Yakeen NEET 2.0 2026

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Anatomy of Flowering Plants

Q1 Cortex is the region found between:
(A) epidermis and stele.
(B) pericycle and endodermis.
(C) endodermis and pith.
(D) endodermis and vascular bundle.

Q2 The first formed primary phloem consists of narrow sieve tubes and is referred to as:
(A) exarch. (B) endarch.
(C) protophloem. (D) metaphloem.

Q3 Vascular bundles in dicot stem are:
(A) conjoint, open and exarch.
(B) conjoint, open and endarch.
(C) conjoint, closed and exarch.
(D) conjoint, closed and endarch.

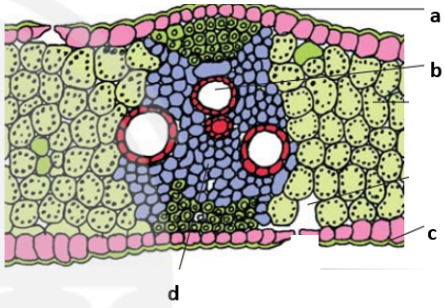
Q4 The outermost layer of a dicot root, responsible for absorption, is called:
(A) epiblema.
(B) trichome.
(C) medullary rays.
(D) mesophyll.

Q5 Match **List-I** with **List-II**.

	List-I		**List-II**
(A)	Cells with active cell division capacity	(I)	Vascular tissues
(B)	Tissue having all cells similar in structure and function	(II)	Meristematic tissue
(C)	Tissue having different types of cells	(III)	Sclereids
(D)	Dead cells with highly thickened walls and narrow lumen	(IV)	Simple tissue

Choose the **correct** answer from the options given below:
(A) A-IV B-III C-II D-I
(B) A-I B-II C-III D-IV
(C) A-III B-II C-IV D-I
(D) A-II B-IV C-I D-III

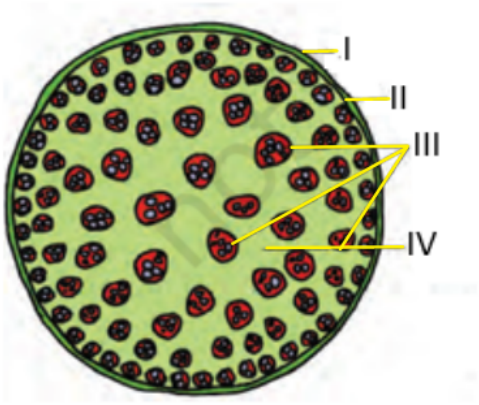
Q6 Recognise the figure and find out the correct matching



(A) a-abaxial epidermis, b-xylem, c-adaxial epidermis, d-phloem
(B) a-adaxial epidermis, b-xylem, c-abaxial epidermis, d-phloem
(C) a-abaxial epidermis, b-phloem, c-adaxial epidermis, d-xylem
(D) a-adaxial epidermis,b-phloem, c-abaxial epidermis, d-xylem

Q7 What is the name of the parenchymatous tissue that is located between the xylem and phloem?
(A) Cambium
(B) Conjunctive tissue
(C) Pericycle
(D) Medullary rays

Q8 Identify the part where water-containing cavities are present.



(A) I (B) II
(C) III (D) IV

Q9 Radial vascular bundles with polyarch condition are found in:
(A) dicot stem.
(B) dicot root.
(C) monocot stem.
(D) monocot root.

Q10 Given below are two statements: one is labelled as Assertion A and the other is labelled as Reason R:
Assertion A: Cuticle is absent in lower epidermal region of the dorsiventral leaf.
Reason R: In dorsiventral leaves, the abaxial epidermis generally bears more stomata than the adaxial epidermis.
In the light of the above statements, choose the **correct** answer from the options given below:
(A) A is true but R is false.
(B) A is false but R is true.
(C) Both A and R are true and R is the correct explanation of A.
(D) Both A and R are true but R is NOT the correct explanation of A.

