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 – April/May– 2017**

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| **Code :** | **14NT2025** | **Duration :** | **3hrs** |
| **Sub. Name :** | **APPLICATION OF NANO TECHNOLOGY IN FOOD PROCESSING** | **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. | Outline the protein classification with example. | CO2 | 10 |
| b. | Discuss the concept of nanotechnology application in food processing. | CO2 | 10 |
| (OR) | | | | |
| 2. |  | Write a note on i. types of amino acids, ii. Fatty acids and  iii. Carbohydrates with suitable example. | CO2 | 20 |
| 3. |  | Prioritize functional foods as a health promoting food. | CO1 | 20 |
| (OR) | | | | |
| 4. | a. | Focus the importance of essential minerals used in food fortification. | CO1 | 10 |
|  | b. | List out the desirable characteristics of delivery system. | CO1 | 10 |
| 5. | a. | Explain the potential health risk pertaining to nano foods. | CO3 | 10 |
|  | b. | Categorize the surfactants and biopolymers. | CO2 | 10 |
| (OR) | | | | |
| 6. |  | Paraphase the following i. types of encapsulated material ii. Materials used for encapsulation iii. Method of release. | CO1 | 20 |
| 7. |  | Report the role of biobased polymers and surface biocides. | CO1 | 20 |
| (OR) | | | | |
| 8. |  | Defend your ideas on active packaging materials in food packaging. | CO1 | 20 |
|  | | **Compulsory:** |  |  |
| 9. |  | Editorialize the concept of technology for creating structured delivery system. | CO1 | 20 |

ALL THE BEST