# **EXERCISE-I**

#### PLANT TISSUES

- 1. The cells of quiescent centre show
  - (A) Very few mitochondria
  - (B) Low RNA/DNA contents
  - (C) No ribosomes
  - (D) No active cell division
- 2. If a sign board was nailed on the side of tree five feet above the ground in (1965), how high would the sign be in (1978), if the tree grew 1 inches taller each year
  - (A) 5 feet(B) 9 feet 8 inches(C) 6 feet(D) 14 feet 8 inches
- 3. The meristematic cells are
  - (A) Differentiated cells
  - (B) Dedifferentiated cells
  - (C) Mature and living
  - (D) Immature and living
- 4. Aerenchyma is usually found in

(A) Cortex	(B) Pith
(C) Pith rays	(D) All these regions

5. The face of the cell wall where lignification occurs in Sclerenchyma

(A) Outer	(B) Inner
(C) Radial	(D) All the faces

6. The tissue having high water retaining capacity is

(A) Chlorenchyma	(B) Collenchyma
(C) Fibres	(D) Prosenchyma

- 7. The term stereome refers to
  - (A) Fibres only
  - (B) Sclerenchyma only
  - (C) Collenchyma and fibres
  - (D)All mechanical tissue

#### **8.** Fibres are

(A) Always aseptate	(B) Always septate
(C) Sometimes aseptate	(D) Sometimes septate

- 9. The pulp of pear is crisp due to the presence of (A) Fibres(B) Sclereids
  - (C) Both of these (D) Silica
- **10.** Collenchyma is a

(A) Photosynthetic tissue

(B) Water conducting tissue

(C) Living mechanical tissue

- (D) Dead mechanical tissue
- **11.** Angular collenchyma is found in

(A) Althaea	(B) Cucurbita
(C) Lactuca	(D) Salvia

- 12. Collenchyma differs from sclerenchyma in(A) Retaining protoplasm at maturity
  - (B) Having thick walls
  - (C) Having wide lumen
  - (D) Being meristematic
- **13.** The leaves usually possess one of the following types of sclereids

(A) Brachysclereids	(B) Osteosclereids
(C) Macrosclereids	(D) Astrosclereids

- 14. Sclerenchyma tissue is(A) Living and mechanical
  - (B) Living and non-mechanical
  - (C) Dead and mechanical
  - (D) Dead and non-mechanical
- 15. The tissue that gives rise to all kinds of tissues
  - (A) Parenchyma (B) Sclerenchyma
  - (C) Collenchyma (D) Aerenchyma

