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10ME769

Seventh Semester B.E. Degree Examination, Jan./Feb. 2021

## Product Life Cycle Management

Time: 3 hrs.

Max. Marks:100

*Note: Answer any FIVE full questions, selecting at least TWO questions from each part.*

### PART - A

- 1 a. Define components of PLM and explain phases of PLM. (10 Marks)  
b. What are the threads of PLM? Explain in detail. (10 Marks)
- 2 a. Explain the characteristics of PLM. (10 Marks)  
b. List out the drivers of PLM and explain. (10 Marks)
- 3 a. Explain Product Data Management (PDM) system and reason for implementing PDM in an organization. (10 Marks)  
b. Explain:  
(i) Versioning (ii) Check-in (iii) Check-out (10 Marks)  
(iv) Views (v) Work flow
- 4 a. How collaborative product development can be achieved effectively using product reuse? Explain with example. (10 Marks)  
b. What is the use of digital mock-up and prototype development in product development? (10 Marks)

### PART - B

- 5 a. What are the steps involved in creation of 3DXML using CAD drawing and explain. (10 Marks)  
b. How to create an animation for assembly instruction using a composer? (10 Marks)
- 6 a. How to optimize the product and parameterization of product design? Explain. (10 Marks)  
b. What are the uses of publication, parameters formula, rule, check in design of product? (10 Marks)
- 7 a. What is digital manufacturing and benefit of digital manufacturing? (10 Marks)  
b. Explain:  
(i) Virtual learning curve  
(ii) Manufacturing the rest  
(iii) Manufacturing the first one (10 Marks)
- 8 a. What are the PLM implementation strategies? Explain. (10 Marks)  
b. Explain:  
(i) Impact of strategy  
(ii) Infrastructure assessment (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8 = 50, will be treated as malpractice.