

**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**

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