

7E4064

Roll No. _____

Total No of Pages: **2****7E4064****B. Tech. VII Sem. (Main/Back) Exam., Nov.-Dec.-2016****Mechanical Engineering****7ME5 (O) Product Development and Launching****Time: 3 Hours****Maximum Marks: 80****Min. Passing Marks Main: 26****Min. Passing Marks Back: 24***Instructions to Candidates:*

*Attempt any **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 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. NIL2. NIL

UNIT – I

- Q.1 (a) What do you mean by product development? Discuss the importance of New Product for growth of enterprise. [8]
- (b) How products are classified? Explain the responsibilities for a new product development team. [8]

OR

- Q.1 (a) Explain the generic product development process for market pull product. [8]
- (b) Discuss the various general strategies for a New Product Development. Also show the various factors contributing to new product development. [4+4=8]

UNIT – II

- Q.2 Explain with steps involved in the process of need analysis and describe its importance. [16]

[7E4064]

Page 1 of 2

[1380]

OR

- Q.2 Explain in detail engineering statement of a problem and give the concept of target specification and its importance. [16]

UNIT – III

- Q.3 (a) "Concept generation – A creative process". Explain how? [8]
(b) Discuss any two tools of creativity. [8]

OR

- Q.3 Write short note on: (any four) [4×4=16]
(a) Concept feasibility
(b) Creative thinking process
(c) Concept selection
(d) Road blocks to creativity
(e) Inversion

UNIT – IV

- Q.4 (a) With an example, explain the detailed design phase of product development. [10]
(b) Define the term "Product design". What are the essential factors of product design? rtuonline.com [6]

OR

- Q.4 (a) Define "Ergonomics". How it is important part of product development? [10]
(b) Explain different steps of preliminary design. [6]

UNIT – V

- Q.5 (a) Justify the statement "Promotion of Right Culture". [6]
(b) Explain the role of management in launching of a product. Also identify the area of risk in management of a new product. [10]

OR

- Q.5 Explain any two- [4×2=8]
(a) Project scheduling
(b) Estimation of time and resources
(c) Evolution of product launch strategy