GPLUS EDUCATION

Date :	
Time :	BIOLOGY
Marks:	

PLANT GROWTH AND DEVELOPMENT

Single Correct Answer Type Rapid and dramatic increase in shoot length is called a) Triple response growth b) Bolting c) scarification d) Night break effect Environment heterophylly is seen in 2. b) Coriander a) Cotton c) Larkspur d) Buttercup Genetically dwarf plants can be induced to grow tall by using a) Gibberellins b) Phycobillins c) Auxins d) Cytokinins Increased growth per unit time is termed as 4. a) Nascent growth rate b) Growth rate c) Biomass d) All of these Which plant hormone promotes seed dormancy, bud dormancy and causes stomatal closure? 5. a) IAA b) Abscisic acid c) GA d) cytokinin I. Lag phase \rightarrow Log phase \rightarrow Stationary phase II. Geometric and Arithmetic phase of growth III. Growth shown by all living organism in vivo IV. $L_t = L_0 + rt$ Match the above characters with sigmoid curve, arithmetic growth, embryo development and choose the correct option accordingly Sigmoid curve Arithmetic Embryo development growth III, IV П a) II c) I II, III II A plant have 13 hours critical day light under which condition it will flower Duration of dark Duration of light period period a) 13 11 b) 11 13 d) 10 c) 12 12 14 The shedding of leaves, flowers or fruits due to change in the hormonal balance in plants, is referred as c) Photoperiodism a) Senescence b) Ascission d) vernalization The phytohormone that induces cell elongation is known to be produced by a fungus. The asexual stage of this fungus is called a) Rhizopus sexualis b) Fusarium moniliformae c) Gibberella fujikuroi d) Fusarium oxysporum 10. Cytokinins are mostly a) Glucosides b) Amino purines d) phenolic c) Acidic 11. Geotropic response is perceived by a) Mature roots b) Elongation roots c) Root cap d) Root hairs 12. The natural plant hormone isolated from corn kernels and coconut milk is a) Florigen b) GA_3 c) Free auxins d) Zeatin 13. In the expression, $W_1 = W_0 e^{rt}$ (geometrical growth), W_1, W_0, r, t represents W_0 a) Initial size Final size Growth rate Time of growth

b) Final size Initial size Growth rate Time of growth

	c) Final size Initial size Growth rate Time of dividi	ng	
	d) Initial size Final size Growth rate Time of dividi	ng	
14.	Natural cytokinins are synthesized in tissue that are		
	a) Senescent b) Dividing rapidly	c) Storing food material	d) Differentiating
15.	Which of the following processes is concerned with	Cholodny-Went theory?	
	a) Photomorphogenesis b) Photoperiodism	c) Phototropism	d) photorespiration
16.	Growth at cellular level is the increase in the amoun	t of	•
	a) Cell wall b) Cell membrane	c) Protoplasm	d) All of the above
17.	Which one of the following is a natural growth inhib	-	,
	a) NAA b) ABA	c) IAA	d) GA
18	I. Antagonist to GA	·) ·· ·· ·	u) a
20.	II. Promoted bud dormancy		
	III. Promoted stomatal closure		
	IV. Promoted abscission layer		
	Identify the hormone/s which promote/s all these e	vents in plants and choose	the correct ontion
	a) Cytokinin b) Auxin	c) Abscisic acid	d) C ₂ H ₄
10		c) Abscisic acid	u) C ₂ 11 ₄
19.	Thigmotropism is best seen in a) Tendrils b) Leaf apex	a) Poot anov	d) Ctom anov
20	, .	c) Root apex	d) Stem apex
20.	In coleoptile tissue, auxin is	J.	
	a) Not transported because it is used where it is made.	ae	
	b) Transported by diffusion		
	c) Transported from the base to tip by osmosis	· · · · · · · · · · · · · · · · · · ·	
0.4	d) Produced by growing apices of stem, which migra		1
21	Which of the following induces flowering in long day	-	
	a) Gibberellins b) Cytokinin	c) Auxins	d) Ethylene
~ ~			
22.	I. Lag phase		
22.	II. Stationary phase		
22.	II. Stationary phase III. Exponential phase	CATION.	
22.	II. Stationary phase III. Exponential phase Arrange the above steps of geometrical growth (from		rrect sequence of their
22.	II. Stationary phase III. Exponential phase Arrange the above steps of geometrical growth (from occurrence and choose the correct option according	ly	_
	II. Stationary phase III. Exponential phase Arrange the above steps of geometrical growth (from occurrence and choose the correct option according a) $I \rightarrow III \rightarrow III$ b) $I \rightarrow III \rightarrow III$	$\begin{array}{c} \text{ly} \\ \text{c) III} \rightarrow \text{II} \rightarrow \text{I} \end{array}$	d) III \rightarrow I \rightarrow II
	II. Stationary phase III. Exponential phase Arrange the above steps of geometrical growth (from occurrence and choose the correct option according a) $I \rightarrow III \rightarrow III$ b) $I \rightarrow III \rightarrow III$ Fruits can be left on the tree longer, so as to increase	ly c) III \rightarrow II \rightarrow I e the market period. This is	d) III \rightarrow I \rightarrow II due to the function of
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23.24.25.26.27.28.	II. Stationary phase III. Exponential phase Arrange the above steps of geometrical growth (from occurrence and choose the correct option according a) $I \rightarrow II \rightarrow III$ b) $I \rightarrow III \rightarrow III$ Fruits can be left on the tree longer, so as to increase a) Delay senescence by auxin c) Delay senescence by cytokinin Name the process when dedifferentiated cells again a) Cell-enlargement b) Redifferentiation For cryopreservation, plant materials are frozen at a) -196° C b) -150° C Maximum elongation takes place in a) Conducting tissue c) Both (a) and (b) One hormone helps in ripening of fruits, while the or respectively a) Abscisic acid and auxin c) Auxin and ethylene Micropropagation is done by a) Auxins b) GA	c) III → II → I the market period. This is b) Delay senescence by Cl d) Delay senescence by Gl loss the ability to divide an c) Dedifferentiation c) −80°C b) Fibre d) Cell wall and membranther stimulates closure of second by Ethylene and abscisic and Ethylene and gibberell	d) III → I → II due to the function of H ₂ − CH ₂ A d get mature? d) Differentiation d) −40°C te tomata. These are acid ic acid d) Both (a) and (b)

