

18MCA553

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

Max. Marks: 100 Time: 3 hrs.

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

a. Define software architecture. Discuss why software architecture is important. b. Explain the influence of architecture with respect to system stake holder. c. What is architecture business cycle? Explain with diagram. OR 2 a. Discuss about architectural pattems, 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) b. 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) b. Discuss the tactics with respect to availability. (10 Marks) b. Discuss the tactics with respect to security. (10 Marks) 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? b. Explain the role of business goals in architecturally significant requirements. (10 Marks) b. Define view. Explain the role of module view in software architecture. (10 Marks) OR 8 a. Discuss the sections of documentation beyond views. b. How an architecture is documented in agile development project? Explain. (10 Marks) OR 9 a. Define architectural pattem. Also discuss the relationship between patterns. (10 Marks) Discuss the guidelines in implanting the Broker architectural pattem. (10 Marks)			Module-1	# · · · · · · · · · · · · · · · · · · ·
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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.

b. Explain MVC architecture with neat diagram.