

Programme Name: MMS / PGDM: MMS

Name of the Course: New Product Development & Concurrent Engineering

Maximum marks: 100 No. of Sessions: 15

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Weblink:

### **Learning Objectives:**

1. To make student aware about product design, development

2. To study product development process

- 3. To understand impact of concurrent engineering on NPD
- 4. To study role of value analysis/value engineering in NPD

### Reference Books:

- 1. Operations and Industrial Management Donald Delmar
- 2. Operations Management Decision Making in the operations function Roger Schvoeder
- 3. Operations Management for Competitive Advantage Chase Jacobs Acquilanc
- 4. The PDMA handbook of NPD-Kenneth B. Kahn
- 5. Handbook of NPD Christoph Loch, Stylianos Kavadias



## <u>Plan:</u>

Session	Topics to be covered	Books referred/ Recommended/ References-	Learning	<b>Evaluation of Students</b>	
No		Print/Articles/ News/Research papers/ Online	outcomes	understanding by	
		database/ Software /Simulations used		MCQs, Quiz, Short Test	
1	Defining for business goals	The Pursuit Of New Product Development:     The Business Development Process-Marc A.     Annacchino, P.E.	Need of NPD     Perspective of ORG. Towards NPD	Q & A Session	
2	Defining for business goals	The Pursuit Of New Product Development:     The Business Development Process-Marc A.     Annacchino, P.E.	Difference between Innovation & Invention     Invention leading to Innovation	Case Discussion	
3	Product Development Process	Operations Management for competitive Advantage-Richard Chase, F Jacobs, Nicholas Aquilano, Nitin Agrawal	Role of     Technology in PD     QFD Approach	MCQ's	
4	Time bound Research and development	The Pursuit Of New Product Development:     The Business Development Process-Marc A.     Annacchino, P.E.	<ul><li>Risk assessment</li><li>Commitment</li><li>How to generate planned revenue</li></ul>		
5	Prototype manufacturing	<ul> <li>NPD Process for Software-Scott Harper</li> <li>The PDMA Book of NPD- Kenneth B. Kahn</li> <li>Handbook of NPD Christoph Loch, Stylianos Kavadias(Page 433)</li> <li>Video</li> </ul>	How to do     Prototyping     Prototyping Tools	Practical assignment	
6	Concurrent Engineering concepts	<ul> <li>The PDMA handbook of NPD-Kenneth B. Kahn</li> <li>Handbook of NPD Christoph Loch, Stylianos Kavadias</li> </ul>	What is CE?		

		Academic Teal (2010-2017)			
7	Concurrent Engineering concepts	Project (Ref)-Product Development Using CE	Student will understand how CE applied to PD	Test	
8	Practices for easier and quicker delivery of prototypes	<ul> <li>The PDMA Book of NPD- Kenneth B. Kahn</li> <li>Technology used for prototyping-Video</li> </ul>	How Rapid     Prototyping     happened?	Discussion on Mini project assigned	
9	Applications of VA	<ul> <li>Report by Lean Enterprise Research Centre Cardiff, United Kingdom</li> <li>VA Handbook 2009 Australian Government</li> </ul>	Contribution of VA in NPD Process		
10	Applications of VE at design stage.	Value Improvement Methods- David K.H. Chua National University of Singapore	How VE helps to reduced costs, increased value, better designs, improved performance, and enhanced quality	Practical Assignment	
11	Successful pilot run and production	Handbook of NPD Christoph Loch, Stylianos Kavadias	Prelaunch activities for NPD	Discussion with current	
12	Successful pilot run and production	The Pursuit Of New Product Development: The Business Development Process-Marc A. Annacchino, P.E.		scenario	
13	Successful pilot run and production	Handbook of NPD Christoph Loch, Stylianos Kavadias	_		
14	Case Studies	Case attached			
15	Presentations	Mini project Presentations	Practical Exposure	Evaluation criteria Attached	

2. Practical Approach : Other activities (Atleast 4 distinct activities)

	Tractical Approach Tother activities (Atleast 4 distinct activities)			
Sr.	Activity Name	Topic Coverd	Learning outcomes	Source
No.				
1	Role Play			



2	Industry Visit			
3	Academic Projects	Mini Projects	Practical exposure to the concepts of NPD & CE	
4	Book Review			
5	Group Discussion	Group Discussion on related Cases	Views on NPD & CE	Will submit on completion of course
6	Business Quiz / Business News sharing			
7	Videos / Simulation	Videos of Related topics	Knowledge up gradation about ND & CE	Internet
8	Use of Softwares and Labs			
9	Any other activity			



## **Evaluation:**

## I) Internal:

Component	Details	Marks
Class Test	20 marks class test: 15 Marks MCQs & 5 case solving	20
Presentation	Practical Projects on Materials Management	10
Case Study	Group discussions & debates	_
Participation		5
Others	Attendance	5

**Signature of Faculty** 

Signature of the Co-ordinator