of       are described as         (A) Lignin       (B) Pectin         (C) Cutin       (D) Suberin         17. The collenchyma that does not possess the thickenings at the angles alone is called as       (A) Trichosclereids are called as         (A) Tubular       (B) Angular         (C) Lamellar       (D) Lacunate         18. The collenchyma without intercellular spaces and having thickening of the argles is called as       (B) Tubular         (A) Angular       (B) Tubular         (C) Lamellar       (B) Tubular         (D) Plate       Cystoliths are composed of         (A) Calcium oxalate       (B) Calcium carbo         (C) MgCO <sub>3</sub> (D) Glucosides	cells	
<ul> <li>(A) Lignin (B) Pectin (D) Suberin</li> <li>(A) cystoliths (B) Raphides (D) Inulin</li> <li>(B) Raphides (D) Inulin</li> <li>The collenchyma that does not possess the thickenings at the angles are is called as (A) Trichosclereids</li> <li>(A) Tubular (B) Angular (D) Lacunate</li> <li>(B) Libriform sclereids (C) Brachysclereids</li> <li>(C) Lamellar (D) Lacunate</li> <li>(D) Polymorphic sclereids</li> <li>(D) Polymorphic sclereids</li> <li>(D) Polymorphic sclereids</li> <li>(D) Polymorphic sclereids</li> <li>(A) Calcium oxalate (B) Calcium carbo (C) MgCO<sub>3</sub></li> </ul>		
<ul> <li>(C) Cutin (D) Suberin (C) Druses (D) Inulin</li> <li>17. The collenchyma that does not possess the thickenings at the angles does is called as (A) Tubular (B) Angular (C) Lamellar (D) Lacunate (D) Lacunate (D) Lacunate (C) Lamellar (D) Plate</li> <li>18. The collenchyma without intercellular spaces and having thickening of the agles is called as (A) Angular (D) Plate (D) Plate</li> <li>19. C) Cutin (D) Plate</li> <li>(C) Druses (D) Inulin (C) Druses (D) Inulin (C) Druses (C) Druses</li></ul>		
<ul> <li>17. The collenchyma that does not possess the thickenings at the angles does is called as</li> <li>(A) Tubular</li> <li>(B) Angular</li> <li>(C) Lamellar</li> <li>(B) Tubular spaces and having thickening of the address is called as</li> <li>(A) Angular</li> <li>(B) Tubular</li> <li>(B) Tubular</li> <li>(B) Tubular</li> <li>(C) Lamellar</li> <li>(D) Plate</li> <li>25. Hair like sclereids are called as</li> <li>(A) Trichosclereids</li> <li>(B) Libriform sclereids</li> <li>(C) Brachysclereids</li> <li>(D) Polymorphic sclereids</li> <li>26. Cystoliths are composed of Cystoliths are composed of C) MgCO<sub>3</sub></li> <li>(B) Calcium carboo (C) MgCO<sub>3</sub></li> </ul>		
<ul> <li>thickenings at the angles Jone is called as</li> <li>(A) Tubular</li> <li>(B) Angular</li> <li>(C) Lamellar</li> <li>(D) Lacunate</li> <li>(B) Libriform sclereids</li> <li>(C) Brachysclereids</li> <li>(D) Polymorphic sclereids</li> <li>(D) Polymorphic sclereids</li> <li>(A) Angular</li> <li>(B) Tubular</li> <li>(B) Tubular</li> <li>(D) Plate</li> <li>(A) Calcium oxalate</li> <li>(B) Calcium carbo</li> <li>(D) Glucosides</li> </ul>		
(A) Tubular(B) Angular(B) Libriform sclereids(C) Lamellar(D) Lacunate(C) Brachysclereids18.The collenchyma without intercellular spaces and having thickening of the argues is called as (A) Angular(B) Tubular(A) Angular(B) TubularCystoliths are composed of (C) MgCO3(B) Calcium carbo (D) Glucosides		
(C) Lamellar       (D) Lacunate       (C) Brachysclereids         18. The collenchyma without intercellular spaces and having thickening of the argles is called as (A) Angular       (B) Tubular       (D) Polymorphic sclereids         (A) Angular       (B) Tubular       (A) Calcium oxalate       (B) Calcium carbo (C) MgCO3         (C) MgCO3       (D) Glucosides		
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(A) Angular(B) Tubular(A) Calcium oxalate(B) Calcium carbo(C) Lamellar(D) Plate(C) MgCO3(D) Glucosides		
(C) Lamellar (D) Plate (A) Calcium oxalate (B) Calcium carbo $(C) MgCO_3$ (D) Glucosides		
$(C)$ $M_{2}CO_{3}$ $(D)$ Shucoshucos	nate	
10 The tiggue that form the major part of the primery		
<b>27.</b> The thickening in xylem appears on		
(A) Parenchyma (B) Prosenchyma (B) Prosenchyma (A) All (B) Primary wall		
(C) Collenchyma (D) Sclerenchyma (C) Secondary wall (D) Tertiary wall		
<b>28.</b> Vassels differ from tracheids		
<b>20.</b> Sclereids in the seed coat are generally (A) In being living		
(A) Brachysclereids and astrosclereids (B) In the they are made up of a single cell	(B) In the they are made up of a single cell	
(B) Astrosclerieds and trichosclereids (C) In that they consist of a vertical row of cells	(C) In that they consist of a vertical row of cells with	
(C) Trichosclereids and macrosclereids cross-wall dissolved	cross-wall dissolved	
(D) Macrosclereids and osteosclereids (D) Becasue they conduct water		
<b>21.</b> Some lignified cells found in xylem having living <b>29.</b> A tracheid differs from a vessel in having		
cytoplasm in them, belong to the class of (A) Thick walls without contents		
(A) Parenchyma (B) Collenchyma (B) Scalariform thickenings		
(C) Sclereids (D) Fibres (C) Discontinuous lumen of its cells which	h are	
22. The osteosclereids have thickening of separated by end wall		
(A) Ca-carbonate and lignin (D) Lack of brodered pits		
(B) Ca-oxalate and lignin <b>30</b> When the bordered pits are arranged in horize	ontal	
(C) Either of these rows, the pitting is said to be	ontai	
(D) Lignin only (A) Opposite (B) Alternate		
(C) Scalariform (D) Reticulate		
25. Needle like crystals appearing in parenchyma cells		
accance as     31. Bordered pits are very common in       (A) Drugos     (B) Cristoliths		
(C) Inulin (D) Raphides (C) Dicotyledons (D) Pteridophytes		

