

**Code No: C3306****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD  
M.TECH I SEMESTER EXAMINATIONS APRIL/MAY-2012****PRODUCT DATA MANAGEMENT  
(ADVANCED MANUFACTURING SYSTEMS)****Time: 3hours****Max.Marks:60****Answer any five questions  
All questions carry equal marks****- - -**

- 1.a) What are the various factors to be considered in the design and development of a product which can have good demand?  
b) What are the methods to be adopted in understanding, promoting and involving customer to develop a product?
- 2.a) Explain with a flow chart the integration of customer, designer, material supplier and methods engineer in the development of a product.  
b) What are the qualities to be possessed by process planner in the development of a product?
- 3.a) Describe about structured approaches and searches made in obtaining proper solution for process planning.  
b) What are the steps to be taken in simplification and standardisation of component for a particular purpose?
- 4.a) What is the need of changes in the product and explain its implications on production and quality?  
b) How to integrate design, drafting, process planning for the effective production of components?
- 5.a) Describe fundamental and incidental interactions in the efficient design of a product.  
b) Describe the integration of design, process planning and managing costs of a production process.
- 6.a) Describe about the importance of technology driven products and user driven products.  
b) How the quality of the industrial design be assessed and maintained?
- 7.a) What are the various elements be considered in the estimation of manufacturing cost and indicate the methods to reduce it.  
b) What is the need of prototype components and explain the modifications to be made for easy manufacture and reduced cost.
8. Answer the following
  - a) Accelerating the project execution.
  - b) Minimizing system complexity
  - c) Customer and competitor.