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

CLASS: IMSc SEMESTER: VI BRANCH: FOOD TECH SESSION: SP/2023

SUBJECT: FT330R1 FOOD PACKAGING TECHNOLOGY

TIME: 3 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.

Q.1(a) Q.1(b)	Discuss various methods that can be used for food preservation. List the critical factors required for need for changes in package design.	[8] [2]	CO CO1 CO2	BL BL2 BL1
Q.2(a)	Write short notes on the manufacture of paper and paperboard.	[8]	CO3	BL2
Q.2(b)	Define technical shelf life.	[2]		BL1
Q.3(a)	Explain various methods of coatings of plastics. Discuss gravure printing with a neat sketch.	[5]	CO5	BL3
Q.3(b)		[5]	CO2	BL2
Q.4(a) Q.4(b)	Define active and intelligent packaging techniques. Explain different classifications of time temperature indicator (TTI).	[4] [6]	CO3	BL1 BL2
Q.5(a)	Discuss any two types of biopolymers. Write short notes on improving the recyclability of plastics packaging.	[5]	CO2	BL2
Q.5(b)		[5]	CO5	BL2

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