

NEET/PMT

BIOLOGY TEST PAPER

MORPHOLOGY OF FLOWERING PLANTS, ANATOMY OF FLOWERING PLANTS

DATE: 13/3/2021

- Which is the correct pair for edible part?
(i) Tomato – Thalamus (ii) Maize – Cotyledons
(iii) Guava – Mesocarp (iv) Date palm – pericarp
- What is the eye of potato?
(i) Axillary bud (ii) Accessory bud
(iii) Adventitious bud (iv) Apical bud
- Juicy hair – like structures observed in the lemon fruit develops from
(i) Exocarp (ii) Mesocarp
(iii) Endocarp (iv) Mesocarp and endocarp
- Which of the following represents the edible part of the fruit of litchi?
(i) Endocarp (ii) Pericarp
(iii) Juicy aril (iv) Mesocarp
- Pineapple (anasas) fruit develops from
(i) A unilocular polycarpellary flower
(ii) A multipistillate syncarpous flower
(iii) A cluster of compactly borne flowers on a common axis
(iv) A multilocular monocarpellary flower
- In which of the following fruits is the edible part the aril?
(i) Custard apple (ii) Pomegranate
(iii) Orange (iv) Litchi
- Long filamentous threads protruding at the end of a young cob of maize are
(i) Anthers (ii) Styles
(iii) Ovaries (iv) Hairs
- Cotyledons and testa respectively are edible parts in
(i) Cashew nut and litchi (ii) Groundnut and pomegranate
(iii) Walnut and tamarind (iv) French bean and coconut
- A fruit developed from hypanthodium inflorescence is called?
(i) Caryopsis (ii) Hesperidium
(iii) Sorosis (iv) Syconus
- Ovary is half – interior in the flower of
(i) Cucumber (ii) Guava

- (iii) Plum (iv) Brinjal
11. Which one of the following is a xerophytic plant in which the stem is modified into a flat, green and succulent structure ?
- (i) Casuarina (ii) Hydrilla
(iii) Acacia (iv) Opuntia
12. The 'Eyes' of the potato tuber are
- (i) Root buds (ii) Flower buds
(iii) Shoot buds (iv) Axillary buds
13. Flowers are zygomorphic in
- (i) Mustard (ii) Gulmohur
(iii) Tomato (iv) Datura
14. A drupe develops in
- (i) Mango (ii) Wheat
(iii) Pea (iv) Tomato
15. Sweet potato is homologous to
- (i) Turnip (ii) Potato
(iii) Colocasia (iv) Ginger
16. Which one of the following pairs is wrongly matched while the remaining three are correct?
- (i) Agave – Bulbils
(ii) Grass – Runner
(iii) Water hyacinth – Runner
(iv) Bryophyllum – Leaf buds
17. Vexillary aestivation is characteristic of the family
- (i) Solanaceae (ii) Brassicaceae
(iii) Fabaceae (iv) Asteraceae
18. Phyllode is present in
- (i) Australian Acacia (ii) Opuntia
(iii) Asparagus (iv) Euphorbia
19. Cymose inflorescence is present in
- (i) Trifolium (ii) Brassica
(iii) Solanum (iv) Sesbania
20. The gynoecium consists of many free pistils in flowers of
- (i) Papaver (ii) Michelia
(iii) Aloe (iv) Tomato

21. Among bitter gourd, mustard, brinjal, pumpkin chinarose, lupin, cucumber, sunnhemp, gram, guava, beanchilli, plum, petunia, tomato, rose, withania, potato, onion, aloe and tulip how many plants have hypogynous flower?
- (i) Eighteen (ii) Six
(iii) Ten (iv) Fifteen
22. An example of edible underground stem is
- (i) Sweet potato (ii) Potato
(iii) Carrot (iv) Groundnut
23. When the margins of sepals or petals overlap one another without any particular direction, the condition is termed as
- (i) Twisted (ii) Valvate
(iii) Vexillary (iv) Imbricate
24. Aggregate fruit develops from
- (i) Multicarpellary, apocarpous ovary
(ii) Multicarpellary ovary
(iii) Multicarpellary, syncarpous ovary
(iv) Monocarpellary ovary
25. Flowers are unisexual in
- (i) Cucumber (ii) China rose
(iii) Onion (iv) Pea
26. Function of companion cells is to
- (i) Provide energy to sieve elements for active transport
(ii) Provide water to phloem
(iii) Loading of sucrose into sieve elements by passive transport
(iv) Loading of sucrose into sieve elements
27. Some vascular bundles are described as open because these
- (i) Are surrounded by pericycle but no endodermis
(ii) Are capable of producing secondary xylem and phloem
(iii) Possess conjunctive tissue between xylem and phloem
(iv) Are not surrounded by pericycle
28. Which sequence correctly illustrates the arrangement of layers from outside to inside in a dicot stem?
- (i) Hypodermis → Endodermis → Pericycle → Phloem → Xylem
(ii) Endodermis → Hypodermis → Pericycle → Xylem → Phloem
(iii) Hypodermis → Endodermis → Pericycle → Xylem → Phloem
(iv) Endodermis → Hypodermis → Pericycle → Phloem → Xylem
29. Epidermis is the surface covering of a plant body. Which of the following functions is not performed by the epidermis?
- (i) Protecting the plant from mechanical injury
(ii) Protecting the plant from invasion by pathogens
(iii) Preventing the loss of water from the plant, along with the cuticle
(iv) Preventing the exchange of gases between the plant and environment

