Seat No.: ___ Enrolment No.___ **GUJARAT TECHNOLOGICAL UNIVERSITY** MCA - SEMESTER-V • EXAMINATION - SUMMER • 2014 Subject Code: 650001 Date: 23-05-2014 **Subject Name: Software Engineering** Time: 10:30 am - 01:00 pm **Total Marks: 70 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. What do you mean by "Software Engineering". Write a brief note on Prescriptive 06 Q.1. (a) Process Models. Explain the following terms in brief: **(b)** 04 (i) Phases of Extreme Programming (XP) (ii) Scrum Distinguish between the following: (c) 04 (i) Cohesion and Coupling (ii) Architectural Style and Architectural Pattern What do you mean by Eliciting Requirements? What is its role in building analysis **Q.2 07** model? How quality of requirements can be helpful in model building? State and explain the golden rules that form the basis of interface design. **07 (b)** OR Write and explain the guiding principles of Validation and Testing. **07 (b)** Q.3 Discuss Requirements Modeling for WebApps. **07** (a) **(b)** Explain Data abstraction and procedure abstraction. 07 OR **Q.3** Discuss Functional independence and Information hiding 07 (a) Explain OO Design Concepts with suitable examples. **(b)** 07 Q.4. Write a short note on Formal Technical Review (FTR). (a) **07** Explain Equivalence Partitioning and Boundary Value Analysis of Black-Box **(b)** 07 Testing. OR Write a brief note on: Architectural Styles. **07 O.4.** (a) Discuss following Principles: 07 **(b)** (i) Open-Closed Principle (OCP) (ii) Common Reuse Principle (CRP) Q.5. Discuss Test Strategies for Conventional Software. **07** What is Basis Path Testing? Explain Flow Graph Notation and Independent Program **07 (b)** Path. OR Q.5. Explain Unit Testing, Integration Testing and Validation Testing in an OO Context. **07** (a) Discuss Metrics for Requirements Model and Metrics for Design Model. **(b) 07**
