KUMARAGURU
college of technology
character is life

B.E DEGREE EXAMINATIONS: NOV/DEC 2022

(Regulation 2018)

Seventh Semester

MECHATRONICS ENGINEERING

U18MCE0020:Product Lifecycle Management

COURSE OUTCOMES

CO1: Apply concepts of product lifecycle management and visioning

CO2: Apply relative importance of product concepts, processes and workflow

CO3: Apply principles of collaborative product development

CO4: Outline considerations in system architecture understand the industrial process

CO5: Apply product lifecycle management strategy and assessment of current systems and applications.

CO6: Apply the infrastructure assessment, assessment of current systems and applications.

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-
PART A (10 x 2 = 20 Marks)
(Answer not more than 40 words)

1.	What are the stages of Product lifecycle?	CO1	[K1]
2.	Mention few important needs for PLM.	CO1	[K2]
3.	Write down the major characteristics of Growth level in PLM.	CO2	[K2]
4.	Mention the major role of mass customization, in business drivers for PLM.	CO2	[K2]
5.	Write a short note on Product reuse.	CO3	[K2]
6.	State the importance of Engineering Change Management.	CO3	[K2]
7.	Classify the interactions between chunks.	CO4	[K2]
8.	What is system architecture?	CO4	[K1]
9.	Write down the principles for PLM strategy.	CO5	[K2]
10.	Mention the major success factors for ERP Projects.	CO6	[K1]

Answer any FIVE Questions:-
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

11.	Discuss the key consideration of digital threads in product lifecycle management with a neat sketch.	16	CO1	[K2]
12.	Describe the elements of Product Lifecycle Management in detail.	16	CO2	[K1]

13.	a)	Explain in detail about the relation between engineering vault and product reuse in an organization.	8	CO3	[K₂]

13. a) Explain in detail about the relation between engineering vault and product reuse in an organization.   8   CO3   [K$_2$]

    b) How to analyze the assessment of current system?   8   CO6   [K$_2$]

14. Explain how fundamental and incidental interactions is related with system architecture.   16   CO4   [K$_2$]

15. Explain the impact on the organization of developing a strategy for PLM?   16   CO5   [K$_2$]

16. Discuss how to manage the product lifecycle in terms of sales, cost and cash flow, with a neat sketch.   16   CO1   [K$_3$]

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