30.	The cut flowers and vegetables can be kept fresh for	a long period by this plant	hormone.
	a) Gibberellins	b) Cytokinins	
	c) Auxins	d) Ethylene	
31.	Photoperiodism was first characterized in		
	a) Tobacco b) Potato	c) Tomato	d) Cotton
32.	Hydroponics is a system of growing plants in		
	a) Soil less culture or solution culture	b) Acidic soils	
	c) Soil less culture with alkaline pH	d) Soil less culture with a	cidic pH
33.	If a plant need 10 hours darkness than identify the o	condition under which it wi	ll flower
	I. 14 hours day period		
	II. 10 hours dark period		
	III. $9\frac{1}{2}$ hours dark period		
	2		
	IV. 9 hours dark period		
	Choose the correct option	a) I and IV	d) I and II
24	a) I and III What halps in flavoring?	c) I and IV	d) I and II
34.	What helps in flowering?	-) Dl+l	J) [[4]]
25	a) Cytochrome b) ABA	c) Phytochrome	d) Ethylene
35.	Which of them is not an extrinsic factor?	ь) т со	
	a) Light, O ₂	b) Temperature, CO ₂	
26	c) Nutrient, water	d) Growth regulator and	genetic factor
36.	The stress hormone that helps plant to respond dro	-	D Del 1
0.7	a) Auxins b) Abscisic acid	c) Cytokinin	d) Ethylene
37.	Auxins promote		
	a) Cell growth and enlargement	b) Cambial activity	
20	c) Apical dominance	d) All of the above	
38.	The flowers of <i>Oxalis</i> open during the day and close		
0.0	a) Photonasty b) Nyctinasty	c) Phototactic	d) Seismonastic
39.	Developing embryo (in vitro) shows	ALIUN	
	a) Geometric growth	b) Arithmetic growth	
	c) Geometric and arithmetic growth	d) None of the above	
40.	Respiratory climacteric is related with		
	a) ABA b) C ₂ H ₄	c) Auxin	d) GA
41.	I. Increased vacuolation		
	II. Cell enlargement		
	III. New cell wall deposition		
	Which of the above are the characteristics of phase	of elongation?	
	Choose the correct option accordingly		
	a) I and II b) II and III	c) I and III	d) I, II and III
42.	Coiling of garden pea tendrils around any support is	-	
	a) Thigmotaxis b) Thigmonasty	c) Thigmotropism	d) Thermotaxis
43.	Internodal elongation just prior to flowering in beet	, cabbage and in many plan	ts with rosette habit is
	called		
	a) Pruning b) Blotting	c) Grafting	d) Cutting
44.	Member of auxin, which is widely used to kill the did	cotyledonous weed is	
	a) IAA b) IBA	c) NAA	d) 2-4-D
45.	Identify to which plant hormone, the given function	belongs	
	I. Initiates flowering in pineapples		
	II. Induces flowering in mango		
	III. Root growth and root hair promotion		
	I II III		

	a) C_2H_4 C_2H_4 C_2H_4	b) C ₂ H ₄ IAA GA	
	c) C ₂ H ₄ GA IAA	d) GA 🏻 IAA 🔻 IBA	
46.	Growth period of plant is generally divided into		
	a) Four phases b) Three phases	c) Two phases	d) Five phases
47.	Difference between kinetin and zeatin is		
	a) Kinetin is active zeatin, is non-active	b) Zeatin is active kinetin	, is non-active
	c) Zeatin is synthetic, kinetin is natural	d) Zeatin is natural, kinet	in is synthetic
48.	Auxanometer is used to detect		
	a) Respiration b) Transpiration	c) Plant movement	d) Growth
49.	Auxin was isolated by		
	a) Charles Darwin b) Francis Darwin	c) FW Went	d) de Vries
50.	The most common auxin is		
	a) GA b) ABA	c) Kinetin	d) IAA
51.	Study the following statements		
	I. O ₂ helps in releasing metabolic energy, which is es	sential for growth	
	II. Nutrients are required by plants for the synthesis	of protoplasm	
	III. Change in temperature could be the detrimental	for the survival of an organ	ism
	IV. Light and gravity don't affect the stages of growth	ı	
	Choose the correct option		
	a) I, II, III and IV b) I, II and III	c) I, III and IV	d) I, II and IV
52.	Which plant hormone is found in gaseous form?		
	a) Auxin b) Cytokinin	c) Ethylene	d) ABA
53.	Measurement and comparison of total growth in geo	metrical growth of a plant	per unit time is called
	a) Absolute growth rate	b) Qualitative growth rate	e
	c) Relative growth rate	d) Exponential growth ra	te
54.	Auxin in plant means for		
	a) Cell elongation	b) Fruit ripening	
	c) Cell division	d) Inhibition of root grow	rth
55.	Grand place of growth is an another name of	SECTION	
	a) Lag phase	b) Stationary phase	
	c) Diminishing growth phase	d) Exponential growth ph	
56.	Which of the following movements in plants is due to		on of auxin?
	a) Movement of shoot towards the source of light	b) Nyctinasty	
	c) Movement of sunflower towards sun	d) All of the above	
57.	Primary growth of plants is contributed by		
	a) Root apical meristem	b) Shoot apical meristem	
	c) Intercalary meristem	d) All of these	
58.	Growth of the plant is open because of) D 1100	D All C.1 1
5 0	a) Differentiation b) Dedifferentiation	c) Redifferentiation	d) All of the above
59.	Senescence as an active developmental cellular proc	ess in the growth and funct	tioning of a flowering plant,
	is indicated in	1) 1 (' '	
	a) Vessels and tracheid differentiation	b) Leaf ascission	
(0	c) Annual plants	d) Floral parts	
60.	Phytohormone commonly called stress hormone is) (211 112	1) 1
(1	a) Auxin b) Abscisic acid	c) Gibberellins	d) cytokinins
61.	Which one of the following is not a effect of gibberel		.:.
	a) Increase grapes stalk	b) Delay senescence of fru	
(2	c) Induce dormancy	d) Increase sugarcane ste	III
62.	Study the following question I. Who was the first to confirm the release of volatile	2	
	TO WHO WAS THE HESE TO CONTIRM THE PELEASE OF VOIATILE	17	

	Substance fro	m ripened oi	gans of plan	ts?				
	II. Who discov	ered kinetin	from herrin	g sperm?				
III. Who discovered GA?								
	Which of the f	ollowing opt	ion correctly	answer the g	iven questions?			
	a) I-Cousin, II		-	_	b) I-Cousin, II-Ku	rosawa, I	II-Darwin	
	c) I-Cousin, II		_		d) I-Kurosawa, II-	Miller an	ıd Skoog, III-Cousi	ns
63.	Which of the f			plant growth?	-		J	
	a) H ₂ O	J	b) 0 ₂	. 0	c) Nutrients		d) All of these	
64.		air of physiol		s of two phyto	hormones, which a	are synth	-	ent
	amino acids?					•		
	I. Formation	of perennat	ting buds in <i>l</i>	Lemna.				
	II. Simultane	=	-					
	III. Bolting in		0 1 11					
	IV. Apical dor	_	olyalthia.					
	a) II and IV		b) I and IV		c) II and III		d) I and II	
65.	Choose the co	rrect statem	•				,	
	I. Cytokinin –	Delay of leaf	senescene					
	II. Auxin – Api	-						
	III. Ethylene –							
	IV. Gibberellir	_		eaves				
	a) I and II		b) I and IV		c) II and III		d) II and IV	
66.	-	l growth, log	-	resented by	,		,	
		In geometrical growth, log phase is represented by a) Rapid consumption of nutrientb) Rapid increment of cell number						
	c) Highest gro	_		7d1 '	d) All of the above			
67.	The pigment i		hotomorpho	genetic move	•			
	a) Cytochrom		b) Phytochr		c) Chromatin		d) vernalin	
68.					_400		,	
	Growth in plants is measured by the increase in I. fresh weight I. dry weight							
	II. dry weight		J PLUS	EDUC	WITON			
	III. length, are	a and volum	e					
	IV. cell numbe							
	Choose the co	rrect option						
	a) All except I	and II	b) All excep	t III	c) All except IV		d) I, II, III and IV	
69.	To make store	ed food availa	able for gern	nination, with	which hormone se	ed shoul	d be treated?	
	a) Gibberellin	S	b) Auxin		c) Abscisic acid		d) Cytokinin	
70.	Which of the f	following ind	uces floweri	ng in long day	plants?			
	a) Gibberellin	S	b) Cytokinir	ı	c) Auxins		d) Ethylene	
71.	The movemen	it of hairs in	Drosera is					
	a) Thermonas	stic	b) Thigmon	astic	c) Seismonastic		d) photonastic	
72.	Most widely u	sed compou	nd as a sourc	ce of ethylene	is			
	a) Nepthol		b) Acetol		c) Ethephon		d) Ethepcon	
73.	The site of per	ception of li	ght is					
	a) Root		b) Shoot		c) Leaves		d) Meristem	
74.	On the basis o	f correlation	, find the cor	rect option fr	om columns.			
	Column I	Column II	Column					
			III]				
	I Foolish	(p)	(i)					
	plant	Volatile	Induces					
	II. Induces	hormone (q) GA	dormancy (ii)Ripens	1				
	senescence	(q) un	fruits					

