

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/2024)

CLASS: BTECH
BRANCH: PROD

SEMESTER : VII
SESSION : MO/2024

SUBJECT: PE411 SUPPLY CHAIN MANAGEMENT

TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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		CO	BL
Q.1(a)	Construct a typical supply chain model for an OEM and show its upstream side only.	[2] 1	2
Q.1(b)	What are the various flows that occur in a supply chain? Illustrate it.	[3] 1	2
Q.2(a)	List the various modelling approaches for supply chains.	[2] 2	2
Q.2(b)	Differentiate between the two supply chain metrics: Inventory Turnover and Supply Chain Cycle Time.	[3] 2	2
Q.3(a)	What is CCC and how to calculate it for a supply chain?	[2] 2	3
Q.3(b)	Explain the term 'Risk Pooling' and how it is being used in design of distribution network?	[3] 3	3
Q.4(a)	How to find the optimum number of warehouses for a supply chain using various costs?	[2] 3	2
Q.4(b)	Describe the network type 'Distributor Storage with Carrier Delivery' and cite any TWO practical applications of this model.	[3] 3	3
Q.5(a)	Mention any four modes of transport and their features in brief.	[2] 3	2
Q.5(b)	Discuss the two important trade-offs in transportation decisions.	[3] 2	3

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