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 :** | **14FP3016** | **Duration :** | **3hrs** |
| **Sub. Name :** | **Milling & Bakery 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. | Characterize flowable & Floodable type of granules in reference to designing equipment for bulk handling of solids or granulated powders? How are these characters manifested? | CO3 | 10 |
|  | b. | Paraphrase the following dough & gluten strength tests (Graph/interpretation is a must )   1. Farinograph 2. Mixograph | CO1 | 5  5 |
| (OR) | | | | |
| 2. | a. | Draw the structure of a wheat kernel and explain its different components. | CO1 | 5 |
|  | b. | Ennumerate the different physical tests that are done for wheat quality testing. | CO1 | 5 |
|  | c. | Paraphrase the following dough & gluten strength tests (Graph/interpretation is a must )   1. Extensiograph 2. Amylograph | CO1 | 5  5 |
| 3. |  | Reconstruct the Milling Process of wheat (use suitable sketches were required) | CO2 | 20 |
| (OR) | | | | |
| 4. | a. | Explain the milling test done by Buhler Laboratory Flour Mill. | CO1 | 10 |
|  | b. | Recreate the different basic tests done to flour on receipt in a bakery industry. | CO1 | 10 |
| 5. |  | Summarize the different methods of mixing used in Shortening type cakes. | CO2 | 20 |
| (OR) | | | | |
| 6. | a. | Reconstruct the Bread making process during the following:   1. Chorleywood Bread Process 2. Sponge & Dough Process | CO3 | 5  5 |
|  | b. | Discuss the stages of Bread making w.r.t dough rheology | CO3 | 10 |
| 7. | a. | Explain the method of mixing of Foam based cakes | CO2 | 10 |
|  | b. | Conclude how doneness of cakes is checked. | CO2 | 5 |
|  | c. | Enumerate the different parameters to take into consideration for the economical design of bulk handling equipment. | CO3 | 5 |
| (OR) | | | | |
| 8. | a. | Explain the different types of ovens found in commercial bakeries? (Use diagrams wherever required) | CO2 | 10 |
|  | b. | Summarise how Compounded Fluid Shortening is handled in a bakery Industry (Illustrate a Nitrogen Blanketing system) | CO2 | 10 |
|  | | **Compulsory:** |  |  |
| 9. |  | Describe in detail the biscuit making process with emphasis on the gauging, sheeting and cutting unit operations. | CO2 | 20 |

ALL THE BEST