



MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

VI SEMESTER B.TECH. (MEDIA TECHNOLOGY)

END SEMESTER MAKE-UP EXAMINATIONS, JULY 2022

SUBJECT: PACKAGING DESIGN AND TESTING [MED 3251]
REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **all the** questions.
- ❖ Missing data may be suitable assumed.

<i>Qn no:</i>	<i>Question</i>	<i>M</i>	<i>CO</i>	<i>BTL</i>
1	Explain the procedure in designing an optimum cushion package.	4	1	1
2	What are corrugated boards? Explain the uses of corrugated boards with suitable examples	3	2	1
3	Discuss the influence of barrier properties on improving shelf life of packaged food.	3	4	2
4	Explain the importance of box compression strength	4	3	2
5	Discuss various types of corrosion in packaging with suitable example for each.	3	4	1
6	List and explain three tests conducted on glass containers	3	1	2
7	Explain the process of pressure bubble vacuum forming with a neat sketch	4	1	1
8	Recommend various properties of cushioning materials for high quality packaging applications. Give suitable example for each	3	3	1
9	Explain plunger type injection molding machine with a neat sketch	3	2	1
10	Explain the working of horizontal form-fill-seal machine with a neat sketch	4	4	3
11	Select the process of manufacturing narrow necked glass bottles. Explain such process with neat diagram	3	4	3
12	What are the significance of delamination strength in packaging material? Explain	3	3	2
13	Explain the four Components of Aerosols	4	1	1
14	With the help of neat diagrams, explain the manufacturing of a Two-Piece Single Drawn and Multiple Drawn (DRD) Cans	3	3	1
15	Mention the important basic functions of container coatings and write a short note on DECORATIVE COATINGS	3	2	2

