



Third Semester B.E. Degree Examination, June/July 2023
Software Engineering

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Define Software Engineering? Briefly discuss the attributes of good software? (10 Marks)
b. Through a neat diagram, explain the incremental development process? Also mention the benefits of this model when compared to waterfall model? (10 Marks)

OR

- 2 a. Give the sketch of requirement engineering process and explain the different stages? (10 Marks)
b. Indicate why requirement validation is needed. Discuss different checks to be carried out during requirement validation process. (10 Marks)

Module-2

- 3 a. What is object orientation? List and explain the aspects of object oriented approach? (10 Marks)
b. Why models are created? Summarize the three different models of objects oriented development. (10 Marks)

OR

- 4 a. Explain the object and class diagram concept with example. (10 Marks)
b. State the following terms with example
i) Multiplicity ii) Association end name iii) Ordering iv) Bags and sequences
v) Association class. (10 Marks)

Module-3

- 5 a. Illustrate the state diagram of micro wave oven application in event driven model. (10 Marks)
b. Describe the following with example.
i) Class diagram and association ii) Generalization iii) Aggregation. (10 Marks)

OR

- 6 a. What is design pattern? Briefly discuss the essential elements of design pattern. (10 Marks)
b. With a neat block diagram, explain the phases of Rational Unified Model (RUD). (10 Marks)

Module-4

- 7 a. Write a note on software testing? Illustrate the idea of component interface testing. (10 Marks)
b. Discuss Test Driven Development (TDD) with its process and benefits. (10 Marks)

OR

- 8 a. What is user testing? Explain six stages of acceptance testing. (10 Marks)
b. Outline Lehman's laws of program evaluation dynamics (Any five) (10 Marks)

Module-5

- 9 a. Define software pricing. Discuss the factors affecting software process. (10 Marks)
b. Name of project plan sections and explain in detail. (10 Marks)

OR

- 10 a. How would you define software Quality? Briefly discuss the software quality attributes. (10 Marks)
b. Elaborate the purpose of program inspection? Analyze the different inspection checks/fault classes done during program inspection. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg. 42+8 = 50, will be treated as malpractice.

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