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**Subject: Biology**

**Topic: Algae , Bryophytes & Pteridophytes**

**M.M. 200 COMPETITIVE TEST**  **Time: 60 Min.**

1. The plant body of green algae may be :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Unicellular | b) Colonial | c) Filamentous | d) All of these |

1. Green algae have cell wall made up of

|  |  |
| --- | --- |
| a) Outer layer of pectose and inner layer of cellulose | b) Cellulose + Algin |
| c) Inner layer of pectose and outer layer of algin | d) Cellulose + peptidoglycan |

1. Which pigment is found in brown algae

|  |  |
| --- | --- |
| a) Chl a + Chl c | b) Chl a + Chl c + Fucoxanthine |
| c) Chl a + Chl d | d) Chl a + r-Phycoerythrin |

1. The members of Phaeophyceae are found in

|  |  |  |  |
| --- | --- | --- | --- |
| a) Fresh water | b) Marine water | c) land | d) on rock |

1. Usually plant body of brown algae consist of

|  |  |  |  |
| --- | --- | --- | --- |
| a) Holdfast | b) Stipe | c) Frond | d) All of these |

1. Chl a + Chl d + r-Phycoerythrin are pigments of :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Rhodophyceae | b) Phaeophyceae | c) Chlorophyceae | d) Cyanophyceae |

1. Porphyra and Polysiphonia belongs to :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Chlorophyceae | b) Rhodophyceae | c) Cyanophyceae | d) Xanthophyceae |

1. Bryophytes includes :

|  |  |
| --- | --- |
| a) Mosses | b) Lycopods |
| c) Horse tail | d) Liverworts + Mosses |

1. Bryophytes mostly grow in –

|  |  |
| --- | --- |
| a) In dry area | b) In snow |
| c) In moist shaded areas in hills, damp & humid place | d) In water |

1. Bryophytes are called as “Amphibians of plant kingdom” because :

a) They are found in water only

b) Plants live in soil but are dependent on water for sexual reproduction

c) It needs water for spore formation

d) Water is essential for its survival

1. Choose the correct option :

a) In bryophytes sexual reproduction is Oogamy

b) Sex organs are unicellular in algae but multicellular from bryophytes to angiosperms

c) Archaegonium is flask shaped

d) All of these

1. Gametophytes generation is dominant in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Gymnosperm | b) Bryophytes | c) Angiosperms | d) Algae |

1. Which is dominant phase in life cycle of bryophytes :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Gametophyte | b) Sporophyte | c) Seta | d) Sporogonium |

1. Sphagnum is used for packaging material for transportation of living materials because :

|  |  |
| --- | --- |
| a) Acidic nature | b) Creeping capacity |
| c) Water holding capacity | d) (a) & (b) |

1. Sphagnum produce \_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
| a) Oil | b) Peat | c) Agar | d) Antibiotics |

1. Bryophytes are not characterised by :

|  |  |
| --- | --- |
| a) Well developed root system & vascular tissue | b) Rhizoids |
| c) Alternation of generation | d) Presence of embryo |

1. The sporophytes in mosses is \_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| a) Less elaborated than that in liverworts | b) More elaborated than that in liverworts |
| c) Equally elaborated than that in liverworts | d) None of these |

1. In bryophytes meiosis occurs in

|  |  |  |  |
| --- | --- | --- | --- |
| a) Spores | b) Gamete mother cell | c) Gametes | d) Spore mother cell |

1. In bryophytes male gametes is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Non flagellate | b) Biflagellate | c) 3 flagella | d) Many flagella |

1. The alternation of generation the sporophyte generation is \_\_\_\_\_ and gametophyte generation is \_\_\_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
| a) N , 2N | b) 2N , 2N | c) 2N , N | d) N , N |

1. What is the ecologic importance of pteridophytes:

|  |  |
| --- | --- |
| a) They are used as medicine purpose | b) They prevent soil erosion |
| c) They are frequently grown as ornamental plants | d) All of these |

1. Plant body in pteridophytes is

|  |  |
| --- | --- |
| a) Sporophyte (2N) having no root, stem & leaves | b) Gametophyte (N) having root, stem & leaves |
| c) Gametophyte (N) having no root, stem & leaves | d) Sporophyte (2N) having true root, stem & leaves |

1. Leaves bearing sporangium are sporophyll. In some pteridophytes sporophylls form compact mass structure called :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Sporocarp | b) Strobilus or cone | c) Spike | d) Flower |

1. Cone is found in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Equisetum | b) Salvinia | c) Selaginella | d) Both (a) & (c) |

1. Protonema stage is found in :

|  |  |
| --- | --- |
| a) Mosses | b) Liverworts |
| c) Diploid and found in pteridophytes | d) Haploid and found in pteridophytes |

1. Fresh water red algae is

|  |  |  |  |
| --- | --- | --- | --- |
| a) Batrachospermum | b) Corallina | c) Porphyra | d) Porphyridium |

1. Reserve food of red algae is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Laminaria | b) Floridean starch | c) Mannitol | d) Starch |

1. Sargasso sea is part of

|  |  |
| --- | --- |
| a) Pacific ocean | b) South Atlantic ocean |
| c) North Atlantic ocean | d) Indian ocean |

1. Rhodophyceae are reddish in colour due to the presence of

|  |  |  |  |
| --- | --- | --- | --- |
| a) Fucoxanthine | b) Phycocyanin | c) Phycoerythrin | d) Carotene |

1. Parasite *Cephaleuros* belongs to :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Green algae | b) Red algae | c) Brown algae | d) Bryophytes |

