



Third Semester B.E. Degree Examination, June/July 2024 Software Engineering

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. What is Software Engineering? Explain the waterfall model approach to develop a software product with a neat diagram. (10 Marks)
b. Explain Insulin pump control system with a neat diagram. (10 Marks)

OR

- 2 a. Explain Requirement Engineering process with a neat diagram. (10 Marks)
b. In connection with requirements analysis and elicitation, explain the following:
i) Scenario ii) Interviewing (10 Marks)

Module-2

- 3 a. What is object orientation? Explain the four aspects or characteristics required by an object oriented approach. (10 Marks)
b. What is an object oriented development? Explain object oriented themes. (10 Marks)

OR

- 4 a. Explain the following:
i) Link
ii) Association
iii) Multiplicity
iv) Ordering (10 Marks)
b. Explain association classes and qualified associations with an example for each. (10 Marks)

Module-3

- 5 a. What are structural models? In connection with structural models, explain the following:
i) Generalization ii) Aggregation (10 Marks)
b. What is Event-Driven modeling? Explain the state diagram of a microwave oven. (10 Marks)

OR

- 6 a. Explain the Rational Unified process, with a neat diagram. (10 Marks)
b. What are Design Models? Explain weather station state diagram. (10 Marks)

Module-4

- 7 a. What is Software Testing? Explain Test Driven Development with a neat diagram. (10 Marks)
b. What is Acceptance Testing? Explain Acceptance Testing process with a neat diagram. (10 Marks)

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.

OR

- 8 a. What is Software Evolution? Explain software evolution process with a neat diagram. (10 Marks)
- b. What is Software Re-Engineering? Explain software evolution process with a neat diagram. (10 Marks)

Module-5

- 9 a. What is Project Planning? Explain the project planning process with a neat diagram. (10 Marks)
- b. Explain the following:
- i) Project scheduling
 - ii) Estimation techniques
- (10 Marks)

OR

- 10 a. What is Software Quality? With a neat diagram, explain process based approach to achieve product quality. (10 Marks)
- b. What is Software Review? Explain the software Review process with a neat diagram. (10 Marks)
