



## RAVI MATHS TUITION CENTRE , WHATSAPP - 8056206308

Time : 100 Mins

BIOLOGY TEST 5 PLANT KINGDOM 1

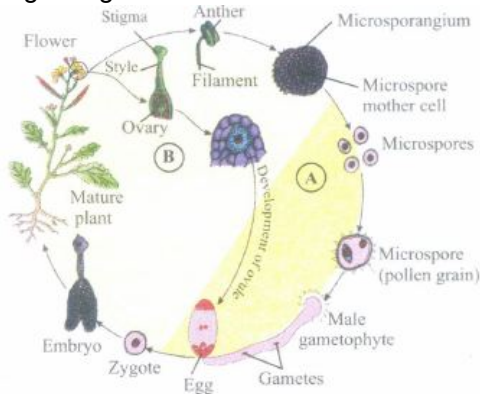
Marks : 500

1. *Monascus purpureus* is a yeast used commercially in the production of:-  
a) citric acid   b) blood cholesterol   c) ethanol   d) streptokinase for removing clots from the blood vessels
2. Nitrifying bacteria:-  
a) Oxidize ammonia to nitrates   b) Convert free nitrogen to nitrogen compounds  
c) Convert proteins into ammonia   d) Reduce nitrates to free nitrogen
3. In bryophytes  
a) sporophytes are dependent upon gametophytes  
b) sporophyte and gametophyte generations are independent   c) sporophyte in itself completes the life cycle  
d) gametophytes are dependent upon sporophyte.
4. \_\_\_\_\_ do not have free living gametophyte.  
a) Bryophytes   b) Pteridophytes   c) Gymnosperms   d) both (b) and (c)
5. In **Pinus**, male strobilus bears a large number of  
a) anthers   b) stamens   c) microsporophylls   d) megasporophylls.
6. Which type of sexual reproduction is found in *Volvox*?  
a) Isogamous   b) Anisogamous   c) Oogamous   d) All of these
7. select incorrect statement about viroid:-  
a) Free infectious RNA   b) It was discovered T.O Diener   c) It causes potato spindle tuber disease  
d) It contains high molecular weight RNA
8. Choose the correct set of bacterial disease  
a) Mumps, cholera, dengue   b) Chicken pox, typhoid, mumps   c) Mumps, tetanus, chicken pox  
d) cholera, typhoid, tetanus
9. Phycobilins are characteristic pigments of:-  
a) Rhodophyta and phaeophyta   b) Rhodophyta and phrophyta   c) phrophyta and cyanophyta  
d) Rhodophyta and cyanophyta
10. Floridean starch is characteristic feature of :-  
a) Polysiphonia, Gracilaria, Porphyra   b) Laminaria, sargassum, Porphyra  
c) Polysiphonia, Laminaria, Porphyra   d) Chara, Dictyota, Polysiphonia
11. Which one has the largest gametophyte?  
a) Cycas   b) Angiosperm   c) Selaginella   d) Moss
12. The prominent phase in the life cycle of bryophytes is  
a) gametophyte   b) sporophyte   c) seta   d) sporogonium.
13. Which group shows the most extensive metabolic diversity?  
a) Plantae   b) Animalia   c) Monera   d) Fungi
14. Select the correct combination of the statement (a-d) regarding the characteristics of certain organisms:  
(a) Methanogens are Archaeobacteria which produce methane in marshy areas  
(b) *Nostoc* is filamentous blue-green alga which assimilates atmospheric nitrogen  
(c) Chemosynthetic autotrophic bacteria synthesize cellulose from glucose  
(d) *Mycoplasma* lack a cell wall and can survive without oxygen  
The correct statements are:  
a) (a), (b), (c)   b) (b), (c), (d)   c) (a), (b), (d)   d) (b), (c)

15. Which of the statements regarding haplontic life cycle is incorrect?  
 a) Sporophytic generation is represented only by the one-celled zygote.    b) There is no free-living sporophyte.  
 c) Mitosis in the zygote results in the formation of haploid spores.  
 d) The haploid spores divide mitotically and form the gametophyte.

