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 :** | **14FP2006** | **Duration :** | **3hrs** |
| **Sub. Name :** | **DAIRY ENGINEERING AND 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. | Classify the milk based on fat content. | CO1 | 10 |
| b. | List out the various test carried at the milk reception. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Write in detail about various types of milk storage tanks. | CO2 | 10 |
| b. | Summarize the effect of contaminants present in milk. | CO1 | 10 |
|  | | | | |
| 3. | a. | Describe the HTST pasteurization process using plate heat exchanger with a neat sketch. | CO2 | 15 |
|  | b. | 600 kg of cow milk testing 4% fat is to be standardized to toned milk by removing 33% fat cream. Calculate the amount of toned milk. | CO1 | 5 |
| (OR) | | | | |
| 4. | a. | Generalize the concept of centrifugal cream separation process. | CO2 | 10 |
|  | b. | Select the different types of coolers used in dairy industry. | CO2 | 10 |
|  | | | | |
| 5. | a. | Indicate the process steps involved in paneer making. | CO3 | 10 |
|  | b. | Discuss the various defects in cheese. | CO1 | 10 |
| (OR) | | | | |
| 6. | a. | Illustrate the process of ice cream making. | CO3 | 10 |
|  | b. | Paraphrase the process of ghee making. | CO3 | 10 |
|  | | | | |
| 7. | a. | Explain the construction and working of drum dryer with a neat sketch. | CO3 | 15 |
|  | b. | List out the physico-chemical properties of milk. | CO1 | 5 |
| (OR) | | | | |
| 8. | a. | Explain the construction and working of centrifugal pumps. | CO2 | 10 |
|  | b. | Write the process of bottle fillers in dairy processing. | CO2 | 10 |
|  | | **Compulsory:** |  |  |
| 9. |  | Explain the preparation methods for the following  a. Yoghurt b. Acidophilus milk | CO3 | 20 |

ALL THE BEST