32.	The unthickened space of	f a pit is called as	41.	The sieve area of a sieve	plate is comparable to one
	(A) Pit membrane	(B) pit cavity		of the following	
	(C) Pit chamber	(D) Pit apperture		(A) Perforation plate of	vessel
33	Vassals have been osbeerved in some staridonbytes			(B) End wall of a trache	id
55.	like	ed in some pieridophytes		(C) Primary pit fields	
	(A) Selaginella	(B) Isoetes		(D) All of these	
	(C) Rhynia	(D) Lycopodium	42.	The terms leptom and h	edrom refer to
24	C		-120	(A) Phloem only	
34.	Companion cells are abse	nt in		(B) Xylem only	
	(A) Halophytes	(B) Aerophytes		(C) Phloem and xylem r	espectively
	(C) Monocots	(D) Oynnospenns		(D) Xylem and phloem i	respectively
35.	Mature and differentiated c	ells of one of the following		(D) Ayiem and philoenin	espectively
	contain cytoplasm but no	nucleus	43.	The sieve cell lack	
	(A) Xylem paranchyma	(B) Companion cells		(A) Well defined sieve p	late
	(C) Xylem vessels	(D) Sieve tubes		(B) Specialized sieve ar	ea
36.	The sieve elements were	discovered by		(C) Both of these	
	(A) Hofmeister	(B) Munch		(D) Sieve pores	
	(C) Nageli	(D) Hartig	11	Lignin is the main constituent of	
37	Palloon like structures formed in the lumon of some		44.	(A) Crowing tissues (P) Cor	(D) Combine
57.	non-functioning sieve tub	es are called as		(A) Growing ussues	(B) Cambium (D) Phloem
	(A) Tylose	(B) Tylosis			
	(C) Tylasoid	(D) Thylosoid	45.	Lignin is a component of	f the secondary cell walls of
• •		. , .		(A) Epidermis	(B) collenchyma
38.	The albuminous cells of gy	uminous cells of gymnosperms are analogous		(C) sclerenchyma	(D) Parenchyma
	(A) Sieve tybe	(D) Sigura tuba alamant	46	Which of the following ti	ssues is composed of mainly
	(A) Sieve tube (C) Companion cell	(D) All of these	-101	dead cells	ssues is composed of manny
				(A) Phloem	(B) Epidermis
39.	Two cells of phloem whi	ch arise from a common		(C) Xylem	(D) Endodermis
	mother cell are	11			
	(A) Serve cell and albumin	nous cell	47.	The resin ducts of gymn	osperms are
	(B) Phloem parenchyma a	and phloem cell		(A) Lysigenous	(B) Schizogenous
	(C) Seive tube elements a	nd companion cell		(C) Schizolysigenous	(D) Any above
	(D) Primary philoem cell a	nd secondary philoem cell	48.	Clowes reported quiesce	nt centre in Zea mays which
40.	One of the following is	absent in the phloem of		represents	
	monocots			(A) Highest rate of mitoitc divisions	
	(A) Sieve tubes			(B) Slow DNA replicat	ion
	(B) Phloem parenchyma			(C) Slow mitotic divisions	
	(C) Companion cells			(D) Both (B) and (C)	
	(D) Phloem fibres				

