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06IS72

Seventh Semester B.E. Degree Examination, June/July 2013
Software Architectures

Time: 3 hrs. Max. Marks:100

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

PART – A

1 a. What are the different activities involved in creating a software architecture. **(06 Marks)**
b. Briefly explain software architecture with definitions. **(07 Marks)**
c. Discuss software structures, in detail. **(07 Marks)**

2 a. Enlist architectural styles and explain event – based, implicit invocation, in brief. **(06 Marks)**
b. Explain the decompositon of the paper "KEYWORD IN CONTEXT" and give solution through,
i) Abstraction data types
ii) Implicitly invocation solution. **(14 Marks)**

3 a. Explain quality attribute scenarios for system quality attributes. **(06 Marks)**
b. Describe modifiability general scenario generation. **(07 Marks)**
c. Summarize availability tactics and write a brief note on them. **(07 Marks)**

4 a. Discuss in brief the pattern, from Mud to structure. **(10 Marks)**
b. Illustrate the behaviour of the black board architecture based on speech recognition and list the steps to implement black board pattern. **(10 Marks)**

PART – B

5 a. Explain in detail, 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. List the participating components in a Micro Kernel pattern and derive the static structure of a Micro Kernel system. **(06 Marks)**
b. With an illustration, discuss the behaviour of Micro Kernel architecture when an external server requests a service that is provided by an internal server. **(06 Marks)**
c. Explain open implementation, Meta level architecture with reference to solution, structure and its implementation. **(08 Marks)**

7 Write short notes on :
a. Design pattern
b. Master -slave pattern
c. Whole – part pattern
d. Proxy pattern. **(20 Marks)**

8 a. Illustrate the evolutionary delivery life cycle model and describe a method for designing architecture to satisfy both quality requirements and functional requirement. **(10 Marks)**
b. Explain views with reference to concept, choosing the view and its documentation. **(10 Marks)**

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