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Eighth Semester B.E. Degree Examination, Dec.2014/Jan.2015
Software Architectures

Time: 3 hrs.

Max. Marks:100

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

PART – A

- 1 a. What are the factors which affect the influence on software architecture? Explain ABC. (08 Marks)
- b. Explain Hybertsson's three views for software architecture. (07 Marks)
- c. Explain briefly the properties of a good software architecture design. (05 Marks)
- 2 a. Define architectural style. Mention any four commonly used styles. (05 Marks)
- b. Explain the advantages and disadvantages of pipes and filters in architectural style. (08 Marks)
- c. Explain the basic requirements for a mobile robot's architecture. (07 Marks)
- 3 a. What is functionality? Give examples. (04 Marks)
- b. Explain the quality attributes scenarios. (09 Marks)
- c. Explain how the faults are detected and prevented. (07 Marks)
- 4 a. Explain the list of components of a pipe and filters and write the problems based on blackboard problem. (08 Marks)
- b. Discuss the steps involved in the implementation of pipes and filters architecture. (12 Marks)

PART – B

- 5 a. What is the need of proxies and bridge components in a broker system? Explain it. (06 Marks)
- b. What is broker architecture? Write down the steps involved in implementing distributed broker architecture patterns. (10 Marks)
- c. What are the limitations of PAC patterns? (04 Marks)
- 6 a. List out and explain the components of a microkernel pattern. (10 Marks)
- b. Explain the advantages and disadvantages of a reflective architectural pattern. (06 Marks)
- c. Mention the liabilities of reflection architecture patterns. (04 Marks)
- 7 a. Explain the five steps implementation of master-slave pattern. (10 Marks)
- b. What are the benefits and liabilities of proxy design patterns? Define proxy design pattern. (10 Marks)
- 8 a. Draw a neat diagram and explain the evolutionary delivering life cycle model. (10 Marks)
- b. What are the steps in ADD? (04 Marks)
- c. Write the uses of SA documentation. (06 Marks)

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