

## NEET BIOLOGY 2018-19 - Chennai

Periodic Test : 020

Number of questions: 150

Name: \_\_\_\_\_

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Time: 3HRS

**Negative Marks : 4 marks for correct attempt & 1 mark deducted for every wrong attempt.**

- An example of colonial alga is  
(a) Volvox  
(b) Ulothrix  
(c) Spirogyra  
(d) Chlorella
- Select the mismatch.  
(a) Cycas - Dioecious  
(b) Salvinia - Heterosporous  
(c) Equisetum - Homosporous  
(d) Pinus - Dioecious
- Zygotic meiosis is characteristic of  
(a) Fucus  
(b) Funaria  
(c) Chlamydomonas  
(d) Marchantia
- Life cycles of Ectocarpus and Fucus respectively are  
(a) diplontic, haplodiplontic  
(b) haplodiplontic, diplontic  
(c) haplodiplontic, haplontic  
(d) haplontic, diplontic
- Conifers are adapted to tolerate extreme environmental conditions because of  
(a) broad hardy leaves  
(b) superficial stomata  
(c) thick cuticle  
(d) presence of vessels
- Which one of the following statements is wrong?  
(a) Algae increase the level of dissolved oxygen in the immediate environment.  
(b) Algin is obtained from red algae, and carrageenan from brown algae.  
(c) Agar-agar is obtained from Gelidium and Gracilaria.  
(d) Laminaria and Sargassum are used as food.
- Select the correct statement.  
(a) Sequoia is one of the tallest trees.  
(b) The leaves of gymnosperms are not well adapted to extremes of climate.  
(c) Gymnosperms are both homosporous and heterosporous.  
(d) Salvinia, Ginkgo and Pinus all are gymnosperms.

8. In bryophytes and pteridophytes, transport of male gametes requires

- (a) birds
- (b) water
- (c) wind
- (d) insects

9. Which one of the following statements is wrong?

- (a) Chlorella and Spirulina are used as space food.
- (b) Mannitol is stored food in Rhodophyceae,
- (c) Algin and carrageenan are products of algae.
- (d) Agar-agar is obtained from Gelidium and Gracilaria.

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

- (a) Pteris
- (b) Pinus
- (c) Funaria
- (d) Marchantia

11. Read the following five statements (A to E) and select the option with all correct statements.

- (a) Mosses and lichens are the first organisms to colonise a bare rock.
- (b) Selaginella is a homosporous pteridophyte,
- (c) Coralloid roots in Cycas have VAM

(d) Main plant body in bryophytes is gametophytic, whereas in

pteridophytes it is sporophytic,

(e) In gymnosperms, male and female gametophytes are present within sporangia located on sporophyte.

- (a) A, D and E      (b) B, C and E
- (c) A, C and D      (d) B, C and D

12. Male gametes are flagellated in

- (a) Ectocarpus
- (b) Spirogyra
- (c) Polysiphonia
- (d) Anabaena

13. Which one of the following is wrong about Chara?

- (a) Upper oogonium and lower round antheridium
- (b) Globule and nucule present on the same plant
- (c) Upper antheridium and lower oogonium
- (d) Globule is male reproductive structure

14. Which of the following is responsible for peat formation:

- (a) Marchantia
- (b) Riccia
- (c) Funaria
- (d) Sphagnum

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

- (a) Pteris
- (b) Funaria
- (c) Lilium
- (d) Pinus.

16. Select the wrong statement.

- (a) In Oomycetes, female gamete is smaller and motile, while male gamete is larger and non-motile.
- (b) Chlamydomonas exhibits both isogamy and anisogamy and Fucus shows oogamy
- (c) Isogametes are similar in structure, function and behavior.
- (d) Anisogametes differ either in structure, function or behavior

17. Isogamous condition with non-flagellated gametes is found in

- (a) Volvox
- (b) Fucus
- (c) Chlamydomonas
- (d) Spirogyra.

18. Monoecious plant of Chara shows occurrence of

- (a) upper antheridium and lower oogonium on the same plant
- (b) upper oogonium and lower antheridium on the same plant
- (c) antheridiophore and archegoniophore on the same plant
- (d) stamen and carpel on the same plant,

19. Read the following statements (A - E) and answer the question which follows them.

- A. In liverworts, mosses and ferns gametophytes are free-living.
- B. Gymnosperms and some ferns are heterosporous.
- C. Sexual reproduction in Fucus, Volvox and Albugo is oogamous,
- D. The sporophyte in liverworts is more elaborate than that in mosses.
- E. Both, Pinus and Marchantia are dioecious.

How many of the above statements are correct?

- (a) Three
- (b) Four
- (c) One
- (d) Two

20. Syngamy can occur outside the body of the organism in

- (a) mosses
- (b) (h) algae
- (c) ferns
- (d) fungi.

