NEET Sample Paper 3 PDF for Class 11 (Botany)

1. Which of the following match is incorrect?
(1) Fungi – Spore formation
(2) Hydra – Budding
(3) Planaria – Regeneration
(4) Yeast – Conidia

2. The biological concept of species was given by;
(1) John Ray
(2) Linnaeus.
(3) Aristotle
(4) Ernst Mayr.

3. According to binomial nomenclature, every living organism has;
(1) two scientific name with single component.
(2) one scientific name with two components.
(3) two names, one Latin and other common.
(4) one common name with three components.

4. The equivalent rank of Carnivora in taxonomic categories of man and housefly is respectively;
(1) Homo and Musca.
(2) Hominidae and Muscidae.
(3) Mammalia and Insecta.
(4) Primata and Diptera.

5. Which of the following statements is correct about Trypanosoma?
(1) They are flagellated protozoan.
(2) They are parasite.
(3) They cause sleeping sickness.
(4) All of these.

6. A system of classification, in which external and

internal features are considered, is
(1) natural system
(2) phylogenetic system
(3) artificial system
(4) synthetic system

7. Which of the following environmental conditions are essential for optimum growth of Mucor on a piece of bread?
(a) Temperature of about 25°C
(b) Temperature of about 5°C
(c) Relative humidity of about 5%
(d) Relative humidity of about 95%
(e) A shady place
(f) A brightly illuminated place

8. Pathogen of white rust disease belongs to the group
(1) Ascomycetes (2) Basidiomycetes
(3) Phycomycetes (4) Deuteromycetes

9. Natural system of classification differs from artificial system in;
(1) employing only one floral trait
(2) taking only one vegetative trait
(3) bringing out similarities and dissimilarities
(4) developing evolutionary trends

10. The major pigments in green algae are _____ and _____; and stored food is _____.
(1) Chl a; Chl d; Starch
(2) Chl a; Chl c; Floridean starch
(3) Chl a; Chl b; Starch
(4) Chl a; Chl c; manitol

11. Which of the following is regarded as giant algae?
(1) Porphyra
(2) Gelidium

(3) Polysiphonia
(4) Nereocystis

12. Protonema is
(1) a fossil pteridophyte.
(2) the juvenile phase of a moss gametophyte.
(3) a part of the sporophyte of Funaria.
(4) None of these.

13. Choose the correct statement for bryophytes.
(1) Their sporophytic generation is smaller than gametophytic and is generally parasite
(2) Meiosis takes place in reproductive organs and results in the formation of gametes
(3) Their roots function for both conduction and support
(4) Their gametophytic generation is the dominant phase which produces spores and each spore gives rise to a new gametophytic plant.

14. According to phylogenetic classification organisms belonging to same taxa
(1) are same in anatomy
(2) have same genetic constituent
(3) have a common ancestor
(4) have all characteristics same.

15. In which group of organisms the cell walls form two thin overlapping shells which fit together?
(1) Dinoflagellates
(2) Slime moulds
(3) Chrysophytes
(4) Euglenoids

16. Natural classification systems developed were based on;

(1) natural affinities amongst organism.
(2) ultrastructure and anatomy.
(3) embryology.
(4) All of these

17. Select the wrong statement.
(1) Cell wall is present in members of fungi and plantae.
(2) Mushrooms belong to basidiomycetes.
(3) Pseudopodia are locomotory and feeding structures in sporozoans.
(4) Mitochondria are the powerhouse of the cell in all kingdoms except monera.

18. In Pinus/gymnosperms, the haploid structure are;
(1) megaspore, endosperm and embryo
(2) megaspore, pollen grain and endosperm
(3) megaspore, integument and root
(4) pollen grain, leaf and root.

19. Which of the following is correct about leaf?
(1) It has originated from root apical meristem.
(2) It is arranged in basipetal order.
(3) It arises from axillary bud.
(4) It bears a bud in its axil.

20. Leaf base is swollen to form pulvinus in;
(1) some leguminous plants.
(2) some crucifers.
(3) some monocots.
(4) some cycads.

21. What is the function of thin flexible petiole?
(1) It helps the plant to climb.
(2) It increases the rate of respiration.
(3) It allows lamina to flutter in wind there by cooling the leaf and bringing fresh air to leaf

surface.
(4) It decreases the rate of transpiration.