49.	The sclereids characteristic	of the intercellular spaces	56.	6. A scientist who wish to study the disease free will studied	
	of Nymphaea are				$(\mathbf{D})$ $\mathbf{D}'_{4}$
	(A) Osteosclereids	(B) Brachysclerieds		(A) Correx	(B) Plui (D) Phloem
	(C) Macrosclereids	(D) Astrosclerieds		(C) Shoot apex	
50.	If the stem apex has more most likely result is	than one tunica layer the	57.	Primary vascular tissue i following meristem	is formed by one of the
	<ul><li>(A) All layers get modified</li><li>(B) All form epidermis</li></ul>	l to cortex		<ul><li>(A) Protonema</li><li>(C) Procambium</li></ul>	<ul><li>(B) Promeristem</li><li>(D) Ground meristem</li></ul>
	(C) Only lowermost forms cortex		58.	The strength and rigidity of	of a cell wall is due to the
	(D) Only outermost forms	epidermis		substance known as	
51.	Cystoliths are characterist	ic of -		(A) Suberin	(B) Celllulose
	(A) Nerium (B) Urtica			(C) Lignin	(D) Pectin
	(C) Ficus elastica	(D) Both (B) and (C)	59.	A leaf primordium grow in	nto adult leaf by means of
52.	They lack phloem parench	yma cells		(A) Apical meristem (B) Lateral meristem	
	<ul> <li>(A) All dicots</li> <li>(B) Monnocots with secondary growth</li> <li>(C) All monocots</li> <li>(D) both (A) and (B)</li> </ul>			(C) Marginal meristem (D) Apical and marginal	meristem
				~	
			60.	Silica is abundant in the cell wall of	
53.	An example for the enucleated living plant cell is (A) Xylem parenchyma (B) RBC			<ul><li>(A) All the monocots</li><li>(B) All the dicots</li></ul>	
				(C) Grasses and horsetails	
	(C) Sieve tubes of phloem			(D) All gymnosperms	
	(D) Companion cells of ph	loem	61.	Which of the following fib	res is not a plant product ?
	(D) companion cens of ph	noem		(A) Hemp	(B) Cotton
54.	Vascularization of plants occ	cur in the following manner		(C) Flax	(D) Silk
	(A) Procambium, xylem and phloem differentiate at the same time		62.	Meristematic cells contain	
	(B) Procambium different	iate first, xylem and then		(A) Thin homogenous cell wall	
	phloem			(B) Dense cytoplasm	
	(C) Procambium differentiate first, then phloem and then xylem			(C) Large nuclei (D) All above	
	(D)All develop simultaneously		63.	Elongation of grass internode is due to	
				(A) Lateral meristem	
55.	The histogen forming root	-cap 1s		(B) Apical meristem	
	(A) Plerome	(B) Periblem		(C) Intercalary meristem	
	(C) Dermatogen	(D) Calyptrogen		(D) Procambium	

				Anaw	my of Flowering Flames
64.	The term'meristem' was g	iven by	73.	73. Maximum growth in root occurs	
	(A) Esau	(B) Hanstein		(A) At its tip	(B) Towards light
	(C) Strasburger	(D) Nageli		(C) Behind the apex	(D) Towards apex
65.	A distinct nucleus is gene	rally present in each and	74.	Root cap is not found in-	
	differentation the nucleus	disorganizes in which of		(A) Hollyhock	(B) Pistia
	the following	uisorganizes in which of		(C) Sunflower	(D) China rose
	(A) Phloem parenchyma	(B) Companion cells	75.	Monocot leaves grow by	
	(C) vessels	(D) None of the above		(A) Apical meristem	(B) Lateral meristem
66.	The living cells providing t	tensile strength are		(C) Intercalary meristem	(D) Dermatogen
	<ul><li>(A) Parenchyma</li><li>(C) Sclerenchyma</li></ul>	<ul><li>(B) Collenchyma</li><li>(D) Sclerotic cells</li></ul>	76.	Which of the following is a tissue	a well differentiated plant
67.	In Korper kappe theory, Kappe for	the Korper is body and		(A) Apical meristem (C) Parenchyma	(B) Cambium (D) All the above
	(A) Cortical cells	(B) Calyptrogen	77.	Which of the following is a	a primary meristem
	(C) Epidermis	(D) None of these		(A) Intra fascicular cambiu	ım
68.	Which of the following is	not true about sclereids'		(B) Cork cambium	
	(A) These are also called stone cells			(C) Vascular combium in a	roots
	(B) These form sclerenchyma with fibres			(D) None of the above	
	(C) These are groups of living cells		78	Which of the following	nlants grow by a single
	(D) These are found in nu	tt shells, guava pulp, pear	70.	"apical cell"	plants grow by a single
69.	The jute fibres anatomical	ly are		(A) Monocots	(B) Dicots
	(A) Bast fibres	(B) Cortical fibres		(C) Gymnosperms	(D) Bryophyta
	(C) Xylem fibres	(D) Pith fibres	79.	The secondary meristem originates from	
70.	Monocot leaves are forme	ed by		(A) Promeristem	(B) Primary meristem
	(A) Intercalary meristem			(C) Permanent tissue	(D) Secretory tissue
	(B) Lateral meristem		00	The formation of most and in	_
	(C) Apical meristem		80.	The function of root cap is	5
	(D) Mass meristem			(A) Protection of root tip	and control of geotropic
71.	Embryo of a seed is made	e up of		(B) Storage of food produ	icts
	(A) Meristematic tissue	(B) Parenchyma		(C) Absorption of nutrient	s s
	(C) Collenchyma (D) Sclerenchyma			(D) None of the above	
72.	Bamboo, grass and mint ste	em elongate by the activity			
	of		81.	Tunica is a rib meristem be	ecause it divides in
	(A) Primary meristem			(A) Anticlinal plane only	
	(B) Secondary meristem			(B) Periclinal plane only	
	(C) Intercalary meristems			(C) Both 1 & 2	
	(D) Apical meristems			(D)Several different plane	S

