

NEET PLANT GROWTH AND DEVELOPMENT — PLANT GROWTH REGULATORS: AUXINS — PYQS

Max. Marks: 76

Questions: 19

Section A (MCQ) — 19 questions

Q.1 Match List I with List II : [NEET (UG) 2026]

List-I (Growth Regulator)		List-II (Function/Effect)	
A.	2,4-D	I.	Brewing industry
B.	GA ₃	II.	Stimulation of stomatal closure
C.	Kinetin	III.	Herbicide
D.	ABA	IV.	Nutrient mobilisation

(1) A-I, B-II, C-IV, D-III (2) A-I, B-IV, C-III, D-II

(3) A-IV, B-III, C-II, D-I (4) A-III, B-I, C-IV, D-II

 Scan or tap for the
full solution
 

Q.2 Which of the following plant growth regulators is used as herbicide? [RE-NEET (UG) 2026]

- (1) Gibberellin (2) 2,4-D
(3) Kinetin (4) Absciscic acid

 Scan or tap for the
full solution
 

Q.3 Read the following statements on plant growth and development.

- A. Parthenocarp can be induced by auxins.
 B. Plant growth regulators can be involved in promotion as well as inhibition of growth.
 C. Dedifferentiation is a pre-requisite for re-differentiation.
 D. Absciscic acid is a plant growth promoter.
 E. Apical dominance promotes the growth of lateral buds.

Choose the option with all correct statements.

[NEET (UG) 2025]

- (1) A, D, E only (2) B, D, E only
(3) A, B, C only (4) A, C, E only

 Scan or tap for the
full solution
 

Q.4 Auxin is used by gardeners to prepare weed-free lawns. But no damage is caused to grass as auxin

[NEET (UG) 2024]

- (1) promotes apical dominance.
 (2) promotes abscission of mature leaves only.
 (3) does not affect mature monocotyledonous plants.
 (4) can help in cell division in grasses, to produce growth.

 Scan or tap for the
full solution
 

Q.5 The plant hormone used to destroy weeds in a field

[NEET (UG) 2021]

- (1) IBA (2) IAA (3) NAA (4) 2, 4-D

 Scan or tap for the
full solution
 

Q.6 Fruit and leaf drop at early stages can be prevented by the application of [NEET 2017]

- (1) ethylene (2) auxins
(3) gibberellic acid (4) cytokinins.

 Scan or tap for the
full solution
 

Q.7 The *Avena* curvature is used for bioassay of

[NEET 2016 (Phase 1)]

- (1) IAA (2) ethylene (3) ABA (4) GA₃.

 Scan or tap for the
full solution
 

Q.8 Auxin can be bioassayed by [AIPMT 2015]

- (1) potometer
 (2) lettuce hypocotyl elongation
 (3) *Avena* coleoptile curvature
 (4) hydroponics.

 Scan or tap for the
full solution
 

Q.9 What causes a green plant exposed to the light, on only one side, to bend towards the source of light as it grows? [AIPMT 2015 (Cancelled)]

- (1) Light stimulates plant cells on the lighted side to grow faster.
- (2) Auxin accumulates on the shaded side, stimulating greater cell elongation there.
- (3) Green plants need light to perform photosynthesis.
- (4) Green plants seek light because they are phototropic.

Scan or tap for the full solution



Q.10 Dr. F. Went noted that if coleoptile tips were removed and placed on agar for one hour, the agar would produce a bending when placed on one side of freshly-cut coleoptile stumps. Of what significance is this experiment? [AIPMT 2014]

- (1) It made possible the isolation and exact identification of auxin.
- (2) It is the basis for quantitative determination of small amounts of growth-promoting substances.
- (3) It supports the hypothesis that IAA is auxin.
- (4) It demonstrated polar movement of auxins.

Scan or tap for the full solution



Q.11 The pineapple which under natural condition is difficult to blossom has been made to produce fruits throughout the year by application of

[NEET 2013 (Karnataka)]

- | | |
|----------------|------------------------|
| (1) NAA, 2,4-D | (2) Phenyl acetic acid |
| (3) Cytokinin | (4) IAA, IBA. |

Scan or tap for the full solution



Q.12 One of the commonly used plant growth hormones in tea plantations is [AIPMT 2010 (Mains)]

- | | |
|--------------|--------------------------|
| (1) ethylene | (2) abscisic acid |
| (3) zeatin | (4) indole-3-acetic acid |

Scan or tap for the full solution



Q.13 Phototropic curvature is the result of uneven distribution of [AIPMT 2010 (Prelims)]

- | | |
|-----------------|-----------------|
| (1) gibberellin | (2) phytochrome |
| (3) cytokinins | (4) auxin |

Scan or tap for the full solution



Q.14 Coiling of garden pea tendrils around any support is an example of [AIPMT 2010 (Prelims)]

- | | |
|-------------------|-----------------|
| (1) thigmotaxis | (2) thigmonasty |
| (3) thigmotropism | (4) thermotaxis |

Scan or tap for the full solution



Q.15 One of the synthetic auxin is [AIPMT 2009]

- | | | | |
|---------|--------|---------|---------|
| (1) IAA | (2) GA | (3) IBA | (4) NAA |
|---------|--------|---------|---------|

Scan or tap for the full solution



Q.16 How does pruning help in making the hedge dense? [AIPMT 2006]

- (1) It releases wound hormones.
- (2) It induces the differentiation of new shoots from the rootstock.
- (3) It frees axillary buds from apical dominance.
- (4) The apical shoot grows faster after pruning.

Scan or tap for the full solution



Q.17 Parthenocarpic tomato fruits can be produced by [AIPMT 2006]

- (1) treating the plants with phenylmercuric acetate
- (2) removing androecium of flowers before pollen grains are released
- (3) treating the plants with low concentrations of gibberellic acid and auxins
- (4) raising the plants from vernalized seeds.

Scan or tap for the full solution



Q.18 Which of the following prevents the fall of fruits? [AIPMT 2001]

- | | |
|---------------------|------------|
| (1) GA ₃ | (2) NAA |
| (3) Ethylene | (4) Zeatin |

Scan or tap for the full solution



Q.19 If the apical bud has been removed then we observe [AIPMT 2000]

- | | |
|---------------------------|------------------------|
| (1) more lateral branches | (2) more axillary buds |
| (3) plant growing stops | (4) flowering stops |

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9	10	11
Ans.	4	2	3	3	4	2	1	3	2	1	1
Ques.	12	13	14	15	16	17	18	19			
Ans.	4	4	3	4	3	3	2	1			