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10IS81

**Eighth Semester B.E. Degree Examination, Dec.2018/Jan.2019**  
**Software Architectures**

Time: 3 hrs.

Max. Marks:100

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

**PART – A**

- 1 a. 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. (10 Marks)
- b. Write short notes on:
  - i) Architectural patterns
  - ii) Reference model
  - iii) Reference architectures. (06 Marks)
- c. Why is software architecture important? (04 Marks)
- 2 a. Discuss the invariants, advantages and disadvantages of pipes and filter architecture style. (10 Marks)
- b. Explain the brief about KWIC (Keyword in context) with shared data solution. (10 Marks)
- 3 a. What is quality attribute scenario? List the parts of such a scenario. Distinguish between availability scenario and modifiability scenario. (10 Marks)
- b. What do you mean by tactics? Explain the availability tactics with a neat diagram. (10 Marks)
- 4 a. Discuss the guidelines involved in the implementation of pipes and filter architecture. (10 Marks)
- b. Discuss in brief the pattern. From mud-to structure. (10 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 the microkernel system? (10 Marks)
- b. Explain the dynamic scenarios of reflection with neat diagram. (10 Marks)
- 7 Write short notes on:
  - a. Design pattern
  - b. Master-slave pattern
  - c. Whole-part pattern
  - d. Proxy pattern. (20 Marks)
- 8 a. Explain with neat diagram evolutionary delivery life cycle model. (08 Marks)
- b. Write a note on creating a skeletal system. (06 Marks)
- c. What are the uses of architectural documentation? (06 Marks)

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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.