



CBCS SCHEME

18MCA553

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Fifth Semester MCA Degree Examination, July/August 2021 Software Architecture

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

- 1 a. Define Software architecture. Explain the importance of Software architecture. (07 Marks)
b. What makes a "Good" architecture? (06 Marks)
c. Define Structure. Explain different types of structures. (07 Marks)
- 2 a. Describe the activities involved in creating software architecture. (07 Marks)
b. Briefly explain the Stakeholders for a system. (07 Marks)
c. With neat diagram explain what do "architectures influence". (06 Marks)
- 3 a. Define quality attribute. With neat diagram explain the parts of a quality attribute scenario. (10 Marks)
b. Explain how faults are detected and prevented using availability tactics. (10 Marks)
- 4 a. Explain tactics of performance quality attribute. (10 Marks)
b. Explain security and usability tactics of detect attacks and support user initiative. (10 Marks)
- 5 a. List out parameters for analyzing performance. Explain queuing model for performance for model view controller. (10 Marks)
b. With neat diagram explain redundancy tactics used to model an architecture for availability. (10 Marks)
- 6 a. Explain how to gather ASRs by interviewing stakeholders. (10 Marks)
b. Briefly explain relationship between business goals and an architecture. Explain how to express business goals. (10 Marks)
- 7 a. Explain in detail the steps involved in attribute driven design method. (10 Marks)
b. Briefly explain the uses and notations of architectural documentation. (10 Marks)
- 8 a. Explain the concept of view template applied to architectural documentation. (10 Marks)
b. Write a note on levels of testing, how an architecture plays a role in each phase. (10 Marks)
- 9 a. What do you mean by Architectural patterns? Explain briefly how is it categorized. (10 Marks)
b. Briefly explain implementation approach of layered architecture. (10 Marks)
- 10 a. Identify the components involved in broker architecture. Explain the responsibilities of each component. (10 Marks)
b. Discuss the structure of Model-view controller pattern. (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.