16. Which one of the following is a vascular cryptogam?  
 a) Ginkgo    b) Marchantia    c) Cedrus    d) Equisetum

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



a)

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

b)

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

c)

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

d)

A	B
Gametophytic generation (n)	Gametophytic generation (n)

18. Which of the following is an aquatic fern?  
 a) Adiantum    b) Dryopteris    c) Salvinia    d) Equisetum
19. Peat moss is  
 a) Sphagnum    b) Dryopteris    c) Funaria    d) Polytrichum
20. Moss peristome takes part in \_\_\_\_\_.  
 a) spore dispersal    b) photosynthesis    c) protection    d) absorption
21. Sperms of both Funaria and Pteris were released together near the archegonia of Pteris. Only Pteris sperms enter the archegonia as \_\_\_\_\_.  
 a) Pteris archegonia repel Funaria sperms    b) Funaria sperms get killed by Pteris sperms  
 c) Funaria sperms are less mobile    d) Pteris archegonia release chemical to attract its sperms
22. Infoldings of plasma membrane in bacteria are called as:-  
 a) Episomes    b) Plasmid    c) Pili    d) Mesosomes
23. Which pigment is found in phaeophyceae?  
 a) Chl.a, c and fucoxanthin    b) Chl.a, d and vioxanthin    c)  $\beta$  Carotene and phycocyanin    d) None of these
24. Cup-shaped chloroplast is present in  
 a) Spirogyra    b) Chlamydomonas    c) Ulothrix    d) Chara.
25. Armoured cell wall and biflagellated cells are characteristic of:-  
 a) Chrysophyta    b) Pyrrophyta    c) Euglenophyta    d) Cyanophyta
26. The giant Redwood tree (Sequoia sempervirens) is a an  
 a) angiosperm    b) free fern    c) pteridophyte    d) gymnosperm.
27. Seaweeds are a source of  
 a) chlorine    b) fluorine    c) bromine    d) iodine.
28. Seed habit first originated in \_\_\_\_\_.

- a) certain ferns   b) certain pines   c) certain monocots   d) primitive dicots
29. For higher plants, flowers are chiefly used as a basis of classification, because:-  
 a) These show a great variety in colour   b) It can be preserved easily  
 c) Reproductive parts are more conservative than vegetative parts   d) None of these
30. True nucleus is absent in:-  
 a) Mucor   b) Vaucheria   c) Volvox   d) Anabaena
31. Common example of red algae is  
 a) Porphyra   b) Batrachospermum   c) Ectocarpus   d) both (a) and (b).
32. 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
33. An alga very rich in protein is \_\_\_\_\_.  
 a) Spirogyra   b) Ulothrix   c) Oscillatoria   d) Chlorella
34. Pneumatophores occur in \_\_\_\_\_.  
 a) Carnivorous plants   b) Free-floating hydrophytes   c) Halophytes   d) Submerged hydrophytes
35. Which one is a wrong statement?  
 a) Brown algae have chlorophyll a and c, and fucoxanthin  
 b) Archegonia are found in Bryophyta, Pteridophyta and Gymnosperms   c) Mucor has biflagellate zoospores  
 d) Haploid endosperm is typical feature of gymnosperms
36. Read the given statements and select the correct option.  
 Statement 1 Bryophytes show alternation of generation.  
 Statement 2 A haploid gametophytic generation and a diploid sporophytic generation alternate in the life cycle.  
 a) Both statements 1 and 2 are correct.   b) Statement 1 is correct but statement 2 is incorrect.  
 c) Statement 1 is incorrect but statement 2   d) Both statements 1 and 2 are incorrect
37. Sexual reproduction in Spirogyra is an advanced feature because it shows \_\_\_\_\_.  
 a) physiologically differentiated sex organs.   b) different sizes of motile sex organs.  
 c) same size of motile sex organs.   d) morphologically different sex organs.
38. Gemmae are asexual reproductive bodies of  
 a) brown algae   b) mosses   c) liverworts   d) red algae
39. The 'wing' of Pinus seed is derived from \_\_\_\_\_.  
 a) testa   b) testa and tegmen   c) surface of ovuliferous scale   d) All of the above
40. In prokaryotes, chromatophores are-  
 a) Specialized granules responsible for colouration of cells  
 b) structures responsible for organizing the shape of the organism  
 c) Inclusion bodies lying free inside the cells for carrying out various metabolic activities  
 d) Internal membrane systems that may become extensive and complex in photosynthetic bacteria
41. Which one of the following statements about Cycas is incorrect?  
 a) It does not have a well organised female flower   b) It has circinate venation  
 c) Its xylem is mainly composed of xylem vessels   d) Its roots contain some blue-green algae
42. Algin is phycocolloid, obtained from the cell wall of  
 a) Polysiphonia and Porphyra   b) Gelidium and Laminaria   c) Microcystis and Volvox  
 d) Focus and Dictyota
43. Which one of the following is wrong statement  
 a) Phosphorus is a constituent of cell membranes certain nucleic acids and all proteins  
 b) Nitrosomonas and Nitrobacter are chemoautotrophs  
 c) Anabaena and Nostoc are capable of fixing nitrogen in free-living state also  
 d) Root nodule forming nitrogen fixers live aerobes under free-living conditions
44. Which kind of life-cycle pattern is exhibited by seed-bearing plants?  
 a) Haplontic   b) Diplontic   c) Haplo-diplontic   d) All of these
45. In which one of these the elaters are present along with mature spores in the capsule (to help in spore dispersal)?

