous habit and may have given rise to terrestrial (land) habit?

(A) Chlamydomonas

(B) Fritschiella

(C) Vaucheria

(D) Ulothrix

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q347. Which has vascular tissue, produces spores, but does not has seeds?

(A) Bryophyta

(B) Pteridophyta

(C) Gymnosperms

(D) Angiosperms

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q348. Which is the tallest gymnospermic tree species?

(A) Pinus

(B) Cycas

(C) Ginkgo

(D) Red wood tree Siquoia

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q349. Which of the following algae are suitable for human consumption?

(A) Laminaria and Fucus

(B) Gracilaria and Chondrus

(C) Porphyra and Spirogyra

(D) Rhodymania and Porphyra

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q350. Which of the following are true of most angiosperms?

(A) a triploid endosperm within the seed

(B) an ovary that becomes a fruit

(C) a small (reduced) sporophyte

(D) 1 and 2 only

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q351. Which of the following can be regarded as seedless vascular plants?

(A) Angiosperms

(B) Gymnosperms

(C) Bryophytes

(D) Pteridophytes

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q352. Which of the following group of marine algae are used as food?

(A) Chlamydomonas, Volvox and Gracilaria

(B) Porphyra, Laminaria and Sargassum

(C) Laminaria and Gracilaria

(D) Porphyra and Chlamydomonas

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q353. Which of the following groups of algae do not have eukaryotic organization?

(A) Green algae

(B) Blue-green algae

(C) Red algae

(D) Golden-brown algae

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q354. Which of the following gymnospermic corolloid roots are associated with N_2-fixing cyanobacteria?

(A) Pinus

(B) Cycas

(C) Cedrus

(D) Ginkgo

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q355. Which of the following gymnosperms is a bushy trailing shrub?

(A) Ephedra

(B) Cycas

(C) Pinus

(D) Araucaria

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q356. Which of the following is an algal parasite?

(A) Volvox

(B) Ulothrix

(C) Porphyra

(D) Cephaleuros

Correct Answer: **(D)** Level: **Moderate** Tagging: **Understanding**

Q357. Which of the following is an important character for fern classification

(A) Number of pinnae

(B) Number of pinnules

(C) Shape of leaf

(D) Position of sori and form of indusium

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q358. Which of the following is an important source of edible protein?

(A) Spirogyra

(B) Porphyra

(C) Spirulina

(D) Cephaleuros

Correct Answer: **(C)** Level: **Moderate** Tagging: **Applying**

Q359. Which of the following is correct about heterospory ?

(A) Selaginella and Salvinia are heterosporous

(B) Heterosporous pteridophytes have macro (large) and micro (small) spores

(C) The development of zygote within female gametophyte is the precursor to the seed habit

(D) All of the above

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q360. Which of the following is correct for Cycas reproduction?

(A) Zooidogamy is followed by siphonogamy

(B) Siphonogamy is followed by zooidogamy

(C) Siphonogamy only

(D) Zooidogamy

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q361. Which of the following is correct the ploidy level in labelled organs of plant shown in given figure?

(A) Sporophyte-Diploid (2n)

(B) Antheridia-Haploid (n)

(C) Rhizoids – Haploid (n)

(D) All of the above

Correct Answer: **(D)** Level: **Moderate** Tagging: **Analyzing**

Q362. Which of the following is incorrect with respect to angiosperms?

(A) Endosperm – Triploid

(B) Megaspore – Diploid

(C) Pollen grain – Haploid

(D) Synergid – Haploid

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q363. Which of the following is living fossil?

(A) Gnetum

(B) Cycas

(C) Ginkgo

(D) Both (b) and (c)

Correct Answer: **(D)** Level: **Moderate** Tagging: **Analyzing**

Q364. Which of the following is not correctly matched?

(A) Chlamydomonas - Unicellular flagellated

(B) Laminaria - Flattened leaf-like thallus

(C) Chlorella - Unicellular non-flagellated

(D) Volvox - Colonial form, non-flagellated

Correct Answer: **(D)** Level: **Moderate** Tagging: **Remembering**

Q365. Which of the following is true about bryophytes?

