

Code No: **R1641353**

**R16**

**Set No. 1**

**IV B.Tech I Semester Regular Examinations, October/November - 2019**  
**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 FOUR questions from Part-B*

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**PART-A(14 Marks)**

1. a) Write about any two optical properties that affect quality of fruits and vegetables. [3]
- b) Write about determination of maturity standard of fruits and vegetables by shape, size and aroma. [3]
- c) Mention the flow chart for drying and dehydration procedure. [2]
- d) Differentiate CAS and MAS. [2]
- e) Write about packaging of bananas. [2]
- f) Write about acetic acid fermentation. [2]

**PART-B(4x14 = 56 Marks)**

2. a) Write in detail about pre-harvest factors that affect the quality of fruits and vegetables. [7]
- b) Explain the role of mechanical and electrical properties affecting the quality of fruits and vegetables. [7]
3. a) Define grading. Write about different types of graders. [7]
- b) Write in detail about harvesting indices of different fruit crops. [7]
4. a) Write about different types of cans used for canning. Mention the causes of spoilage of canned foods. [7]
- b) Describe in detail different methods of freezing. [7]
5. a) Define pre-cooling. Explain different methods of pre-cooling. [7]
- b) Describe in detail about control atmospheric storage along with its advantages and disadvantages. [7]
6. a) Write about preparation of unfermented fruit beverages with the help of flow chart. [7]
- b) Describe in detail about different packaging materials. [7]
7. a) Write in detail about processing of grape wine with the help of flow chart. [7]
- b) Write in detail about sensory, hidden and quantitative characteristics of fruits and vegetables for processing. [7]