- a) Riccia b) Marchantia c) Funaria d) Sphagnum
46. In pteridophytes, prothallus produces  
a) sporangia b) antheridia and archegonia c) vascular tissues d) root, stem and leaf.
47. Which of the following suffix is always correct for taxonomic categories without any exception?  
a) "-ia" for class like in class Mammalia b) "-ca" for genus like in genus Musca  
c) "-ceae" for family like is family poaceae d) "-oda" for phylum like in phylum Arthropoda
48. Which one of the following living organisms completely lacks a cell wall?  
a) Cyanobacteria b) Sea-fan(Gorgonia) c) Saccharomyces d) Blue-green algae
49. Algae with starch as reserve food material are also characterised by  
a) Presence of chlorophyll b b) Sulphated phycocolloids c) Nonsulphated phycocolloids  
d) Nonflagellate nature
50. Gametophytic plant body is nonvascular in  
a) Algae and liverworts b) Mosses and ferns c) gymnosperms and angiosperms d) All of these
51. Pteridophytes differ from mosses/ bryophytes in possessing \_\_\_\_\_.  
a) flagellate spermatozooids b) independent gametophyte c) well developed vascular system  
d) archegonia
52. Consider the following four statements whether they are correct or wrong:  
(a) The sporophyte in liverworts is more elaborate than that in mosses  
(b) Salvinia is heterosporous  
(c) The life-cycle in all seed-bearing plants is diplontic.  
(d) In Pinus male and female cones are borne on different trees.  
The two wrong statements together are:  
a) statements (a) and (b) b) statements (a) and (c) c) statements (a) and (d) d) statements (b) and (c)
53. Read the given statements and select the correct option.  
**Statement 1:** Main plant body of bryophytes is sporophytic.  
**Statement 2:** Main plant body of pteridophytes is gametophytic.  
a) Both statements 1 and 2 are correct. b) Statement 1 is correct but statement 2 is incorrect  
c) Statement 1 is incorrect but statement 2 is correct. d) Both statements 1 and 2 are incorrect.
54. At least a half of the total CO<sub>2</sub> fixation on Earth is carried out through photosynthesis by:  
a) angiosperms b) gymnosperms c) algae d) bryophytes
55. Nuclear membrane is absent in:-  
a) Penicillium b) Agaricus c) Volvox d) Nostoc
56. Plants of this group are diploid and well adapted to extreme conditions. They grow bearing sporophylls in compact structures called cones. The group in reference is  
a) monocots b) dicots c) pteridophytes d) gymnosperms.
57. What is the chromosome number in rhizoid, egg cells, capsule and protonema, if leaf cell of bryophyte contains 10 chromosomes?  
a) 10, 10, 20 and 10 respectively b) 10, 20, 20 and 10 respectively c) 20, 10, 20 and 10 respectively  
d) 10, 10, 20 and 20 respectively
58. Angiosperms A and B shown in the figure belong to the Class \_ and \_ respectively.
- a)
- | A             | B               |
|---------------|-----------------|
| Dicotyledonae | Monocotyledonae |
- b)
- | A               | B               |
|-----------------|-----------------|
| Monocotyledonae | Monocotyledonae |
- c)
- | A               | B               |
|-----------------|-----------------|
| Monocotyledonae | Monocotyledonae |
- d)
- | A             | B             |
|---------------|---------------|
| Dicotyledonae | Dicotyledonae |
59. Green algae are considered as ancestors of higher plants due to their resemblance with higher plants in:-  
a) Pigments b) Cell wall c) Stored food d) All the above
60. **Assertion:** Spores in mosses are contained within the capsule.  
**Reason:** Spores are formed by mitotic division in mosses.

