



[4658] – 161

Seat No.	
-------------	--

T. E. (Info. Tech.) (Semester – I) Examination, 2014
SOFTWARE ENGINEERING
(2008 Course)

Time : 3 Hours

Max. Marks : 100

- Instructions :** 1) Answers to the **two sections** should be written in **separate** answer books.
2) Answer **any three** questions from **each section**.
3) Neat diagrams must be drawn **wherever** necessary.
4) Figures to the **right** side indicate **full** marks.
5) **Use** of calculator is **allowed**.
6) Assume suitable data **if necessary**.

SECTION – I

1. a) Define software engineering. Explain the failure curve of software. Explain in detail the following software myths : 10
 - 1) Management myths
 - 2) Customer myths
- b) Explain software spiral process model. 6
- OR
2. a) Explain in detail extreme programming. 8
- b) Explain the umbrella activities of software process in detail. 8
3. a) Explain Domain analysis. Discuss in short data objects, cardinality and modularity in data models. 8
- b) Explain the requirement elicitation process. 8
- OR
4. a) Draw a level 0, level 1 and level 2 DFD for a library book issuing system for a college student. 7
- b) Explain the class based elements of analysis model in detail. 9
5. a) In the context of software design, explain the following in brief : 8
 - 1) Information hiding
 - 2) Refactoring
- b) Explain the golden rules used for user interface design. 8
- c) List the various elements that make up the design model of any system. 2
- OR

P.T.O.



- | | |
|---|-----------|
| 6. a) Explain all architectural styles in detail. | 10 |
| b) Explain the web design pyramid. What are interface design principles for web application ? | 8 |

SECTION – II

- | | |
|--|----------|
| 7. a) What are the objectives of unit testing ? How is unit testing carried out ? | 8 |
| b) Compare and contrast integration testing for conventional and object oriented software. | 8 |

OR

- | | |
|---|----------|
| 8. a) What is black box testing ? Explain the ways to perform black box testing. | 8 |
| b) What are the testing strategies for web application ? Explain the testing process for web application. | 8 |
| 9. a) Explain the FP based Estimation Decomposition Technique. | 8 |
| b) Explain decision tree to support make-buy decision with an example. | 8 |

OR

- | | |
|--|-----------|
| 10. a) What is empirical estimation model ? Explain with any one technique. | 8 |
| b) What is the relevance of four P s in project planning ? Explain in detail. | 8 |
| 11. a) What is risk mitigation, risk monitoring, risk management ? Explain in brief. | 10 |
| b) Define SCM. What are the contents of SCM repository ? | 8 |

OR

- | | |
|--|-----------|
| 12. a) What are the software quality factors ? Explain any four. | 12 |
| b) Explain the various steps involved in change control process. | 6 |

—————