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B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

January / February 2025 Semester End Main Examinations

Programme: B.E. **Semester: VII**

Branch: Industrial Engineering and Management **Duration: 3 hrs.**

Course Code: 22IM7PCSCR **Max Marks: 100**

Course: Supply Chain Management and ERP

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

			UNIT - I	*CO*	*PO*	Marks
1	a)		With a neat diagram, explain the supply chain process cycles.	*CO1*	*PO1*	**10**
	b)		Illustrate the macro processes that are included in a supply chain.	*CO1*	*PO1*	**10**
			OR			
2	a)		How does a company achieve strategic fit between its supply chain strategy and its competitive strategy? Explain. Also sketch the zone of strategic fit.	*CO2*	*PO2*	**10**
	b)		Analyze the impact of Supply chain drivers on the responsiveness and efficiency of the supply chain.	*CO2*	*PO2*	**10**
			UNIT - II			
3	a)		With a neat graph, discuss the relationship between desired response time and number of facilities.	*CO1*	*PO1*	**08**
	b)		Analyze the Manufacturer Storage with Direct Shipping type of distribution network.	*CO2*	*PO2*	**08**
	c)		Tabulate the performance characteristics of in-transit merge.	*CO2*	*PO2*	**04**
			OR			
4	a)		Provide the suitable framework for network design decisions. Briefly explain the same.	*CO2*	*PO2*	**12**
	b)		Illustrate the evaluation of network design decisions using decision tree.	*CO2*	*PO2*	**08**
			UNIT - III			
5	a)		Compare and contrast P and q-systems of inventory management.	*CO3*	*PO2*	**05**
	b)		An enterprise requires 1000 units per month. The ordering cost is estimated to be Rs 50 per order. In addition to Rs 1, the carrying costs are 5% per unit of average inventory per year. The purchase price is Rs 20 per unit. Find the economic lot size to be ordered and the total minimum cost.	*CO3*	*PO2*	**05**
	c)		Compare and contrast VED and FSND analysis of inventory.	*CO3*	*PO2*	**10**

			OR			
	6	a)	Evaluate the strengths and weaknesses of different transportation network structures.	*CO3*	*PO2*	**12**
		b)	Explain the two fundamental supply chain decisions involving this trade-off between transportation and inventory costs.	*CO3*	*PO2*	**08**
			UNIT - IV			
	7	a)	Explain the situation and need for implementation of ERP in Indian context.	*CO4*	*PO3*	**10**
		b)	List the various modules of ERP. Explain any two modules in detail.	*CO4*	*PO3*	**10**
			OR			
	8	a)	Discuss the advantages and limitations of ERP systems.	*CO4*	*PO3*	**10**
		b)	What is business process mapping? How does it impact the implementation of a new ERP system?	*CO4*	*PO3*	**10**
			UNIT - V			
	9	a)	What is e-SRM? Enumerate its benefits.	*CO5*	*PO1 PO2 PO3 PO5 PO9 PO10 PO12*	**10**
		b)	Explain how blockchain technology can improve transparency in a global supply chain.	*CO5*	*PO1 PO2 PO3 PO5 PO9 PO10 PO12*	**10**
			OR			
	10	a)	Discuss the advantages and limitations of using blockchain in supply chain management.	*CO5*	*PO1 PO2 PO3 PO5 PO9 PO10 PO12*	**08**
		b)	Analyze the potential benefits of integrating smart contracts into supply chain processes. How do they reduce inefficiencies and ensure compliance?	*CO5*	*PO1 PO2 PO3 PO5 PO9 PO10 PO12*	**12**

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