

Exam.Code:0916  
Sub. Code: 6399

2053  
B.E. (Computer Science and Engineering)  
Fourth Semester  
CS-404: Software Engineering

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) State the essential features of agile model.
- b) What type of coupling and cohesion level is desirable?
- c) Explain the concept of software configuration control.
- d) Differentiate between software process and project.
- e) Discuss the techniques for review of SRS.

(5x2)

**UNIT - I**

- II. a) What are different types of cost estimation models? Explain in detail the importance of COCOMO model to calculate: effort, schedule, and staff for an organic project.
- b) Explain the framework of inspection/review process. (6,4)
- III. a) Discuss the RAD model. Compare RAD model against waterfall model.
- b) Explain step-by-step structured design methodology for function oriented design. (2x5)
- IV. a) Why software maintenance is critical for change control? Explain various types of maintenance.
- b) Draw DFD and data dictionary for a university registration system. (2x5)

**UNIT - II**

- V. a) Differentiate functional and structural testing. Explain any two testing techniques of structural testing.
- b) Explain software maintenance metrics. (6,4)

P.T.O.

(2)

- VI. a) For UML, explain sequence diagram and deployment diagram. Justify with examples. (3+3)
- b) Discuss the important programming practices. (4)
- VII. Write short note on the following:-
- a) Acceptance testing
  - b) Change control
  - c) CASE standards
  - d) SRS validation (4x2½)

x-x-x