**NAAHAR PUBLIC SCHOOL (CBSE) SENIOR SECONDARY,**

Ayyur agaram, villupuram

**TERM-I 2022-23, SLIP TEST – III on Morphology of Flowering plants**

CLASS: XI – A1 Duration : 30 mins.

Sub: BIOLOGY Max. Marks: 30

Tr. Initial: MHR / ATCHAYA Date: 28.10.2022

SECTION – A (60 x ½ = 30)

1. Which of the following tuberous root is a not a tap root?
   A. carrot **B. sweet potato**
   C. turnip D. radish

2. Negative geotropic roots are found in
   **A. Rhizophora** B. Maize
   C. Banyan D. Vanda

3. Cylindrical phylloclades are found in
   A. Opuntia **B. Euphorbia**
   C. Cactus D. All of these

4. The placenta is in centre in which of these plants?
   A. Argemone B. Marigold
   **C. Dianthus** D. Mustard

5. Identify the trimerous flower from the following options.
   A. Petunia **B. Gloriosa**
   C. Sesbania D. Trifolium

6. Fibrous mesocarp is seen in a plant
   **A. which has stony endocarp**
   B. which has only liquid endosperm
   C. which is dioecious
   D. All of these

7. Which of these is a medicinal plant of potato family?
   **A. Ashwagandha** B. Petunia
   C. Muliathi D. Aloe

8. Tendrils in pea are modified _____.
   A. axillary buds B. terminal buds
   **C. leaves** D. lateral buds

9. Which of these options is correct about the leaves at each node in Alstonia?
   A. Each node has one leaf
   B. Each node has two leaves
   **C. Each node has more than two leaves**
   D. All options possible

10. Cells are very small, thin-walled and with dense protoplasm. Which region of root is this?
   A. region proximal to region of elongation
   B. region of root cap
   **C. region above root cap**
   D. region where root hairs are present

11. Supporting roots of sugarcane arise from:
   **A. Lower nodes of stem**
   B. Radicle of seed
   C. Aerial branches of stem
   D. Internodes of stem

12. Pneumatophores are similar to _____in function.
   A. hydathodes **B. stomata**
   C. tendrils D. thorns

13. Lateral branches originate from the underground portion of the main stem in
   A. Pistia **B. Chrysanthemum**
   C. Mint D. Oxalis

14. Which of these stem modifications are seen in aquatic plants?
   A. runner B. stolon
   C. sucker **D. offset**

15. Which of these is a dicot seed with endosperm?
   A. Orchid **B. Castor**
   C. Pea D. Sorghum

16. Rhizome, which grows vertically is also called a
   **A. Corm** B. Stolon
   C. Bulbil D. Root stock

17. The structures that help grapevines hold onto a support are called -
   A. Climbers **B. Tendrils**
   C. Creepers D. Cork

18. Why are most of the seeds so hard and durable?
   A. Due to the drying up of the tissues
   **B. To protect the embryo**
   C. To protect the plumule
   D. To survive the winter season

19. Keel is characteristic of the flowers of
   A. Gulmohur **B. Cassia**
   C. Calotropis D. Petunia

20. A flower is represented by the following floral formula – Br, %,♀,K3+2, C(5), G(2).Which of the following statement about the flower is correct?
   **A. The flower is actinomorphic**
   B. The ovary is inferior
   C. The flower has 6 petals
   D. The flower is staminate

21. Which of the following cannot be determined by observing a floral diagram?
   A. Aestivation of calyx and corolla
   **B. Position of ovary on the thalamus**
   C. Placentation
   D. Symmetry of flower

22. In some seeds, the endosperm formed as a result of double fertilization, is a food storing tissue. Coconut water is the liquid reservoir of nutrients that nourishes the young coconut for a year or more of its life, delivering vital nutrients for sustained

development of the solid coconut meat found inside the fruit. The coconut water and the edible part of coconut are equivalent to _____.

A. Mesocarp B. Embryo
C. Endosperm D. Endocarp

23. The correct match for the edible part of fruit is
**A. Guava - pericarp with thalamus fused**
B. Tomato - thalamus
C. Maize - cotyledon
D. Datepalm – epicarp

24. What is the most important role of fruits?
A. To provide food for the embryo
B. To protect the seed
**C. To attract animals which will help in dispersal of seeds**
D. None of the above

25. The calyx is green in color since they originate from a leaf.
**A. True** B. False

26. Axile placentation is present in
A. Pea B. Argemone
C. Dianthus **D. Lemon**

27. In Nepenthes, the pitcher is a modified
A. Leaf tip
**B. Leaf lamina**
C. Lower part of the petiole
D. Upper part of the petiole

28. The leaves without petiole are called
**A. Sessile** B. Petiolate
C. Rachis D. Lamina

29. Stolon is an example of
**A. Sub-aerial stem modification**
B. Underground stem modification
C. Underground root modification
D. Sub-aerial root modification

30. Tomato, brinjal, potato belong to which angiosperm plant family?
**A. Solanaceae** B. Liliaceae
C. Fabaceae D. Brassicaeae

31. In Eichhornia, the purpose of stem modification is
A. Water storage **B. Vegetative propagation**
C. Photosynthesis D. Defense

