

[Total No. of Questions - 9]  
(2123)

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M. Tech 1st Semester Examination

Software Engineering

CSE1-512/MT-102

Time : 3 Hours

Max. Marks : 100

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** Attempt five questions in all, by selecting one question from each of sections A, B, C and D and Question 9 of Section E which is compulsory. All questions carry equal marks.

**SECTION - A**

1. Explain the advantages, disadvantages and working of any two software development models. (20)
2. What is software engineering? Explain the software myths, terminology and role of management in software development. (20)

**SECTION - B**

3. Explain the working of COCOMO and COCOMO-II with their differences. (20)
4. Explain the role, views, component and connector of software architecture. (20)

**SECTION - C**

5. What are the principles of functional oriented design? Differentiate it with structured and object oriented design. (20)

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6. What do you mean by internal classes & operations in design methodology? Explain PDL. (20)

#### SECTION - D

7. What are the principles of programming? Explain the coding process and metrics of software verification. (20)
8. (a) Explain the difference between regression and testing.  
(b) Explain the concept of re-engineering. (20)

#### SECTION - E

9. Answer the followings:
- (a) Explain the concept of deployment view and performance analysis.
- (b) Explain the purpose of critical design review.
- (c) Explain the role of class diagrams.
- (d) How reverse engineering is possible?
- (e) Explain the requirement of certification in software engineering. (5×4=20)
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