Q 8029

M.E. DEGREE EXAMINATION, MAY/JUNE 2006.

Second Semester

CAD/CAM

1653 — INTEGRATED PRODUCT AND PROCESSES DEVELOPMENT

(Regulation 2005)

Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Differentiate product development from design process.

2. What is the difference between original design and adaptive design?

3. Distinguish reverse engineering from redesign.

4. What is meant by product portfolio?

5. What are the difficulties faced by the OEM who uses conventional product development methods?

6. What is the relevance of concurrent engineering in product development?

7. Name any two methods to understand the customer needs when a new product is to be launched/a variant is to be introduced.

8. What is S-curve and its relevance in product development?

9. What is a consumable platform architecture w.r.t. products?

10. Differentiate functional requirements from constraints as encountered in product development.

PART B — (5 × 16 = 80 marks)

11. (i) Discuss different product portfolios. (8)

(ii) Discuss different portfolio architectures as practised in product development. (8)

12. (a) Explain the steps involved in a modern product development proces

Or

(b) Explain the terms product life cycle and S curve and their use in pr development.

13. (a) Explain the basics of formulating a successful product development and team roles.

Or

(b) How will a product be introduced in the market? Discuss the steps.

14. (a) Explain the methodology used to collect the data from customer developing products.

Or

(b) Explain the steps involved in product development planning and th of Gantt charts in this effort.

15. (a) Discuss a few methods that are used to generate concepts and indic few principles from TIPS.

Or

(b) Explain the steps involved in concept selection process in pro development.