22. Which of the following is the endospermic seed?
(1) Bean
(2) Gram
(3) Pea
(4) Castor

23. Aleurone layer in maize seed is rich in _____.
(1) proteins
(2) carbohydrates
(3) lipids
(4) All of these

24. A major characteristic of monocot root is the presence of
(1) vasculature without cambium
(2) cambium sandwiched between phloem and xylem along the radius
(3) open vascular bundles
(4) scattered vascular bundles.

25. In a cymose inflorescence the main axis;
(1) has unlimited growth
(2) bears a solitary flower
(3) has unlimited growth but lateral branches end in flowers
(4) terminates in a flower

26. The end walls of sieve tube elements are perforated in a sieve-like manner to form the;
(1) metaxylem
(2) protoxylem
(3) companion cells
(4) sieve plates

27. Assertion (A): Chemotaxonomy classify organism at molecular level.
Reason (R): Cytotaxonomy classify organisms at cellular level.
(1) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
(2) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).

28. Presence of carotenes in chloroplast helps in:-
(1) ATP synthesis
(2) Conversion of radiant energy into chemical energy
(3) Protecting chlorophyll molecules from photooxidation
(4) Absorption of longer wavelength of light

29. Which of the following class of Algae is mostly found in salt water?
(1) Phaeophyceae (2) Rhodophyceae
(3) Chlorophyceae (4) Both (1) and (2)

30. The core of cilia and flagella is called;
(1) axoneme.
(2) protoplasmic sheath.
(3) granum.
(4) spoke.

31. Assertion (A): Meiosis has evolutionary significance because it results in variation in genetic material.
Reason (R): Variation in genetic material is due to crossing over.
(1) Both Assertion (A) and Reason (R) are true

and Reason (R) is the correct explanation of Assertion (A).
(2) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).
(3) Assertion (A) is true but Reason (R) is false.
(4) Both Assertion (A) and Reason (R) are false.

32. Who showed that sunlight is essential to the plant process that purifies the air fouled by burning candles or breathing animals?
(1) Engelman
(2) Joseph Priestley
(3) Ingenhousz
(4) Van Niel

33. Assertion (A): PEP is the primary carbon di acceptor in C4 plants
Reason (R): RUBP is the primary carbon do oxide acceptor in C3 plants.
(1) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
(2) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).
(3) Assertion (A) is true but Reason (R) is false.
(4) Both Assertion (A) and Reason (R) are false.

34. In C4 plants
(1) Calvin cycle occurs in mesophyll.
(2) Calvin cycle occurs in bundle sheath cells.
(3) sugar is formed in mesophyll cells.
(4) C3 acid is transported from mesophyll to bundle sheath.

35. Statement-I: Under water stress, the rate of

photosynthesis declines because of stomatal closure leading to decrease in CO_2 supply.
Statement-II: Reduced water potential decrease leaf surface area for photosynthesis. Causes decline in the rate of photosynthesis.
(1) Statement I and Statement II both are correct.
(2) Statement I is correct and Statement II is incorrect.
(3) Statement I is incorrect and Statement II is correct.
(4) Statement I and Statement II is incorrect.

36. At anaphase I, each chromosome has _____ chromatids.
(1) two (2) one
(3) four (4) three

37. Which of the following statements is correct for meiosis?
(1) First division is equational and second reductional.
(2) First division is reductional and second equational.
(3) Both divisions are equational.
(4) Both divisions are reductional.

38. The main difference between a dividing animal and plant cell lies in
(1) cell plate formation.
(2) chromosome movement.
(3) coiling of chromosome.
(4) chromosome division.

39. Assertion (A): Majority of pteridophytes are heterosporous.
Reason (R): Sellaginella and Salvinia are homosporous

(1) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
(2) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).
(3) Assertion (A) is true but Reason (R) is false.
(4) Both Assertion (A) and Reason (R) are false.

40. How does pruning help in making the hedge dense?
(1) It releases wound hormones.
(2) It induces the differentiation of new shoots from the rootstock.
(3) It frees axillary buds from apical dominance.
(4) The apical shoot grows faster after pruning

41. Which of the following growth hormones has specific effect on cytokinesis?
(1) Cytokinins
(2) Gibberellins
(3) Auxins
(4) Ethylene