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

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**End Semester Examination – Nov/Dec– 2018**

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| **Code :** | **14FP2025** | **Duration :** | **3hrs** |
| **Sub. Name:** | **CEREALS AND PULSES 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. | Define parboiling. Discuss any two modern methods of parboiling. | CO1 | 10 |
| b. | Explain in detail about working of LSU drier with neat sketch. | CO1 | 10 |
| (OR) | | | |  |
| 2. |  | Discuss in detail about modern rice milling process with help of layout. | CO1 | 20 |
|  |  |  |  |  |
| 3. | a. | Write a note on rubber roll sheller with neat sketch. | CO1 | 10 |
| b. | Discuss solvent extraction method for extraction of rice bran oil and its refining process. | CO1 | 10 |
| (OR) | | | |  |
| 4. | a. | Explain construction and working of Engleberg huller. | CO1 | 10 |
| b. | Draw and discuss principle and working of vertical cone polisher. | CO1 | 10 |
|  |  |  |  |  |
| 5. | a. | Discuss working of wet milling of pulses. | CO2 | 10 |
| b. | Explain with neat sketch working of mini dhal mill. | CO2 | 10 |
| (OR) | | | |  |
| 6. | a. | Write a note on dry milling of pulses with help of flow chart. | CO2 | 10 |
| b. | Demonstrate wet milling of maize with the help of flow chart. | CO2 | 10 |
|  |  |  |  |  |
| 7. | a. | Compare bag and bulk storage of grains. | CO3 | 6 |
| b. | A cylindrical silo of 2.5m diameter and 20m height is filled with wheat. Calculate the load on the bottom, the lateral thrust at every 2.0 m depth on the walls. The silo is made of steel with smooth walls. The characteristics of wheat are as follows. Minimum and Maximum bulk density:720 and 830 kg/m3 respectively. Minimum and maximum angle of friction 25 and 30o. Minimumangle of friction on smooth sheeting:18o. Angle of repose:25o. | CO3 | 14 |
| (OR) | | | |  |
| 8. | a. | Explain construction features of Morai and Bukari type traditional storage structures. | CO3 | 10 |
| b. | Write a note on Squat silo and Vertical silo with neat sketch. | CO3 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. |  | Discuss design, principle, construction and working of screw conveyor and belt conveyor with neat sketch. | CO3 | 20 |