USN ☐☐☐☐☐☐☐☐☐☐ **10IS81**

Eighth Semester B.E. Degree Examination, Dec.2018/Jan.2019
Software Architectures

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions, selecting*
at least TWO full 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.   Write short notes on:
         i)   Architectural patterns
         ii)   Reference model
         iii)   Reference architectures.   **(06 Marks)**
    c.   Why is software architecture important?   **(04 Marks)**

2   a.   Discuss the invariants, advantages and disadvantages of pipes and filter architecture style.
                                                                                        (10 Marks)
    b.   Explain the brief about KWIC (Keyword in context) with shared data solution.   **(10 Marks)**

3   a.   What is quality attribute scenario? List the parts of such a scenario. Distinguish between availability scenario and modifiability scenario.   **(10 Marks)**
    b.   What do you mean by tactics? Explain the availability tactics with a neat diagram. **(10 Marks)**

4   a.   Discuss the guidelines involved in the implementation of pipes and filter architecture.
                                                                                        (10 Marks)
    b.   Discuss in brief the pattern. From mud-to structure.   **(10 Marks)**

PART – B

5   a.   Define broker architectural pattern. Explain types of participating components which comprises it.   **(10 Marks)**
    b.   Explain with neat diagram the dynamic scenarios of Model View Controller (MVC).
                                                                                        (10 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 short notes on:
    a.   Design pattern
    b.   Master-slave pattern
    c.   Whole-part pattern
    d.   Proxy pattern.   **(20 Marks)**

8   a.   Explain with neat diagram evolutionary delivery life cycle model.   **(08 Marks)**
    b.   White a note on creating a skeletal system.   **(06 Marks)**
    c.   What are the uses of architectural documentation?   **(06 Marks)**

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