

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – II • EXAMINATION – WINTER • 2013****Subject code: 1720204****Date: 31-12-2013****Subject Name: Software Engineering Methodologies****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) Describe the role of risk analysis in an evolutionary process model like spiral model. **07**
(b) Differentiate between sequential and cyclical methodology. **07**
- Q.2** (a) Why software developers should not wait until testing – for finding and correcting all errors? **07**
(b) Distinguish between software errors and defects **07**
- OR**
- (b) What are verification and validation? **07**
- Q.3** (a) Explain creational, structural and behavioral design patterns (relevant to object oriented design). **07**
(b) Explain design pattern and framework. Do they refer to the same thing (work product)? **07**
- OR**
- Q.3** (a) Write a brief note on Zachman’s frame work. **07**
(b) What makes software design different than coding? Do you design software when you ‘write’ a program? **07**
- Q.4** (a) What do you mean by architectural styles? Explain pipes and filters. **07**
(b) What is the difference between object oriented and layered architecture? **07**
- OR**
- Q.4** (a) Write a short note on difference between Content architecture and Web APP architecture. **07**
(b) What is software architecture? Why is it important? **07**
- Q.5** (a) Explain the advantages and issues in software re-use. **07**
(b) What is customer satisfaction? **07**
- OR**
- Q.5** (a) What are formal methods of software development? Why are they not used widely? **07**
(b) How do you define software quality? Explain SQA. **07**
