

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Horticulture

Semester	: II (New)	Term	: Second	Academic Year	: 2021-22
Course No.	: H/HORT 121	Title	: Growth and Development of Horticultural Crops		
Credits	: 2 (1+1)				
Day & Date	: Tuesday, 20.09.2022	Time	: 9:00 to 11:00 hrs	Total Marks	: 40

- Note :**
1. Solve ANY EIGHT questions from SECTION 'A'.
 2. All questions from SECTION 'B' are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagram wherever necessary.

SECTION 'A'

- Q.1 Explain in detail the factors causing dormancy of seeds.
- Q.2 Narrate about the physiological effect of auxins.
- Q.3 How does the process of germination start? Describe the physiological changes during seed germination.
- Q.4 Comment on source and sink relationship. How do you increase source and sink activity?
- Q.5 Explain different types of senescence patterns in whole plant.
- Q.6 Explain the physiological role of ethylene in fruit ripening and breaking seed dormancy of seed and bud.
- Q.7 Describe various uses of plant growth regulators in horticultural crops.
- Q.8 Write about the role of Gibberellins.
- Q.9 Write in short about the importance of photoperiodism. Give some phytochrome-mediated photoresponses in plants.
- Q.10 Explain the physiological role of pruning. Write specific objectives of pruning.

SECTION 'B'

Q.11 Fill in the blanks:

- 1) The response of plants to the photoperiod expressed in the form of flowering is called _____.
- 2) _____ is the most abundant and widely distributed natural cytokinin in higher plants and in some bacteria.
- 3) _____ is often a useful measurement in bio-productivity studies.
- 4) The precursor for the synthesis of auxin in plants is _____.

Q.12 Define the following terms:

- | | |
|--------------------------------|--------------------|
| 1) Programmed Cell Death (PCD) | 2) Plant Hormone |
| 3) Leaf Epinasty | 4) Growth Analysis |

