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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