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82.	The cells of a permanent tissue do not divide because these are		89.	Collenchyma is found in	~
				(A) Herbaceous climbers	
(A) Dead			(B) Hydrophytes		
	(B) enucleate			(C) Woody climbers	
	(C) Arrested at G-1 stage	2		(D) Xerophytes	
	(D) Arrested at prophase		90.	Mechanical tissue consisting of living cells is	
83.	Leaf primordium grows b	У		(A) Sclerenchyma	(B) Collenchyma
	(A) Apical meristem	(B) Intercalary meristem		(C) Chlorenchyma	(D) Parenchyma
	(C) Mass meristem	(D) both 1 & 2	91.	Collenchyma differs from	sclerenchyma in
84.	Plastochron is			(A) Retaining protoplasm	at maturity
	(A) Period between initiation of two successive leaf primordia			(B) Having thick walls	
				(C) Having a wide lumen	
	(B) Distance between two successive leaf primordia			<ul><li>(C) Having a wide lumen</li><li>(D) Being meristematic</li><li>Prosenchyma forms</li></ul>	
	(C) Region of origin of root branch		92.	Prosenchyma forms	
	(D) Region of origin of stem branch			(A) Root-pericvcle	(B) Stem-pericycle
85.	In which of the following ways parenchyma is the			(C) Root-endodermis	(D) Stem-hypodermis
	basic or fundamental type of tissue		93.	Rod-like elongated scler	eids in the seed-coats of
	(A) Morphologically	(B) Physiologically	siologically	pulses are called	
	(C) Phylogentically	(D) All the above		(A)Astrosclereids	(B) Macrosclereids
86.	Aerenchyma is helpful to plant by			(C) Trichosclereids	(D) Brachysclereids
	(A) Providing buoyancy in hydrophytes		94.	"Patua" is obtained from I	Hibiscus sabdariffa is
	(B) Promoting photosynth	nesis		(A) Secondary phloem	
	<ul><li>(C) Give mechanical strength to plants</li><li>(D) Giving flexibility to plants</li></ul>			(B) Collenchymatous hypodermis	
				(C) Pericycle	
87.	A parenchyma cell which stores ergastic materials			(D) Epidermis	
	of waste substance is		95.	Which of following plant	cells are without vacuoles
	(A) Phragmoblast	(B) Conidioblast		and without nuclei	
	(C) Idiobasi	(D) Blastofficie		(A) Cambium cells	(B) Xylem vessels
88.	Flesh of a fruit is mostly r	nade up of		(C) Root hairs	(D) Companion cells
	(A) Parenchyma (B) Collenchyma		<b>96</b> .	The tissue responsible f	or translocation of food
	(C) Sclereids	(D) Meristem		material is	
				(A) Parenchyma	(B) Sieve tubes
				(C) Vessels	(D) Fibres

