

Total No. of Questions : 10] [Total No. of Printed Pages : 3

Roll No.

IT-605(N)

B. E. (Sixth Semester) EXAMINATION, June, 2011

(Information Technology Engg. Branch)

**SOFTWARE ENGINEERING AND PROJECT
MANAGEMENT**

[IT – 605(N)]

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note : Attempt all questions. All questions carry equal marks.

1. (a) What is prime objective of software engineering ?
Define software engineering paradigm. 10
- (b) Explain the following : 10
 - (i) Spiral model
 - (ii) Waterfall model

Or

2. (a) Discuss the selection process parameters for a life cycle model. 10

P. T. O.

- (b) Give the importance of software engineering. Define software process. State the importance features of a process. 10
3. Write short notes on the following : 10 each
- (a) COCOMO estimation criteria
 - (b) Software metrics
- Or*
4. Write short notes on the following : 10 each
- (a) Software maintenance
 - (b) Task scheduling with an example.
5. (a) Differentiate between requirement and specification. 8
- (b) Explain the ways and means for collecting the software requirements and how are they organized and represented. 12
- Or*
6. (a) Explain the extensions of DFD for real time systems. 10
- (b) Explain the software requirement analysis and modeling. 10
7. (a) Explain the testing procedures for boundary conditions. 10
- (b) Describe verification and validation criterial for software. 10
- Or*
8. (a) Describe unit testing and integration testing. How test plans are generated ? 10
- (b) Discuss software failures and faults ? What are test coverage criteria ? 10

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9. What are the major uses of a requirement specification document ? In what ways these uses affect the style and content of a requirement document ? 20

Or

10. What are the purpose of software quality assurance ? Why should the quality assurance organization be independent of development organization ? 20