Exam.Code:0916 Sub. Code: 6399

2023

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

Time allowed: 3 Hours Max. Marks: 50

NOTE: Attempt <u>five</u> 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) What are the various components of project planning?
 - b) What is an acceptance testing?
 - c) State process and project metrics.
 - d) Write note on software engineering challenges.
 - e) How quality of the software is assessed? (5x2)

UNIT - I

- II. a) What is the role of coupling and cohesion in software design? Explain the various types of coupling.
 - b) How the phase wise distribution of efforts is calculated by COCOMO model to calculate cost, schedule, and staff of a project for an organic type of project. (2x5)
- III. a) Explain features of RAD model and compare it with traditional SDLC model.
 - b) Explain the different components of SRS. (2x5)
- IV. a) What is the role of a structured design methodology? Explain various steps for function oriented design.
 - b) Write note on inspection and review procedure. (2x5)

<u>UNIT - II</u>

V. Differentiate among black box and white box testing. Explain in detail the one testing technique used for white box testing. (10)

P.T.O.

VI. a) What is the significance of state transition diagram in UML?

b) Explain the various CASE tools.

(2x5)

VII. Write note on the following:-

- a) System testing
- b) Class diagram
- c) S/W maintenance

d) Alpha testing

 $(4x2\frac{1}{2})$

x-x-x