- a) If both assertion and reason are true and reason is the correct explanation of assertion.  
 b) If both assertion and reason are true but 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.

61. All single celled eukaryotes placed under protista and the link with fungi, plants and animals, Slime moulds are saprophytic protists. what is incorrect about it:

- a) Body moves along decaying twigs and leaves engulfing organic matter  
 b) Under suitable conditions from plasmodium which may grow and spread over several feet  
 c) Under favourable conditions plasmodium differentiate and form fruiting body  
 d) Their spores possess cell wall

62. Archegoniophore occurs in:

- a) Chara b) Funaria c) Adiantum d) Marchantia

63. Match the following list of microbes and the importance:

(a) Saccharomyces cerevisiae	(i) Production of immunosuppressive agents
(b) Monascus purpureus	(ii) Ripening of swiss cheese
(c) Trichoderma polysporum	(iii) Commercial production of ethanal
(d) Propionibacterium sharmanii	(iv) Production of blood cholesterol lowering agents

a)	b)	c)	d)
a b c d	a b c d	a b c d	a b c d
iii i iv ii	iii iv i ii	iv iii i i i	iv ii i iii

64. The imperfect fungi which are decomposers of and help in mineral cycling belong to:

- a) Ascomycetes b) Deuteromycetes c) Basidiomycetes d) Phycomycetes

65. Phycoerythrin is present in

- a) Euglena b) Polysiphonia c) Chlamydomonas d) Fucus.

66. Laminaria belongs to the class

- a) chlorophyceae b) Cyanophyceae c) Phaeophyceae d) Rhodophyceae

67. Casparian strips occur in \_\_\_\_\_.

- a) Cortex b) Pericycle c) Epidermis d) Endodermis

68. In gymnosperms, the pollen chamber represents:

- a) The microsporangium in which pollen grains develop  
 b) A cell in the pollen grain in which the sperms are formed  
 c) A cavity in the ovule in which pollen grains are stored after pollination  
 d) An opening in the megagametophyte through which the pollen tube approaches the egg

69. In Chlorophyceae, sexual reproduction occurs by \_\_\_\_\_.

- a) isogamy and anisogamy b) isogamy, anisogamy and oogamy c) oogamy only  
 d) anisogamy and oogamy

70. Which one single organism or the pair of organism is correctly assigned to its or their named taxonomic group?

- a) Yeast used in making bread and beer is a fungus b) Nostoc and Anabaena are examples of protistes  
 c) Paramecium and plasmodium belong to the same kingdom as that of Penicillium  
 d) Lichen is a composite organism formed from the symbiotic association of an algae and protozoan

71. Gymnosperms

- a) Are Homosporous  
 b) Possess a male gametophyte which is highly reduced and is confined to single cell only  
 c) possess strobili on same or different trees  
 d) Show the presence of female gametophyte which is retained within microsporangium

72. Haplo-diplontic life cycle is found in

- a) bryophytes b) pteridophytes c) fungi d) both (a) and (b).