Q11 Cells of this tissue are living and show angular wall thickening. They also provide mechanical support. The tissue is:
(A) xylem. (B) sclerenchyma.
(C) collenchyma. (D) epidermis.

Q12 Select the **correct** match from the following.
(A) Trichome - Fundamental tissue system
(B) Guard cells - Conducting tissue system
(C) Xylem - Epidermal tissue system
(D) Root hair - Epidermal tissue system

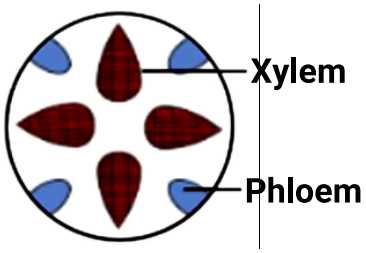
Q13 "Grass leaves curl inwards during water stress". Select the most appropriate reason from the following options.
(A) Flaccidity of bulliform cells.
(B) Closer of stomata.
(C) Turgidity of bulliform cells.
(D) Reduction of air spaces in spongy mesophyll.

Q14 How many of the following are examples of lateral meristem? [Cork cambium, Intercalary meristem, Intrafascicular cambium, Interfascicular cambium, Apical meristem]
(A) 4 (B) 3
(C) 2 (D) 1

Q15 Select **correct** features w.r.t. trichomes in shoot system.
I. Usually unicellular
II. Branched or unbranched
III. Sometimes secretory
IV. Prevent water loss due to transpiration
V. Soft or stiff
Choose the correct answer from the options given below.
(A) All except III & V
(B) I, III & IV only
(C) All except I
(D) I, II, IV & V only

Q16 Root hairs are:
(A) multicellular elongation of epidermal cells.
(B) unicellular elongation of endodermal cells.
(C) multicellular elongation of endodermal cells.
(D) unicellular elongation of epidermal cells.

Q17 Select the **correct** location where this type of vascular bundle is present in plants.



(A) Dicotyledonous root
(B) Monocotyledonous stem
(C) Monocotyledonous leaf
(D) Dicotyledonous leaf

Q18 Match **List-I** with **List-II**.

	List-I		List-II
(A)	Dicot stem	(I)	Palisade mesophyll
(B)	Dicot leaf	(II)	Starch sheath present
(C)	Monocot stem	(III)	Sclerenchymatous hypodermis
(D)	Monocot root	(IV)	More than six xylem bundles

Choose the correct answer from the options given below:
(A) A-I, B-II, C-III, D-IV
(B) A-II, B-I, C-III, D-IV
(C) A-IV, B-III, C-I, D-II
(D) A-II, B-III, C-I, D-IV

Q19 The deposition of waxy material suberin in the tangential as well as radial walls in the form of casparian strips is found in:
(A) epidermal cells.
(B) guard cells.
(C) endodermal cells in root.
(D) subsidiary cells.

Q20 Given below are two statements: one is labelled as Assertion A and the other is labelled as Reason R:
Assertion A: In monocotyledons, the vascular bundles are referred to as closed and they do not form secondary tissues.
Reason R: The vascular bundles in monocotyledons have no cambium, and thus, do not form secondary tissues.
In the light of the above statements, choose the **correct** answer from the options given below:
(A) A is true but R is false.
(B) A is false but R is true.
(C) Both A and R are true and R is the correct explanation of A.
(D) Both A and R are true but R is NOT the correct explanation of A.

