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18MCA553

Fifth Semester MCA Degree Examination, Jan./Feb. 2021
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. What makes good Architectural structure as well as process? Explain.   **(10 Marks)**
   b. With suitable diagram, explain reference architecture and its parts and also explain why software architecture is important?   **(10 Marks)**

OR

2 a. Explain with suitable diagram, architecture structures and also explain Four – Plus – One approach.   **(10 Marks)**
   b. What is Architecture Business Cycle? With suitable diagram, explain the influences on architecture.   **(10 Marks)**

Module-2

3 a. Explain Availability Quality attribute, with the help of general scenario.   **(10 Marks)**
   b. Discuss with suitable example, the common scheduling strategies.   **(10 Marks)**

OR

4 a. What do you mean by Tactic? Explain with suitable diagram, the security tactic.   **(10 Marks)**
   b. Explain Business Qualities and justify why they are important.   **(10 Marks)**

Module-3

5 a. Explain with proper diagram, the queuing model of performance.   **(10 Marks)**
   b. Discuss in detail about switch – over an failure concept.   **(10 Marks)**

OR

6 a. In detail explain, the steps involved in Quality attribute workshop.   **(10 Marks)**
   b. How do you categories the business goals while gathering Architecturally Significant Requirement (ASRs)?   **(10 Marks)**

Module-4

7 a. What is Attribute driven design and the steps involved in designing the architecture?
          (10 Marks)
   b. Discuss in detail the steps involved in Software Architecture testing.   **(10 Marks)**

OR

8 a. Discuss the seven parts in documenting the views.   **(10 Marks)**
   b. Enumerate on template in documenting the interface.   **(10 Marks)**

Module-5

9 a. Explain with suitable structure the Black Board Architectural Pattern.   **(10 Marks)**
   b. Enumerate on Interactive design Pattern Model – View - Control.   **(10 Marks)**

OR

10 a. Critically evaluate the distributed Pattern Broker.   **(10 Marks)**
    b. Write in detail about presentation Abstraction – Control Pattern.   **(10 Marks)**

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