

Total No. of Questions : 12]

SEAT No. :

P1346

[Total No. of Pages : 2

[4858] - 1090

**T.E. (Computer Engineering) (Semester - II)**

**SOFTWARE ENGINEERING**

**(2012 Pattern) (End Semester)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) All questions are compulsory.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*
- 4) Assume suitable data, if necessary.*

**UNIT - I**

**Q1)** Discuss the similarity and differences between pure evolutionary development and the agile development approaches in use today? [7]

OR

**Q2)** What is Extreme Programming? Explain the Extreme Programming process. [7]

**UNIT - II**

**Q3)** What do you mean by CRC? Write the steps for identifying analysis classes using CRC modeling. [7]

OR

**Q4)** Explain how do we negotiate and validate requirements during requirement analysis process? [7]

**UNIT - III**

**Q5)** Explain refactoring? Give the importance of refactoring in improving quality of software. [6]

OR

**Q6)** Enlist different types of architectural styles and explain any one software architecture in detail. [6]

**P.T.O.**

## **UNIT - IV**

- Q7)** a) What are the main objective of Software Testing and what are the principles of software testing? [9]  
b) Differentiate between : [8]  
i) Condition and loop Testing  
ii) Verification and Validation

OR

- Q8)** a) What do you understand by system testing? What are the different kinds of System testing that are usually performed on large software products? [9]  
b) What do you understand by the term integration testing? Which types of defects are uncovered during integration testing? [8]

## **UNIT - V**

- Q9)** a) Explain in detail software process and project metrics. [9]  
b) What are the different categories of Risk. Explain Risk management process in detail. [8]

OR

- Q10)** a) What is project decomposition? What are the work task for communication process using process decomposition. [9]  
b) Explain COCOMO model for project cost estimation. [8]

## **UNIT - VI**

- Q11)** a) What is the need for Software Quality ? Explain different McCall's quality factors. [8]  
b) What is significance of Object Constraint Language (OCL)? Explain in detail. [8]

OR

- Q12)** a) Explain the working of service-oriented architecture. [8]  
b) What is Software Quality? What are the factors affecting Software Quality? [8]

