

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

Nov – Dec 2023-24		
B.Tech Program (All Branches)		Scheme : II
Examination: LY Semester: VII		
Course Code: ILC7051 and Course Name: Product Life Cycle Management		
Date of Exam: 11/12/2023	Duration: 2.5 Hours	Max. Marks: 60

Instructions:				
(1) All questions are compulsory.				
(2) Draw neat diagrams wherever applicable.				
(3) Assume suitable data, if necessary.				
		Max. Marks	CO	BT level
Q 1	Solve any six questions out of eight:	12		
i)	Explain PLM strategies.	2	1	Un
ii)	Explain any 2 PLM applications.	2	1	Un
iii)	Explain the concept of simultaneous engineering in brief.	2	2	Un
iv)	Explain the benefits of a product configurator?	2	2	Un
v)	Explain importance of Product data management system	2	3	Un
vi)	List out applications of digital mockups and explain any two .	2	4	Un
vii)	Explain LCA? Write its four benefits.	2	6	Un
viii)	Explain environmental strategies in product design	2	5	Un
Q.2	Solve any four questions out of six.	16		
i)	Explain Product life cycle cost analysis	4	6	Un
ii)	Explain need of model building	4	4	Un
iii)	Identify how “ everyday use” of system is a barrier of PDM system implementation	4	3	Ap
iv)	Explain the importance and benefits of PLM.	4	1	Un
v)	Examine the key factors in sustainable development in product design and development	4	5	An

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vi)	Explain the Design for X System. Also explain the Choice of Design for X Tools and its use in the Design Process.	4	2	Un
Q.3	Solve any two questions out of three.	16		
i)	Explain the phases in product life cycle by considering an example of any one product	8	1	Un
ii)	Examine end of life strategies for product and flow of material resources	8	5	An
iii)	Explain modeling and simulation in product design	8	4	Un
Q.4	Solve any two questions out of three.	16		
i)	Explain new product development strategies	8	2	Un
ii)	Identify and explain various reasons to implement PDM system	8	3	Ap
iii)	Explain cost analysis and life cycle approach in details	8	6	Un
