FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2011

(CCSS)

BCA—Core Course

CA 5B 10—SOFTWARE ENGINEERING

[As per 2009 Admission Syllabus]

Time : Three Hours

Maximum Weightage : 30

I. Answer all questions.

1. Which is not a requirements elicitation technique ?
   (a) Interviews.
   (b) The use case approach.
   (c) FAST.
   (d) Data flow diagram.

2. Which is not a characteristic of good SRS ?
   (a) Correct.
   (b) Complete.
   (c) Consistent.
   (d) Brief.

3. Outcome of requirement specification is :
   (a) Design document.
   (b) Software requirement specification.
   (c) Text document.
   (d) None of these.

4. In which mod of software development, the project has tight constraints ?
   (a) Organic.
   (b) Embedded.
   (c) Semi detached.
   (d) None of the above.

5. _______ is generally measured as mean time to failure.

6. Process of generating analysis and design documents is called _______.

7. _______ is a discipline that integrates process, methods and tools for the development of software.

8. Person responsible for conducting requirement analysis.

9. Cyclomatic complexity is denoted by \( V(G) = \) _______.

10. Level 0 DFD is similar to _______.

11. The basic concepts of ER model are _______.

12. How many maturity levels are there in CMM ?

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(12 \times \frac{1}{4} = 3)
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II. Answer all short answer type questions.

13. What is feasibility study ?

14. What are structure charts ?

15. List the major risks in a software projects.

16. What is the goal of testing ?
17. What is maintenance?
18. Distinguish between verification and validation.
19. What is quality control?
20. Why is software configuration management important?
21. What is CASE?

(9 × 1 = 9)

III. Answer any five short essay questions.

22. Discuss the differences between object oriented design and function oriented design.
23. Explain boundary value analysis testing techniques.
24. Explain DFD with an example.
25. What are the different levels of testing? Explain.
26. Distinguish between coupling and cohesion.
27. What are the different steps in feasibility study?
28. Discuss various reverse engineering tools.

(2 × 5 = 10)

IV. Answer any two essay questions.

29. Explain the structure of an SRS document.
30. Discuss the different techniques for Black box testing in detail.
31. What are the different software development life cycle models? Explain any two.

(4 × 2 = 8)