

NAAHAR PUBLIC SCHOOL(CBSE) SENIOR SECONDARY,
Ayyuragaram, Villupuram
TERM-I 2022-23, SLIP TEST – III on Morphology of Flowering plants

CLASS: XI – A1

Sub: BIOLOGY

Tr. Initial: MHR / ATCHAYA

Duration :30 mins.

Max. Marks: 30

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?

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|--------------------------------------|
| 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. Date palm - 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. Brassicaceae

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 structure 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. $\oplus \text{ } \overline{\text{K}}_{(5)} \text{ } \text{C}_5 \text{ } \text{A}_5 \text{ } \underline{\text{G}}_{(2)}$
B. $\oplus \text{ } \overline{\text{K}}_{(5)} \text{ } \overline{\text{C}}_{(5)} \text{ } \text{A}_5 \text{ } \underline{\text{G}}_{(2)}$
C. $\oplus \text{ } \overline{\text{K}}_{(5)} \text{ } \text{C}_{(5)} \text{ } \text{A}_{(5)} \text{ } \underline{\text{G}}_2$
D. $\oplus \text{ } \overline{\text{K}}_5 \text{ } \overline{\text{C}}_5 \text{ } \text{A}_{(5)} \text{ } \underline{\text{G}}_2$

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 cap
 B. 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. \oplus 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 old and a new 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 venules 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