	(r) Zeatin (iii)		
	Usually		
	sterile		
	a) I-p-ii, II-r-i b) I-r-iii, II-q-iii	c) I-q-iii, II-p-ii	d) La i II r ii
75.	Natural cytokinins are synthesised in which regions		d) I-q-i, II-r-ii
73.	a) Root apices	b) Young fruit	
	-		
76	c) Developing shoot buds The rosette habit of cabbage can be changed by appl	d) All of the above	
70.			d) Ethanhan
77	a) IAA b) GA Which is used as weedicide?	c) ABA	d) Ethaphon
//.		a) IAA	4) A D A
70	a) 2,4-D b) IBA	c) IAA	d) ABA
78.	The living differentiated cells, regain capacity of divi		
70	a) Redifferentiation b) Dedifferentiation	c) Differentiation	d) Reverse division
79.	Photoperiodism was first studied by) TYATTAT 1	D.C.
00	a) Garner and Allard b) Darwin	c) FW Went	d) Cousins
80.	A phytohormone, which increases the production of	starch hydrolyzing enzymo	es during the germination
	of maize seeds, is employed for the following		
	a) Increasing the vase-life period of flowers	b) Induction of seedless f	
0.4	c) Acceleration of ripening of banana fruits	d) Eradication of dicot we	
81.	Treatment of seed at low temperature under moist of		
	a) Scarification b) Vernalization	c) Chelation	d) Stratification
82.	The Plant Growth Regulator (PGR), ethylene comes		
	a) Simple plant hormone	b) Complex plant hormon	
	c) Plant growth inhibitor hormone	d) Plant growth promoter	r hormone
83.	Plants requiring low light intensity for optimum pho		
	a) Heliophytes b) Pteridophytes	c) Sciophytes	d) Bryophytes
84.	Nicotiana sylvestris flowers only during long days	7 T T T T T T T T T T T T T T T T T T T	
	raised in the laboratory under different photoperiod		ower at the same time and
	can be cross fertilized to produce self-fertile offsprin	•	
	What is the best reason for considering <i>N. sylvestris</i>	_	_
	a) They are physiologically distinct	b) They are morphologica	=
	c) They cannot interbreed in nature	d) They are reproductive	ly distinct
85.	Large amount of ethylene is synthesised by		
	a) Developing roots and fruits	b) Developing shoots and	
	c) Senescence tissues and ripening fruits	d) Young tissue and unrip	pened fruits
86.	In geometrical growth, lag phase is represented by		
	a) Initial rapid growth b) Latter rapid growth	c) Initial slow growth	d) Latter slow growth
87.	Natural and synthetic-auxin (IAA, NAA, IBA, 2-4-D) h	-	
	a) Agriculture b) Horticulture	c) Both (a) and (b)	d) Sericulture
88.	Water is required in plant growth for		
	a) Enzymatic reactions b) Cell enlargement	c) Extension growth	d) All of these
89.	IAA is derived from or which of the following is invo	lved in the synthesis of a pl	lant IAA and vasoconstrides
	cerotonin?		
	a) Tryptophan b) Tyrosine	c) Phenylalanine	d) None of these
90.	During differentiation, the cells undergo few to majo	r structural changes in the	ir
	a) Cell wall b) Protoplasm	c) Both (a) and (b)	d) Cytoplasm
91.	Study the following statement		
	I. Cytokinins are formed primarily in roots		
	II. Auxin and cytokinin are antagonistic in apical don		
	III. Kinetin (a modified DNA purine) was discovered	from herring sperm	

- IV. Zeatin is auxin
- V. Zeatin was firstly extracted from herring

Choose the incorrect one

- a) I and II
- b) III

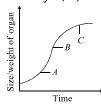
- c) II and V
- d) IV and V

- 92. SDP also called
 - a) Short night plant

b) Long night plant

c) Intermediate night plant

- d) None of these
- 93. Arithmetic growth is linear because
 - a) One daughter cell remains meristematic and other differentiates and mature
 - b) Both daughter cell remains meristematic
 - c) Both daughter cells gets matured
 - d) All of the above
- 94. In S-shaped curve, the growth is highest in which phase?
 - a) Lag phase
- b) Steady phase
- c) Log phase
- d) All of these
- 95. Identify *A*, *B*, *C* in the given graph and choose the correct option accordingly



- a) A-Log phase, B-Lag phase, C-Stationary phase
- b) A-Lag phase, B-Log phase, C-Stationary phase
- c) A-Lag phase, B-Stationary phase, B-Log phase
- d) B-Log phase, B-Stationary phase, A-Lag phase
- 96. Pick out the correct statements.
 - V. Cytokinins especially help in delaying senescence.
 - VI. Auxins are involved in regulating apical dominance.
 - VII. Ethylene is especially useful in enhancing seed germination.