(A) They are thalloid

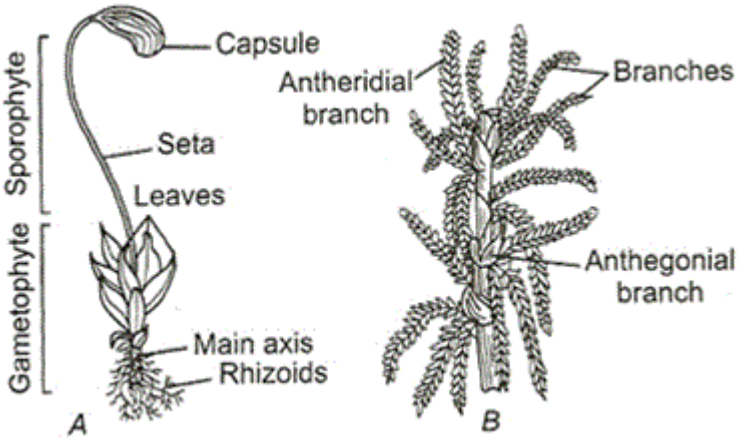
(B) They contain chloroplast

(C) They possess archegonia

(D) All of the above

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q366. Which of the following options correctly identifies the plants their groups from the following structure?



(A) A-Funaria-Moss; B-Sphagnum-Moss

(B) A-Funaria-Liverwort; B-Sphagnum-Moss

(C) A-Selaginella-Bryophytes; B-Funaria-Liverwort

(D) A-Selaginella-Pteridophytes; B-Funaria-Moss

Correct Answer: **(A)** Level: **Moderate** Tagging: **Analyzing**

Q367. Which of the following plant cells is not surrounded by a cell wall?

(A) Root hair cell

(B) Stem hair cell

(C) Gamete cell

(D) Bacterial cell

Correct Answer: **(C)** Level: **Moderate** Tagging: **Applying**

Q368. Which of the following plant does not have Rhizobium containing root nodules?

(A) Phaseolus

(B) Pinus

(C) Pisum

(D) Cicer

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q369. Which of the following plant group lack true roots, stem and leaves?

(A) Angiosperms

(B) Gymnosperms

(C) Pteridophytes

(D) Bryophytes

Correct Answer: **(D)** Level: **Moderate** Tagging: **Analyzing**

Q370. Which of the following pteridophytes is heterosporous

(A) Psilotum

(B) Adiantum

(C) Equsetum

(D) Salvinia

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q371. Which of the following represents the reserve food material and main component of cell wall in Chlorophyceae ?

(A) Starch - cellulose

(B) Floridians Starch - cellulose

(C) Mannitol and laminarian - cellulose and algin

(D) Starch - cellulose and algin

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q372. Which of the following statement is correct about the gametophytic stage in the alteration of generation with in the life cycle?

(A) Generation that produces the gametes

(B) Generation that produces the spores

(C) Generation that produces vascular tissue

(D) The diploid generation

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q373. Which of the following statement is true about the sporophytic stage in plant life cycle?

(A) The haploid generation

(B) Generation that produces the gametes

(C) Generation that produces the spores

(D) Generation that produces vascular

Correct Answer: **(C)** Level: **Moderate** Tagging: **Understanding**

Q374. Which of the following statements is wrong about bryophytes?

(A) Fertilization takes place in presence of water

(B) Gametophytic place is dominant in life cycle

(C) Sporophyte is physiologically dependent on gametophyte

(D) Zygote undergoes meiosis to produce sporophyte

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q375. Which of the following taxa shows zooidogamousoogamy?

I. Spirogyra II. Funaria

III. Pteris IV. Cycas

(A) I, II and III

(B) I, III and IV

(C) I, II and IV

(D) II, III and IV

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q376. Which of these is mismatched?

(A) Phaneros - Visible

(B) Kryptos - Concealed

(C) Gymno - Naked

(D) Bryon - Liverworts

Correct Answer: **(D)** Level: **Moderate** Tagging: **Analyzing**

Q377. Which one of the following formed in Spirogyra is different based on its nucleus?

(A) Zygospore

(B) Azygospore

(C) Aplanospore

(D) Akinete

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q378. Which one of the following is a living fossil ?

(A) Cycas

(B) Moss

(C) Saccharomyces

(D) Spirogyra

Correct Answer: **(A)** Level: **Moderate** Tagging: **Remembering**

Q379. Which one of the following is a vascular cryptogam?

(A) Equisetum

(B) Ginkgo

(C) Marchantia

(D) Cedrus

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q380. Which one of the following is considered important in the development of seed habit?

(A) Dependent sporophyte

(B) Heterospory

(C) Haplontic life cycle

(D) Free-living gametophyte

Correct Answer: **(B)** Level: **Moderate** Tagging: **Applying**

Q381. Which one of the following plants functions as symbolic nitrogen-fixing plant?

(A) Azolla

(B) Cycas

(C) Moss

(D) Marchantia

Correct Answer: **(A)** Level: **Moderate** Tagging: **Applying**

Q382. Which one pair of examples will correctly represent the grouping spermatophyta according to one of the schemes of classifying plants?

(A) Rhizopus,Triticum

(B) Ginkgo,Pisum

(C) Acacia,Sugarcane

(D) Pius,Cycas

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q383. Which region is responsible for origin of rhizoids in Funaria?

