

Code No: RT41353

R13**Set No. 1****IV B.Tech I Semester Regular/Supplementary Examinations, Oct/Nov - 2018**
POST HARVEST ENGINEERING FOR HORTICULTURE PRODUCE**(Agricultural Engineering)****Time: 3 hours****Max. Marks: 70***Question paper consists of Part-A and Part-B**Answer ALL sub questions from Part-A**Answer any THREE questions from Part-B*

PART-A (22 Marks)

1. a) Briefly describe the mechanical properties affecting the quality of fruits and vegetables [4]
- b) Write about the optical methods used for determination of harvesting indices of fruits and vegetables. [4]
- c) Write about the chemical preservation of fruits and vegetables with SO₂. [3]
- d) Write about the effects of CAS. [4]
- e) Write about the advantages of fresh packaging. [3]
- f) Briefly write about the sensory characteristics. [4]

PART-B (3x16 = 48 Marks)

2. a) Write in detail about the environmental factors affecting the quality of fruits and vegetables. [8]
- b) Explain in detail about the cultural factors which affect the quality of fruits and vegetables. [8]
3. a) What is peeling of fruits and vegetables? [4]
- b) What is grading of fruits and vegetables? List out the factors affecting grading. What are various types of graders? Explain any two of them. [12]
4. a) What is drying? Explain about the different types of dryers. [8]
- b) Write in detail about the different methods of freezing of fruits and vegetables. [8]
5. a) Define pre cooling. Explain in detail about room cooling and hydro cooling methods with the help of neat diagrams. [8]
- b) Write about the requirements of fresh fruits package under CAS or MAS. [8]
6. a) Write about the preparation and preservation of unfermented fruit beverages. [8]
- b) What is meant by packaging? Explain the different packaging materials used for packing of apples and oranges. [8]
7. a) Write in detail about the preparation of vinegar. [8]
- b) Explain the extraction of turmeric oleoresin. [8]