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

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

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| **Code :** | **16FP2002** | **Duration :** | **3hrs** |
| **Sub. Name :** | **POST HARVEST TECHNOLOGY** | **Max. marks :** | **100** |

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

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Paraphrase the unit operation of whitening during the rice milling process. Discuss on the working of the machineries used in this unit operation. | CO1 | 10 |
| b. | Illustrate the Brown Rice Production System with a neat sketch (indicate the process flow) | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Paraphrase the unit operation of separating broken grains from whole grains during the rice milling process. Discuss on the working of an indented cylinder grader using necessary diagrams. | CO1 | 10 |
| b. | Summarise the machines used for the mechanical cleaning of paddy prior to milling. | CO1 | 10 |
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| 3. | a. | Summarise the different machines involved in the cleaning and grading of pulses and their functions | CO1 | 10 |
| b. | Discuss the factors affecting transpiration in fruits & vegetables. | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Discuss the working of any 3 machineries used in the dehusking of pulses. | CO1 | 10 |
| b. | Recognise the three pathways followed by a fruit or vegetable during respiration. Categorise the various ways of measuring gas exchange taking place due to respiration of fruits & vegetables. | CO1 | 10 |
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| 5. |  | Summarise the principles and application of canning with relation to the processing of fruits and vegetables. (Include process flow chart and diagrams required) | CO1 | 20 |
| (OR) | | | | |
| 6. |  | Discuss the non-thermal methods of food preservation especially with emphasis on the irradiation technology and its application specifically for fruits, vegetables, nuts, and spices | CO2 | 20 |
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| 7. | a. | Discuss in detail the method of manufacture of cocoa. | CO1 | 10 |
| b. | Explain the manufacture of Black Tea with emphasis on the aromatic and pigmatic changes that take place during its manufacture. | CO2 | 10 |
| (OR) | | | | |
| 8. | a. | Summarise the manufacture of parchment coffee. | CO1 | 10 |
| b. | Classify the quality of cocoa bean based on the International Cocoa Standards - Model Ordinance, ‘‘cocoa merchantable quality’’ | CO2 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Discuss the postharvest technology used in the production of black pepper. | CO1 | 10 |
| b. | Discuss the postharvest technologyinvolved in the manufacture of Nutmeg and mace. | CO1 | 10 |