30. Dicot stem differs from dicot root in
 (i) Presence of cortex (ii) Absence of endodermis
 (iii) Absence of pericycle (iv) Position of protoxylem
31. Radial conduction of water takes place by
 (i) Hill bunt (ii) White rust
 (iii) Leaf curl (iv) Bacterial blight
32. The common bottle cork is a product of
 (i) Dermatogen (ii) Phellogen
 (iii) Xylem (iv) Vascular cambium
33. Companion cells are closely associated with
 (i) Sieve elements (ii) Vessel elements
 (iii) Trichomes (iv) Guard cells
34. For a critical study of secondary growth in plants, which one of the following pairs is suitable?
 (i) Wheat and maiden hair fern (ii) Sugarcane and sunflower
 (iii) Teak and pine (iv) Deodar and fern
35. Which one of the following is resistant to enzyme action?
 (i) Pollen exine (ii) Leaf cuticle
 (iii) Cork (iv) Wood fibre
36. The length of different internodes in a culm of sugarcane is variable because of
 (i) Size of leaf lamina at the node below each internode
 (ii) Intercalary meristem
 (iii) Shoot apical meristem
 (iv) Position of axillary buds
37. Vascular tissues in flowering plants develop from
 (i) Periblem (ii) Dermatogens
 (iii) Phellogen (iv) Plerome
38. Palisade parenchyma is absent in leaves of
 (i) Gram (ii) Sorghum
 (iii) Mustard (iv) Soybean
39. The annular and spirally thickened conducting elements generally develop in the protoxylem when the root or stem is
 (i) Differentiating (ii) Maturing
 (iii) Elongating (iv) Widening
40. Heartwood differs from sapwood in
 (i) Presence of rays and fibres (ii) Absence of vessels and parenchyma
 (iii) Having dead and non- conducting elements (iv) Being susceptible to pests and pathogens
41. Which one of the following is not a lateral meristem ?
 (i) Intrafascicular cambium (ii) Interfascicular cambium

- (iii) Phellogen (iv) Intercalary meristem
42. The cork cambium, cork and secondary cortex are collectively called
 (i) Phellem (ii) Phelloderm
 (iii) Phellogen (iv) Periderm
43. Gymnosperms are also called soft wood spermatophytes because they lack
 (i) Thick – walled tracheids (ii) xylem fibres
 (iii) Cambium (iv) Phloem fibres
44. Water containing cavities in vascular bundles are found in
 (i) Cycas (ii) Pinus
 (iii) Sunflower (iv) Maize
45. Closed vascular bundles lack
 (i) Cambium (ii) Pith
 (iii) Ground tissue (iv) Conjunctive tissue
46. Companion cells are closely associated with
 (i) Trichomes (ii) Guard cells
 (iii) Sieve elements (iv) Vessel elements
47. Interfascicular cambium develops from the cells of
 (i) Medullary rays (ii) Xylem parenchyma
 (iii) Endodermis (iv) Pericycle
48. Age of a tree can be estimated by
 (i) Its height and girth (ii) Biomass
 (iii) Number of annual rings (iv) Diameter of its heartwood
49. Tracheids differ from the tracheary elements in
 (i) Having casparian strips (ii) Being imperforate
 (iii) lacking nucleus (iv) Being lignified
50. You are given a fairly old piece of dicot stem and a dicot root. Which of the following anatomical structure will you use to distinguish between the two?
 (i) Secondary xylem (ii) Secondary phloem
 (iii) Protoxylem (iv) Cortical cells
51. Vascular bundles in monocotyledons are considered closed because
 (i) Xylem is surrounded all around by phloem
 (ii) A bundle sheath surrounds each bundle
 (iii) Cambium is absent
 (iv) There are no vessels with perforations
52. In a ring girdled plant
 (i) Neither root nor shoot will die (ii) the shoot dies first
 (iii) The root dies first (iv) the shoot and root die together

