

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]
(2123)

1409

B. Tech 5th Semester Examination

Software Engineering (O.S.)

IT (ID)-5001

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 selecting one question from each of the section A, B, C and D. Section E is compulsory. All question carry equal marks.

SECTION - A

- 1 (a) Why spiral model is known as meta model?
(b) Elaborate the need for Software Engg. (20)
2. (a) What is Entity Relationship diagram? Explain in detail.
(b) Explain why software requirement analysis and specification is known as crucial step? (20)

SECTION - B

3. Explain in detail COCOMO model for all types of systems. (20)
4. (a) Specify all the application areas of software metrics.
(b) Draw and explain sophisticated information flow model. (20)

SECTION - C

5. Explain all types of Black-box testing techniques. (20)

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6. (a) Compare and contrast top down integration and bottom up integration.
- (b) What are test cases? How they should be designed? **(20)**

SECTION - D

7. (a) Describe Iterative enhancement model for software maintenance.
- (b) Describe all the categories of maintenance in detail. **(20)**
8. (a) Illustrate the cost impact of defects with one suitable example.
- (b) List all software quality assurance activities. **(20)**

SECTION - E

9. (a) What is object diagram?
- (b) Define structured analysis.
- (c) What is DDL?
- (d) What is risk projection?
- (e) List two software metrics.
- (f) Write a short note on smoke testing.
- (g) Define testability.
- (h) Why testing for real time system is difficult?
- (i) What is the need of software maintenance?
- (j) What is the use of software quality control? **(10×2=20)**