97.	A mature sieve tube differ	rs from a vessel-	105.A nectar-secreting gla	and cell characterstically	
	(A) In lacking a functional nucleus		contains	contains	
	(B) Absence of lignified walls		(A) Granular cytoplasm filling the cell and a small		
	(C) Being nearly dead		nucleus		
	(D) Lacking cytoplasm		(B) Granular cytoplasm, nucleus	a central vacuole and a small	
98.	Vessels and companion cell in the xylem and phloem of	lls are respectively present f	(C) Granular cytoplasm conspicuous nucleus	n filling the cell and a large	
	(A) Gymnosperm (C) Angiosperm	<ul><li>(B) Pteridophytes</li><li>(D) Bryophyta</li></ul>	(D) Vacuolated cytoplas	sm but with a large nucleus	
99.	Sieve plates in angiosperr	ns are	<b>106.</b> Lacunar collenchyma hypodermis of	is specifically present in	
	<ul><li>(A) Oblique &amp; in lateral w</li><li>(B) Straight &amp; in end wall</li></ul>	valls	(A) Cucurbita stem (C) Brinial stem	(B) Sunflower stem (D) maize stem	
	(C) Oblique & in end wal	l	<b>107</b> . Passage cells more disti	nct in endodermis of	
	(D) Straight & in lateral wall		(A) Dicot stem	(B) Monocot stem	
100.Bordered pits occur in		(C) Dicot root	(D) Monocot root		
	(A) Sec. phloem (C) Metaxylem	(B) Protoxylem (D) Bark	108. When protoxylem faces	pericycle, it is called	
		(A) Endarch	(B) Mesarch		
<b>101.</b> Complex tissues are not found in		(C) Exarch	(D) Polyarch		
	(A) Few bryophytes	(B) Pteridophytes	<b>109.</b> Suberin is (A) Polysaccharide (B) Protein		
	(C) All gametophytes	(D)All spermatophytes		(B) Protein	
102	.End walls of tracheids and	l vessels respectively are	(C) Fatty substance	(D) Pectocellulose	
	(A) Pitted & perforated	(B) Perforated & pitted	110. In true hydrophytes, the stomata are present on		
	(C) Both perforated	(D) Both pitted	(A) upper epidermis	(B) lower epidermis	
103	Quiescent centre theory	For demonstrating apical	(C) Both	(D) None of the above	
	organisation in root was p	proposed by	111 Type of vascular hundle	s in fern roots	
	(A) Schuepp	(B) hanstein	(A) hadrocentria	(D) Lonotoontrio	
	(C) Clowes	(D) Nageli	(C) Conjoint collateral	(B) Lepotcentric (D) Radial	
<ul><li>104.Sieve tubes are ideal for nutrient transport because they have</li><li>(A) No end walls</li></ul>		112. Which of the following	is / are correct statement		
		(a) Exarch xylem condition present in roots			
	(B) Bordered pits		(b) Endarch xylem cond	ition present in stem	
(C) Narrow lumen rich in cytoplasm (D) Broad lumen with little peripheral cytoplasm		(c) Open type of vascul stem	ar bundle present in Dicot		

