

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA SEM-V Examination- Dec.-2011****Subject code: 650001****Date: 12/12/2011****Subject Name: Software Engineering (SE)****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.

- Q.1** (a) Explain the following terms : Scrum, Archetypes, Modularity **06**
(b) Write a short note on Formal Technical Review (FTR). **04**
(c) What do you understand by evolutionary process models. Explain Spiral model in detail. **04**
- Q.2** (a) State and explain the three golden rules that form the basis of interface design. **07**
(b) Explain the server-side and client-side issues for configuration and security testing for Web applications. **07**
- OR**
- (b) What is black-box testing ? State the various testing techniques applied in black-box testing. Explain any one in detail. **07**
- Q.3** (a) Explain the various steps involved in computing earned value and also explain the interpretation of the progress indicators. **07**
(b) What is requirement engineering ? Describe the seven distinct tasks encompassed in requirement engineering. Also, explain Quality Function Deployment. **07**
- OR**
- Q.3** (a) What is an architectural style ? Explain the categories of architectural styles in detail. **07**
(b) What is design patterns and explain various kinds of patterns in detail ? **07**
- Q.4** (a) Explain in detail component-level design for traditional software components. **07**
(b) What do you understand by empirical estimation models ? Explain COCOMO II model giving suitable example. **07**
- OR**
- Q.4** (a) Explain function-point metric for requirement modeling. **07**
(b) Explain aesthetic design and content architecture of content design for WebApp design. **07**
- Q.5** (a) What is integration testing ? Explain in detail top-down and bottom-up integration testing. **07**
(b) Distinguish between the following : **07**
a. Cohesion and Coupling
b. Architectural Style and Architectural Pattern
- OR**
- Q.5** (a) Explain object-oriented testing strategies. **07**
(b) Distinguish between the following : **07**
a. Navigation Syntax and Navigation Semantics
b. Verification and Validation
