



[4459] – 261

Seat No.	
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T.E. (IT) (Semester – I) Examination, 2013
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) From Section I answer Q. 1 or Q. 2, Q. 3 or Q. 4, Q. 5 or Q. 6 and answer Q. 7 or Q. 8, Q. 9 or Q. 10, Q. 11 or Q. 12.
3) **Neat** diagrams must be drawn **wherever** necessary.
4) Figures to the **right** indicate **full** marks.

SECTION – I

1. A) Software Engineering is considered as layered technology. Comment. 9
B) What is software Process Framework ? What are Umbrella activities ? 9
OR
2. A) Explain the following models : 10
i) Waterfall model
ii) Concurrent model
B) What are Process Models ? Explain Personal Software Process and Team Software Process. 8
3. A) What is Requirement Engineering ? Explain Requirement Negotiation and Requirement Specification. 8
B) Draw level 0, level 1 and level 2 DFD for student registration system. 8
OR
4. A) Explain scenario based and class based elements of analysis model. 8
B) What Control Specification and Process Specification ? 8

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5. A) Explain the goals of design process. 8

B) Explain Data – centered architecture and Data – Flow architecture. 8

OR

6. A) Explain elements of Data Design and Architectural Design in brief. 8

B) Explain Interface Design Steps in brief. 8

SECTION – II

7. A) Explain following system testing types : 8

1) Recovery testing

2) Security testing

3) Stress testing

4) Performance testing.

B) What is black box testing ? What are the ways to perform black box testing ? 8

OR

8. A) What is difference between testing and debugging ? Explain in detail debugging process. 8

B) What are the testing strategies for web application ? Explain the testing process for web application. 8

9. A) What are the 4 Ps involved in software project management ? Explain the W5HH principles. 8

B) Define the term 'software scope'. Write short note on make by decision. 8

OR

10. A) What factors should be considered when planning the structure of software engineering teams ? What are the organizational paradigms for software engineering teams ? 8

B) Describe in detail the project estimation with use-cases. What are its pitfalls ? 8



11. A) Define software risk. Explain various types of risks with suitable example.
Explain risk management process. **10**

B) What are elements that exist when an effective SCM system is implemented ?
Explain each in detail. **8**

OR

12. Write short notes on : **18**

- 1) Software quality assurance (SQA)
- 2) Change control process
- 3) Earned value analysis.