



May - June - 2011

[3963] - 360

T.E. (Computer Engg.) (Semester - II) Examination, 2011
SOFTWARE ENGINEERING (New)
(2008 Pattern)

Time : 3 Hours

Max. Marks : 100

- Instructions :** 1) Answer 3 questions from Section I and 3 questions from Section II.
2) Answers to the **two** Sections should be written in **separate** books.
3) **Neat** diagrams must be drawn **wherever** necessary.
4) **Black** figures to the **right** indicate **full** marks.
5) **Assume** suitable data, **if** necessary.



SECTION - I

1. a) Define software engineering. How software engineering is different from hardware engineering ? Justify. 8

b) Explain process pattern template with an example. 8

OR

2. a) What do you mean by evolutionary process models ? Explain spiral model as an evolutionary process model. 8

b) Explain how extreme programming process supports agility with its framework activities ? 8

3. a) What are requirements engineering tasks ? Explain the elicitation process using quality function deployment. 8

b) Explain the analysis model with its elements. 8

OR

4. a) How use cases can be used to model the requirements ? Write an usecase for 'login' with a template and diagram. 8

b) What do you mean by flow modeling ? Explain data flow modeling with an example. 8

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5. a) Explain the following design concepts
i) Modularity ii) Architecture 6
b) What are the different types of design classes ? 6
c) Explain any two architectural styles with respect to program structure. 6

OR

6. a) Explain the user interface design issues. 6
b) What do you mean by software architecture ? Explain the system context diagram elements with an example. 6
c) Explain the user interface design process. 6

SECTION – II

7. a) Define software testing. Explain the unit testing strategy. 8
b) What is system testing ? Explain any two system testing strategies. 8

OR

8. a) Explain the following :
i) Condition testing ii) Loop testing. 8
b) Differentiate white box and black box testing. Explain the graph based testing method as a black box testing method. 8
9. a) Explain the role of people, product and process in project management. 6
b) Differentiate and explain size and function oriented metrics. 6
c) Explain the FP based estimation technique. 6

OR

10. a) Explain the concept of make buy decision using decision tree analysis. 6
b) What is software project estimation ? How use cases are used in estimation ? 6
c) How do you measure software quality in terms of maintainability and integrity ? 6
11. a) What is a task network in project scheduling ? Explain with an example. 8
b) How risk projection is carried out using risk table ? 8

OR

12. a) What is software configuration management ? Explain the change control mechanism in software configuration management. 8
b) Explain earned value analysis in project scheduling. 8