73. In which of the following characters, the angiosperms resemble gymnosperms?

- a) Presence of ovule b) Absence of endosperm c) Presence of vessels  
 d) Mode of fertilisation by zootidophytogamy

74. The algae shown in the given figure belong to the Class



- a) Chlorophyceae   b) Phaeophyceae   c) Rhodophyceae   d) Cyanophyceae.
75. "Ordines Anomali" of Bentham and Hooke includes  
 a) seed plants showing abnormal forms of growth and development  
 b) Plants represented only in fossil state  
 c) Plants described in the literature but which Bentham and Hooker did not see in original  
 d) A few orders which could not be place satisfactorily in the classification
76. The function of mesosome in prokaryotes is:-  
 a) Aerobic respiration   b) Cell wall formation   c) Both (1) and (2)   d)  $N_2$ -fixation
77. **Assertion:** Bryophytes are called as terrestrial amphibians.  
**Reason:** Bryophytes require an external layer of water on the soil surface for their existence.  
 a) If both assertion and reason are true and reason is the correct explanation of assertion.  
 b) If both assertion and reason are true but 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.
78. In Pinus, endosperm cells have 30 chromosomes then how many chromosomes are present in sieve cells:-  
 a) 30   b) 60   c) 10   d) 15
79. Brown algae is characterised by the presence of \_\_\_\_\_.  
 a) phycocyanin   b) phycoerythrin   c) fucoxanthin   d) haematochrome
80. **Assertion:** Stomata are found on the surface of leaves in gymnosperms.  
**Reason:** In gymnosperms, cuticle of leaves is thin.  
 a) If both assertion and reason are true and reason is the correct explanation of assertion.  
 b) If both assertion and reason are true but 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.
81. Chlorophylla, chlorophyll and phycoerythrin pigments are found in:  
 a) Cyanophyceae   b) Bacillariophyceae   c) Rhodophyceae   d) Chlorophyceae
82. \_\_\_\_\_ classification systems were based on evolutionary relationships between various organisms.  
 a) Natural   b) Artificial   c) Phylogenetic   d) Both (a) and (b)
83. Algae have cell wall made up of:  
 a) Cellulose, hemicellulose and pectins   b) Cellulose, galactans and mannans  
 c) Hemicellulose, pectins and proteins   d) Pectins, cellulose and proteins
84. **Assertion:** In gymnosperms, the male and female gametophytes do not have independent existence.  
**Reason:** They remain within the sporangia retained on the sporophyte.  
 a) If both assertion and reason are true and reason is the correct explanation of assertion.  
 b) If both assertion and reason are true but 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.
85. Find the false statement from the followings:-  
 a) Cyanobacteria, that are also referred to as bluegreen algae are not algae any more  
 b) Algae, bryophytes, pteridophytes, gymnosperms and Angiosperms are described under the kingdom Plantae  
 c) Artificial systems gave equal weightage to vegetative and sexual characteristics  
 d) Cytotaxonomy uses the chemical constituents of the plant cells to resolve confusions taxonomy
86. Which out of the following are included under Tracheophyta, i.e., vascular plants?  
 a) Pteridophytes   b) Gymnosperms   c) Angiosperms   d) All of these
87. 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	ii
sporophyte	differentiated

b)

i	ii
sporophyte	not differentiated

c)

i	ii
gametophyte	differentiated

d)

i	ii
gametophyte	not differentiated

88. Grass leaves curl inwards during very dry weather. Select the most appropriate reason from the following:

- a) Flaccidity of bulliform cells    b) Shrinkage of air spaces in spongy mesophyll    c) Tyloses in vessels  
d) Closure of stomata

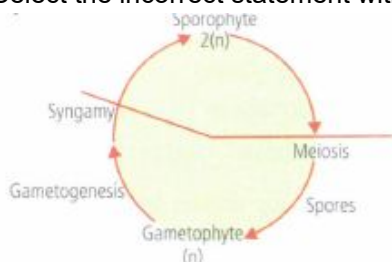
89. Seed plants are all

- a) heterosporous    b) dioecious    c) monoecious    d) homosporous.

