



Roll No.

Total No. of Pages : 02

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B.Tech (Ind. Engg. & Mgt.) (Spl. in TQM) (Sem.-6)

PRODUCT PLANNING, DESIGN AND DEVELOPMENT

Subject Code : IEM-601

M.Code : 70997

Time : 3 Hrs.

Max. Marks : 40

INSTRUCTIONS TO CANDIDATES :

1. Attempt All EIGHT questions from SECTION-A carrying TWO marks each.
2. Attempt any SIX out of EIGHT questions from SECTION-B carrying FOUR marks each.

SECTION-A

Q1. Answer briefly :

- a) What is Quality Function Deployment?
- b) How can you improve the aesthetic of a product?
- c) What is meaning of design for assembly?
- d) What is FMEA? Give one example.
- e) How concurrent engineering is helpful in production?
- f) What is trademark?
- g) What is rapid prototyping? Name two rapid prototyping techniques?
- h) What is meaning of intellectual property?

SECTION-B

Q2. How would you select the material and manufacturing process for a product? Explain with an example.



- Q3. What do you understand by design for environment (DFE)? What are methods to implement DFE?
- Q4. What is benchmarking? What is its need? Explain the process of benchmarking.
- Q5. What is reverse engineering? Explain its process and benefits.
- Q6. What is remanufacturing? Explain different factors driving remanufacturing.
- Q5. Explain the process of determining cost and selling price of a product.
- Q6. Can a small negligence in product designing be responsible for a major loss to a company? If yes, explain with an example.
- Q7. Explain current trends in product design and development.

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