



CBCS SCHEME

16/17MCA34

Third Semester MCA Degree Examination, June/July 2019 Software Engineering

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. What is Software Engineering? Explain the attributes of good software. (06 Marks)
- b. What are the key challenges facing software engineering? (05 Marks)
- c. What are the basic principles of agile software development? (05 Marks)

OR

- 2 a. Explain the waterfall model with its merits and demerits. (08 Marks)
- b. Explain extreme programming in detail. (08 Marks)

Module-2

- 3 a. What is requirement engineering? Explain functional and non-functional requirements. (08 Marks)
- b. Explain the general structure of a requirements document suggested by IEEE. (08 Marks)

OR

- 4 a. Explain the requirements elicitation and analysis process with a neat diagram. (08 Marks)
- b. What is CBSE? Explain the basic elements of component model. (08 Marks)

Module-3

- 5 a. Explain the four types of system models. (08 Marks)
- b. Explain the following: i) Class diagram ii) Context diagram. (08 Marks)

OR

- 6 a. Briefly explain the four architectural views. (08 Marks)
- b. Explain architectural styles of Component and Connectors (CC) in brief. (08 Marks)

Module-4

- 7 a. What are the most important design issues that have to be considered in distributed systems engineering? Explain. (08 Marks)
- b. Discuss in detail Software as a Service. (08 Marks)

OR

- 8 a. Illustrate Multi-Tier Client-Server architectures. (08 Marks)
- b. Briefly discuss about coupling and cohesion. (08 Marks)

Module-5

- 9 a. What is black box testing? Explain about equivalence partitioning and boundary value analysis. (08 Marks)
- b. What is white box testing? Explain control flow based criteria and data flow based testing. (08 Marks)

OR

- 10 a. What is Risk Management? Briefly explain the Risk Management activities. (08 Marks)
- b. Discuss about project scheduling and staffing. (08 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.