21. What is common in all the three, Funaria, Dryopteris and Ginkgo?

- (a) Presence of archegonia
- (b) Well developed vascular tissues
- (c) Independent gametophyte
- (d) Independent sporophyte

22. Which one of the following is wrongly matched?

- (a) Spirogyra - Motile gametes

- (b) Sargassum - Chlorophyll
- (c) Basidiomycetes - Puffballs
- (d) Nostoc - Water blooms

23. The plant body is thalloid in

- (a) Sphagnum
- (b) Salvinia
- (c) Marchantia
- (d) Funaria.

24. Which one of the following is common to multicellular fungi, filamentous algae and protonema of mosses?

- (a) Diplontic life cycle
- (b) Members of Kingdom Plantae
- (c) Mode of nutrition
- (d) Multiplication by fragmentation

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

- (a) Pteridophyte gametophyte has a protonemal leafy stage.
- (b) In gymnosperms, female gametophyte is free-living,
- (c) Antheridiophores and archegoniophores are present in pteridophytes,
- (d) Origin of seed habit can be traced in pteridophytes.

26. In Pinus, the wings of the seed develops from

- (a) Ovuliferous scale
- (b) (h) Integument

- (c) Nucellus
- (d) Bract.

27. In bryophytes

- (a) both generations are independent
- (b) gametophytes are dependent upon sporophytes
- (c) sporophytes complete their life cycle
- (d) sporophytes are dependent upon gametophytes.

28. Which one is the most advanced from evolutionary view point?

- (a) Selaginella
- (b) Funaria
- (c) Chlamydomonas
- (d) Pinus

29. Pinus differs from mango in having

- (a) tree habit
- (b) green leaves
- (c) ovules not enclosed in ovary
- (d) wood.

30. Pyrenoids are the centres for formation of

- (a) Porphyra
- (b) enzymes
- (c) fat
- (d) starch.

31. Pteridophytes differ from bryophyte and thallophytes in having

- (a) vascular tissues
- (b) motile antherozoids

- (c) archegonia  
(d) alternation of generations
32. Chloroplast of Chlamydomonas is  
(a) stellate  
(b) cup-shaped  
(c) collar-shaped  
(d) spiral.
33. In Ulothrix/Spirogyra 'reduction division (meiosis) occurs at the time of  
(a) gamete formation  
(b) zoospore formation  
(c) zoospore germination  
(d) vegetative reproduction.
34. Pteridophytes differ from mosses/bryophytes in possessing  
(a) independent gametophyte  
(b) well developed vascular system  
(c) archegonia  
(d) flagellate spermatozoids
35. Protonema occurs in the life cycle of  
(a) Riccia  
(b) Funaria  
(c) Anthoceros  
(d) Spirogya
36. Resin and turpentine are obtained from  
(a) Cycas  
(b) Pinus  
(c) Cedrus  
(d) abies.
37. Turpentine is got from  
(a) angiospermous wood  
(b) bryophytes  
(c) gymnospermous wood  
(d) ferns.
38. In Pinus, the pollen grain has 6 chromosomes then in its endosperm will have  
(a) 12  
(b) 18  
(c) 6  
(d) 24
39. A plant having seeds but lacking flowers and fruits belongs to  
(a) pteridophytes  
(b) mosses  
(c) ferns  
(d) gymnosperms
40. Which one of the following is not common between Funaria and Selaginella?  
(a) Archegonium  
(b) Embryo  
(c) Flagellate sperms  
(d) Roots
41. The plant group that produces spores and embryo but lacks vascular tissues and seeds is  
(a) Pteridophyta  
(b) Rhodophyta  
(c) Bryophyta

- (d) Phaeophyta.
42. A plant in which sporophytic generation is represented by zygote is
- (a) Pinus
  - (b) Selaginella
  - (c) Chlamydomonas
  - (d) Dryopteris.
43. Bryophytes are amphibians because
- (a) they require a layer of water for carrying out sexual reproduction
  - (b) they occur in damp places
  - (c) they are mostly aquatic
  - (d) all the above.
44. Which one has the largest gametophyte?
- (a) Cycas
  - (b) Angiosperm
  - (c) Selaginella
  - (d) Moss
45. The common mode of sexual reproduction in Chlamydomonas is
- (a) isogamous
  - (b) anisogamous
  - (c) oogamous
  - (d) hologamous.
46. The product of conjugation in Spirogyra or fertilization of Chlamydomonas is
- (a) zygospore
  - (b) zoospore
  - (c) oospore
  - (d) carpospores
47. Moss peristome takes part in
- (a) spore dispersal
  - (b) photosynthesis
  - (c) protection
  - (d) absorption.
48. Apophysis in the capsule of Funaria is
- (a) lower part
  - (b) upper part
  - (c) middle part
  - (d) fertile part.
49. In Pinus/gymnosperms, the haploid structure are
- (a) megaspore, endosperm and embryo
  - (b) megaspore, pollen grain and endosperm
  - (c) megaspore, integument and root
  - (d) Pollen grain, leaf and root.
50. Sperms of both Funaria and Pteris were released together near the archegonia of Pteris, only its 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.