Q21 If 1 = primary tissues, 2 = lateral meristem, 3 = primary meristem and 4 = secondary tissue, then what will be their sequence of development in a plant?
(A) 4 → 1 → 2 → 3
(B) 1 → 3 → 4 → 2
(C) 1 → 3 → 2 → 4
(D) 3 → 1 → 2 → 4

Q22 Out of the following, how many features belong to monocot root?
(1) Radial vascular bundles
(2) Cambium is absent
(3) Endodermis absent
(4) Pith well developed
(5) Polyarch condition
Choose the correct answer from the options given below:
(A) One
(B) Two
(C) Three
(D) Four

Q23 In monocots, guard cells are generally ____**i**____ in shape and in dicots, it is _____**ii**_____ in shape.
(A) dumb-bell, bean
(B) bean, dumb-bell
(C) barrel, dumb-bell
(D) lens, bean

Q24 In the leaf of plant, vascular bundles are found in the:
(A) veins and midrib.
(B) lower epidermis.
(C) palisade tissue.

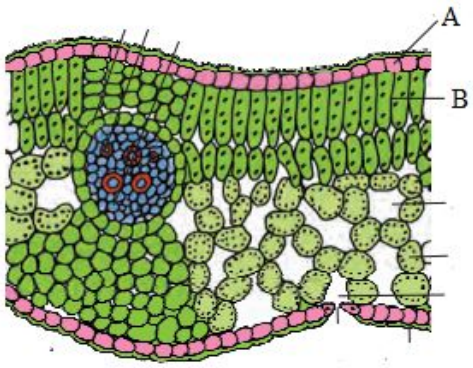
(D) upper epidermis.

Q25 Given below are two statements:
Statement I: Endarch and exarch are the terms often used for describing the position of secondary xylem in the plant body.
Statement II : Polyarch xylem bundles is the most common feature of the dicot root system.
In the light of the above statements, choose the most appropriate answer from the options given below:
(A) Statement I is correct but Statement II is incorrect.
(B) Statement I is incorrect but Statement II is correct.
(C) Both Statement I and Statement II are correct.
(D) Both Statement I and Statement II are incorrect.

Q26 Which of the following provides mechanical support to the growing parts of plants like young stem and petiole of a leaf?
(A) Sclerenchyma
(B) Collenchyma
(C) Parenchyma
(D) Xylem vessels

Q27 All are the primary meristem tissue, **except**:
(A) intercalary meristem.
(B) cork cambium.
(C) shoot apical meristem.
(D) root apical meristem.

Q28 T.S. of dicotyledonous leaf passing through the midrib is given below. Identify **A** and **B** respectively.



(A) A – Adaxial epidermis, B – Spongy mesophyll
(B) A – Adaxial epidermis, B – Palisade mesophyll
(C) A – Abaxial epidermis, B – Guard cells
(D) A – Cuticle, B – Phloem

Q29 How many of the given are parts of epidermal tissue system?

Trichomes, root hairs, cortex, subsidiary cells, mesophyll, stomata

(A) Three (B) Two
(C) Four (D) Five

Q30 Which of the following structures surround the vascular bundles in leaves?
(A) Bundle sheath cells
(B) Endodermis
(C) Epidermis
(D) Hypodermis

Q31 The composition of stele is:
(A) pericycle, vascular bundle and pith.
(B) pericycle and pith only.
(C) endodermis and pericycle only.
(D) endodermis, pericycle and pith only.

Q32 Given below are two statements:
Statement I : Parenchyma is living but collenchyma is dead tissue.
Statement II : Gymnosperms lack xylem vessels but presence of xylem vessels is the characteristic of angiosperms.
In the light of the above statements, choose the most appropriate answer from the options given below:
(A)

Statement I is correct but Statement II is incorrect.
(B) Statement I is incorrect but Statement II is correct.
(C) Both Statement I and Statement II are correct.
(D) Both Statement I and Statement II are incorrect.

Q33 Which type of cells are elongated and arranged vertically in dicot leaf?
(A) Spongy parenchyma
(B) Palisade parenchyma
(C) Collenchyma
(D) Epidermal cells

Q34 Pericycle in dicotyledonous stem is in the form of:
(A) lunar patches of sclerenchyma.
(B) semi-lunar patches of sclerenchyma.
(C) semi-lunar patches of collenchyma.
(D) circular patches of collenchyma.

