

Printed Pages : 3



EOE083

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 199853

Roll No.

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B.Tech

(SEM. VIII) THEORY EXAMINATION 2014-15

PRODUCT DEVELOPMENT

Time : 3 Hours]

[Total Marks : 100

1 Attempt any **four** questions in following part. **5x4=20**

(a) Explain in brief the following, in relation to product development:

- (i) Core benefit
- (ii) generic product, and
- (iii) Augmented product

(b) Explain the evaluation of centrifugal pump.

(c) Explain Need - Base Development and Technology Base Development.

(d) "The development of communication system in the present era is technology- based development."
Explain giving examples.

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[Contd...

- (e) Describe the typical product life cycle. Explain the various phases of the cycle.
- (f) Discuss the differences between old and new design methods.

2 Attempt any **two** questions in following part. **10x2=20**

- (a) Explain what is meant by design morphology? Discuss all the three phases of product design.
- (b) What are the essential factors consider in the analysis of need?
- (c) Explain the comparison checklist method of ideation. Also explain, with a suitable example, how analogy helps in getting new ideas.

3 Attempt any **two** questions in following part. **10x2=20**

- (a) What is decision making? Explain its importance. Describe the steps in the decision making process.
- (b) Give an account of break even analysis.
- (c) Explain the utility concept. Also discuss the law of diminishing marginal utility.

4 Attempt any **two** questions in following part. **10x2=20**

- (a) What is the Bath Tub curve? Draw and explain the various feature of a bath tub curve of a product.
- (b) Explain Reliability of system in series with an example.

- (c) What is Anthropometric Data? Explain the need of anthropometric data in design.

5 Attempt any **two** questions in following part. **10x2=20**

- (a) Explain the plotting of each Quality control Chart in detail.
- (b) What is the technology forecasting? Describe its characteristics, history and importance.
- (c) Describe the Judgment-Based Technological forecasting Technique.
