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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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