M.C.A DEGREE EXAMINATIONS: NOV/DEC 2010
First Semester
MASTER OF COMPUTER APPLICATIONS
P07CA303: Software Engineering

Time: Three Hours   **Maximum Marks: 100**
Answer All Questions: -
PART A (10 x 2 = 20 Marks)
1. What do you mean by process framework?
2. What are the characteristics of risks?
3. Identify the actors and use cases in a library system.
4. List out the requirements validation techniques.
5. Define coupling and cohesion.
6. List out the software design concepts.
7. Define alpha and beta testing.
8. Define cyclomatic complexity.
9. Name the measures for reliability in software.
10. What is software quality assurance plan?

PART B (5 x 16 = 80 Marks)
11. a) (i) Describe the spiral model of software development.   (10)
    (ii) What are the advantages and disadvantages of waterfall model?   (6)
(OR)
  b) What are the different types of agile process models? Explain the characteristics of each
    of them in detail.

12. a) (i) Explain the requirements engineering tasks.   (8)
   (ii) Discuss about development of use cases.   (8)
(OR)
  b) With suitable examples and required diagrammatic representation explain the following:
    (i) Scenario based modeling   (8)
    (ii) Behavioral modeling   (8)
13. a) Discuss the following:
    (i) architectural design   (8)
    (ii) component level design   (8)
(OR)
  b) Explain in detail the user interface design.

14. a) (i) Discuss the various test to be conducted for system testing.
(OR)
  b) (i) Describe how unit testing and integration testing are conducted for object oriented
    software.   (8)
    (ii) Explain the basis path testing.   (8)

15. a) (i) Discuss on software reviews.   (10)
    (ii) Explain software reliability   (6)
(OR)
  b) Explain the following:
    (i) software configuration management   (8)
    (ii) software quality assurance   (8)

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