90. Bryophytes comprise \_\_\_\_\_.

- a) Sporophyte of longer duration    b) Dominant phase of sporophyte which is parasitic  
c) Dominant phase of gametophyte which produces spores  
d) Small sporophyte phase generally parasitic on gametophyte

91. Select the incorrect statement with respect to given type of life cycle.



- a) Meiosis occurs at the time of spore formation in sporophytic plant.  
b) Gametophytic plant is produced by germination of spores.  
c) This life cycle is exhibited by most algae and some seed bearing plants  
d) This life cycle is exhibited by many bryophytes and pteridophytes.

92. Ringworm in humans is caused by :

- a) Viruses    b) Bacteria    c) Fungi    d) Nematodes

93. Which group of plantae represents gametophytic plant body with dependent sporophyte?

- a) Algae and bryophytes    b) Bryophytes and pteridophytes    c) Liverworts and mosses  
d) Ferns and Cycads

94. Which one of the following plants is monoecious?

- a) Pinus    b) Cycas    c) Papaya    d) Marchantia

95. Which part of poppy plant is used to obtain the drug Smack?

- a) Roots    b) Latex    c) Flowers    d) Leaves

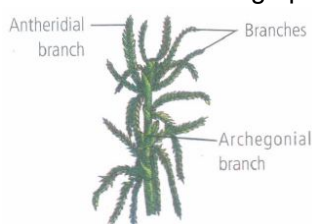
96. What is the ploidy of primary endosperm nucleus (PEN) in angiosperms?

- a) Haploid    b) Diploid    c) Triploid    d) Polyploid

97. Archegoniophore is present in \_\_\_\_\_.

- a) Marchantia    b) Chara    c) Adiantum    d) Funaria

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



- a) Marchantia - Liverwort    b) Sphagnum - Moss    c) Sphagnum - Liverwort    d) Funaria - Moss

