



USN

USN registration box with 10 empty cells

10IS81

Eighth Semester B.E. Degree Examination, June/July 2016

Software Architecture

Time: 3 hrs.

Max. Marks:100

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

PART - A

- 1 a. Briefly explain software architecture with definitions. (05 Marks)
b. 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)
c. Why is software architecture important? (05 Marks)
2 a. Explain in brief about KWIC (Keyword in Context) with shared data solution. (10 Marks)
b. Enlist architectural styles and explain event-based, implicit invocation. (06 Marks)
c. Explain the advantages and disadvantages of pipes and filters in architectural style.(04 Marks)
3 a. What is modifiability? Explain general scenario for modifiability. (10 Marks)
b. Explain in brief the business qualities. (04 Marks)
c. Explain how faults are detected and prevented. (06 Marks)
4 a. What do you mean architectural pattern? How it is categorized? Explain the structure part of the solution for ISO layered architecture. (10 Marks)
b. Explain the steps involved in the implementation of pipes and filters architecture. (10 Marks)

PART - B

- 5 a. What do you mean by broker architecture? What are the steps involved in implementing distributed broker architecture pattern? (10 Marks)
b. Write benefits of MVC. (05 Marks)
c. What are the liabilities of PAC? (05 Marks)
6 a. What are the steps involved in implementing the microkernel system? (10 Marks)
b. Explain the dynamic scenarios of reflection with neat diagram. (10 Marks)
7 Write notes on:
a. Design pattern
b. Master-Slave pattern
c. Whole-part pattern
d. Proxy pattern
e. Command processor (20 Marks)
8 a. Explain the steps performed when designing an architecture using the ADD method. (10 Marks)
b. Write short notes any two of following:
i) Forming team structures
ii) Documenting across views
iii) Documenting interfaces. (10 Marks)

Important Note : 1. On completing your answers, carefully draw diagonal cross lines on the remaining blank spaces. 2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.