VIII. Gibberellins are responsible for immature falling of leaves.

- a) I and III
- b) I and IV
- c) II and III
- d) I and II

- 97. Haptonastic movement is found in
 - a) Drosera
- b) Oxalis
- c) Mimosa
- d) Cucurbita
- 98. Diagram *A* and *B* indicate the shape of leaves in larkspur and buttercup respectively, choose the correct option



- a) The juvenile and adult leaf of larkspur differ in size due to genetic and plant growth regulator factors
- b) Both leaf of buttercup differ in size due to genetic and intercellular factors
- c) Both larkspur and buttercup leaf size variation is due to habitat plasticity

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- d) None of the above
- 99. Canary grass experiment for phototropism was firstly conducted by
 - a) Went
- b) Darwin
- c) Cousins
- d) Kurosawa

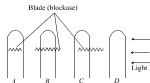
- 100. Which one is an example of redifferentiation?
 - a) Cork cambium

b) Secondary cortex

c) Meristems

- d) Interfasicular cambium
- 101. Which hormone is called the dormancy hormone?

a) IAA	b) NAA	c) ABA	d) GA
102. Plant growth regula	tors are also described as		
a) Plant growth sub	stance	b) Plant hormones	
c) Phytohormones		d) All of these	
103. Name of a gaseous p	olant hormone is		
a) IAA	b) Gibberellins	c) Ethylene	d) Abscisic acid
•	can't be sustained for much t	•	•
I. limited space and			
II. accumulation of t	oxic agent		
III. unlimited space	_		
IV. accumulation of	nutrient agent		
Choose the correct of	combination of options		
a) I and III	b) III and IV	c) I and II	d) IV and II
105. Programmed cell de	eath is scientifically termed as		
a) Autotomy	b) Cell lysis	c) Apoptosis	d) None of these
106. The following states	nents are given about plant gr	owth hormones:	
IX. Kinetin is a degr	adative substance from DNA	molecule.	
X. ABA is present,	in all the plants.		
XI. Low ratio of cyt	okinins to auxins favours root	formation only.	
XII. ABA is synthesiz	zed catabolically through mev	alonate pathway.	
The correct combina	ation is		
a) I and II	b) II and III	c) I and III	d) III and IV
107. Plants followA բ	oathways in response to envir	onment or phases of life to	form different kind of
structures. This abil	ity is calledB		
Complete the given	statement with the correct co	mbination of options	
a) A-same; B-elastic	rity	b) A-elasticity; B-same	
c) A-different; B-pla	stically	d) A-same; B-plastically	у
	ds into flowers, is a type of	CATION	
a) Autonomic move		b) Autonomic moveme	
c) Paratonic moven		d) Autonomic moveme	nt of growth
109. The bioassay of aux	in is		
a) <i>Avena</i> curvature	test	b) Callus formation	
c) Culture of fungus		d) Seed dormancy	
	om cambium, root apical and s	shoot apical meristem diffe	rentiate and mature to
	ctions. This act is called		
a) Differentiation	b) Dedifferentiation	c) Redifferentiation	d) All of these
	ng by low temperature treatm		
a) Vernalization	b) Cryobiology	c) Photoperiodism	d) Pruning
	due to reversible turgor chang	=	
a) Nyctinastic	b) Seismonastic	c) Heptonastic	d) Photonastic
113. The type of growth called	where new cells are always be	eing added to plant body by	the activity of meristem is
a) Closed form of gr	rowth	b) Diffused form of gro	wth
c) Open form of gro		d) Discontinuous form	
	ing is a day neutral plant?	-	÷
a) Helianthus annı		b) Euphorbia pulcheri	rima
c) Avena sativa		d) Beta vulgaris	
-	experiment	- •	



	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
	Light		
	Which coleoptile bend toward the light? Choose the	correct option	
	a) A and B b) C and D	c) A and D	d) <i>C</i> and <i>B</i>
116.	Which one of the following acids is a derivative of ca	=	,
	a) Indole-butyric acid b) Indole-3 acetic acid	c) Gibberellic acid	d) Abscisic acid
117.	Growth plotted against time gives a	,	,
	a) Parabolic curve b) Sigmoid curve	c) Upright line	d) Horizontal line
118.	Cell elongation in intermodal regions of the green pl	,	
	a) Indole acetic acid b) Cytokinins	c) Gibberellins	d) Ethylene
119.	An enzyme that can stimulate germination of barley	•	
	a) α -amylase b) Lipase	c) Protease	d) Invertase
120.	The final structure at maturity of a cell/tissue is det	•	
	a) Type of cells	b) Type of cell division	
	c) Location of cell within tissue	d) Nutrient in cells	
121.	Charles Darwin and Francis Darwin are related with		
	a) Vernalisation	b) Effect of plant hormon	es (auxin)
	c) Photoperiodism	d) Phototropism	
122.	Vernalisation can be reversed by		
	a) Application of high temperature	b) Application of auxin	
	c) Application of more less temperature	d) Application of gibberel	lin
123.	Constantly dividing cells, both at the root apex and s	shoot apex represents	
	a) Elongation phase of the growth	b) Meristematic phase of	the growth
	c) Maturation phase of the growth	d) None of the above	
124.	In most of the higher plants, the growing A bud i	nhibits the growth ofB	bud, a phenomenon called
	apical dominance. Removal of the shoot tips usually	results in growth ofC b	uds.
	Complete the given statement with the correct comb	pination of options given in	the codes below
	a) A-lateral, B-axillary, C-axillary	b) A-apical, B-lateral, C-ap	pical
	c) A-apical, B-lateral, C-lateral	d) A-lateral, B-apical, C-la	teral
125.	How many gibberellins are reported from widely di		ant and fungi?
	a) More than 50 b) More than 75	c) More than 100	d) More than 25
126.	Abscisic acid is primarily synthesized in		
	a) Lysosomes b) Golgi complex	c) Chloroplast	d) ribosomes
127.	Cytokinins are formed in		
	a) Roots b) Leaves	c) Fruits	d) Stems
128.	Which hormone (PGR) encounters the apical domin	· ·	
	a) IAA b) Cytokinin	c) C_2H_4	d) NAA
129.	The terms auxin is applied to		
	I. IAA II. IBA		
	III. NAA IV. 2-4-D		
	Select the correct option		
	a) I, II and III b) II, III and IV	c) I, III and IV	d) I, II, III and IV
130.	Which of the following is an anti-gibberellin?	N 70.1	
464	a) Auxin b) ABA	c) Ethylene	d) Cytokinin
131.	Which hormone is responsible for apical growth?		

