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 module 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)

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