[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

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**

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