

NEET PLANT GROWTH AND DEVELOPMENT — GIBBERELLINS AND CYTOKININS — PYQS

Max. Marks: 76

Questions: 19

Section A (MCQ) — 19 questions

Q.1 Which of the following plant growth regulators promotes internode elongation prior to flowering in cabbage? [RE-NEET (UG) 2026]

- (1) Ethephon (2) Absciscic acid
(3) Gibberellin (4) Indole butyric acid

Scan or tap for the full solution 

Q.2 Which one of the following phytohormones promotes nutrient mobilization which helps in the delay of leaf senescence in plants? [NEET (UG) 2025]

- (1) Gibberellin (2) Cytokinin
(3) Ethylene (4) Absciscic acid

Scan or tap for the full solution 

Q.3 Spraying sugarcane crop with which of the following plant growth regulators, increases the length of stem, thus, increasing the yield? [NEET (UG) 2024]

- (1) Auxin (2) Gibberellin
(3) Cytokinin (4) Absciscic acid

Scan or tap for the full solution 

Q.4 F. Skoog observed that callus proliferated from the internodal segments of tobacco stem when auxin was supplied with one of the following except : [RE-NEET (UG) 2024]

- (1) Extract of Vascular tissues
(2) Coconut milk
(3) Absciscic acid
(4) Yeast Extract

Scan or tap for the full solution 

Q.5 Given below are some statements about plant growth regulators.

- A. All GAs are acidic in nature.
B. Auxins are antagonists to GAs.
C. Zeatin was isolated from coconut milk.
D. Ethylene induces flowering in Mango.
E. Absciscic acid induces parthenocarpy.

Choose the correct set of statements from the options given below : [RE-NEET (UG) 2024]

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

Scan or tap for the full solution 

Q.6 Spraying of which of the following phytohormone on juvenile conifers helps hastening the maturity period, that leads early seed production? [NEET (UG) 2023]

- (1) Gibberellic Acid (2) Zeatin
(3) Absciscic Acid (4) Indole-3-butyric Acid

Scan or tap for the full solution 

Q.7 Which of the following growth regulators is an adenine derivative? [NEET (UG) 2022 (Phase 2)]

- (1) Absciscic acid (2) Auxin
(3) Cytokinin (4) Ethylene

Scan or tap for the full solution 

Q.8 Name the plant growth regulator which upon spraying on sugarcane crop, increases the length of stem, thus increasing the yield of sugarcane crop [NEET (UG) 2020]

- (1) Absciscic acid (2) Cytokinin
(3) Gibberellin (4) Ethylene

Scan or tap for the full solution 

Q.9 You are given a tissue with its potential for differentiation in an artificial culture. Which of the following pairs of hormones would you add to the medium to secure shoots as well as roots? [NEET 2016 (Phase 2)]

- (1) IAA and gibberellin
(2) Auxin and cytokinin
(3) Auxin and absciscic acid
(4) Gibberellin and absciscic acid

Scan or tap for the full solution 

Q.10 During seed germination its stored food is mobilized by [NEET 2013]

- (1) ABA (2) gibberellin
(3) ethylene (4) cytokinin.

Scan or tap for the full solution



Q.11 Which one of the following pairs, is not correctly matched? [AIPMT 2007]

- (1) Gibberellic acid - Leaf fall
(2) Cytokinin - Cell division
(3) IAA - Cell wall elongation
(4) Absciscic acid - Stomatal closure

Scan or tap for the full solution



Q.12 An enzyme that can stimulate germination of barley seeds is [AIPMT 2006]

- (1) invertase (2) α -amylase
(3) lipase (4) protease

Scan or tap for the full solution



Q.13 Farmers in a particular region were concerned that premature yellowing of leaves of a pulse crop might cause decrease in the yield. Which treatment could be most beneficial to obtain maximum seed yield? [AIPMT 2006]

- (1) Application of iron and magnesium to promote synthesis of chlorophyll
(2) Frequent irrigation of the crop
(3) Treatment of the plants with cytokinins along with a small dose of nitrogenous fertilizer
(4) Removal of all yellow leaves and spraying the remaining green leaves with 2,4,5-trichlorophenoxyacetic acid

Scan or tap for the full solution



Q.14 Cell elongation in internodal regions of the green plants takes place due to [AIPMT 2004]

- (1) indole acetic acid (2) cytokinins
(3) gibberellins (4) ethylene.

Scan or tap for the full solution



Q.15 Differentiation of shoot is controlled by [AIPMT 2003]

- (1) high auxin : cytokinin ratio
(2) high cytokinin : auxin ratio
(3) high gibberellin : auxin ratio
(4) high gibberellin : cytokinin ratio.

Scan or tap for the full solution



Q.16 Coconut milk factor is [AIPMT 2003]

- (1) abscisic acid (2) an auxin
(3) a gibberellin (4) cytokinin

Scan or tap for the full solution



Q.17 Dwarfness can be controlled by treating the plant with [AIPMT 2002]

- (1) cytokinin (2) gibberellic acid
(3) auxin (4) antigibberellin

Scan or tap for the full solution



Q.18 Which hormone breaks dormancy of potato tuber? [AIPMT 2001]

- (1) Gibberellin (2) IAA
(3) ABA (4) Zeatin

Scan or tap for the full solution



Q.19 Coconut milk is used in tissue culture because it contains [AIPMT 2000]

- (1) Auxin (2) Gibberellin
(3) Ethylene (4) Cytokinin

Scan or tap for the full solution



ANSWER KEY

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