SEMESTER S7

MANUFACTURING STRATEGY

Course Code	OESFT723	CIE Marks	40
Teaching Hours/Week (L: T:P: R)	3:0:0:0	ESE Marks	60
Credits	3	Exam Hours	2 Hrs. 30 Min.
Prerequisites (if any)	None	Course Type	Theory

Course Objectives:

1. Understand manufacturing and operations strategy concepts for world-class competitiveness.
2. Learn to develop and apply strategies for quality management and world-class manufacturing.

SYLLABUS

Module No.	Syllabus Description	Contact Hours
1	Manufacturing output, Operations Systems, Operations Strategy, Functional strategy within context of a firm, Functional dominance within corporate strategy, Concept of world class manufacturing organization, 6 Ps of Manufacturing, Skinners' view and Hayes and Wheelwright framework of Manufacturing Strategy, Alternative paradigm of manufacturing strategy, Some generic manufacturing strategies	8
2	Developing a manufacturing strategy, Understanding markets, The concept of order winners and qualifiers, Basic Characteristics and Specific Dimensions of Order Winners and Qualifiers. Developing an Operations Strategy: Methodology	8
3	Developing an Operations Strategy: Roth and Miller Classification, Enlightened View of Manufacturing, Manufacturing Strategy Taxonomy, Total Quality Management and Manufacturing Excellence, Deming's approach to Quality, Business Excellence Awards.	10
4	Critical success factors for World Class Manufacturing, Value Added	10

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	Engineering, Total Employee Involvement, HR theories for Operations Strategy, Flexible Manufacturing system, Toyota production System, World Class Manufacturing and India	

Course Assessment Method
(CIE: 40 marks, ESE: 60 marks)

Continuous Internal Evaluation Marks (CIE):

Attendance	Assignment	Internal Examination-1 (Written)	Internal Examination- 2 (Written)	Total
5	15	10	10	40

End Semester Examination Marks (ESE)

In Part A, all questions need to be answered and in Part B, each student can choose any one full question out of two questions

Part A	Part B	Total
• 2 Questions from each module. • Total of 8 Questions, each carrying 3 marks **(8x3 =24marks)**	• Each question carries 9 marks. • Two questions will be given from each module, out of which 1 question should be answered. • Each question can have a maximum of 3 sub divisions. **(4x9 = 36 marks)**	**60**

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Course Outcomes (COs)

At the end of the course students should be able to:

Course Outcome		Bloom's Knowledge Level (KL)
CO1	Understand the fundamentals of manufacturing output, operations systems, and strategies, including world-class manufacturing concepts and frameworks.	**K3**
CO2	Analyze the process of developing manufacturing and operations strategies, focusing on order winners, qualifiers, and their role in market competitiveness.	**K2**
CO3	Gain knowledge of key models and classifications related to operations strategy, such as Roth and Miller's classification, Total Quality Management (TQM), and process choice.	**K2**
CO4	Explore the critical success factors of world-class manufacturing, including value-added engineering, total employee involvement, and systems like the Toyota Production System.	**K2**

Note*: K1- Remember, K2- Understand, K3- Apply, K4- Analyse, K5- Evaluate, K6- Create*

CO-PO Mapping Table:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	2		2	2		2	2	3	2
CO2	3	3	2	2		3	2		2	2	3	2
CO3	2	3	3	3	2	3	2	2	2	2	3	3
CO4	2	2	2	2	2	3	2	2	3	2	3	3

Text Books				
Sl. No	**Title of the Book**	**Name of the Author/s**	**Name of the Publisher**	**Edition and Year**
1	Manufacturing Operations Strategy (2)	Alex Hill & Terry Hill Palgrave	Macmillan	-
2	Total Quality Management	Dale H Besterfield and others	Pearson	-

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Reference Books				
Sl. No	**Title of the Book**	**Name of the Author/s**	**Name of the Publisher**	**Edition and Year**
1	Manufacturing- Missing Link in Corporate Strategy	W Skinner	Harvard Press,	1969
2	The Toyota Way	J K Liker	Tata McGraw Hill	-

Video Links (NPTEL, SWAYAM…)	
Module No.	**Link ID**
I	https://www.youtube.com/watch?v=sSX9u5yIK6o
II	https://www.youtube.com/watch?v=HnuCLqwAGYU
III-IV	https://www.youtube.com/watch?v=rhCbxPeBEdM