Register Number: ……………………..

B.E DEGREE EXAMINATIONS: MAY/JUNE 2013

Fifth Semester

COMPUTER SCIENCE & ENGINEERING

CSE113:Software Engineering

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

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The most important feature of spiral model is
   a) requirement analysis.
   b) risk management
   c) quality management.
   d) configuration management.

2. If every requirement stated in the Software Requirement Specification (SRS) has only one interpretation, SRS is said to be
   a) correct
   b) unambiguous
   c) consistent
   d) verifiable.

3. The frozen requirements, where _____.
   a) requirements change over time
   b) requirements doesn't change over time
   c) no requirements at all
   d) None of the above

4. Scenario based model is mostly used to draw _____
   a) use case diagram
   b) state diagram
   c) sequence diagram
   d) activity diagram

5. The feature of the object oriented paradigm which helps code reuse is
   a) object
   b) class
   c) inheritance
   d) aggregation

6. The desired level of coupling is
   a) No coupling
   b) Control coupling
   c) Common coupling
   d) Data coupling

7. Alpha and Beta Testing are forms of
   a) Acceptance testing
   b) Integration testing
   c) System testing
   d) Unit testing

8. For a function of two variables, boundary value analysis yields
   a) 4n + 3 test cases
   b) 4n + 1 test cases
   c) n + 4
   d) None of the above

9. Agile software development process motivates_____
   a) peer work
   b) conventional method
   c) following the system
   d) follow to protocol

10. Changes made to an information system to add the desired but not necessarily the required features is called
    a) Preventative maintenance
    b) Adaptive maintenance
    c) Corrective maintenance
    d) Perfective maintenance.

PART B (10 x 2 = 20 Marks)

11. Define Software Engineering?
12. What do you mean be Extreme Programming?
13. Define Requirement Engineering.
14. Explain Behavioral Modeling.
15. What is fan-In and Fan-Out?
16. State any four User Interface Design guidelines.
17. Compare Verification with Validation.
18. What is performance testing?
19. State any four size oriented metrics used in Software Engineering.
20. How risks are managed in Software Development?

PART C (5 x 14 = 70 Marks)

21. a)   What do you mean by software Development Models? Explain Waterfall model with a neat diagram.

(OR)

    b) (i)   Explain Agile Development and the Process.   (7)
        (ii) Discuss about the people factors in Agile development Teams   (7)

22. a)   Explain various elicitation techniques and their problems used in software development process in detail.

(OR)

    b)   Explain about the following with suitable examples
                 (a) Use Case Diagram
                 (b) State Diagram
                 (c) Activity Diagram

23. a)   Discuss about how data flow is mapped into software architecture.

(OR)

    b)   (i)   What do you mean by Cohesion? Explain the various types of cohesion.   (6)

         (ii)   What do you mean by design Pattern? How are they described? State the   (8)
various types of design patterns?

24. a)   (i)   What is the purpose of Testing? Explain various strategies for testing.   (6)

         (ii)   Explain about the Unit and Integration testing's and their need.   (8)

(OR)

    b)   (i)   Explain Stress and Regression Testing.   (6)

         (ii)   Write about Software Configuration Management.   (8)

25. a)   (i)   Explain about the importance of measurement in Software Development.   (6)

         (ii)   Write short notes on Object oriented and use case oriented metrics.   (8)

(OR)

    b)   Write short notes on

         (a)   Software Reengineering   (6)

         (b)   COCOMO Model   (8)

****