

NEET BIOLOGY 2018-19 - Chennai

Test ID : 040

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Number of questions: 150

Time: 3HRS

Name: _____

ID No: _____

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

1. Match the algae given in column I with their example given in column II and choose the correct combination from the options given.

Column I	Column II
A. Green alga	I. Dictyota
B. Brown alga	II. Porphyra
C. Red alga	III. Spirogyra
(a) A- III; B - III; C - I	
(b) A- III; B - I; C - II	
(c) A- II; B - III; C - I	
(d) A- I; B - II; C - III	

2. Blue – green algae belong to-----

- (a) eukaryotes
- (b) prokaryotes
- (c) rhodophyceae
- (d) chlorophyceae

3. Which of the following facilitates opening of stomata aperture?

- (a) Decrease in turgidity of guard cells
Radial orientation of cellulose
- (b) micro fibrils in the cell all of guard cells
- (c) Longitudinal orientation of cellulose micro fibrils in the cell wall of guard cells
- (d) Contraction of outer wall of guard cells

4. Which of the following example belong to the same class of algae?

- (a) chara, focus, polysiphonia
- (b) volvox, spirogyra, chlamydomonas
- (c) porphyra, ectocarpus, ulothrix
- (d) sargassum, laminaria, gracilaria

5. Which of the following statements with respect to algae are correct?

- (i) Fusion between one large, non-motile female gamete and a smaller, motile male gamete is termed as oogamous.
- (ii) Fusion of two gametes similar in size is called anisogamous.
- (iii) In chlorophyceae, the major pigments are chlorophyll a and b, and the food is stored as mannitol
- (a) (i) and (v)
- (b) (iii) and (v)
- (c) (i) and (ii)
- (d) (i) and (iv)

6. Why rhodophyta exhibit a red colour?

- (a) Since most rhodophyta grow at great depths, the chlorophyll can only absorb light in the red area of the spectrum.
- (b) The wavelengths of light that are absorbed by chlorophyll are passed to phycoerythrin (a red pigment).
- (c) Red pigment of rhodophyta absorbs all the light waves.
- (d) The light reaching the greatest depth in water is in the blue-green region of the spectrum, is absorbed by phycoerythrin.

7. Which of the following groups of plants play an important role in plant succession on bare rocks/soil?

- (a) Algae
- (b) Bryophytes
- (c) Pteridophytes
- (d) Gymnosperms

8. Algin, carrageenan and proteins are obtained from

- (a) red algae, brown algae, green algae respectively
- (b) brown algae, red algae, green algae respectively
- (c) red algae, green algae, brown algae respectively
- (d) green algae, brown algae, red algae respectively

9. Flagellate isogametes and anisogametes are found in -----

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

10. Classification of plants proposed by Carolus Linnaeus was artificial because it was based on

- (a) only a few morphological characters.
- (b) evolutionary tendencies which are diverse.
- (c) anatomical characters which are adaptive in nature.
- (d) physiological traits along with morphological characters.

11. Which of the following branch of science is being described by the given statements?

- (i) It can easily done by using computers based on all observable characters.
- (ii) Numbers and codes are assigned to all the characters and the data are then processed.

(iii) Each character is given equal weightage and at the same time hundred of characters can be considered.

- (a) Cytotaxonomy
- (b) Numerical taxonomy
- (c) Chemotaxonomy
- (d) β - taxonomy

12. Phylogenetic classification system is based on the

- (a) morphological characters of various organisms.
- (b) anatomical characters of various organisms.
- (c) physiological characters of various organisms.
- (d) evolutionary relationships between the various organisms.

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

- (a) Ulothrix
- (b) Chlorella
- (c) Spirogyra
- (d) Polysiphonia

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

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

15. Which one of the following statements is incorrect?

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

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

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

17. Male gametophyte in angiosperms produces

- (a) single sperm and vegetative cell.
- (b) single sperm and two vegetative cells.
- (c) three sperms.
- (d) two sperms and a vegetative cell.