99. In which group of organisms the cells walls for two thin overlapping shells which fit together

- a) Slime moulds    b) Chrysophytes    c) Euglenoids    d) Dinoflagellates

100. Which one of the following is a correct statement?

- a) Antheridiophores and archegoniophores are present in pteridophytes
  - b) Origin of seed habit can be traced in pteridophytes
  - c) pteridophyte gametophyte has a protonemal and leafy stage
  - d) In gymnosperms female gametophyte is free living
101. Which one of the following is commonly used in transfer of foreign DNA into crop plants?
- a) *Penicillium expansum*    b) *Trichoderma harzianum*    c) *Meloidogyne incognita*
  - d) *Agrobacterium tumefaciens*
102. Two plants can be conclusively said to belong to the same species if they:
- a) Have same number of chromosomes    b) Can reproduce freely with each other and form seeds
  - c) Have more than 90 percent similar genes    d) Look similar and possess identical secondary metabolites
103. Pigment-containing membranous extensions in some cyanobacteria are:
- a) Chromatophores    b) Heterocysts    c) Basal bodies    d) Pneumatophores
104. The "endosperm" of a gymnosperm represent:-
- a) Gametophytic tissue    b) Sporophytic tissue    c) Tissue formed by double fertilization    d) Polyploid tissue
105. The chief water conducting elements of xylem in gymnosperms are:
- a) Tracheids    b) Vessels    c) Fibres    d) Transfusion tissue
106. Which fungus is used extensively in biochemical and genetic work?
- a) *Agaricus*    b) *Aspergillus*    c) *Claviceps*    d) *Neurospora*
107. Mycorrhizal roots of \_\_\_\_\_ are associated with some fungal symbionts.
- a) *Pinus*    b) *Cedrus*    c) *Cycas*    d) *Ginkgo*
108. cone bearing Pteridophyta are:-
- a) *Lycopsidea* and *Psilopsida*    b) *Filicinae* and *Lycopsidea*    c) *Filicinae* and *Sphenopsida*
  - d) *Lycopsidea* and *Sphenopsida*
109. A well developed archegonium with neck consisting of 4-6 rows of neck canal cells, characterises:
- a) gymnosperms only    b) bryophytes and pteridophytes    c) pteridophytes and gymnosperms
  - d) gymnosperms and flowering plants
110. Which of the following are not membrane -bouns :
- a) Mesosomes    b) Vacuoles    c) Ribosomes    d) Lysosomes
111. Myxomycetes are-
- a) saprobes or parasites, having mycelia, a sexual reproduction by fragmentation, sexual reproduction
  - b) Slimy mass of multinucleate protoplasm, having pseudopodia-like structures for engulfing food reproduction through fragmentation of zoospores
  - c) Prokaryotic organisms, cellular or acellular saprobes or autotrophic, reproduce by binary fission
  - d) Eukaryotic, single-celled or filamentous saprobes or autotrophic, asexual reproduction by division of haploid individuals, sexual reproduction by fusion of two cells or their nuke
112. 'Red tides' are produced by
- a) Red algae    b) Dinoflagellates    c) Diatoms    d) Brown algae
113. Which of the following is responsible for peat formation?
- a) *Marchantia*    b) *Riccia*    c) *Funaria*    d) *Sphagnum*
114. Ergot of rye is caused by a species of:-
- a) *Claviceps*    b) *Phytophthora*    c) *Ucinula*    d) *Ustilago*
115. In class Phycomycetes the mycelium is:-
- a) Coenocytic and aseptate    b) Coenocytic and septate    c) Uninucleate and aseptate
  - d) Multinucleate and septate
116. Largest sperms in the plant world are found in \_\_\_\_\_ .
- a) *Pinus*    b) *Banyan*    c) *Cycas*    d) *Thuja*
117. In the five-kingdom classification, *Chlamydomonas* and *Chlorella* have been included in:
- a) *Plantae*    b) *Monera*    c) *Protista*    d) *Algae*



118. **Assertion:** Algae show only anisogamous type of reproduction.  
**Reason:** In algae, gametes can never be non flagellated.
- a) If both assertion and reason are true and reason is the correct explanation of assertion.
  - b) If both assertion and reason are true but 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.
119. Which of the following are noncellular organisms that are characterized by having an inert crystalline structure outside the living cell:-
- a) Bacteria
  - b) Mycoplasma
  - c) virus
  - d) Lichen
120. **Assertion:** Chlorella and Spirulina are used as a food supplement by space travellers.  
**Reason:** Chlorella and Spirulina are unicellular algae.
- a) If both assertion and reason are true and reason is the correct explanation of assertion.
  - b) If both assertion and reason are true but 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.
121. The dominant Phase in the life Cycle of pteridophyta is nutritionally equivalent to the
- a) gametophytic phase of bryophyta
  - b) Sporophytic Phase of Bryophyta
  - c) Gametophytic Phase of angiosperm
  - d) Gametophytic Phase of Gymnosperm
122. The sporophyte is the dominant phase in
- a) pteridophytes
  - b) gymnosperms
  - c) angiosperms
  - d) all of these.
123. Examine the given characters:-
- (A) Formation of only one functional megaspore in amegasporangium
  - (B) Formation of hard covering around megasporangium
  - (C) Development of embryo from zygote within the female gametophyte
  - (D) Retention of megaspore inside the megasporangium
- These were very essential events occurred during the course of evolution for the phenomenon of:-
- a) Heterospory
  - b) seed habit
  - c) Fruit formation
  - d) Covered seed formation
124. Dinoflagellates are called fire algae due to which character:-
- a) They appear like fire due to pigments
  - b) They produce fire due to friction
  - c) They occur on burnt places
  - d) They show bioluminescence
125. The main difference between gram  $\oplus$  and gram  $\ominus$  resides in the composition of:-
- a) Cilia
  - b) Cell-wall
  - c) Cell-membrance
  - d) Cytoplasm