		Allal	omy of Flowering Plants	
(d) Monocot stem posses closed vascular bundles		120. Sclerenchymatous bundle sheath is present in		
(e) Gymnosperms have sieve tubes & companion		(A) Grass	(B) Sunflower	
cells		(C) Banyan	(D) Gram	
(A) a, b, c, d, e (B) a, b, c, e (C) a b c d (D) a c d e	(B) a, b, c, e (D) a, c, d, e	121. Pith is not well developed in		
(0) 4, 0, 0, 4	(12) u, e, u, e	(A) Monocot stem	(B) Monocot root	
ΔΝΔΤΟΜΥΟΕΡ	LANT PARTS	(C) Dicot Stem	(D) Dicot root	
ANAIOMI OF PLANI PARIS		<b>122.</b> In dicot Root		
113. Hypodermis of dicot ster	m is composed by	<ul><li>(A) Vascular bundles are scattered with cambium</li><li>(B) Vascular bundles are open and arranged in a ring</li></ul>		
(A) Parenchyma	(B) Collenchyma (D) Bast fibres			
(C) Sclerenchyma				
<b>114.</b> The xylem is exarch in		(C) Xylem and phloem are radial		
(A) Stem	(B) Root	(D) Xylem is always end	larch	
(C) Leaf	(D) Petiole	123.Less than six radial vasc	ular bundles are present in	
115. In stems the xylem is referred to as		(A) Monocot stem	(B) Dicot stem	
(A) Endarch	(B) Polyarch	(C) Monocot root	(D) Dicot Root	
(C) Mesarch	(D) Exarch			
116 Masarah condition of whom accurs in		SECONDARY	GROWTH	
<b>116.</b> Mesarch condition of xylem occurs in $(A)$		<b>124.</b> Suberin is chiefly deposi	ted in the cells of	
(C) Monocot leaves	(D) None of these	(A) Sclerenchyma	(B) Collenchyma	
		(C) Cork	(D) Phelloderm	
117. Collenchymatous hypoder	rmis is characteristic feature			
of		125. Cork cambium is		
(A) Dicot stem	(A) Dicot stem		(A) Always primary meristem	
(B) Monocot stem	(B) Monocot stem		(B) Always secondary menstem	
(C) Monocot as well as dicot stem		(C) May be secondary o	r primary meristem	
(D) Hydrophytes		(D) Failing primary & Failing secondary mension		
119 TS of a plant part arbitists applications		<b>126.</b> Bark includes all the tiss	ues	
endarch and closed bundles scattered in a ground tissue that should be the part		(A) Lying outside the vascular cambium		
		(B) Formed by vascular cambium		
(A) Monocot root	(B) Dicot root	(C) formed by phelloger	1	
(C) Monocot stem	(D) Dicot stem	(D) Phellem & phelloder	m	
		127. Which tissue remains mo	ore active during autumn	
<b>119.</b> Cortex and pith are not distinguished in		(A) Vascular cambium	(B) Cork cambium	
(A) Monocot stem	(B) Monocot root	(C) Parenchyma	(D) Sclerenchyma	
(C) Dicot stem	(D) Dicot root			

		Allato	my of riowering riants
128. Abnormal secondary growth occurs in		136.Stem of date palm increases in girth due to activity	
(A) Cucurbita	(B) Sunflower	of	
(C) Hordeum	(D) Dracaena	(A) Intercalary meristem	(B) Apical meristem
129. In which stem, lateral meristem is absent		(C) Lateral meristem	(D) None of the above
(A) Palm	(B) Bougainvillea	137. Living tissue in lenticel is c	called
(C) Boerhaavia	(D) Mirabilis	(A) Conjunctive tissue	
<b>130.</b> Formation of which tissue is example of dedifferentiation		(B) Connective tissue	
		(C) Complementary tissue	
(A) Inter fascicular cambium		(D) Phelloderm	
(B) Apical meristem	14111	<b>120</b> E-4	
(C) Intra fascicular cambium		<b>138.</b> Extra stellar secondary growth occurs due to the	
(D) Inter calary meristem			
(), ii ii i j i iii		(A) Intrafascicular cambium	
<b>131.</b> In dicot root, vascular can	mbium originates from	(B) Inter fascicular cambium	
(A) Conjunctive tissue	(B) pith rays	(C) vascular cambium	
(C) Pericycle	(D) $1 \& 3$ both	(D) Cork cambruin	
<b>132.</b> In dicot root which tissue becomes dead due to		<b>139.</b> Which of the following provide maximum mechanical strength to a tree trunk.	
activity of phellogen			
(A) All tissue outside cortex		(A) Heart wood	
(B) Tissue outside hypod	lermis	(B) sap wood	
(C) Tissue outside endodermis		(C) Cork	
(D) Tissue outside pericycle		(D) Late wood	
133. A wood with scattered parenchyma is called		140.Formation of vascular ray	vs occurs in which order
(A) Paratracheal	(B) Apotracheal	(A) Centripetal	(B) Centrifugal
(C) Syntracheal	(D) None	(C) Acropetal order	(D) 1 & 2 both
134.Formation of secondary xylem and phloem is		141. Most conspicuous annual rings form in	
respectively		(A) Temperate evergreen plants	
(A) Centrifugal and centripetal		(B) Tropical deciduous	
(B) Centripetal and centrifugal		<ul><li>(C) Temperate deciduous plants</li><li>(D) Tropical evergreen</li><li>142. Cambium cells divide in which plane.</li></ul>	
(C) Both centripetal			
(D) Both centrifugal			
135.Normal secondary gwowth takes place in		(A) Tongontial	( <b>B</b> ) <b>P</b> adial
(A) Dicots & Monocots		$(\mathbf{C})$ Oblique	(D) Anticlinal
(B) Gymnosperms & Monocots		(C) Conque	
(C) Dicots & Gymnospe	rms		
(D) Only in dicots			

