

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA - SEMESTER-V • EXAMINATION – SUMMER 2013****Subject Code: 650001****Date: 10-05-2013****Subject Name: Software Engineering****Time: 02.30 pm - 05.00 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** Explain the following terms : **14**
- (a) Abstraction
 - (b) Open-Closed Principle
 - (c) Agile Process
 - (d) Formal Technical Review
 - (e) Measures and Metrics
 - (f) Time-Line Chart
 - (g) MVC Architecture
- Q.2** (a) Explain the waterfall process model in detail. Why does a waterfall model fail at times ? **07**
- (b) What is white-box testing ? Explain control structure testing in detail. **07**
- OR**
- (b) Describe the various architectural pattern domains. **07**
- Q.3** Write short notes on the following : **14**
- (a) Adaptive Software Development
 - (b) Quality Function Deployment
 - (c) Debugging Process
 - (d) Deployment Principles
- OR**
- Q.3** (a) Explain navigation testing for Web applications. **07**
- (b) Explain how the requirements model can be transformed into design model. **07**
- Q.4** (a) Explain the various design notations at component level for designing traditional software. **07**
- (b) State and explain the three golden rules that form the basis of interface design. **07**
- OR**
- Q.4** (a) Explain the user interface design evaluation cycle giving a suitable example. **07**
- (b) Describe the set of goals that are applicable to WebApp design. **07**
- Q.5** Distinguish between the following : **14**
- (a) Top-Down and Bottom-Up Integration Testing
 - (b) Cohesion and Coupling
 - (c) Alpha Testing and Beta Testing
 - (d) Verification and Validation
- OR**
- Q.5** (a) Explain the various taxonomy of architectural styles. **07**
- (b) Explain the software engineering resources required for software development. **07**
