

B. E. (Computer Science and Engineering)  
Third Semester  
CS-305: 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) Differentiate between function oriented and object oriented design.
- b) What is regression testing and acceptance testing?
- c) State the need of SRS and project plan in software development.
- d) Write note on the inspection activity.
- e) What are V & V activities?

(5x2)

UNIT - I

- II. a) State the pros and cons of spiral model.  
b) Why DFD is important? Draw a DFD of any system alongwith its data dictionary.  
(4,6)
- III. For what type of software development, the agile and rapid models are used. Justify each one with their merits and demerits.  
(10)
- IV. a) What is cohesion? Explain the different types of cohesion.  
b) Explain the components of SRS.  
(2x5)

UNIT - II

- V. a) What is the Basic and Intermediate COCOMO model? What parameters of a project can be estimated with these models? State with an example.  
b) Write note on coding practices.  
(6,4)
- VI. Differentiate white box and black box testing. Explain in detail the testing technique used for black box and white box testing.  
(10)
- VII. Write note on the following:-
  - a) Risk management
  - b) Use case diagrams
  - c) Component diagram
  - d) Exhaustive testing  
(4x2½)

x-x-x