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P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belagavi)
Seventh Semester, B.E. - Industrial and Production Engineering
Semester End Examination; February - 2022
Supply Chain Management

Time: 3 hrs   *Max. Marks: 100*

Course Outcomes

The Students will be able to:
CO1: The students should learn and understand necessity of Supply Chain management.
CO2: Demonstrate ability to make use Supply Chain.
CO3: Students will be able to use different types of Dynamometers.
CO4: The students get exposure to different types of Supply chain flows methods.
CO5: Students should be able to demonstrate the knowledge of Supply Chain management.

<u>***Note:***</u> **I) PART - A** is compulsory. **Two** marks for each question.
    II) PART - B: Answer any <u>**Two**</u> sub questions (from a, b, c) for Maximum of **18 marks** from each unit.

Q. No.	Questions	Marks	BLs	COs	POs
	I : PART - A	**10**			
I a.	Mention the cycle views of supply chain.	2	L1	CO1	PO1
b.	Mention any two factors influencing distribution network design.	2	L1	CO2	PO1
c.	What do you mean by TCSR?	2	L1	CO3	PO1
d.	Mention the modes of transportation in supply chain management.	2	L1	CO4	PO1
e.	What is the concept of six sigma with the help of a suitable graph?	2	L1	CO5	PO1
	II : PART - B	**90**			
	UNIT - I	**18**			
1 a.	Explain with suitable illustrative sketch, the cycle views of supply chain process (Push / Pull process).	9	L2	CO1	PO2
b.	Explain the drivers of supply chain management using a suitable flow diagram.	9	L2	CO2	PO2
c.	Explain with a suitable diagram the strategies adopted in achieving strategic fit in supply chain.	9	L2	CO1	PO2
	UNIT - II	**18**			
2 a.	Explain any two methods or models for facility / capacity allocation in an industry.	9	L2	CO2	PO2
b.	Evaluate the network decisions using decision trees for a typical industry.	9	L2	CO2	PO2
c.	Explain with suitable example the discounted cash flow analysis.	9	L2	CO2	PO2

	UNIT - III	**18**			
3 a.	Explain the role of cycle inventory in a supply chain with suitable example.	9	L2	CO2	PO2
b.	Discuss the driving factors in managing multi echelon cycle inventory with suitable example.	9	L2	CO3	PO1
c.	Discuss the various managerial levers adopted to improve supply chain profitability with an example.	9	L3	CO3	PO2
	UNIT - IV	**18**			
4 a.	Explain the performance characteristics of any two modes of transportation with trade off.	9	L2	CO4	PO3
b.	Explain the role of sourcing decisions in a supply chain with a suitable example.	9	L2	CO4	PO2
c.	How the revenue management is achieved in transportation in handling of perishable assets, bulk items with suitable example.	9	L2	CO4	PO2
	UNIT - V	**18**			
5 a.	Explain with suitable example the concept of bull whip effect and its coordination in SCM.	9	L2	CO5	PO2
b.	Explain the following concepts as applied in SCM:				
	i) Lean supply chain	5	L3	CO5	PO1
	ii) Reverse logistics	4			
c.	Discuss the applications of information technology in supply chain management.	9	L2	CO5	PO2

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