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10ME769

Seventh Semester B.E. Degree Examination, Dec.2013/Jan.2014
Product Life Cycle Management

Time: 3 hrs.

Max. Marks:100

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

PART – A

- 1 a. Define PCM, explain the phases of PCM enumerating examples for the same. (10 Marks)
b. List the components of PCM and explain the data management involved in the threads of PCM. (10 Marks)
- 2 a. List and explain any four characteristics of PCM. (10 Marks)
b. What are PCM elements? Explain the external drivers of PCM. (10 Marks)
- 3 a. Explain the PDM implementation for aerospace industries. (10 Marks)
b. What are the flow process involved in the workflow management. (10 Marks)
- 4 Write short notes on the following:
 - a. Smart parts.
 - b. Prototype development.
 - c. Virtual testing.
 - d. Engineering change management. (20 Marks)

PART – B

- 5 a. Write the ways of creating an animation for assembly instructions. (10 Marks)
b. Using suitable software explain the schematics of CAD drawings. (05 Marks)
c. Briefly explain the tools of communication for collaborative work. (05 Marks)
- 6 a. Write the design parameterization giving suitable example of an automotive product. (10 Marks)
b. Explain the parameters considered for knowledge and design optimization. (10 Marks)
- 7 a. What is digital manufacturing? List and explain the concepts of manufacturing the first component. (10 Marks)
b. Explain the concepts of virtual learning curve. (05 Marks)
c. Briefly explain the production planning giving suitable example. (05 Marks)
- 8 a. Explain the process of implementing the PCM strategy with suitable examples. (10 Marks)
b. With the fundamentals of PCM strategy explain its impact. (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.