18. In bryophytes and pteridophytes, transport of male gametes requires -----

- (a) Wind
- (b) Insects
- (c) Birds
- (d) Water

19. An example of colonial alga is -----

- (a) Volvox
- (b) Ulothrix
- (c) Spirogyra
- (d) Chlorella

20. Life cycle of Ectocarpus and Fucus respectively are:

- (a) Diplontic, Haplodiplontic
- (b) Haplodiplontic, Diplontic
- (c) Haplodiplontic, Haplontic
- (d) Haplontic, Diplontic

21. Double fertilization is exhibited by ----

- (a) algae
- (b) fungi
- (c) angiosperms
- (d) gymnosperms

22. Winged pollen grains are present in ----

- (a) Mustard
- (b) Cycas
- (c) Pinus
- (d) Mango

23. An association between roots of higher plants and fungi is called -----

- (a) lichen
- (b) fern
- (c) mycorrhiza
- (d) blue green algae

24. Which of the following statements about bacteria is incorrect?

- (a) Some bacteria are parasitic
- (b) Food poisoning is caused by products of putrefying bacteria.
- (c) Bacteria reproduce by cell division, as often as once every twenty minutes.
- (d) Bacteria manufacture food by help of chloroplasts.

25. Common cold is a ----- disease.

- (a) bacterial
- (b) viral
- (c) protozoan
- (d) fungal

26. Which of the following bacteria plays an important role in recycling the nutrients like nitrogen, phosphorus, iron and sulphur?

- (a) Chemoheterotrophic bacteria
- (b) Chemosynthetic autotrophic bacteria
- (c) Parasitic bacteria
- (d) Saprophytic bacteria

27. In Amoeba and Paramecium osmoregulation occurs through.

- (a) Pseudopodia
- (b) Nucleus
- (c) Contractile vacuole
- (d) General surface

28. Which of the following statement is correct regarding sexual reproduction in fungi?

- (a) Plasmogamy is followed by karyogamy.
- (b) Sexual reproduction is absent in fungi.
- (c) Sexual reproduction takes place by conidia or sporangiospores or zoospores.
- (d) Karyogamy is followed by Plasmogamy.

29. Which of the following statements about deuteromycetes are correct?

- (a) Some members are saprophytes or parasites.
- (b) A large number of members are decomposers of litter and help in mineral cycling.
- (c) *Alternaria*, *Colletotrichum*, *Cercospora* and *Trichoderma* are examples of deuteromycetes.
- (a) (i) and (ii)
- (b) (i) and (iii)
- (c) (ii) and (iii)
- (d) (i), (ii) and (iii)

30. Analyse the given statements and answer the questions.

- (i) Kingdom Protista forms a link between monerans and the other organisms like plants, animal and fungi.
 - (ii) Protists reproduce asexually and sexually by a process involving cell fusion and zygote formation.
 - (iii) Being eukaryotes, the protistan cell body contains a well – defined nucleus and other membrane – bound organelles.
- Find out the statements that are correct?
- (a) (i) and (ii)
 - (b) (i) and (iii)
 - (c) (ii) and (iii)
 - (d) (i), (ii) and (iii)

31. Analyse the following statements (i) to (iv) and answer the questions.

- (i) In this group, the *plasmidium* differentiates and forms fruiting bodies, bearing spores at their tips.
- (ii) Spores possess true walls.
- (iii) The spores are dispersed by air currents.
- (iv) The spores are extremely resistant and survive for many years even under adverse conditions.

The above statements belongs to:

- (a) Chrysophytes
- (b) Slime moulds
- (c) Dinoflagellates
- (d) Euglenoid

32. The shape of tobacco mosaic virus is__

- (a) spherical-shaped
- (b) rod-shaped
- (c) cuboidal
- (d) oval-shaped

33. In dinophyceae the two flagella are

- (a) Anterior
- (b) one transverse and other vertical
- (c) lateral
- (d) posterior

34. Which of the following statements are correct to describe viruses?

- (a) it is simple and unicellular organisms
- (b) it contains DNA or RNA and enclosed by protein coat
- (c) it possesses own metabolic system and Respond to stimuli.
- (d) It maintains genetic continuity and undergo mutations.

