

## NEET : CHAPTER WISE TEST-3

SUBJECT :- BIOLOGY

CLASS :- 11<sup>th</sup>

CHAPTER :- PLANT KINGDOM

DATE.....

NAME.....

SECTION.....

### (SECTION-A)

- Artificial system of classification  
(A) Includes features like anatomy, morphology and photochemistry  
(B) Was given by George Bentham and Joseph Dalton Hooker  
(C) Gave equal weightage to vegetative and floral characters  
(D) Brought together the closely related species
- System of classification proposed by Bentham and Hooker  
(A) Based on natural affinities among the organisms  
(B) Believes that organisms belonging to same taxa have a common ancestor  
(C) Considered embryology, photochemistry anatomy of plants as criteria and  
(D) Both (A) and (C)
- The classification of organisms on the basis of DNA sequencing is known as  
(A) Cytotaxonomy  
(B) Chemotaxonomy  
(C) Phenetics  
(D) Adansonian taxonomy
- Which of the following feature was not used by Bentham and Hooker for classification of plants?  
(A) External features (B) Anatomy  
(C) Photochemistry (D) Phylogeny
- Which of the following features is common in artificial, natural and phylogenetic system of classification?  
(A) Anatomy  
(B) Phylogeny  
(C) Morphology  
(D) Phytochemistry
- The thallus organization of Volvox is  
(A) Unicellular and motile  
(B) Flagellate colonial  
(C) Colonial and non-flagellate  
(D) Multicellular and coccid
- The main criterion used in classification of algae is  
A. Flagellation  
B. Type of pigmentation  
C. Chemistry of cell wall  
(A) (B) only (B) (B) and (C) only  
(C) (A) and (B) only (D) (A), (B) and (C)
- Which of the following are colonial and filamentous green algae respectively?  
(A) Ulothrix and Volvox  
(B) Volvox and Spirogyra  
(C) Chara and Volvox  
(D) Chlamydomonas and Chara
- Brown algae do not include  
(A) Filamentous form  
(B) Unicellular form  
(C) Parenchymatous form  
(D) Large massive form
- Algin and carrageen obtained from  
(A) Brown and red algae, respectively  
(B) Red and brown algae, respectively  
(C) Brown and green algae, respectively  
(D) Green and red algae, respectively
- Zoospores are absent in which of the following algae?  
(A) Ectocarpus (B) Laminaria  
(C) Volvox (D) Polysiphonia
- What is the food material in the members of class Rhodophyceae?  
(A) Floridean starch (B) Laminarin  
(C) Cellulose (D) Proteins
- How many of the following are associated with members of red algae?  
Laminarin and mannitol, Non-motile spores, Oogamous reproduction, Phycocolloids in cell wall, Complex post fertilization development  
(A) Three (B) Four  
(C) Two (D) Five

14. Gametangia and sporangia are non-jacketed and- unicellular in

- (A) Chara, Volvox, Polysiphonia
- (B) Ulothrix, Porphyra, Volvox
- (C) Chlamydomonas, Ulothrix
- (D) Chara, Gelidium, Gracilaria

15. Members of class Rhodophyceae mostly found in

- (A) Fresh water habitat in the colder regions
- (B) Marine habitats in the warmer areas
- (C) Fresh water habitat in the warmer areas
- (D) Marine habitat in the colder regions

16. An alga which can be employed as food for human being is

- (A) Laminaria
- (B) Porphyra
- (C) Spirulina
- (D) All of these

17. Consider the following statements

- A. They vary in colour from olive green to various shades of brown depending upon the amount of xanthophyll present.
- B. Present at the great depths in the oceans where relatively little light penetrates.
- C. The sexual reproduction shows considerable variation in the type and formation of sex cells.

