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

CLASS: IMSC SEMESTER: V BRANCH: FOOD TECH. SESSION: MO/2018 SUBJECT: IMF5001 FOOD PACKAGING 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) Define Active Packaging system. [2] (b) Write short note on gas indicators in intelligent packaging techniques. [3] Q2 (a) Write down the benefits of packaging of food items. [2] (b) Discuss antimicrobial packaging techniques. [3] Q3 (a) Discuss non-migratory bioactive polymers (NMBP) with a neat sketch. [2] [3] (b) Discuss the following limitations of non-migratory bioactive polymers (NMBP) (i) Limited locus of activity (ii) Mechanism of action Q4 Discuss the following types of inherently bioactive synthetic polymers: [5] (i) Chitosan (ii) UV irradiated nylon Q5 (a) Define time temperature indicator (TTI) [2] (b) State the requirements for an effective Time Temperature Indicator (TTI). [3] 06 Explain Diffusion and enzymatic based TTI's with neat sketch. [5]

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