

7E4064

Roll No. : _____

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B.Tech. (Sem. VII) (Main) Examination, January - 2010
Mechanical Engineering
(7ME5 Product Development & Launching)

Time : 3 Hours]

[Total Marks : 80

[Min. Passing Marks : 24

Attempt overall five questions selecting one question from each unit. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)

Use of following supporting material is permitted during examination.
 (Mentioned in form No. 205)

1. _____ Nil _____

2. _____ Nil _____

UNIT - I

1. What are pre-requisites for new product development? How does product development team help in it?

16

OR

1. Write brief notes on
 (a) Market pull products
 (b) Customized products
 (c) Platform based products.

6,5,5

UNIT - II

2. How is need-analysis done for a new product? What is economic existence of need?

16

OR

2. Describe methods to identify a need. Also describe engineering statement of problem.

16



UNIT - III

- 3 Write briefly on :
- (a) Brain storming
 - (b) Analogy
 - (c) Inversion. — 5.5.6

OR

- 3 Explain the procedure to carry out concept feasibility and concept selection. 16

UNIT - IV

- 4 (a) What factors influence the identification of subsystems 8
- (b) Explain different requisites for preparing an assembly drawing. 8

OR

- 4 Write briefly on :
- (a) Design compatibility.
 - (b) Ergonomics and aesthetics. 8.8

UNIT - V

- 5 Explain the composition and role of various components in design team staffing and organization 16

OR

- 5 Write briefly on :
- (a) Project Task matrix
 - (b) Project Scheduling. 8.8