



B.E DEGREE EXAMINATIONS: NOV/DEC 2023

(Regulation 2018)

Seventh Semester

AERONAUTICAL ENGINEERING

U18AEE0220: 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.
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)

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|---|-----|-------------------|
| 1. List out the various phases of Product lifecycle. | CO1 | [K ₂] |
| 2. Write a short note on SaaS Solutions. | CO1 | [K ₂] |
| 3. Mention few characteristics of Maturity level in PLM. | CO2 | [K ₂] |
| 4. List the external drivers for PLM. | CO2 | [K ₂] |
| 5. State the importance of product reuse. | CO3 | [K ₂] |
| 6. Write Short notes on digital mock-up and prototype development. | CO4 | [K ₂] |
| 7. List few features of Product Lifecycle Management System. | CO4 | [K ₂] |
| 8. How the PLM Initiatives can will be helpful in supporting the Corporate Objectives? | CO5 | [K ₂] |
| 9. List the five success factors for ERP Projects. | CO5 | [K ₂] |
| 10. List out the advantages of PLM information model to facilitate the exchange of information. | CO6 | [K ₂] |

Answer any FIVE Questions:-

PART B (5 x 16 = 80 Marks)

(Answer not more than 400 words)

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| 11. Explain how to manage the product lifecycle in terms of sales, cost and cash flow, with a neat sketch. | 16 | CO1 | [K ₂] |
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12.	Explain: Product Lifecycle Management Elements.	16	CO2	[K ₂]
13.	Explain the Engineering Change Management in detail.	16	CO3	[K ₂]
14.	a) Explain the various types of Product Data with example.	8	CO4	[K ₂]
	b) Explain the following features of PLM systems.	8	CO4	[K ₂]
	i) Bill of Materials (BOM).			
	ii) Computer-Aided Design (CAD) Tools and Management.			
	iii) Product Data Management (PDM).			
	iv) Product Regulation and Governance.			
15.	Discuss in detail about the important factors required for setting up the PLM strategy.	16	CO5	[K ₂]
16.	Explain the important parameters involved in the PLM infrastructure assessment.	16	CO6	[K ₂]
