

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Horticulture

Semester	: II (New)	Term	: Second	Academic Year	: 2022-23
Course No.	: H/HORT 121	Title	: Growth and Development of Horticultural Crops		
Credits	: 2 (1+1)	Time	: 9:00 to 11:00 hrs.	Total Marks	: 40
Day & Date	: Saturday, 05.08.2023				

- 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 Define growth. Write in brief the phases of growth in horticultural crops.
- Q.2 Write in short about growth curve. Give in brief the phases of growth curve in horticultural crops with well labeled diagram.
- Q.3 Write about the components of growth analysis of horticultural crops.
- Q.4 Comment on photoperiodism. Write in brief about day length requirement for flowering in horticultural crops with examples.
- Q.5 Comment on the role of bioregulators in growth and development of horticultural crops.
- Q.6 Write in brief about physiology of ripening of climacteric and non-climacteric fruits.
- Q.7 Describe in brief the biosynthesis of auxins and mention its role in horticultural crops.
- Q.8 Differentiate between C₃ and C₄ plants.
- Q.9 Write in short about factors affecting induction of flowering in fruit crops.
- Q.10 Write in brief about training and pruning. Give the objectives of pruning.

SECTION 'B'

Q.11 Define the following terms:

- 1) Plant growth regulator
- 2) Sink
- 3) Development
- 4) Translocation of assimilates

Q.12 Fill in the blanks:

- 1) Spinach is a _____ day plant.
- 2) _____ is naturally occurring auxin in plants.
- 3) _____ can induce flowering in long day plants even under non-inductive short days.
- 4) Vernalized plant can be devernalized by _____.