Q35 On the basis of given features, select the **correct** option to which they belong:
A. Cambium - Absent
B. Vascular bundles - Scattered
C. Phloem parenchyma - Absent
D. Water containing cavities - Present
(A) Dicot and monocot stem
(B) Dicot root and monocot leaf
(C) Monocot stem only
(D) Monocot root,stem and leaf

Q36 Stomatal apparatus consists of:
(A) guard cells and subsidiary cells only.
(B) stomatal aperture only.
(C) subsidiary cells and epidermal cells.
(D) stomatal aperture, guard cells and subsidiary cells.

Q37 Sclereids are commonly found in:
(A) young stems and petioles of leaves.
(B) fruit wall of nuts.
(C) fleshy stems.
(D) roots.

Q38 In an dorsiventral leaf palisade parenchyma is located towards:
(A) abaxial surface.
(B) adaxial surface.
(C) around the midrib.
(D) near the stomata.

Q39 Identify which of the following characteristics are related to a dicotyledonous leaf.
A. Parallel venation.
B. Absence of bulliform cells in the epidermis.
C. Mesophyll not differentiated into palisade and spongy.
D. Well-differentiated mesophyll.
Choose the most appropriate answer from the options given below:
(A) A, B, and D are correct
(B) A, B, and C are incorrect
(C) A, B, and C are correct
(D) B and D are correct

Q40 Which among the following is **not** correct about monocot stem?
(A) Bundle sheath is sclerenchymatous
(B) More than one conjoint vascular bundles are present
(C) Water containing cavities are present within the vascular bundles
(D) Peripheral vascular bundles are larger than centrally located ones

Q41 All are the part of ground tissue system, **except:**
(A) pith.
(B) cortex.
(C) epidermis.
(D) medullary rays.

Q42 Select the **correct** pair from the following.
(A) Cuticle– Monocot root
(B) Bulliform cells – Coloured cells
(C) Stomata – Pore
(D) Mesophyll – Collenchymatous

Q43 Identify the **incorrect** statement from the following.
(A) Trichomes prevent water loss.

(B) All tissues that are neither vascular nor epidermal tissues are called ground tissues.
(C) Medullary rays are parenchymatous.
(D) Pith is with very small intercellular spaces in dicotyledonous stem.

Q44 Which is living mechanical tissue?
(A) Phloem
(B) Parenchyma
(C) Collenchyma
(D) Sclerenchyma

Q45 Match **List I** with **List II.**

List-I		**List-II**
(A)	Cuticle	(I)	Regulate transpiration & gaseous exchange
(B)	Guard cells	(II)	Epidermal hairs on stem
(C)	Stomata	(III)	Waxy thick layer
(D)	Trichomes	(IV)	Regulate opening and closing of stomata

Choose the **correct** answer from the options given below:
(A) A-I, B-III, C-IV, D-II
(B) A-III, B-IV, C-II, D-I
(C) A-III, B-I, C-II, D-IV
(D) A-III, B-IV, C-I, D-II

Answer Key

Q1	(A)
Q2	(C)
Q3	(B)
Q4	(A)
Q5	(D)
Q6	(B)
Q7	(B)
Q8	(C)
Q9	(D)
Q10	(B)
Q11	(C)
Q12	(D)
Q13	(A)
Q14	(B)
Q15	(C)
Q16	(D)
Q17	(A)
Q18	(B)
Q19	(C)
Q20	(C)
Q21	(D)
Q22	(D)
Q23	(A)
Q24	(A)
Q25	(D)
Q26	(B)
Q27	(B)
Q28	(B)
Q29	(C)
Q30	(A)
Q31	(A)
Q32	(B)
Q33	(B)
Q34	(B)
Q35	(C)
Q36	(D)
Q37	(B)
Q38	(B)
Q39	(D)
Q40	(D)
Q41	(C)
Q42	(C)
Q43	(D)
Q44	(C)
Q45	(D)