

Roll No

MMIP/MMIE/MMPD-201

M.E./M.Tech., II Semester

Examination, December 2016

Product Design And Lifecycle Management

Time : Three Hours

Maximum Marks : 70

- Note :* i) Attempt any five questions.
ii) All questions carry equal marks.
iii) Draw neat diagrams wherever required.

1. Write and explain the various types of method used in product design. 14
2. Explain in brief : 14
 - i) Design through creative routes
 - ii) Adaptive and variant design
3. What do you understand by PLM? Explain various types of method for PLM and its benefits. 14
4. Define design for manufacturing. Explain DFM is performed throughout the development process and also give over view on DFM processes. 14
5. Explain Robust design using Taguchi's method. 14

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6. Explain in brief : 14
 - i) Standardization
 - ii) Simplification, and
 - iii) Value analysis-scope techniques in product development
7. What is Six Sigma? Explain basic steps involved in the application of Six Sigma. 14
8. Write short note on : 14
 - a) Design for environment
 - b) Life cycle assessment method and their impact categories
 - c) Application of simulation software for design for quality

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