

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA Integrated - SEMESTER- VI • EXAMINATION – WINTER 2016**

**Subject Code: 4460602****Date: 24/10/2016****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)** What do you understand by evolutionary process models? Explain Spiral Model in detail. **07**
- (b)** What is behavior testing? Discuss any one technique of this testing in detail. **07**
- Q.2 (a)** i). In XP activity how many types of Values are considered? **04**  
ii). Write any 3 Issues that are continue to trouble in Extreme Programming. **03**
- (b)** Discuss the advantages of using Pattern-Based Software design. How Architectural patterns are different from Component level design patterns. **07**
- OR**
- (b)** What is requirement engineering? Describe the seven distinct tasks encompassed in requirement engineering. **07**
- Q.3 (a)** What is software design? Explain various principles and design concepts of software design. **07**
- (b)** Explain in detail component-level design for traditional software components. **07**
- OR**
- Q.3 (a)** Define the function independence. Explain different cohesion and coupling types in details. **07**
- (b)** What are the various elements of good user interface design? Explain the golden rules for the user interface design. **07**
- Q.4 (a)** Write a short note on Web Design E Pyramid for Web Apps. **07**
- (b)** What is Integration Testing? Describe in detail top-down and bottom-up Integration Testing. **07**
- OR**
- Q.4 (a)** Write a short note on content testing for WebApps. **07**
- (b)** What is the distinction between alpha and beta testing? Explain why these forms of testing are particularly valuable. **07**
- Q.5 (a)** What is debugging? Explain art of debugging. **07**
- (b)** What is a formal technical review and why is one conducted? Outline the steps required to conduct a successful FTR? **07**
- OR**
- Q.5 (a)** What is software project estimation? Explain COCOMO II model of Software estimation. **07**
- (b)** What is W5HH principle? Explain in detail. **07**

\*\*\*\*\*