BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (MID SEMESTER EXAMINATION)

SEMESTER: V

CLASS:

IMSC

BRANCH: FOOD TECH. SESSION: MO/2018 **SUBJECT: IMF5005 CEREAL TECHNOLOGY** TIME: 1.5 HOURS **FULL MARKS: 25 INSTRUCTIONS:** 1. The total marks of the questions are 30. 2. Candidates may attempt for all 30 marks. 3. In those cases where the marks obtained exceed 25 marks, the excess will be ignored. 4. Before attempting the question paper, be sure that you have got the correct question paper. 5. The missing data, if any, may be assumed suitably. Q1 (a) What do you mean by grading? What are the purposes of grading? [2] (b) Describe the 'Cereals' and 'Pulses' and write, how they are important for human health? [3] Q2 (a) Give the definition of Standardization (as defined by National Commission on Agriculture [2] standardization)? (b) Write the following International Standard of Wheat as specified in ISO 7970: 1989? [3] (i) Moisture content % (ii) Shrivelled grain % (iii) Broken grain % Q3 (a) Write the following composition of average wheat flour: [2] Starch %, Moisture %, Protein %, Mineral(ash) %, Sugar % and Fat % (b) Draw a structure of the wheat kernel and give chemical composition of major component [3] tissues (germ, bran, and endosperm)? Q4 (a) What is tempering? Give two reasons of Tempering of wheat before milling. [2] (b) Explain the objectives and process of Flour Treatment? [3] Q5 (a) Describe the traditional parboiling process of Dobhapa? [2] (b) How, broken grains can be separated from whole grains during milling process in Rice [3] milling industry? Q6 (a) What are the advantages of extruded rice snack? (b) Describe the manufacturing process of Arare rice crackers from glutinous rice? [3]

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