

M.Sc.(Ag.) Semester – I Examination, 2014

Horticulture

Course : HOR – 501

(Growth and Development of Fruit Vegetables and Ornamental Crops)

Time: 3 Hours

Full Marks: 50

Questions are of value as indicated in the margin.

Answer **any five** questions.

1. Differentiate between climacteric fruit and Non-climacteric fruit. Discuss in brief about the physiology and biochemistry of fruit ripening. 3+7=10
 2. Write in brief about the importance of seed dormancy in agriculture and horticulture. Discuss in brief about the causes of seed dormancy in plants with suitable examples. 4+6=10
 3. What is apical dominance? Discuss in brief about the influence of water and mineral nutrition during growth and development of plant. 2+(4+4)=10
 4. What is harvest index? Describe in brief about assimilate partitioning during growth and development of plants. 2+8=10
 5. What is morphogenesis? Discuss the role of light, temperature and photoperiods on growth, development and flowering of plants. 2+8=10
 6. What is drought? Discuss in brief about the effect of moisture stress on the physiological and morphological parameters of plant. 2+8=10
 7. Write short notes on the following (**any four**): 2.5×4=10
 - (a) Gibberellins
 - (b) Antitranspirants
 - (c) Types of seed germination
 - (d) Parthenocarpy
 - (e) Criteria of essentiality
 - (f) Method of breaking seed dormancy
 8. Differentiate between the following pairs (**any four**): 2.5×4=10
 - (a) Cross pollination and self pollination
 - (b) Physical drought and physiological drought
 - (c) CGR and RGR
 - (d) Short day plant and long day plant
 - (e) Physiological role of nitrogen and potassium
 - (f) Physiological role of auxin and ethylene
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