c) GA

b) Cork cambium

b) ABA

132. Increase in the girth of plant (organ) takes place by

a) IAA

a) Vascular cambium

d) All of these

a) Dath (a) and (h		d) Doot and shoot anical	manistan
c) Both (a) and (b) 133. Effect of photoperiod on growth and development of		d) Root and shoot apical meristem	
	_		=
a) Vernalisation	b) Photoperiodism	c) Both (a) and (b)	d) Phototaxis
134. Vernalisation was	•) T 1	1) ()
a) FW Went	b) Darwin	c) Lysenko	d) Cousins
= =	ne that helps in germination of see		
a) ABA	b) Auxin	c) Gibberellin	d) cytokinin
136. Gibberellic acid in	_		
-	spermic plants only	b) In long day plants und	
	ants under long day conditions	d) In day –neutral plants	under dark conditions
137. Vernalization is de	one at		
a) Lower tempera	ture b) Low light intensity	c) Higher temperature	d) High light intensity
138. Development incl	udes (plants)		
I. Differentiation			
II. Redifferentiation	on		
III. Dedifferentiati	on		
Select the right co	mbination from the given option		
a) I and II	b) II and III	c) III and I	d) I, II and III
=	s related to (hormone and plant)	•	•
Hormone Plant	` .		
	heat	b) Cytokinin Corn	
c) Gibberellin Ri		d) Ethylene Tomato	
•	was grown at 12 hours day 12 ho		it flowered, while in the
-	ase was interrupted by flash of lig		
	gories will you place this plant?	one and re ara not produce n	ower onder when one or
a) Long day	b) Darkness neutral	c) Day neutral	d) Short day
	wing hormones does not naturally		uj biloi t day
a) 2,4-D	b) IAA	c) GA	d) ABA
•	processes in plants that naturally		•
	-		
a) Wilting	b) Abscission	c) Plasmolysis	d) Senescence
143. Abscission and do	· · · · · · · · · · · · · · · · · · ·	-> TAA	J) ID (
a) ABA	b) CH ₂ – CH ₂	c) IAA	d) IBA
	zation can be induced by) DI	12.04
a) Cytokinin	b) Auxin	c) Phototropin	d) GA
	inism is characterised by		
	permanent increase in size of an	=	
	permanent increase in size of a co	ell	
c) Both (a) and (b	-		
d) Reversible peri	_		
146. The hormone invo	olved in metabolism of food mater	rial in cereal grains during ş	germination is
a) Auxin	b) Cytokinin	c) Gibberellin	d) None of these
147. A hormone delayi	ng senescence is		
a) Auxin	b) Cytokinin	c) Ethylene	d) gibberellin
148. Cytokinin helps in	delaying the leaf falling/senesce	nces mainly by	
a) Promoting nuti		b) Inhibiting cell divisior	1
c) Promoting cell	elongation	d) Promoting cell differe	ntiation
149. ABA was discover			
a) Mid 1960s	b) Mid 1959s	c) Mid 1096s	d) Mid 1996s
•	tomatoes is induced by		
a) Cytokinin	b) Auxin	c) Gibberellin	d) $CH_2 - CH_2$

151. The role of PGR is of one kind of ...A... control. Along with genomic control and ...B... factors, they play an important role in plant growth. Many of ...C... factor, such as temperature, light, etc., control growth and development via PGR. Choose the correct option A, B and C to complete the given statement a) A-intrinsic, B- intrinsic, C-extrinsic b) A-intrinsic, B-extrinsic, C-extrinsic c) A-extrinsic, B-extrinsic, C-intrinsic d) A-intrinsic, B-extrinsic, C-intrinsic 152. Growth promoting hormone is a) IAA b) Gibberellin c) 2,4-D d) ABA 153. The study of different aspects or appearance of plants in different seasons of the year is called b) Ecosystem c) Phenology a) Ecology 154. In the given figure find out the absolute and relative growth rate and choose the correct option Absolute Growth Rate Relative Growth Rate 1 cm^2 b) 100 cm^2 a) 1 cm² 5 cm^2 c) 5 cm^2 $100 \, \mathrm{cm}^2$ d) 0.5 cm^2 100 cm^2 155. Flowering of plants by exposure to low temperature is called a) Vernalisation b) Cryobiology c) Photoperiodism d) Micrografting 156. Which of the following movement in plants is not related to change in auxin level? a) Nyctinastic leaf movement b) Movement of root towards soil c) Movement of sunflower, tracking the direction of sun d) Movement of shoot towards light 157. I. Leaf abscission is ...A... by auxin in younger leaves and fruits II. Apical dominance is ...B... by auxin Complete the given statement by choosing appropriate options for the given blanks a) A-inhibited; B-promoted b) A-promoted; B-inhibited c) A-inhibited; B-inhibited d) A-promoted; B-promoted 158. Study the following statements of plants growth I. One single maize root apical meristem can give rise to more than 17500 new cells per hour II. A cell in watermelon can increase its size up to 3,50,000 times III. Growth of pollen tube is measured in the terms of its length IV. Growth in dorsiventral leaf is measured in terms of an increase in its surface area Choose the correct option a) I and II b) II and III c) III and IV d) I, II, III and IV 159. The phytohormone, which induces triple response growth is a) IAA b) ABA c) GA_3 d) C_2H_4 160. In the given diagram, what does *A* and *B* indicates?

Choose the correct option

- a) A-Mitosis; B-Meiosis
- b) A-Arithmetic growth; B-Geometric growth
- c) A-Geometric growth; B-Arithmetic growth

	d) A-Multiplicative phase;	B-Replicative growth		
161.	In expression, $L_t = L_0 + r$	t, of arithmetic growth rate	e, L_t , L_0 and r represents	
	L_t L_0	r		
	Length at time Length	at time Elongation per		
	a) zero 't'	unit time		
	Length at time Length	at time Elongation per		
	b) 't' zero	unit time		
	Length at time Length	at time Growth rate		
	c) t zero			
	d) Both (b) and (c)			
162.	Ethephon			
	a) Hasten fruit ripening ir	ı tomatoes	b) Accelerate abscission	
	c) Promote female flower		d) All of the above	
163.	The chemical nature of gil		,	
	a) Acidic	b) Alkaline	c) Proteinaceous	d) Amines
164.		isolated from human urine		,
	a) Auxin	b) ABA	c) Ethylene	d) Gibberellic acid
165.	•	s viral inhibitory property?	o, 2011, 10110	.,
	a) IAA	b) <i>GA</i> ₃	c) ABA	d) 2,4-D
166	=		ne, which is synthesized mo	=
	a) Inhibits the developme		b) Responsible for closing	_
	c) Induces the dormancy		d) Length of internodes in	
167	Shock movement in 'touch		a) hengen of internodes in	creases
	a) Seismonasty	b) Photonasty	c) Chemonasty	d) Thermonasty
168	Vernalisation helps in	b) I notonasty	c) chemonascy	d) Thermonasty
	a) Shortening of reproduc	rtive nhase	b) Shortening of juvenile	nhase
	c) Shortening of vegetative	_	d) Both (a) and (c)	mase
169			ical growth is the ability of	nlants to produce
107.	a) Cell wall	offential phase of geometr	b) New enzyme	plants to produce
	c) New plant material		d) Young ones through mi	tosis
170	Day neutral plant relates t	to	a) roung ones un ough mi	t0313
., 0.	a) Loss of activity during		b) Overactive during day t	ime
	c) Flowering in all possible	•	d) No flowering in any pho	
171	Opening of flower is an ex		a) No nowering in any pin	otoperiou
L / 1.	a) Spontaneous movemer	-	b) Hyponastic movement	
	c) Epinastic movement		d) Cleistogamous movement	ent
172		n graphs, which show the li		
L / L I	1 1	ii grapiis, willen show the h	mear growth earve.	
	Growth Growth			
		Time		
	$A \qquad B$	C		
	a) A and B	b) B and C	c) A and C	d) Only A
173.	Which of the following mo	ovements is induced by inju	ıry?	
	a) Aerotropism	b) Geotropism	c) Tromonasty	d) Traumatropism
174.	Substance related with ph	-		
	a) Ethanol	b) Cytokinins	c) Auxin	d) Gibberellins
175.	I. Plasmatic growth			
	II. Differentiation			
	III. Maturation			
	IV. Senescence			
	Identify the correct seque	nce of the following events	occurring in plants and ch	oose the correct option

