

Code No: **RT41353****R13****Set No. 1**

IV B.Tech I Semester Supplementary Examinations, February/March - 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) Write about the physical properties affecting the quality fruits and vegetables. [4]
b) Briefly explain the factors affecting the effectiveness of a sprayer. [4]
c) Write about the spoilage canned foods. [4]
d) Write about centralized cold storage centers. [4]
e) Draw the flow chart for preparation of citrus juice. [3]
f) Draw the flow chart for extraction of chilli oleoresin. [3]

PART-B (3x16 = 48 Marks)

2. a) Write in detail about the electrical properties affecting the quality of fruits and vegetables. [8]
b) Write in detail about the pre harvest factors affecting the quality of fruits and vegetables. [8]
3. a) Define grading? Explain in detail about different types of graders used for grading of fruits and vegetables. [8]
b) Write in detail about the modern techniques used for determination of maturity standards of fruits and vegetables. [8]
4. a) Write in detail about the different methods of freezing of fruits and vegetables. [8]
b) With the help of a flow chart explain the canning process of fruits and vegetables. [8]
5. a) Explain in detail about MAP and its maintenance. [8]
b) What is CAS? Write in detail about the effects, advantages and disadvantages of CAS. [8]
6. a) Write in detail about the preparation of mango juice with the help of flow chart. [8]
b) Write about packaging of apples and oranges. [8]
7. a) Explain about the solvents used for extraction of oleoresin along with advantages and disadvantages. [8]
b) Explain in detail about the quality characteristics of fruits and vegetables required for processing. [8]