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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

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

**Supplementary Examination – June – 2017**

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| **Code :** | **14FP2037** | **Duration :** | **3hrs** |
| **Sub. Name :** | **TECHNOLOGY OF PACKAGING** | **Max. marks :** | **100** |

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

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| **Q. No** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Explain in detail about the various factors affecting quality of food products with cases and examples. | CO1 | 20 |
| (OR) | | | | |
| 2. |  | Evaluate the different types of methods involved in two piece cans making with the aid of diagrams. | CO1 | 20 |
| 3. | a. | Describe the following concepts with illustrations:  (i) Different Strategies used in food packaging | CO2 | 10 |
|  | b. | (ii) Functions of food packaging | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Elucidate the principle and method of manufacturing of rigid plastic packaging materials by:  (i) Injection blow moulding | CO2 | 10 |
|  | b. | (ii) Stretch blow moulding | CO2 | 10 |
| 5. |  | Discuss in detail about manufacturing glass containers using blow and press process of container making with a neat sketch. | CO2 | 20 |
| (OR) | | | | |
| 6. |  | List and explain the different stages of paper manufacturing from pulp with the help of diagrams. | CO2 | 20 |
| 7. |  | Demonstrate the working of horizontal form-fill-seal machine with a neatly labeled diagram. | CO3 | 20 |
| (OR) | | | | |
| 8. | a. | Compare ultrasound sealing and induction sealing of plastic films. | CO1 | 10 |
|  | b. | Enumerate the various moisture absorbents and different scavengers used for maintain freshness in active packaging of foods. Write their area of application in food packaging. | CO3 | 10 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Compare modified atmosphere packaging achieved by active and passive methods. | CO3 | 5 |
|  | b. | Give the importance of different gases used in MAP and explain the equipment used for achieving MAP. | CO3 | 15 |

ALL THE BEST