	A	B	C
(A)	Phaeophyceae	Chlorophyceae	Rhodophyceae
(B)	Phaeophyceae	Rhodophyceae	Chlorophyceae
(C)	Chlorophyceae	Rhodophyceae	Phaeophyceae
(D)	Rhodophyceae	Chlorophyceae	Phaeophyceae

18. Choose the incorrect statements for red algae.

- (A) Absence of motile stage in life cycle.
- (B) Presence of red colour pigment phycoerythrin.
- (C) Female sex organ is multicellular and called nucule.
- (D) Storage food is very similar to amylopectin and glycogen.

19. Juvenile, filamentous stage of moss

- (A) Is called protonema
- (B) Develops from germination of spore
- (C) Reproduces by fragmentation
- (D) All of these

20. Which of the following is a dioecious bryophyte?

- (A) Funaria
- (B) Sphagnum
- (C) Marchantia
- (D) Riccia

21. Which of these may not be an ecological importance of bryophytes?

- (A) Peat formation used as fuel.
- (B) First organisms to colonise rocks.
- (C) Reduce the impact of falling rain.
- (D) Prevent soil erosion.

22. In which of the following bryophyte, sporophyte is not divided into foot, seta and capsule?

- (A) Marchantia
- (B) Riccia
- (C) Sphagnum
- (D) Funaria

23. Funaria consists of upright slender axes bearing arranged leaves

- (A) Spirally
- (B) Whorled
- (C) Oppositely
- (D) Both (B) and (C)

24. Pteridophytes do not form

- (A) Cones
- (B) Prothallus
- (C) Spores
- (D) Seeds

25. Pteridophytes are more advance than bryophytes. Which of the following features of pteridophytes justify this statement?

- (A) Internal fertilization
- (B) Sporophytic plant body
- (C) Presence of vascular tissue
- (D) More than one option is correct

26. Pteris, Selaginella and Equisetum resemble in possessing

- (A) Strobilus and Rhizophore
- (B) Adventitious roots and sporophylls
- (C) Two kinds of spores
- (D) Highly reduced gametophytes

27. Which of the following is not a members of class Pteridopsida?

- (A) Equisetum
- (B) Dryopteris
- (C) Pteris
- (D) Adiantum

28. Origin of seed habit or its foundation was laid down in some pteridophytes, but seed formation did not occur because of

- (A) Dependence of water for fertilization
- (B) Absence of precocious development gametophyte of male
- (C) Absence of integumented megasporangium
- (D) Absence of development of zygote into embryo within female gametophyte

29. Pteridophytes are  
 (A) Vascular cryptogams  
 (B) Nonvascular embryophytes  
 (C) First Archegoniates  
 (D) First vascular spermatophytes
30. Read the following statements w.r.t gymnosperms and state true (T) or false (F):  
 A. Include medium size tall trees or tall trees and shrubs of perennial habit.  
 B. Ovules remain exposed, both before and after fertilization.  
 C. All the members possess tap root system in association with fungal filament.  
 D. It is the smallest group of plant kingdom.
- |     |   |   |   |   |
|-----|---|---|---|---|
|     | A | B | C | D |
| (A) | T | T | F | F |
| (B) | T | T | F | T |
| (C) | T | F | T | F |
| (D) | F | F | T | T |
31. Gymnosperms are also called soft wood spermatophytes because they lack  
 (A) Cambium (B) Phloem fibres  
 (C) Thick wall tracheids (D) Xylem fibres
32. The integumented indehiscent megasporangium present in Pinus is called  
 (A) Ovule (B) Strobilus  
 (C) Carpel (D) Endosperm
33. Which of the following is the tallest tree species?  
 (A) Pinus (B) Sequoia  
 (C) Cycas (D) Cedrus
34. Adaptation in conifers to reduce water loss is/are presence of  
 (A) Thick cuticle  
 (B) Sunken stomata  
 (C) Needle-like leaves  
 (D) All of these
35. Sulphur shower is the phenomenon related to  
 (A) Degradation of sulphur rocks by Pimus roots  
 (B) Pollination in Cyear  
 (C) Yellow pollen clouds in pine forest  
 (D) Sulphur utilization by mycorrhizal roots

