MCA DEGREE EXAMINATIONS: DEC 2014

(Regulation 2009)

Third Semester

MASTER OF COMPUTER APPLICATIONS

MCA512**:** Software Engineering

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 2 = 10 Marks)

1. When can you use waterfall life cycle model?

2. Define agile process model.

3. Differentiate validation and verification.

4. What is elicitation?

5. Draw an use case diagram for ATM system consisting of any three actors in it.

6. What are the interface design steps?

7. Give the difference between alpha testing and beta testing.

8. List few testing tools.

9. Is SCM essential for software development? Justify your answer with an example.

10. Name few quality standards for software.

PART B (5 x 16 = 80 Marks)

11. a)   Compare and contrast any four life cycle models in detail.

(OR)

    b) (i)   Explain about incremental model.   (8)

       (ii) Explain in detail about extreme programming model?   (8)

12. a)   What is requirement engineering? Explain in detail with an example.

(OR)

b) (i) How will you validate the requirements for a student mark list management (8)
system?

(ii) Discuss about flow oriented modeling. (8)

13. a) (i) Narrate about architectural design. (8)

(ii) What is a component? How it is used in software development? (8)

(OR)

b) Explain in detail about user interface design. Design an user interface by applying all the required strategies for railway reservation system.

14. a) (i) When will you perform integration testing? Explain its types in detail. (8)

(ii) Differentiate between testing and debugging. What do you mean by non (8) functional testing?

(OR)

b) (i) How white box testing is essential for a project? Given an example. (8)

(ii) Explain briefly about equivalence glass partitioning and boundary value (8) analysis.

15. a) (i) Narrate the features of SCM. (8)

(ii) Briefly explain about software quality concepts. (8)

(OR)

b) (i) Why do we review the software? What happens when a software is not (8) reviewed?

(ii) What do you mean by software quality assurance plan? Why industries use (8) quality assurance plan?

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