

B.E. DEGREE EXAMINATIONS: NOV/DEC 2010

Fifth Semester

COMPUTER SCIENCE AND ENGINEERING

U07CS504: Software Engineering

Time: Three Hours

Maximum Marks: 100

Answer All the Questions:-

PART A (10 x 1 = 10 Marks)

1. CMM level 4 specifies
 - a) Initial
 - b) repeatable
 - c) defined
 - d) managed
2. _____ are the elements for computer based systems
 - (i) software (ii) hardware (iii) documentation
 - a) (i) and (ii) only
 - b) (i) and (iii) only
 - c) (ii) and (iii) only
 - d) (i), (ii) and (iii)
3. Non functional requirements for a software are
 - a) reliability
 - b) language
 - c) feasible study
 - d) OOPS
4. Rapid prototyping used in the _____ version of the software
 - a) documentation
 - b) initial phase
 - c) testing
 - d) coding
5. Coupling is a measure of _____ among modles in a program structure
 - a) interconnection
 - b) intra connection
 - c) instance
 - d) all of the above
6. Cyclomatic Complexity $V(G) =$
 - a) $E-N+1$
 - b) $E-N-1$
 - c) $E-N+2$
 - d) $E-N+3$
7. One of the following is not a test activities
 - a) test plan
 - b) test documentation
 - c) test analysis
 - d) test execution
8. One of the following is a Black Box testing
 - a) Unit testing
 - b) performance testing
 - c) installation testing
 - d) syntax driven testing
9. Risk Management process includes
 - (i) Identification (ii) Analysis (iii) Software metrics
 - a) (i)
 - b) (i) and (iii)
 - c) (i) and (ii)
 - d) (ii) and (iii)
10. There are _____ measures in Halstead's software science metric
 - a) 5
 - b) 6
 - c) 9
 - d) 7

PART B (10 x 2 = 20 Marks)

11. What are the advantages of prototype model?
12. Define effectors process.

13. What are the advantages of software prototyping?
14. Define data Dictionary.
15. Mention the criteria for an effective modular system.
16. What are the various modes of abstraction?
17. Mention the guidelines for debugging.
18. What are the activities in testing?
19. What are the building blocks for CASE?
20. What is a organic project?

PART C (5 x 14 = 70 Marks)

21. a) Explain about the Software Engineering Life cycle models.

(OR)

- b) (i) Describe about Verification and Validation. (7)
- (ii) Briefly describe System Engineering Hierarchy. (7)

22. a) Describe about Requirement Engineering.

(OR)

- b) Explain about Data Modeling and Data Dictionary (7+7)

23. a) Explain about

- (i) Software Design (7)
- (ii) Cohesion and Coupling (7)

(OR)

- b) Explain about Software Configuration management and User interface Design. (7+7)

24. a) Explain about unit testing and integration testing. (7+7)

(OR)

- b) Discuss about Black box testing and its types.

25. a) Briefly describe about COCOMO model.

(OR)

- b) Describe about the (i) Software Maintenance (7)
- (ii) Taxonomy of CASE tools (7)
