Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov/Dec – 2018**

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| **Code : 14FP3015** |  | **Duration :** | **3hrs** |
| **Sub. Name : ADVANCES IN PROCESSING OF**  **HORTICULTURE, SPICES AND PLANTATION**  **PRODUCTS** |  | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | State the causes and spoilage factors responsible for the heavy loss of fruits and vegetables in detail. | CO1 | 20 |
| (OR) | | | | |
| 2. | a. | Discuss in detail about the post harvest field operations of fruits and vegetables. | CO1 | 15 |
| b. | Enumerate the packaging methods of fruits and Vegetables. | CO2 | 5 |
|  |  |  |  |  |
| 3. |  | Classify the methods of freezing with a special highlight about the effect of freezing on fruits and vegetables. | CO2 | 20 |
| (OR) | | | | |
| 4. | a. | Outline the osmotic dehydration process of fruits and vegetables with a neat sketch. | CO2 | 10 |
| b. | Demonstrate the working principle of Freeze drier with a diagrammatic representation. | CO2 | 10 |
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| 5. |  | Illustrate the production process of Instant coffee powder with a special emphasis on drying applications. | CO3 | 20 |
| (OR) | | | | |
| 6. | a. | Report the chemical composition and the role of chicory in coffee production. | CO3 | 12 |
| b. | Classify the brewing practices of coffee. | CO3 | 8 |
|  |  |  |  |  |
| 7. | a. | Summarize the manufacture of green tea with a block diagram | CO3 | 15 |
| b. | Write a short note on grading of tea. | CO3 | 5 |
| (OR) | | | | |
| 8. |  | Recall the steps involved in production of Chocolate with a quality specification. | CO3 | 20 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Discuss the chemistry, post harvest technology and quality specifications for ginger. | CO3 | 10 |
| b. | Explain the production of cinnamon oils, oleoresins, quills and grading of quills in detail. | CO3 | 10 |