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Roll No.

18E5

B. Tech. EXAMINATION, 2024

(Fifth Semester)

(C Scheme) (Main & Re-appear)

CSE

CSE309C

Software Engineering

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Write any *five* advantages of “high performance teams with core protocols” methodology of software development. **10**
(b) List any *five* application areas of software. **5**
2. With the help of suitable diagram explain the spiral model of software development with its advantages and disadvantages as compared to waterfall model. **15**

Unit II

3. Define the term "data modeling". Write and explain three elements of data modeling. **15**
4. (a) Discuss the relationship between concept of information hiding as an attribute of effective modularity and concept of module independence. **10**
(b) What do you mean by a data dictionary ?
What are its uses ? **5**

Unit III

5. (a) List the challenges faced during testing of Real Time Systems. Propose and elaborate a strategy. **10**
(b) How is debugging different from testing ?
Discuss any *one* approach for debugging. **5**
6. List and explain the guiding principles of interface design for a software application. **15**

Unit IV

7. Differentiate between software reliability, software quality and software safety with suitable examples. Also discuss the role of each in success or failure of a software project **15**
8. List and explain any *five* categories of risks associated with a software project. Suggest a strategy to manage these risks. **15**