

Exam. Code: 0916

Sub. Code: 6399 ✓

2054

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. 1 which is compulsory and selecting two questions from each Unit.*

x-x-x

I. Attempt the following:-

- a) What are the different methods to perform verification and validation?
- b) What is accepting and regression testing?
- c) Name the best and worst level of coupling and cohesion.
- d) Explain the salient features of agile software development model.
- e) Explain with an example the function point (FP) metrics for software design.

(5x2)

UNIT - I

II. a) Differentiate among basic and intermediate COCOMO models. Use this model to calculate effort, cost, schedule, and staff for an organic software project.

b) Under which situations the sequence diagram is used to model the software.

Draw a sequence diagram of any system with proposer labels and notations.

(2x5)

III. a) Differentiate spiral model against the traditional waterfall model.

b) Explain the various components/structure of SRS.

(2x5)

IV. a) What is the role of coupling and on which factors it depends? Explain the various types of coupling.

b) Write a note on validation of SRS.

(2x5)

P.T.O.

(2)

**UNIT - II**

- V. Differentiate among white box and glass box testing. Elaborate any two testing methods used in white box testing technique. (5+5)
- VI. a) What is the software maintenance? Why it is important in SDLC? Explain software maintenance metrics. (2+2+2)
- b) Write a note on CASE standards. (4)
- VII. Write note on the following:-
- a) Modularity in design
  - b) Extend and include relation in use case
  - c) Deployment diagram
  - d) User interface design and coding standards (10)