



Term Evaluation (Odd) Semester Examination September 2025

Roll no.....

Name of the Program Course: **B.Tech.(ME)**

Semester: **V Sem.**

Name of the Paper: **Supply chain Management**

Paper Code: **TME 515**

Time: **1.5 hour**

Maximum Marks: 50

Note:

- (i) Answer all the questions by choosing any one of the sub-questions
- (ii) Each question carries 10 marks.

Q1	(10 marks)	CO1, CO2
(a)	What is Supply Chain Management (SCM)? Discuss its objectives and significance in today's competitive business environment.	
OR		CO1, CO2
(b)	Describe the main factors (drivers) that affect supply chain performance. How do they help improve efficiency and quick response?	
Q2	(10 marks)	CO1, CO2
(a)	Identify and explain the different types of flows in a supply chain. Provide suitable examples for each.	
OR		CO1, CO2
(b)	How do supply chain drivers help in achieving alignment between supply chain strategy and competitive business strategy?	
Q3	(10 marks)	CO1, CO2
(a)	What is forecasting? Explain the types of forecasting methods and their use in supply chain planning..	
OR		CO1, CO2
(b)	What do you mean by facility location? Discuss the factors that guide location choice and capacity planning in a supply chain network.	
Q4	(10 marks)	CO1, CO2
(a)	Define Sales and Operations Planning (S&OP). Explain its steps and key benefits.	
OR		CO2, CO3
(b)	What are supply chain network optimization models? Explain their applications with examples.	
Q5	(10 marks)	CO2, CO3
(a)	What is Inventory? Describe the types of inventory and explain the Economic Order Quantity (EOQ) model in detail. Also, define lead time.	
OR		CO2, CO3
(b)	The demand for an item is 15,000 units per annum and the unit cost is Rs. 150. For a unit, inventory interest cost is 12% and storage cost is 10%. Set up cost is Rs.1200 per order. Calculate the optimal order quantity.	