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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – Nov/Dec – 2016**

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|  |  | **Semester :** | **2016-17 ODD** |
| **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. | a. | Discuss in detail on the Technology and challenges involved in the Minimal processing of fruits and vegetables | CO1, 2 | 15 |
| b. | Discuss briefly on the concept of Hurdle technology | CO1, 2 | 5 |
| (OR) | | | | |
| 2. | a. | Discuss briefly on the following – (2 x 10)   1. Manufacture of fruit powders by spray drying 2. Deyhydration technology of Onions | CO1, 2 | 20 |
| 3. | a. | Discuss in detail on the technology of Irradiation preservation of Fruits and vegetables | CO1, 2 | 20 |
| (OR) | | | | |
| 4. | a. | Discuss in detail on the Light pulse Technology in Food Preservation | CO1, 2 | 12 |
|  | b. | Discuss briefly on the concept of Modified atmosphere packaging of fruits and vegetables | CO1, 2 | 8 |
| 5. | a. | Discuss in detail on the following – (2 x 10)   1. Turmeric processing 2. Ginger processing | CO3 | 20 |
| (OR) | | | | |
| 6. | a. | Discuss in detail on the Technology of Supercritical Fluid extraction of spices | CO3 | 10 |
|  | b. | Discuss in detail on the indices of quality for spices | CO3 | 10 |
| 7. | a. | Discuss on the following: 2 x 10   1. Instant tea manufacture 2. Green Tea Technology | CO3 | 20 |
| (OR) | | | | |
| 8. | a. | Discuss on the following –   1. Technology of Instant coffee 2. Technology of Cocoa butter manufacture | CO3 | 12  8 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Discuss in detail on the following – (2 x 10)   1. Vanilla Processing 2. Decaffeination Technology | CO3 | 20 |

ALL THE BEST