



May - June - 2011

[3963] – 365

T.E. (Information Technology) (Semester – I) Examination, 2011
SOFTWARE ENGINEERING (New)
(2008 Pattern)

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) Define software engineering. Explain the failure curve of software. **6**
b) State and explain the practitioner's myths. **4**
c) Explain the iterative software process model in detail. **8**

OR

2. a) Explain the umbrella activities software process in detail. **10**
b) Explain the Spiral Software Processing model in detail. **8**
3. a) Explain the requirement elicitation and requirement elaboration tasks in brief. **10**
b) Draw and explain the traceability table for requirement management. **6**

OR

4. a) Explain the class based elements of analysis model in detail. **8**
b) Draw a label 0, level 1 and level 2 DFD for a library book returning system for a college student. **(1+2+5=8)**
5. a) In the context of software design explain the following in brief: **(4×2=8)**
i) Modularity.
ii) Functional independence.
b) Explain the layered architecture style in detail. **8**

OR

P.T.O.



6. a) In the context of software design explain the following in brief: (4×2=8)
i) Information hiding.
ii) Refactoring.
b) What are the steps involved in User interface design ? How is the interface evaluation done ? 8

SECTION – II

7. a) What are the objectives of unit testing ? How is unit testing carried out ? 8
b) What is black box testing ? Illustrate its importance with an example. 10

OR

8. a) What is regression testing ? How is that carried out ? 10
b) What is unit testing and integration testing in object oriented context ? 8
9. a) What question need be answered in order to develop a project plan using W⁵HH principles ? 8
b) What is the objective of software measurement ? Explain the LOC based software estimation one in brief. 8

OR

10. a) What is OO metric ? 8
b) Explain the COCOMOII estimation model. 8
11. a) What is a risk ? What are the types of software risks ? Write two examples of each. 6
b) What is RMMM ? Write a note on it. 10

OR

12. a) What is project scheduling ? What are the basic principles of project scheduling ? 8
b) Define SCM. What are the contents of SCM repository ? 8