



CBCS SCHEME

18MCA553

Fifth Semester MCA Degree Examination, Jan./Feb. 2023 Software Architecture

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Define software architecture. Discuss why software architecture is important. (06 Marks)
- b. Explain the influence of architecture with respect to system stake holder. (08 Marks)
- c. What is architecture business cycle? Explain with diagram. (06 Marks)

OR

- 2 a. Discuss about architectural patterns, reference models and reference architectures. (06 Marks)
- b. Explain the role of architecture at the earliest set of design decisions. (08 Marks)
- c. Discuss the impotence of an architecture in building the architecture. (06 Marks)

Module-2

- 3 a. Explain the parts of quality attribute scenario with neat diagram. (10 Marks)
- b. Discuss the general scenario with respect to availability. (10 Marks)

OR

- 4 a. Discuss the tactics with respect to availability. (10 Marks)
- b. Discuss the tactics with respect to security. (10 Marks)

Module-3

- 5 a. How availability can be analyzed in modeling the architecture. (10 Marks)
- b. Discuss about experiments and Back – of – the – Envelope analysis. (10 Marks)

OR

- 6 a. How ASRS are gathered by interviewing stake holders? (10 Marks)
- b. Explain the role of business goals in architecturally significant requirements. (10 Marks)

Module-4

- 7 a. Briefly discuss the steps involved in attribute driven design method. (10 Marks)
- b. Define view. Explain the role of moduie view in software architecture. (10 Marks)

OR

- 8 a. Discuss the sections of documentation beyond views. (10 Marks)
- b. How an architecture is documented in agile development project? Explain. (10 Marks)

Module-5

- 9 a. Define architectural pattern. Also discuss the relationship between patterns. (10 Marks)
- b. Discuss the guidelines in implanting the Broker architectural pattern. (10 Marks)

OR

- 10 a. What is layered architectural pattern? Explain. (10 Marks)
- b. Explain MVC architecture with 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.