			Opius Luucution
accordingly a) $I \rightarrow II \rightarrow III \rightarrow IV$	b) $I \rightarrow II \rightarrow IV \rightarrow III$	c) IV \rightarrow III \rightarrow II \rightarrow I	d) IV \rightarrow I \rightarrow II \rightarrow III
176. Which pigment involves i	•	•	$u_j \cap v \rightarrow v$
a) Phytochrome	b) Cytochrome	c) Chlorophyll	d) Anthocyanin
177. Initially, the ABA was idea		ej dinorophyn	aj iniciiocyaniii
a) Inhibitor B	b) Abscission II	c) Dormin	d) All of these
178. Florigen is produced in th	= -	-,	,
a) Leaves	b) Fruit	c) Root	d) Trunk
179. I. Cell elongation	•	,	,
II. Cell division			
III. Cell differentiation			
Among the above mention	ned, what is/are the funct	tion(s) of auxin?	
a) I and II	b) III and I	c) II and III	d) I, II and III
180. Closure of lid of picher, in	pitcher plant, is		
a) Tropic movement		b) Paratonic movement	
c) Turgor movement		d) Autonomous moveme	nt
181. In some plants, sleep mov			
a) Excess of photosynthes	sis	b) Osmotic changes at ba	
c) Excess of respiration		d) Excess of transpiration	n
182. Hormone inducing fruit ri	-) and 1	
a) Ethylene	b) Cytokinin	c) Gibberellic acid	d) Abscisic acid
183. The discovery of gibberel	lins is related with one of		
a) Blast disease of rice	S. Jr.	b) Rust disease of wheat	
c) Bakane disease of rice	awagtawigad by	d) Early blight disease of	potato
184. Phase of maturation is cha			
I. Cells attaining their max II. Proper wall thickening		cation	
III. Rapid cell division	and protopiasinic modifi	Cation	
Select the correct option	JPLUS EDU!	CATION	
a) I and II	b) II and III	c) I and III	d) I, II and III
185. The following statements	,	•	aj i, ii alia iii
I.Cytokinins suppress the			
II.Auxins control apical do			
III.Gibberellins promote s			
IV.Abscisic acid enabling s		ation.	
Which of the above staten			
a) I and II	b) II and III	c) I and III	d) II, III and IV
186. Growing season is the sea	ison of plants in which the	ere is	
a) Maximum vegetative g	rowth	b) Minimum vegetative g	rowth
c) Moderate vegetative gr	rowth	d) Maximum reproduction	on occurs
187. I. On plotting the length o	f an organ against time, a	linear curve is obtained	
$II. L_t = L_0 + rt$			
III. Following mitotic divi	sion, one daughter cell co	ntinues to divide while the o	other differentiate and
mature			
Above are the properties			
a) Arithmetic growth rate)	b) Geometric growth rate	
c) Both (a) and (b)	J J 1	d) Elongation growth rat	
188. The problem of necrosis a	=	_	
a) Spraying auxins	b) Spraying cytokinins	c) Suspension culture	d) subculture
189. The ability of plants to fol	now unierent patriway to	iorin amerent structures in	response to environment is

		Gpius Educatio
called	2.0	
a) Plasticity b) Elasticity	c) Growth	d) Development
190. Opening and closing of flowers represen		
a) Nastic movement	b) Tropic movement	
c) Mutation	d) Autonomic movemen	t
191. During differentiation of tracheary elem	ents,	
a) The cells lose its protoplasm		
b) Cells develop very strong elastic ligno	ocellulosic secondary cell walls	
c) Both (a) and (b)		
d) The cell increases its protoplasm		
192. Leaf abscission, fruit fall, and bud dorma		
a) Auxin b) Cytokinin	c) Gibberellins	d) Abscisic acid
193. The response of different organisms to e		
a) Phototropism b) Phototaxis	c) Photoperiodism	d) Vernalization
194. An example of short day plant is		
a) Wheat b) Maize	c) Chrysanthemum	d) radish
195. The plant hormone produced by <i>Rhizob</i>		
a) IBA b) NAA	c) 2,4-D	d) IAA
196. Growth of the plant is		
a) Determinate b) Indetermin		d) None of the above
197. Plant growth Regulators (PGR) or plant		
a) Produced from many parts of plant	b) Produced from shoot	apices and stem apices
c) Produce single effect	d) Are basic in nature	
Growth Growth	M	
	\(\)	
$ \begin{array}{cccc} $	1	
Which of the following graph shows the	sigmoid growth curve?	
a) A and B b) C	c) A	d) B
199. Which of the following functions is/are in	not the function/s of cytokinin?	
I. New leaves formation		
II. Chloroplast formation in leaves		
III. Lateral shoot formation		
IV. Adventitious shoot formation		
V. Rooting on stem cuttings		
Choose the correct option		
a) Only I b) II and III	c) Only IV	d) Only V
200. Stimulus of vernalisation is perceived by	7	
a) Shoot tips b) Mature tiss	sues c) Embryo tips	d) Both (a) and (c)
201. Differentiation in plants is open because	•	
a) Cells/tissue arising out of meristem re	egain the capacity of division under co	ertain conditions
b) Cells/tissue arising out of different m	eristem have different structures at m	naturity
c) Cells/tissue arising out of different m	eristem have same structures at matu	ırity
d) All of the above		
202. Growth of plant is		
a) Arithmetic b) Geometric	c) Both (a) and (b)	d) Additive
203. Mobilization of stored food in germinating		
a) ABA b) GA	c) Cytokinin	d) Ethylene
204. The cells in the root and shoot apex		
a) Are rich is protoplasm		
b) Have conspicuous nuclei		

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c) Have their cell wall which are primary in nature, thin and cellulosic with abundant plasmodesmatal connections d) All of the above 205. Identify two physiological processes induced by two different phytohormones having a common precursor, which is formed due to the catalytic activity of pyruvic dehydrogenase complex. I. more female folwers in cucumber. II. a-amylase production in barley grain. III. Acceleration of fruit ripening in tomato. IV. Delay in sprouting of potato tubers, the correct combination is b) I and III a) I and II c) II and IV d) III and IV 206. Auxin originates at the tip of the stem and controls growth elsewhere. The movement of auxin is largely a) Basipetal b) Acropetal c) Both (a) and (b) d) centripetal 207. S-shaped or sigmoid growth curve have I. lag phase II. log phase III. stationary phase IV. diminishing growth phase Select the correct option a) All except IV b) All except III c) All except II d) I, II, III and IV 208. The cells proximal (just next away from the tip) to the meristematic zone represents the phase of a) Division b) Maturation c) Elongation d) Meristematic division 209. Given below is a graph drawn on the parameters of growth versus time. A, B and C respectively represent Time a) Exponential phase, log phase and steady state phase b) Steady state phase, lag phase and log phase c) Slow growing phase, lag phase and steady state phase d) Lag phase, steady state phase and log phase 210. When transition from juvenile to adult is gradual than this type of development is called a) Homoblastic development b) Heteroblastic development d) Hetero and homoblastic development c) Homoheteroblastic development 211. Specific areas in the higher plants which takes part in the formation of new cells are called a) Permanent tissue b) Quicent centre c) Meristems d) Subapical part 212. which of the *PGR*₆ induces parthenocarpy in tomatoes? b) Gibberellin c) Cytokinin d) Ethylene a) Auxin 213. Temperature required for vernalisation is a) 5°C to 10°C b) 5°C to 15°C c) 0°C to 5°C d) 3°C to 17°C 214. Which of the following pairs, is not correctly matched? a) Abscisic acid - Stomatal closure b) Gibberellic acid - Leaf fall - Cell division d) IAA - Cell wall elongation c) Cytokinin

respectively for a) Synthetic auxin kinetin and natural auxin b) Gibberellins, natural auxin and kinetin