32. The xylem tissue takes water from the roots to the leaves through the __.
**A. Stem** B. Roots
C. Leaves D. Branches

33. A logical representation of the flower, which gives the details regarding all the parts is called __
A. Floral structuire B. Inflorescence
**C.Floral Formula** D. Anatomy

34. Scutellum in a caryopsis represents
A. Outermost layer of endosperm
B. A sheath that protects the radicle
C. The place where the seed is attached to raphe
**D. A cotyledon**

35. Which of the following is a Pome fruit?
A. Mango **B. Apple**
C. Litchi D. Peach

36. Caryopsis is found in
A. Sunflower **B. Maize**
C. Pea D. Datura

37. The fruit which is chambered, developed from the inferior ovary and has seed with succulent testa is
**A. Pomegranate** B. Orange
C. Guava D. Cucumber

38. Apical meristem may arise from floral meristem
A. True **B. False**

39. Long filamentous threads protruding at the end of a young cob of maize are
A. Hairs B. Anthers
**C. Styles** D. Ovaries

40. Pentamerous actinomorphic flowers, bicarpellary ovary with oblique septa, and fruit capsule or berry, are characteristic features of family
A. Liliaceae B. Asteraceae
C. Brassicaceae **D. Solanaceae**

41. The correct floral formula of chilli is
A. $\oplus\ \varphi\ \delta\ K_{(5)}\ C_5\ A_5\ \underline{G}_{(2)}$
B. $\oplus\ \varphi\ \delta\ K_{(5)}\ \overbrace{C_{(5)}\ A_5}\ \underline{G}_{(2)}$
C. $\oplus\ \varphi\ \delta\ K_{(5)}\ C_{(5)}\ A_{(5)}\ \underline{G}_2$
D. $\oplus\ \varphi\ \delta\ K_5\ \overbrace{C_5\ A_{(5)}}\ \underline{G}_2$

**Ans: B**

42. Out of 5 petals of a flower bud, two are completely internal, two are completely external and the remaining one has its margin at one end internal and external at the other. Which of the following is this type of aestivation?
A. Imbricate B. Valvate
C. Vexillary **D. Quincuncial**

43. A fleshy-fruit with leathery epicarp is called
A. Drupe B. Berry
C. Pome **D. Hesperidium**

44. The leaves are modified into spines in
A. Nepenthes **B. Opuntia**
C. Australian acacia D. Utricularia

45. From the description given below, identify the type of plant modification. A thick horizontally growing stem which usually stores food material. It has nodes and internodes, scale leaves, axillary buds, adventitious roots and a terminal bud.
**A. Rhizome, underground stem modification**
B. Rhizome, underground root modification
C. Tuber, underground stem modification
D. Sucker, underground stem modification

46. Which of the following form the growing part of the root?
A. The root capB. The apical meristem

C. Depending on the plant, either a or b
**D. Both a and b**

47. Pulses of daily use belong to the family
A. Solanaceae **B. Fabaceae**
C. Liliaceae D. Poaceae

48. ⊕ is the symbol that signifies that the flower is _____.
**A. Actinomorphic** B. Zygomorphic
C. Bisexual D. Bracteate

49. Juicy hair-like structures observed in lemon fruit develop from
A. Exocarp B. Mesocarp
**C. Endocarp** D. Both (b) and (c)

50. In an exalbuminous seed
A. The endosperm is formed prior to fertilization
**B.The endosperm is formed after fertilization and the mature seed lacks endosperm**
C. The mature seed contains endosperm
D. Endosperm formation itself is absent

51. Mesocarp, endosperm and thalamus are edible, respectively in:
A. Apple, mango and coconut
B. Coconut, apple and mango
C. Coconut, mango and apple
**D. Mango, coconut and apple**

52. In an inflorescence where the flowers are borne laterally in an acropetal succession, the position of the youngest flower bud shall be
**A. Top of the axis**
B. Bottom of the axis
C. New bud grows in between an new and an old bud
D. None of the above

53. Venation is the term used to describe the pattern of arrangement of
A. Floral organs
B. Flowers in an inflorescence
**C. Veins and vienlets in a lamina**
D. Sepals or petals in a flower

54. Which of the following is an example of a compound leaf?
A. Banana leaf B. Maple leaf
**C. Palm leaf** D. Mango leaf

55. An example of a palmate leaf is _____
A. Neem leaf B. Gulmohar leaf
C. Banana leaf **D. Clover leaf**

56. Which among these is the tallest Angiosperm?
**A. Australian Eucalyptus** B. Banyan
C. Silver Oak D. California Redwood

57. Spadix is the inflorescence of
A. Rice **B. Banana**
C. Amaranthus D. Ficus

58. When storage roots occur in clusters from the base of the stem they are called
**A. Fasciculated roots** B. Nodulose roots
C. Annulated roots D. Beaded roots

59. Potato is included in Solanaceae family because
A. Flower is epipetalous
B. It is pentamerous
C. Ovary is slightly diverted from its position
**D. All of the above**

60. Roots that develop from parts of the plant other than the radicle are called ____.
A. Taproots **B. Adventitious roots**
C. Nodular roots D. Fibrous roots