

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

CLASS: BTECH  
BRANCH: CHEM & CHEM P&P

SEMESTER : VII  
SESSION : MO/2022

SUBJECT: CL425 PLASTIC PACKAGING TECHNOLOGY

TIME: 3:00 Hours

FULL MARKS: 50

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q1 (a) Discuss the various types of packaging that require different technologies and expectations for their accomplishments as a good package. [5]
- Q1 (b) Analyze climate hazards on the package with various factors. [5]
- Q2 (a) Discuss the concept of Reuse, Recycle, Reduction (RRR) in glass containers. [5]
- Q2 (b) Explain the steps involved in the processing of foods and drinks in metal packages. [5]
- Q3 (a) Judge a right kind of plastic material for the product plastic containers for food packaging applications & discuss its structure and properties. [7]
- Q3 (b) Why plastics are used in food packaging and discuss its main reasons. [3]
- Q4 (a) Explain the various novel MAP gases. [5]
- Q4 (b) Discuss retort pouch with a suitable sketch and explain its applications, advantages, and disadvantages. [5]
- Q5 (a) Explain the importance of plastic waste management. [5]
- Q5 (b) Discuss various types of biopolymers used for packaging applications [5]

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