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10IS81

Eighth Semester B.E. Degree Examination, Dec.2016/Jan.2017
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. 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. Briefly explain, what does software architecture constitute. (05 Marks)
- c. Describe the architectural structure of a system. (05 Marks)
- 2 a. Enlist architectural styles and explain event-based, implicit invocation, in brief. (08 Marks)
- b. State the problem of “key words in contex”. Propose solution through,
 - i) Abstraction data types
 - ii) Implicit invocation solution. (12 Marks)
- 3 a. What are the qualities that the architecture itself should posses? (06 Marks)
- b. List the parts of quality attributes scenario. (04 Marks)
- c. What is the goal of tactics for testability? Discuss the two categories of tactics for testing. (10 Marks)
- 4 a. Explain different steps involved in the implementation of pipe and filters architecture pattern. (10 Marks)
- b. Discuss in brief the pattern, from mud to structure. (10 Marks)

PART – B

- 5 a. Explain the broker architectural pattern to structure distributed software system. (10 Marks)
- b. What is model-view architectural pattern? With an example illustration, write its structure and implementation over a scenario. (10 Marks)
- 6 a. Enumerate the implementation of a micro-Kernel pattern. (10 Marks)
- b. Explain the reflection architectural pattern and its known uses. (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 ADD and its steps. (08 Marks)
- b. List the steps in documenting a view for architecture. (07 Marks)
- c. What are the uses of architectural documentation? (05 Marks)

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