

C.A.D./C.A.M. (CBCS Pattern) M.Tech. Second Semester CBCS
PCDS242 - Elective-II - Product Design & Development

P. Pages : 1

Time : Three Hours



GUG/W/18/10990

Max. Marks : 70

- Notes :
1. All questions carry equal marks.
 2. Answer **any five** questions.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Discuss product and technology development cycle. 7
b) What are the considerations for a good design? 7
2. a) Explain how engineering materials are classified. 7
b) Explain the process of material selection for PDD in detail. 7
3. a) State and explain the types of design. 7
b) What are the factors that influence the selection of a process. 7
4. Write short note on 14
 - i) Phases of product development.
 - ii) Ashby material chart.
5. a) Explain benchmarking in detail. 7
b) Explain the concept of quality function development. 7
6. a) What are the different parameters included for defining the cost of the product? 7
b) Explain the concept of depreciation and inflation. 7
7. a) State the importance of prototyping. 7
b) What is 'concurrent Engg'? State its scope. 7
8. Write short notes on: 14
 - i) DFX.
 - ii) Fused – deposition modeling.
