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

CLASS: IMSc SEMESTER: VI BRANCH: FT SESSION: SP/2020 SUBJECT: IMF6009 FOOD INDUSTRY WASTE MANAGEMENT 1.5 HOURS **FULL MARKS: 25** TIME: **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) Show percentage break down EU27 food waste generation. [2] (b) What are the three core attributes for food? [3] Q2 (a) Draw the waste management hierarchy in food waste management system. [2] (b) Give pi chart for green house gas emission in UK food chain sector 2006. [3] Q3 (a) Draw US food waste recovery hierarchy. [2] [3] (b) Give five definitions of food waste. Q4 (a) What are the green production criteria for food and manufacture products? [2] [3] (b) What are the six set of objectives in Food and drink sector where technology must comply? Q5 (a) What are the different types of waste and byproducts generated from citrus fruit? [2] (b) Give schematic diagram of oil extraction from Cottonseed oil seeds. [3] Q6 (a) What are the different modification of cellulose? (b) How animal glue is prepared? Give some applications of animal glue. [3]

::::: 03/03/2020 :::::M