



Eighth Semester B.E. Degree Examination, June/July 2019

Software Architecture

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

PART-A

a. With the help of a neat block diagram of Architecture Business Cycle (ABC), explain in detail the different activities which are involved in creating a Software Architecture.

(10 Marks)

b. What makes a "good" architecture?

(06 Marks)

c. With the help of diagram, list common Software Architecture structures.

(04 Marks)

2 a. Define Architectural style. Mention any four commonly used styles.

(10 Marks)

(10 Marks)

- b. State the problem of KWIC (Keyword in Context Index System), propose implicit invocation and pipe and filter styles to implement a solution for the same. (10 Marks)
- 3 a. Explain the Quality attribute scenarios for availability and modifiability.
 - b. Explain modifiability and performance tactics of prevent ripple effects and resource management. (10 Marks)
- 4 a. Explain the structure components and consequences of black board system. (10 Marks)
 - b. Explain the dynamic scenarios and implementation details of Layer Architecture design pattern. (10 Marks)

PART - B

- 5 a. What do you mean by broker Architecture? Explain the dynamic scenarios of Broken System. (10 Marks)
 - b. Explain with a neat diagram implementation details of Model View Controller (MVC).

(10 Marks)

- 6 a. What is PAC (Presentation, Abstraction and Control) pattern? Explain three level structure of PAC. (10 Marks)
 - b. Explain the CRC and static structure of micro Kernel system.

(10 Marks)

a. Enumerate the implementation steps of reflection pattern.

(10 Marks)

b. Explain Master-Slave design pattern.

(10 Marks)

- 8 a. What is Attribute-Driven Design (ADD)? Explain the steps involved in ADD. (10 Marks)
 - b. What is documenting view? Explain the steps involved in documenting interfaces. (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.

7