



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.															
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Mid - Term Examinations - March 2026

Date: 14-03-2026

Time: 02:00pm - 03:30pm

School: SOE	Program: B. Tech. (Mechanical Engg.)		
Course Code: MEC4010	Course Name: Product Lifecycle Management		
Semester: VI	Max Marks: 50	Weightage: 25%	

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	12	14	14	10	-

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

1	Define the term "Product" and contrast between a "Good" and a "Service" with examples.	2 Marks	L2	CO1
2	Identify four "Internal Drivers" that create the need for PLM within an organization.	2 Marks	L1	CO2
3	Explain the "Design" phase within the Product Life Cycle Process.	2 Marks	L2	CO2
4	Define "Collaborative Product Development" (CPD) and list the PLM areas it typically includes.	2 Marks	L1	CO3
5	List the four main tasks involved in "Engineering Change Management" (ECM).	2 Marks	L1	CO3

Part B

Answer the Questions.

Total Marks 40M

6.	Apply the Product Life Cycle model to the "Maggi" case study. Analyse how the brand managed the "Decline" stage in 2015 to recover.	10 Marks	L4	CO2
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Or				
7.	Analyse the evolutionary milestones of PLM from 1985 to 2017+. How does the transition from "EDM" to "Smart PLM / PLM 4.0" reflect a shift in the strategic focus of engineering organizations?	10 Marks	L4	CO2
8.	A manufacturing unit is transitioning a new product from the verification phase to the factory floor. The team is currently working on "Floor Plan Layouts" and "Packaging Specifications". Apply the Product Life Cycle Process model to identify which stage this activity belongs to and list two other critical requirements that must be prepared during this specific stage.	10 Marks	L3	CO4
Or				
9.	A technology startup has just launched a new fitness tracker. The product is currently in the "Introduction" stage of the Product Life Cycle model. Using the RACE planning framework recommended for this stage, apply a specific marketing strategy to maximize customer lifetime value. What should be the primary focus of their communications and pricing at this point?	10 Marks	L3	CO4
10.	Describe how the promotional positioning and target audience perception of yoghurt evolved as it transitioned from the "Introduction" stage to the "Maturity" stage.	10 Marks	L2	CO1
Or				
11.	Explain the specific product and distribution modifications that facilitated the growth of the yoghurt category during its "Growth" stage.	10 Marks	L2	CO1
12.	An aerospace company is moving a project from the "Requirements" phase to the "Engineering Design" phase. Apply the "Information Characteristics of PLM" model to validate that customer needs are technically met. Which specific method should be used to capture initial requirements, and how should these characteristics be handled at the design level?	10 Marks	L3	CO3
Or				
13.	A multinational corporation is implementing a new PLM system but is facing resistance from its workforce. Using the "PLM Elements - People" component shown in the provided model, apply three specific strategies to manage this organizational change and ensure successful adoption.	10 Marks	L3	CO3