USN | | | | | | | | | | 07MCA546

Fifth Semester MCA. Degree Examination, December 2010
Software Architecture

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions.*

1   a. What is the architecture business cycle? Explain how it works.   (10 Marks)
    b. List all the common software architecture structures. Explain the component connect structure.   (10 Marks)

2   a. Explain the relationships of reference models, architectural patterns, reference architectures and software architectures with a diagram.   (10 Marks)
    b. Explain pipes and filters architecture style, with a neat diagram.   (10 Marks)

3   a. Explain the process control paradigms, with example.   (10 Marks)
    b. Explain the steps involved in implementing the layers architectural pattern. (10 Marks)

4   a. Explain the variants of Broker architecture.   (10 Marks)
    b. Depict the dynamic behavoiur of MVC pattern, with change – propogation mechanism scenario.   (10 Marks)

5   a. What are quality attribute scenarios? Explain the modifiability scenario with diagrams.
                                                                               (10 Marks)
    b. What do you mean by tactics? Explain the availability tactics.   (10 Marks)

6   a. Explain the steps involved in implementing a whole – part structure.   (10 Marks)
    b. Define proxy design pattern. Discuss the benefits and liabilities of the same. (10 Marks)

7   a. Explain with a neat diagram, the evolutionary delivery life cycle model. (10 Marks)
    b. Explain the parts of interface documentation.   (10 Marks)

8   Write short notes on :
    a. View catalog.
    b. Implicit invocation.
    c. Passive filters.
    d. Master – Slave pattern.   (20 Marks)

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