35. Difference between virus and viroid is

- (a) absence of protein coat in viroid but present in virus.
- (b) presence of low molecular weight RNA in virus but absent in viroid
- (c) Both (a) and (b)
- (d) None of these

36. Naked cytoplasm, multinucleated and saprophytic are the characteristics features of -----

- (a) monera
- (b) Protista
- (c) fungi
- (d) slime moulds

37. The symbiotic association between fungi and algae is called -----

- (a) lichen
- (b) mycorrhiza
- (c) rhizome
- (d) endomycorrhiza

38. Which of the following statements is incorrect for virus?

- (a) Viruses are obligate parasites.
- (b) Viruses can multiply only when they are inside the living cells.
- (c) Viruses can not pass through bacterial filters.
- (d) Viruses are made up of protein and DNA or RNA (never both DNA and RNA).

39. Which of the following statement is incorrect?

- (a) TMV has a double-stranded RNA molecule.
- (b) Most plant viruses are RNA viruses.
- (c) The bacteriophage has double-stranded DNA.
- (d) Most animal viruses are DNA viruses.

40. The subunit of capsid is called -----

- (a) core
- (b) nucleotide
- (c) amino acid
- (d) capsomere

41. Match the terms given in column I with their examples given in column II and choose the correct option.

Column I (Terms)	Column II (Examples)
A. Ascus	I. Spirulina
B. Basidium	II. Penicillium
C. Cyanobacteria	III. Agaricus
D. Cyanobacteria	IV. Euglena
E. Animalia	V. Sponges

- (a) A-II; B-III; C-IV; D-V; E-I
- (b) A-I; B-II; C-III; D-V; E-IV
- (c) A-II; B-V; C-III; D-I; E-IV
- (d) A-II; B-III; C-IV; D-I; E-V

42. Which of the following organisms is/are correctly assigned its/their taxonomic group?

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

43. Which of the following pairs is incorrectly matched?

- (a) Anabaena - Cyanobacteria
- (b) Amoeba - Protozoa
- (c) Gonyaulax - Dinoflagellates
- (d) Albugo - Chrysophytes

44. Which class of fungi lacks sex organs but the process of plasmogamy is brought about by fusion of two vegetative or somatic cells of different strains or genotypes?

- (a) Sac fungi
- (b) Bracket fungi
- (c) Imperfect fungi
- (d) Phycomycetes

45. Assume that two normal hyphal cells of different fungal mating types unite.

After a period of time, the cell between these cells will dissolve producing a ----

- (a) mycelium
- (b) fruiting body
- (c) zygote
- (d) dikaryotic cell, which is also heterokaryotic.

46. *Ustilago* causes plant diseases (called smuts) because

- (a) they parasites on cereals
- (b) they lack mycelium
- (c) the develop spoty masses of spores
- (d) their affected parts becomes completely black

47. Read the following statements and answer the questions

(i) some members are saprophytes or parasites while a large number of them are decomposers of litter and help in mineral cycling.

(ii) they reproduce only by asexual spores known as conidia.

(iii) Mycelium is septate and branched.

(iv) *alternaria*, *colletotrichium*, *trichoderma* are examples of this class.

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

48. Which of the following class of fungi is being described by the given statements?

(i) They are found in aquatic habitats and on decaying wood in moist and damp places.

(ii) Mycelium is aseptate and coenocytic.

(iii) Asexual reproduction takes place by zoospores (motile) or by aplanospores (non-motile).

(iv) Some common examples are *Mucor*, *Rhizopus* and *Albugo*.

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

49. Fungi are filamentous with the exception of "x" which is unicellular.

Identify x.

- (a) Yeast
- (b) *Albugo*
- (c) *Mucor*
- (d) Lichen.

50. Clamp connection is found in

- (a) Basidiomycetes
- (b) ascomycetes
- (c) saccharomycetes
- (d) Haplomycetes.