

**U-30/2051**

**GROWTH AND DEVELOPMENT  
OF HORTICULTURAL CROPS**

Paper-XVI  
(Semester-II)

Time : Three Hours]

[Maximum Marks : 45

**Note** : Attempt *two* questions each from Section A and B. Section C will be compulsory. Section A consisting of 4 questions carry 6½ marks each. Section B consisting of 4 questions carry 7 marks each. Section C consisting of 9 short answer type questions carry 2 marks each.

**SECTION-A**

- I. Define growth and development. Explain Canopy photosynthesis and productivity.
- II. Discuss the following :
  - (a) Canopy development.
  - (b) Growth analysis in horticultural crops.
- III. What do you mean by plant bio-regulators ? Explain auxins and gibberelin.
- IV. Define flowering. Discuss factors affecting flowering.

## **SECTION-B**

- V. Describe vernalisation and its application in horticulture.
- VI. Explain various causes and breaking methods of seed dormancy in horticultural crops.
- VII. Define fruit setting. Discuss factors affecting fruit set and development.
- VIII. Write a note on physiology of ripening of fruits.

## **SECTION-C**

- IX. Write short notes on following :
    - (a) Non-climacteric fruits.
    - (b) Day neutral plants.
    - (c) Retardants.
    - (d) Fruit drop.
    - (e) Propagation.
    - (f) Training and Pruning.
    - (g) Photoperiodism.
    - (h) Seed dormancy.
    - (i) Leaf area index.
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