216. 6-furfuryl amino purine, 2-4 dichlorophenoxy acetic acid and indole-3 acetic acid are examples

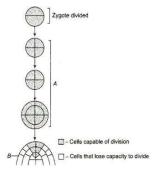
c) Bacteria

215. 'Bakane' (foolish seedling) disease of rice seedlings, was caused by b) Protozoa

d) Virus

a) Fungi

c) Natural auxin, kinetin and synthetic au	tural auxin, kinetin and synthetic auxin d) Kinetin, synthetic auxin and natural auxin		
217. Which of the following is not an influence	e of auxin?		
a) Apical dominance b) Parthenoca	rpy c) Tropic movements	d) Bolting	
218. Importance of day length in flowering of	plants was first shown in		
a) <i>Lemna</i> b) Tobacco	c) Cotton	d) <i>Pentunia</i>	
219. Intussusception is	•	•	
a) Removal of old material from cell wall			
b) Deposition of new material into cell wa	all during differentiation		
c) Deposition of new material into cell wa			
d) Another name of cell division	S		
220. One of the synthetic auxin is			
a) NAA b) IAA	c) GA	d) IBA	
221. Examples of plants which requires vernal	-	,	
a) Pea b) Beat	c) Cabbage	d) All of these	
222. I. More female flowers in cucumber	ey dabbage	a) in or enese	
II. α-amylase production is barley grain			
III. Acceleration of fruit ripening in tomat	70		
IV. Delayed in sprouting in potato tubers			
From the given effects find, out the effect	s of ethylene and choose the correct	ontion accordingly	
a) I and II b) I and III	c) II and IV	d) III and IV	
223. Study the following statements	c) if and iv	uj ili anu iv	
I. Increase in girth of plants is primary gr	owth		
II. Increase in girth of plants occurs due to			
III. Secondary growth of plants occurs du			
IV. Vascular cambium and cork cambium	1 74 1		
V. Elongation of a plant along the axis is c	aned primary growth		
Choose the incorrect options	V Ly and V	d) Land V	
a) I and II b) III and IV	c) IV and V	d) I and V	
224. Plant growth is unique because	d muovistle		
a) Plant retains the capacity for unlimited			
b) Plant retains the capacity for limited g			
c) Plants have diffused growth that differ	's from animais		
d) None of the above	DNA		
225. I. Kinetin is a degradative substance from			
II. ABA is present in all plants including lo	_		
III. Low ratio of cytokinin to auxin favour			
IV. ABA is synthesised catabolically throu			
Choose the correct combination of option			
a) I and II b) II and III	c) I and III	d) III and IV	
226. Search for natural cytokinin lead to the			
a) Isolation of zeatin from corn kernels		b) Isolation of zeatin from coconut milk	
c) Isolation of zeatin from sugarcane			
227. A sleep movement in plants is a nastic res			
a) Dark b) Light	c) Water	d) Both (a) and (b)	
228. Synthetic auxins are used for			
a) Killing weeds	b) Ripening fruits		
c) Increasing the size of the fruits	d) Stimulating growth o		
229. In the given diagram, identify the type of	growth phase in A and B and choose	a correct option accordingly	



- a) A-Arithmetic phase; B-Geometric phase
- b) A-Arithmetic phase; B-Arithmetic phase
- c) A-Geometric phase; B-Geometric phase
- d) A-Geometric phase; B-Arithmetic phase
- 230. How does pruning help in making the hedge dense?
 - a) It induces the differentiation of new shoots from the rootstock
 - b) It frees axillary buds from apical dominance
 - c) The apical shoot grows faster after pruning
 - d) It releases wound hormones
- 231. Which one is not an ethylene effect?
 - a) Swelling of axis

b) Apical hook formation in dicot seedlings

c) Horizontal growth of seedlings

- d) Apical dominance
- 232. Which of the following in incorrectly matched?
 - a) Explant Excised plant part used for callus formation
 - b) Cytokinins Root initiation in callus
 - c) Somatic embryo- Embryo produced from a vegetative cell
 - d) Anther culture- Haploid plants
- 233. Which plant growth regulator is responsible for triple response?
 - a) C_2H_4

b) IAA

c) IBA

d) ABA

- 234. Choose the incorrect pair.
 - a) Auxins To grow

b) Gibberellins – *Gibberella fujikuroi*

c) Cytokinins- Herring sperm DNA

- d) Abscisic acid Flowering hormone
- 235. Which of the following is/are example/s of long day plant?
 - I. Tomato
 - II. Maize
 - III. Rice
 - IV. Radish

Choose the correct option accordingly

- a) I and II
- b) III and IV
- c) Only IV
- d) I, II and III
- 236. Identify *A* and *B* in the given figure and choose the correct option accordingly



- a) A-Root apical meristem; B-Shoot apical meristem
- b) A-Shoot apical meristem; B-Root apical meristem
- c) A-Apical tissue; B-Radicle tissue
- d) A-Radicle tissue; B-Apical tissue

237. Indentify two of the fol	lowing phytohormones, w	nich regulate the stomatal	movements?
I.IAA	II. GA_3		
III. Zeatin	IV. ABA		
a) I and III	b) II and III	c) III and IV	d) II and IV
238. The ripening of fruits of	an be fastened by treatmer	nt with	
a) Gibberellins	b) Cytokinins	c) Ethylene	d) Auxin
239. Prunning of plants pro	, ·	•	•
a) Ethylene	b) Gibberellin	c) Cytokinin	d) Indole acetic acid
240. Identify A , B , C and D for	•		-
			9-7
C B			
A			
7			
a h. 1			
a) A-Hypocotyl, B-Coty	ledons, C-Seed coat, D-Epic	cotyl	
	dons, C-Hypocotyl, D-Seed	=	
	oat, C-Hypocotyl, D-Cotyle		
	l coat, C-Epicotyl, D-Cotyle		
241. Richmond-Lang effect		2011	
a) Delay in senescence		b) Breaking dormancy	7
c) Suppression of apica		d) Cell elongation	
242. Which type of tropism			
a) Thigmonasty and ph	The second secon	b) Hydronasty and the	ormonacty
c) Thermonasty and pl	· ·	d) Hydronasty and ph	-
		uj fiyuronasty anu pin	otoliasty
243. Which one is short day		b) Dankanua aatimua	
a) Brassica compestr	O LEGS ED O	b) Raphanus sativus	
c) Glycine max		d) Papaver somnifer	um
244. Gibberellin was first di	scovered from	1) ['	
a) Algae		b) Fungi	
c) Bacteria		d) Roots of higher plan	nts
245. Winter varieties of who			
a) Spring season	b) Winter season	c) Autumn season	d) Summer season
246. With respect to photop			
a) Wheat, oat, soybean		b) Wheat, <i>Xanthium</i> , p	
c) Wheat, poppy, soybo		d) Wheat, poppy, beet	
247. Which of the following	flowers shows nyctinastic	movement?	
a) <i>Pentapetes</i>	b) Albizzia lebbek	c) Mimosa pudica	d) <i>Bryophyllum</i>
248. Ethylene is connected	with		
a) Aerobic respiration	b) Climacterics	c) Anaerobic	d) fermentation
249. Chooses the incorrect s	statement		
a) PGR has diverse phy	siological effects on plants		
b) PGR may act synerg	ically or antagonistically		
c) Two PGR can have s			
d) GA fasters the matur			
250. In the most situation, A	· -		
a) Agonist for auxin		b) Antagonist to gibbe	rellin
c) Antagonist of auxin		d) Agonist to gibberell	
251. If shoot cuttings are tre	eated with auxin then	, 0	

