Code No: C3306 **R09**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I Semester Supplementary Examinations September 2010
PRODUCT DATA MANAGEMENT
(ADVANCED MANUFACTURING SYSTEMS)

Time: 3hours **Max.Marks:60**

Answer any five questions
All questions carry equal marks

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1. a) How do you integrate the customer, designer, material supplier, and process planner in product development?
   b) How do you establish the product specification? Explain. [12]

2. a) Write a note on process management and improvement.
   b) Discuss the methodology of concept selection in product development. [12]

3. a) What are the structured approaches in concept generation and selection? Explain.
   b) Discuss the product architecture implications. [12]

4. a) Distinguish between the fundamental and incidental interactions in geometric layout development.
   b) What is robust design? Explain. [12]

5. a) How do you simulate the product performance and manufacturing processes electronically? Explain.
   b) How do you assess the quality of industrial design? [12]

6. a) Discuss the methods used to minimize the system complexity.
   b) What are user-driven products? How are they different from technology-driven products? [12]

7. a) What are the principles of prototyping? Explain.
   b) Discuss the methods to accelerate the execution of a project. [12]

8. Write short notes on:
   a) Customer behaviour analysis.
   b) Standardization of product performance.
   c) Baseline project planning. [12]

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