143. Which would do maximum harm to a tree		150. Growth rings are formed due to the activity of	
(A) Loss of half of its leaves		(A) Intrastelar Cambium	
(B) Loss of half of its branches		(B) Intercalary Cambium	
(C) Loss of all of its leaves		(C) Extrastelar cambium	
(D) Loss of all its bark		(D) Primary cambium	
144. External Protective tissues are		151. Annual rings and growth rings are formed due to the	
(A) Cortex and epidermis		fluctuations in the activity of	
(B) Cork and pericycle		(A) xylem	(B) phloem
(C) Cortex and pericycle		(C) xylem and phloem (D) cambium	(D) cambium
(D) Cork and epidermis		152. Annual rings are the bands of	
145.Lenticels do not occur on		(A) Secondary cortex and cork	
(A) Stem	(B) Root	(B) All secondary vascular tissue	
(C) Leaf	(D) Fruit	(C) Secondary xylem and	xylem rays
<b>146.</b> In which of the following there is no differntiation of		(D) Secondary phloem and medullary rays	
heart wood and sap wood		153.In trees, the growth rings represent	
(A) Neem	(B) Ashok	(A) Primary xylem	
(C) Mango	(D) Palm	(B) Secondary xylem	
147.Sap wood differ from heart wood in being		(C) Secondary phloem	
(A) Darker and non conducting		(D) Cambium	
(B) Softer and non conduct	ting		
(C) Lighter and conducting		<b>154.</b> Protective layer found at t	the site of abscission is
(D) Hard, darker and less conducting		(A) Parenchymatous (C) Sclerenchymatous	(B) Collenchymatous (D) Suberized
<b>148.</b> When a tree grows older which of the following			
increase rapidly -		<b>155.</b> The trees growing in deserts will	
(A) Heart wood	(B) Sap wood	<ul><li>(A) Show alternate rings of xylem and sclerenchyma</li><li>(B) Show distinct annual rings</li></ul>	
(C) Pith	(D) Cortex		
<b>149.</b> Knots are formed in the wood due to		(C) Not show distinct annual rings	
		(D) Show the activity of cambium	
(A) External injuries			
(C) Leaf again		156. Annual rings are well den	narcated in trees growing
(C) Leaf scars (D) Insect bits			
(D) insect bites		(A) Simla	(B) Mumbai
		(C) Chennai	(D) Udaipur

<b>157.</b> How many growth rings should be developed per		161. The cambium ring becomes active and begins to cut
year in a plant grown in Rajasthan with four distinct		off new cells, both towards the inner and the
seasons (Viz, summer rains, winter and spring)		outersides. The cells cut off towards pith, mature
(A) Four	(B) Two	into(i) and the cells cut off towards periphery
(C) one	(D) none of the above	mature into(ii) In this question (i) & (ii) are respectively -
<b>158.</b> The Process by which the plant becomes woody is called		(A) (i) secondary phloem, (ii) secondary xylem
$(\Lambda)$ Calcification	(B) Lignification	(B) (i) secondary xylem, (ii) secondary phloem
(C) Impregnation	(D) Fossilization	(C) (i) epidermis, (ii) pericycle
		(D) (i) pericycle, (ii) epidermis
159. Compact wood with little parenchyma is termed		
(A) Heart wood (C) Pycnoxylic wood	(B) Hard wood (D) Manoxylic wood	<b>162.</b> Select the incorrect statement with respect to secondary growth
		(A) intrafascicular and interfascicular cambium are
160. Abnormal secondary growth is observed in		joined to form vascular cambium
(A) Dracaena	(B) Wheat	(B) secondary phloem is formed 8-10 times more
(C) Ginger	(D) Rice	as compared to secondary xylem
		(C) secondary growth has been reported in some monocotyledons such as palm, Yucca, Dracaena,
		(D) In dicot stem some part of vascular cambium is primary and some part is secondary.