SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)
Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai
Accredited by NAAC-UGC with 'A++' Grade (Cycle III) &
Accredited by NBA (B.E - CSE, EEE, ECE, Mech & B.Tech.IT)
COIMBATORE-641 035, TAMIL NADU

Reg. No: | | | | | | | | | | | | |

B.E/B.Tech- Internal Assessment – III
Academic Year 2024-2025 (Even Semester)
Sixth Semester
Mechanical Engineering

A

19MEE311 – LEAN SIX SIGMA FOR SUPPLY CHAIN MANAGEMENT

Time: 1 1/2 Hours **Maximum Marks: 50**

Answer All Questions

		CO	Blooms
1.	Define supply chain fulcrum	CO4	ANA
2.	Difference between demand management and demand planning	CO4	REM
3.	Explain the route map to responsiveness	CO5	UND
4.	Simplify the 'Quick response' logistics (Amazon)	CO5	UND
5.	The future of global sourcing (Mckinsey)	CO5	UND

PART – B (2*13=26 Marks) & (1*14=14 Marks)

				CO	Blooms
6.	(a)	Discuss how a responsive supply chain can be developed by reducing the lead-time gap, improving demand visibility, and adopting agile practices.	13	CO4	ANA
		(OR)			
	(b)	Construct your answer with real-world examples and appropriate supply chain models.	13	CO4	REM
7.	(a)	Evaluate the role of information technology in enabling lean and agile supply chains.	13	CO5	ANA
		(OR)			
	(b)	Summaries the IT systems support quick response logistics, manage global complexity, and improve supply chain visibility.	13	CO5	ANA
8.	(a)	Inspect how supply chain responsiveness can be achieved through effective demand management and the use of information technology (Amazon)	14	CO4	APP
		(OR)			
	(b)	Illustrate your answer with the Japanese philosophy and a case study from the software sector (Adobe)	14	CO5	ANA

Bloom's Taxonomy:
REM – Remember **UND** – Understand **APP**– Apply **ANA**– Analyze **EVA** - Evaluate
CRT - Create

Prepared by 3/5/25 **Teaching Coordinator** 3/5/25 **HoD/Mech** 3/5/25

SNSCT/IQAC/CLT/1.43 (Ver 2)

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B.E/B.Tech- Internal Assessment – III
Academic Year 2024-2025 (Even Semester)
Sixth Semester
Mechanical Engineering

B

19MEE311 – LEAN SIX SIGMA FOR SUPPLY CHAIN MANAGEMENT

Time: 1 1/2 Hours **Maximum Marks: 50**

Answer All Questions

		CO	Blooms
1.	Define forecast capacity	CO4	UND
2.	Formulate the lead time gap	CO4	ANA
3.	State the Product 'push' versus demand 'pull'	CO5	REM
4.	Mention the basic in virtual lean supply chain (Amazon)	CO5	UND
5.	Explain about marketing logistics (Amazon)	CO5	UND

PART – B (2*13=26 Marks) & (1*14=14 Marks)

				CO	Blooms
6.	(a)	Discuss how Adobe applies the principles of supply chain responsiveness and agility in a digital product environment.	13	CO4	ANA
		(OR)			
	(b)	Illustrate the demand planning and 'pull-based' logistics strategies contribute to its performance.	13	CO4	UND
7.	(a)	Explain how information technology enables quick response logistics in global lean supply chains.	13	CO5	UND
		(OR)			
	(b)	How does McKinsey advise organizations to reduce complexity and improve responsiveness using digital tools	13	CO5	APP
8.	(a)	Analyse how Amazon reduces the lead-time gap and improves demand visibility to build a responsive supply chain (Amazon)	14	CO4	ANA
		(OR)			
	(b)	Discuss the product design impacts in supply chain complexity and how Deloitte suggests using IT solutions to manage this in lean and global environments (Deloitte)	14	CO5	ANA

Bloom's Taxonomy:
REM – Remember **UND** – Understand **APP**– Apply **ANA**– Analyze **EVA** - Evaluate
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Prepared by 3/5/25 **Teaching Coordinator** 3/5/25 **HoD/Mech** 3/5/25

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Institution	SNSCT
Branch	Mechanical Engineering
Semester	V
Course Code/Name	19MEE311 - LSSSCM
Name of the Faculty	Mr. M. Gokulraj

'A'

S.No	Quality Parameters basedon blooms	Grade points (g)	Part	No of Questions(n)	Allotted marks (m)	n*m	Q= n*m*g
1	Remember/ Understand (Level - 1,2)	1	A	04	02	8	8
			B	02	13	26	26
			C				
2	Apply (Level - 3)	2	A				
			B	01	13	13	26
			C				
3	Analyze (Level - 4)	3	A	01	02	2	6
			B	03	13	13	39
			C	02	14	28	84
4	Evaluate(Level-5)	4	A				
			B				
			C				
5	Create (Level -6)	5	A				
			B				
			C				

90 153

Quality Index $Qi = \frac{\sum Q}{\sum (n x m)} = 153/90 = 1.70$ - Low

Faculty 3/5/25

Teaching Coordinator 3/5/25

HoD/Mech 3/5/25

VIS.

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Institution	SNSCT
Branch	Mechanical Engineering
Semester	VI
Course Code/Name	21MEE311 - L SSSCM
Name of the Faculty	Mr. M. Gowtham

'B'

S.No	Quality Parameters basedon blooms	Grade points (g)	Part	No of Questions(n)	Allotted marks (m)	n*m	Q= n*m*g
1	Remember/ Understand (Level - 1,2)	1	A	04	02	8	8
			B	01	13	13	13
			C				
2	Apply (Level - 3)	2	A				
			B	01	14	14	28
			C				
3	Analyze (Level - 4)	3	A	01	02	2	6
			B	03	13	39	117
			B	01	14	14	42
4	Evaluate(Level-5)	4	A				
			B				
			C				
5	Create (Level -6)	5	A				
			B				
			C				

90 214

Quality Index $Qi = \frac{\sum Q}{\sum (nxm)}$ = 214/90 = 2.37 → Medium

Faculty 3/5/25

Teaching Coordinator 3/5/25

HoD/Mech 3/5/25

VIG.