a) Root production takes place	b) Shoot elongation takes place	
c) Both (a) and (b)	d) Lateral dominance takes place	
252. Ethylene is used		
a) To decrease the senescence	b) To increase the heigh	its of stem
c) For ripening of fruits	d) For prevention of lea	f fall
253. Growth curve is the		
a) Pictorial representation of total growth/space		
b) Graphical representation of total growth/space		
c) Graphical representation of total growth/time		
d) All of the above		
254. Hormone replacing the requirement of vernalization		
a) ethylene b) auxin	c) gibberellins	d) cytokinin
255. Photoperiod was first observed in		
a) Potato b) Maryland mammoth	c) Four O'clock	d) Evening primrose
256. Decapitation (shoot tip removal) is widely used in		
a) Blotting b) Hedge making	c) Tea plantation	d) Both (b) and (c)
257. Phototropic curvature is the result of uneen Distrib		
a) Gibberellin b) Phytochrome	c) Cytokinins	d) Auxin
258. In photoactive plants, during day time the following	gionic flux of guard cell is	directly involves the
expenditure of energy.		
a) Outward movement of malate	b) Inward movement of	-
c) Outward movement of protons	d) Inward movement of	chloride
259. Which one of the following statement is incorrect?	>	
a) Apparent growth is an irreversible increase in m	ass or volume	
b) Real growth is the formation of new protoplasm		
c) Growth in plants is open ended		
d) Growth in plants is closed ended	0.0000000000000000000000000000000000000	
260. Which hormone causes stunted growth in pea?	LAHON	
a) Gibberellic acid b) Auxin	c) Cytokinin	d) Ethylene
261. Leaf abscission is caused by		
a) ABA b) Cytokinin	c) Auxin	d) gibberellin
262. I. Auxin II. Cytokinin III. GA IV. ABA	2.01	11 1
Which of the above mentioned PGA are acidic in nat	·	
a) I and II b) I, III and IV	c) I, II and III	d) I, II, III and IV
263. In plants, phototropism is the movement	1-)	
a) Towards the light source	b) Away from the light source	
c) Parallel to the light source 264. Which was discovered first?	d) Lateral to the light so	urce
	a) CA	d) C
a) GA ₁ b) GA ₂ 265. Which one is the example of dedifferentiation?	c) GA ₃	d) GA ₄
a) Procambium and vascular cambium	h) Cork cambium and in	torfacicular cambium
c) Cork cambium and vascular cambium	b) Cork cambium and interfasicular cambiumd) Procambium and cork cambium	
266. Identify the correct option for <i>A</i> and <i>B</i>	uj i rocambium anu cor	K Cambium
Compound Function		
2,4-D <i>A</i>		
B Fruit ripening		
A B		
a) Insecticide Auxin	b) Insecticide Cytokini	n
c) Insecticide GA	d) Weedicide Ethylene	
267. Auxin causes	y	

a) Growth of apical bud		b) Growth of lateral bud		
c) Seed dormancy			d) Fall of leaf	
268. Apical dominance is caused	d by			
a) Auxin	b) Cytokinin	c) Ethylene	d) Gibberellin	
269. Permanent localised qualit	ative change in size, bioch	nemistry, structure and fun-	ction of cells or organs is	
called				
a) Cell division		b) Meristematic division		
c) Differentiation		d) Dedifferentiation		
270. The maximum growth rate				
	b) Senescent phase	c) Lag phase	d) Exponential phase	
271. The coiling of tendril arour	-			
	b) Chemotaxis	c) Thigmotropism	d) Geotaxis	
272. 'Apical dominance' in plant				
	b) Auxin	c) Gibberellin	d) $CH_2 - CH_2$	
273. Heterophylly can be observ	ved in			
I. cotton				
II. coriander				
III. larkspur				
Select the right option	1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1) II — 1 III	1) 1 1111	
	b) I and II	c) II and III	d) I and III	
274. Apple's elongation and imp			4) C A	
	b) Ethylene	c) C ₂ H ₄	d) GA	
275. In which category will you 12 hr continuously dark period	place this nower?	>		
12 in continuously daily period	Flower			
Plant				
12 hr interrupted dark period	No flower			
Choose the correct option	Zavus EDII/	ATION		
	b) LDP	c) DNP	d) L - SDP	
276. In the exponential phase of				
a) Progeny cells stops divid	-			
b) Both progeny cells follow	w mitotic division			
c) Both (a) and (b)				
d) Only one progeny cell fo	_		11	
277. Surface area of roots by pro				
• •	b) Kinetin	c) Ethylene	d) ABA	
278. Quantitative comparison b a) Two ways	b) Three ways	c) One ways	d) Four ways	
279. Gibberellins promotes cell	•	•	d) Four ways	
	b) Roots	c) Shoots	d) All of these	
280. I. Indole-3-acetic acid	b) Roots	c) shoots	u) All of these	
II. 2-4, dichlorophenoxy ac	etic acid			
III. 6 Indole butyric acid	etic deld			
IV. Naphthalene acetic acid				
Above are the examples of				
	b) Cytokinin	c) Ethylene	d) Gibberellin	
281. Sprouting of potato under			,	
	b) gibberellin	c) Ethylene	d) cytokinin	
282. The hormone present in th	, ,	•	•	
	= =		15.	
aj Cytokiiiii	b) Gibberellins	c) Ethylene	d) auxin	

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influence that caused the ...B... of the entire coleoptile.

Complete the given statement with the correct combination of options given in the codes below

a) A-root site; B-bending

b) A-lateral side; B-bending

c) A-shoot side; B-bending

d) A-tip; B-bending

284. Bolting may be induced by

a) Gibberellins

b) ABA

c) auxin

d) Cytokinin

285. Plant hormones are

a) Growth regulators

b) Growth promoters

c) Growth inhibitors

d) All of these

286. Which one of the following pairs is not correctly matched?

a) Adenine derivative-kinetin

b) Carotenoid derivative-ABA

c) Terpenes-IAA

d) Indole compounds-IBA

287. I. Initiate rooting in stem cuttings

II. Promote flowering in pineapples

III. Controls xylem differentiation

Identify the functions of auxin and choose the correct option

a) I and II

b) II and III

c) III and I

d) I, II and III

288. Short day plant is

a) Xanthium

b) Pisum

c) Cucumis

d) *Avena*

289. Beta vulgaris is a

a) Short day plant

b) Long day plant

c) Day neutral plant

d) Intermediate day



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