**(SECTION-B)**

36. The wing in the Pinus seed develops from  
 (A) Bract scale  
 (B) Exine  
 (C) Intine  
 (D) Ovuliferous scale
37. Conifers form  
 (A) Bisexual cones  
 (B) Motile spermatozoids  
 (C) Dimorphic branches  
 (D) Endosperm as post-fertilization tissue
38. If the endosperm cell of Pinus contains 12 chromosomes, then what will be the chromosome number in its megasporophyll, pollen, embryo, root respectively?  
 (A) 24, 12, 24, 24 (B) 12, 12, 24, 24  
 (C) 8, 4, 8, 8 (D) 8, 8, 4, 8
39. The thallus organization of Volvox is.  
 (A) Unicellular and motile  
 (B) Flagellate colonial  
 (C) Colonial and non-flagellate  
 (D) Multicellular and coccid
40. Select the correct set w.r.t. haeophyceae:
- |     | Stored food           | Flagella              | Cell wall                          |
|-----|-----------------------|-----------------------|------------------------------------|
| (A) | Laminarin             | 2. Heterokont lateral | Cellulose and Poly sulphate esters |
| (B) | Floridean starch      | No flagella           | Cellulose and pectin               |
| (C) | Mannitol              | 2. Heterokont Lateral | Cellulose and algin                |
| (D) | Laminarin And annitol | 2-8, Heterokontapical | Cellulose                          |
41. How many of the following structures in the algae are motile?  
 Zoospore, Chlamydozoospores, Akinetes, Gametes of Chlamydomonas, Gametes of Spirogyra, Gametes of Fucus, Gametes of Porphyra, Aplanospores  
 (A) Three (B) Four  
 (C) Five (D) Two
42. Members of Chlorophyceae, Phaeophyceae and Rhodophyceae are similar in  
 (A) Reserve food material  
 (B) Apical flagellation  
 (C) Fresh water habitat  
 (D) Chlorophyll a as primary photosynthetic pigment

43. Endosperm in gymnosperm is equivalent to angiosperms.

- (A) Nucleus
- (B) Carpel
- (C) Integumented megasporangium
- (D) Embryo sac

44. In which of the following algae all types of sexual re- production, i.e. isogamous, anisogamous and oogamous reproduction is found?

- (A) Chara
- (B) Chlamydomonas
- (C) Volvox
- (D) Spirogyra

45. Asexual reproduction in Marchantia can occur by

- (A) Spores
- (B) Protonema
- (C) Gemmae
- (D) Eliter

46. Which of the following feature/event in pteridophytes is a precursor to the seed habit considered an important step in evolution?

- (A) Development of cone
- (B) Vascular tissue
- (C) Internal fertilization
- (D) Heterospory

47. Polysulphate ester is present in the cell wall of

- (A) Red algae
- (B) Brown algae
- (C) Green algae
- (D) Both (A) and (B)

48. The algae which are mostly found in marine habitats with abundance in the warmer region

- A. Possess chlorophyll a and d
  - B. Show isogamous sexual reproduction
  - C. Do not show post-fertilization development
  - D. Are characterised by absence of motile spores and gametes
- (A) Only (A) and (C) are correct  
 (B) Only (C) is incorrect  
 (C) Only (A) and (D) are correct  
 (D) (A), (B), (C) and (D) are correct

49. Identify the algae in figure and choose the correct option.



Name of algae	Number of flagella in gametes	Stored food
(A) Spirogyra	Absent	Starch
(B) Ulothrix	2, Apical	Starch
(C) Kelp	2, Laterally inserted, Heterokont	Laminarin mannitol
(D) Polysiphonia	Absent	Floridean starch

50. Read the following statements and select the correct option.

- A. Many species of Porphyra, Laminaria and Sargassum are among the 70 species of freshwater algae used as food.
  - B. At least a half of the total CO<sub>2</sub> fixation on earth is carried out by algae.
- (A) Only (A) is correct  
 (B) Only (B) is correct  
 (C) Both (A) and (B) are correct  
 (D) Both (A) and (B) are incorrect