USN [   ]   06IS51

Fifth Semester B.E. Degree Examination, June/July 2014
Software Engineering

Time: 3 hrs.   Max. Marks:100

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

PART – A

1   a.   Define software process and software process model. Discuss these two in brief. **(08 Marks)**
    b.   Mention and explain the attributes of good software. **(04 Marks)**
    c.   What are legacy systems? Explain the same with its system components and neat sketches. **(08 Marks)**

2   a.   What is system dependability? Explain the principal dimensions and system properties of dependability. **(09 Marks)**
    b.   Explain the component based software engineering with its generic process model. **(06 Marks)**
    c.   Discuss the functional classifications of CASE tools. **(05 Marks)**

3   a.   What are functional and non-functional requirements? Discuss the non-functional requirements, in detail. **(10 Marks)**
    b.   Discuss the requirements elicitation and analysis with a good process model. **(10 Marks)**

4   a.   How does the structured methods are helpful to produce the models for a system? Discuss the components of CASE tools for structured method support. **(10 Marks)**
    b.   Explain the process of risk management with necessary sketches. Discuss any one of its stage of risk management, in detail. **(10 Marks)**

PART – B

5   a.   Mention and explain the main strategies that can be used to decompose a subsystem into models. **(10 Marks)**
    b.   What are the concurrent objects? Discuss the concurrent object implementations. **(06 Marks)**
    c.   Mention and define two types of design models of object oriented design. **(04 Marks)**

6   a.   What is extreme programming (XP)? Explain a number of practices involving in extreme programming (XP). **(10 Marks)**
    b.   List out and explain the Lehman's laws of program evolution dynamics. **(10 Marks)**

7   a.   Brief out the following :
         i)   Integrity testing
         ii) Release testing. **(04 Marks)**
    b.   What is intention of automatic static analysis? Discuss the following, in detail :
         i)   Checks detected by static analysis
         ii) Stages involved in static analysis. **(10 Marks)**
    c.   Define component testing. Mention and explain different types of interface errors in interface testing. **(06 Marks)**

8   Write short notes on :
    a.   Motivating people-human needs hierarchy. **(06 Marks)**
    b.   Software cost estimation techniques. **(08 Marks)**
    c.   Agile methods. **(06 Marks)**

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