

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-VII • EXAMINATION – WINTER 2013**

**Subject Code: 171904**

**Date: 28-11-2013**

**Subject Name: Product Design and Value Engineering**

**Time: 10:30 TO 01:00**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

**Q.1** (a) Discuss duration and cost of product development **07**  
(b) Discuss generic product development process **07**

**Q.2** (a) Discuss steps involved in product planning process **07**  
(b) Discuss how the customer's needs are interpreted during product development process **07**

**OR**

(b) How the final specification of product are being achieved. **07**  
Elaborate steps involved.

**Q.3** (a) Discuss various design for rigidity and stiffness **07**  
(b) What is meant by design for production? Discuss with the help of illustration **07**

**OR**

**Q.3** (a) What is meant by worth of product? How it affect value of the product? **07**  
(b) Discuss value engineering job plan. Elaborate steps involved in brief. **07**

**Q.4** (a) What is meant by value engineering methodology? Give application of it. **07**  
(b) Discuss value engineering training plan. **07**

**OR**

**Q.4** (a) What is FAST diagram? Discuss points to be considered for construction of FAST diagram. **07**  
(b) Discuss value engineering team structure **07**

**Q.5** (a) Discuss characteristics of successful product development process **07**  
(b) Discuss AMF development process **07**

**OR**

**Q.5** (a) Discuss AMF organization **07**  
(b) Discuss generic product development process **07**

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