1. Green algae have starch storage body called

|  |  |  |  |
| --- | --- | --- | --- |
| a) Amyloplasts | b) Pyrenoids | c) Leucoplasts | d) Proplastids |

1. In mosses, rhizoids are :

|  |  |  |  |
| --- | --- | --- | --- |
| a) 2 types | b) unicellular | c) Multicellular | d) absent |

1. Heterosporus fern is

|  |  |  |  |
| --- | --- | --- | --- |
| a) Salvinia | b) Selaginella | c) Marsilae | d) All of these |

1. An example of colonial algae is

|  |  |  |  |
| --- | --- | --- | --- |
| a) Chlorella | b) Volvax | c) Ulothrix | d) Spirogyra |

1. Which of the following pairs is of unicellular algae are edible

|  |  |
| --- | --- |
| a) Gelidium & Gracilaria | b) Anabaena & Volvax |
| c) Chlorella & Spirulina | d) Laminarin & Sargassum |

1. Floridean starch structure similar to

|  |  |
| --- | --- |
| a) Amylopectin and glycogen | b) Mannitol and algin |
| c) Laminaria and cellulose | d) Starch and cellulose |

1. Phycoerythrin is major pigment in

|  |  |  |  |
| --- | --- | --- | --- |
| a) Blue green algae | b) Green algae | c) Brown algae | d) Red algae |

1. Genera like Selaginella and Salvinia produced two kind of spores. Such plants are known as

|  |  |  |  |
| --- | --- | --- | --- |
| a) Heterosporus | b) Homosporus | c) Homosorus | d) Heterosorus |

1. Which of the following algae contains Laminaria and mannitol as reserve food

|  |  |  |  |
| --- | --- | --- | --- |
| a) Ulothrix | b) Ectocarpus | c) Gracilaria | d) Volvax |

1. The following statement are associated with one class of algae. Identify the class.
2. One or more storage bodies called Pyrenoids present in chloroplast
3. They have a rigid cell wall made of inner layer of cellulose and outer layer of pectose.
4. Asexual reproduction is by flagellates spores.
5. *Volvax , Ulothrix , Spirogyra* and *Chara* are members of this family

|  |  |  |  |
| --- | --- | --- | --- |
| a) Chlorophyceae | b) Rhodophyceae | c) Phaeophyceae | d) None of these |

1. Pyrenoids are present in \_\_\_\_\_\_\_\_\_\_ in most of the green algae

|  |  |  |  |
| --- | --- | --- | --- |
| a) Mitochondria | b) Chloroplast | c) In cytosol | d) In nucleus |

1. Which of the following statement is correct :
2. Green algae are members of Chlorophyceae.
3. Brown algae are found in marine water.
4. Some red algae are found in fresh water, mostly in salty (marine) water.
5. The food of red algae is stored as Floridean starch
6. Red algae may occur in both lighted regions close to water surface and also at depths in ocean

|  |  |  |  |
| --- | --- | --- | --- |
| a) (i) & (iv) | b) (ii) , (iii) & (iv) | c) (i) , (iii) & (v) | d) All of these |

1. Consider the following statements :
2. Fragmentation is a process of vegetative reproduction in red algae.
3. Food is stored as Floridean starch in red algae, whose structure is similar to amylopectin and glycogen.
4. Cell wall of red algae is made up of chitin.

Which of the following statements is incorrect.

|  |  |  |  |
| --- | --- | --- | --- |
| a) (i) only | b) (ii) only | c) (iii) only | d) None of these |

1. Evolutionary classification is called :

|  |  |
| --- | --- |
| a) Artificial system | b) Natural system |
| c) Phylogenetic system | d) None of these |

1. Artificial system of classification is given by :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Linnaeus | b) De Candolle | c) Pliny the Elder | d) Bentham & Hooker |

1. Agar-agar is obtained from:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Porphyra | b) Gelidium | c) Gracilaria | d) Both (b) & (c) |

1. Hydrocolloids (water holding substances) produced by certain marine brown and red algae are :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Agar-agar | b) Algin | c) Carrageen | d) Both (b) & (c) |

1. Select the correct match of classes of algae with the number and position of insertion of flagella.

|  |  |
| --- | --- |
| a) Chlorophyceae : 2 – 8, apical flagella | b) Phaeophyceae : Absent |
| c) Rhodophyceae : 2 , Lateral flagella | d) None of these |

1. In pteridophytes, Phloem is without

|  |  |
| --- | --- |
| a) Sieve tube | b) Sieve cells |
| c) Companion cell | d) Both (b) and (c) |

1. Which of the following statement is incorrect about Selaginella (Pteridophytes):

a) It bears large leaves

b) It produces two kind of spores, macro & microspores

c) Its sporophyll may form distinct compact mass structure called strobilus or cone

d) Both (b) & (c)

**[Class =11th]**

**Answers**

**Topic: Algae , Bryophytes & Pteridophytes**

|  |
| --- |
| 1. d |
| 1. a |
| 1. b |
| 1. b |
| 1. d |
| 1. a |
| 1. b |
| 1. d |
| 1. c |
| 1. b |
| 1. d |
| 1. b |
| 1. a |
| 1. c |
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| 1. a |
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| 1. c |
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| 1. b |
| 1. d |
| 1. a |

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| 1. a |
| 1. b |
| 1. c |
| 1. c |
| 1. a |
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| 1. d |
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| 1. c |
| 1. c |
| 1. a |
| 1. d |
| 1. d |
| 1. a |
| 1. c |
| 1. a |