Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY M.E. - SEMESTER- II • EXAMINATION – SUMMER 2015

Date:30/05/2015

Subject Code: 2725003 **Subject Name : Product Development and Innovation** Time:2:30 pm to 5:00 Pm Total Marks: 70 **Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. **Q.1** What do you mean by product development? Why it is required and gives its 07 (a) usefulness. Discuss the process for setting final specification in product development. **07** (b) **Q.2** Explain the characteristics of successful product development. 07 (a) (b) Explain in brief the product planning process. 07 OR **(b)** For identifying customer's needs how do you organize the needs in to hierarchy? 07 Q.3 What would be the relative advantages and disadvantages of involving actual 07 (a) customers in the concept generation process? Write down the industrial design process in detail. 07 (b) Q.3 Explain the concept selection process in detail. 07 (a) Discuss briefly the process of product plan development. 07 (b) **Q.4** Define TRIZ, discuss its concept briefly also give its applications in product 07 design and development. õOFD - A house of qualityö - Prove this statement with suitable example. 07 (b) **Q.4** What is intellectual property? Explain the different forms intellectual property 07 (a) What is concept generation process? Explain it with all five steps. 07 (b) 0.5 What do you mean by copyright and geographical indication in IP rights? 07 (a) discuss in detail. Explain the different types of product development project and give the reasons 07 for poor development planning. OR Discuss the patent search process briefly and the give the details contained in 07 Q.5 patent by giving the patent sample. Write and discuss the different survey formats in concept testing process with 07 (b) example.

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