(A) Lateral region

(B) Dorsal region

(C) Ventral region

(D) Basal region

Correct Answer: **(D)** Level: **Moderate** Tagging: **Applying**

Q384. Which structure is common to both gymnosperms and angiosperms?

(A) stigma

(B) carpel

(C) ovule

(D) ovary

Correct Answer: **(C)** Level: **Moderate** Tagging: **Remembering**

Q385. Which type of moss is Funaria?

(A) Acrocarpous moss

(B) Pleurocarpous moss

(C) Anacrogynous moss

(D) Cleistocarpous moss

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q386. Which type of the rhizoids are present in Riccia?

(A) Unicellular smooth

(B) Multicellular smooth

(C) Unicellular smooth and tuberculated

(D) Multicellular smooth and tuberculated

Correct Answer: **(C)** Level: **Moderate** Tagging: **Applying**

Q387. While entering in the neck of a fern archegonium, sperms shows

(A) Phototaxy

(B) Chemotaxy

(C) Thermotaxy

(D) Cyclosis

Correct Answer: **(B)** Level: **Moderate** Tagging: **Understanding**

Q388. Winged pollen grains are found in

(A) Cycas

(B) Pinus

(C) Pteris

(D) Selaginella

Correct Answer: **(B)** Level: **Moderate** Tagging: **Remembering**

Q389. Zygotic meiosis takes place in

(A) Chlamydomonas

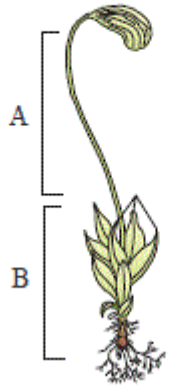
(B) Bryophytes

(C) Pinus

(D) Dryopteris

Correct Answer: **(A)** Level: **Moderate** Tagging: **Analyzing**

Q390. Select the option that correctly identifies A and B in the given figure.



(A) (A) Sporophyte (B) Gametophyte

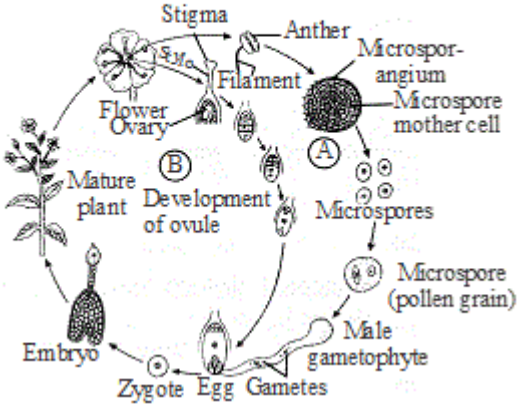
(B) (A) Gametophyte (B) Sporophyte

(C) (A) Male shoot (B) Female shoot

(D) (A) Female shoot (B) Male shoot

Correct Answer: **(A)** Level: **Difficult** Tagging: **Remembering**

Q391. The given figure shows two phases, A and B of a typical angiospermic life cycle. Select the correct option regarding it.



(A) A-Gametophytic generation (n)
B-Sporophytic generation (2n)

(B) A-Sporophytic generation (2n)
B-Gametophytic generation (n)

(C) A-Sporophytic generation (2n)
B-Sporophytic generation (2n)

(D) A-Gametophytic generation (n)
B-Gametophytic generation (n)

Correct Answer: **(A)** Level: **Difficult** Tagging: **Remembering**

In the question a statement of **Assertion** is given followed by a corre-
– sponding statement of **Reason** just below it. Of the statements, mark
the correct answer as :
Assertion Red algae contribute in producing coral reefs.

Reason Some red algae secrete and deposit calcium carbonate over
Q392. their walls.

(A) If both Assertion and Reason are true and Reason is the correct explanation of the Assertion.

(B) If both Assertion and Reason are true but the Reason is not the correct explanation of Assertion.

(C) If Assertion is true but Reason is false.

(D) If both Assertion and Reason are false.

Correct Answer: **(A)** Level: **Difficult** Tagging: **Remembering**

Q393. A multicellular, filamentous alga exhibits a type of sexual life cycle in which the meiotic division occurs after the formation of zygote. The adult filament of this alga has

(A) haploid vegetative cells and diploid gametangia

(B) diploid vegetative cells and diploid gametangia

(C) diploid vegetative cells and haploid gametangia

(D) haploid vegetative cells and haploid gametangia

Correct Answer: **(D)** Level: **Difficult** Tagging: **Remembering**

Q394. 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 pteridophytes.

(D) A primitive structure formed after fertilization in pteridophytes.

Correct Answer: **(C)** Level: **Difficult** Tagging: **Remembering**