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 :** | **14FP2027** | **Duration :** | **3hrs** |
| **Sub. Name :** | **FOOD ADDITIVES** | **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. | Explain the functions and importance of various classes of food additives with examples. | CO1 | 15 |
| b. | Write a short note on GRAS and NOEL. | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | Write about the different methods used for estimating the dietary intake of food additives. | CO3 | 15 |
| b. | Write a note on PFA and ADI. | CO1 | 5 |
| 3. | a. | Briefly discuss about different categories of gums and its application in food. | CO3 | 10 |
|  | b. | Explain the different mechanisms of destabilization of emulsions with the help of a neat diagram. | CO2 | 10 |
| (OR) | | | | |
| 4. | a. | Discuss in detail about formation of an emulsion. | CO2 | 15 |
|  | b. | Mention the types and functions of antioxidants in food products. | CO2 | 5 |
| 5. | a. | Enumerate the types and functions of dough conditioners. | C03 | 15 |
|  | b. | Write a note on humectants. | C03 | 5 |
| (OR) | | | | |
| 6. | a. | Discuss briefly the role of flour improvers in the manufacture of baked goods. | CO3 | 10 |
|  | b. | Mention any five flour improver,its function and application in food. | CO3 | 10 |
| 7. | a. | Explain in detail about natural colourants. | CO3 | 13 |
|  | b. | Briefly discuss about the application of synthetic colourants in food. | CO3 | 7 |
| (OR) | | | | |
| 8. | a. | Explain in detail about the types of fat substitutes and replacers. | CO3 | 15 |
|  | b. | Discuss the functions of flavourants. | CO1 | 5 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Briefly discuss about anti-browning agents. | CO3 | 5 |
|  | b. | Explain the different types of nutritional additives? Explain its application in food. | CO3 | 15 |

ALL THE BEST