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10IS81

**Eighth Semester B.E. Degree Examination, June/July 2015**  
**Software Architectures**

Time: 3 hrs.

Max. Marks:100

**Note: Answer any FIVE full questions, selecting  
atleast TWO questions from each part.**

**PART – A**

- 1 a. Define software architecture, with the help of neat block diagram of ABC (Architecture Business Cycle). Explain in detail the different activities which are involved in creating a software architecture? (12 Marks)  
b. Write short notes on:
  - i) Architectural patterns
  - ii) Reference model
  - iii) Reference architectures. (08 Marks)
- 2 a. Explain in detail about pipes and filters architectural style with types (invariants), advantages and disadvantages. (10 Marks)  
b. Explain in brief about KWIC (Keyword in Context) problem with abstract data types and implicit invocation styles to implement solutions. (10 Marks)
- 3 a. What are the qualities of system? Explain modifiability general scenario? (10 Marks)  
b. What do you mean by tactics? Explain the availability tactics with a neat diagram. (10 Marks)
- 4 a. Briefly explain pipes and filters architectural pattern benefits. (08 Marks)  
b. Define Blackboard architectural pattern. Briefly explain the steps used to implement the blackboard pattern. (08 Marks)  
c. Write a note on HEARSAY-II system. (04 Marks)

**PART – B**

- 5 a. Define Broker architectural pattern. Explain types of participating components which comprises it. (10 Marks)  
b. Explain with neat diagram, the dynamic scenarios of model view controller (MVC)? (10 Marks)
- 6 a. What are the steps involved in implementing microkernel system? (12 Marks)  
b. What are the benefits and liabilities of reflection architectural patterns? (08 Marks)
- 7 a. Discuss 5 steps in implementing Master-Slave pattern. (10 Marks)  
b. Discuss briefly implementation of whole-part-structure. (08 Marks)  
c. Mention benefits of proxy design pattern. (02 Marks)
- 8 a. Explain with neat diagram evolutionary delivery life cycle model. (08 Marks)  
b. What are the suggested standard organization points for interface documentation? (12 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank page.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.