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10ME769

Seventh Semester B.E. Degree Examination, July/August 2021
Product Life Cycle Management

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

- 1 a. With a neat sketch, explain the PLM lifecycle model. (08 Marks)
- b. Explain the feasibility study which leads to a report of the form X contents. (08 Marks)
- c. Write a short notes on :
 - i) Engineering Data Management
 - ii) Computer Integrated Manufacturing (04 Marks)
- 2 a. List and explain any four characteristics of P.L.M. (10 Marks)
- b. Explain any two external drivers of PLM. (05 Marks)
- c. Explain the PLM elements which is in the form of triangle matrix. (05 Marks)
- 3 a. Explain the importance and reasons for implementing PDM systems in organizations. (10 Marks)
- b. Explain the following :
 - i) Versioning
 - ii) Check in and Checkout. (10 Marks)
- 4 a. Write a brief on engineering vaulting and product reuse. (08 Marks)
- b. How to achieve a Bill Of Materials (BOM) in organizations? (06 Marks)
- c. Explain the Design For Environment (DFE). (06 Marks)
- 5 a. Explain the process of creation of 3D XML and CAD drawing using CAD software. (10 Marks)
- b. How an acrobat 3D document is crated? Explain the different steps involved in it? (10 Marks)
- 6 a. What are the need for design parameterization giving suitable example of an automotive product? (10 Marks)
- b. Briefly explain the problems and solution of optimization of product? (10 Marks)
- 7 a. What is digital manufacturing? Explain. (04 Marks)
- b. Give the benefits of digital manufacturing. (06 Marks)
- c. Explain the concepts of virtual learning curve. (05 Marks)
- d. Write a brief note on manufacturing the first one and ramp up. (05 Marks)
- 8 a. How PLM strategy is implemented? Mention five success factors for ERP project. (08 Marks)
- b. Explain the initiatives of PLM to support corporate objectives. (06 Marks)
- c. Explain the infrastructure assessment in P.L.M. (06 Marks)

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.