

SIXTH SEMESTER B.A./B.Sc. DEGREE EXAMINATION, MARCH 2020

(CUCBCSS—UG)

B.C.A.

BCA 6B 14—SOFTWARE ENGINEERING

(2014 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A*Answer all questions.**Each question carries 1 mark.*

1. _____ may be developed for a particular customer or may be developed for a general market.
2. Process can improve by introducing techniques such as _____ and test-driven development.
3. _____ is the process of evaluating a system or component during or at the end of development process to determine whether it satisfies the specified requirements.
4. _____ test is conducted at customer's site ?
5. In the classical waterfall model during _____ phase is the Software Requirement Specification (SRS) document produced ?
6. A _____ lists the purpose of all data items and the definition of all composite data items in terms of their component data items.
7. Expansion of ERD is _____.
8. Spiral model was developed by _____.
9. The worst type of cohesion is _____.
10. _____ is one of the quality attribute.

(10 × 1 = 10 marks)

Part B*Answer all questions.**Each question carries 2 marks.*

11. Differentiate between Computer Science and Software Engineering ?
12. List out design principals.

Turn over

13. Define Coupling.
14. Define Debugging.
15. What are the techniques that software engineering uses to tackle the problem of exponential growth of problem complexity with its size ?

(5 × 2 = 10 marks)

Part C

*Answer any five questions.
Each question carries 4 marks.*

16. What are the fundamental activities of software process ?
17. What are the different types of requirements ? Explain in detail.
18. Draw Use Case Diagram of Result Management System of M.Tech. Programme.
19. Differentiate between integration and system testing with example.
20. Differentiate between organizational level and project level quality management ?
21. What are the components of state transition diagram ? Give example.
22. Discuss about levels of testing ?
23. What do you understand by top-down decomposition in the context of structured analysis ? Explain your answer using a suitable example.

(5 × 4 = 20 marks)

Part D

*Answer any five questions.
Each question carries 8 marks.*

24. Explain various stages of waterfall model with neat diagram.
25. Draw UML activity diagram that shows a workflow for a project planning process.
26. Explain about function oriented design.
27. Explain data flow based testing in white box testing.
28. Explain steps for data flow testing.
29. How software cost is planned based on cost estimation techniques ?
30. What is use case model. Draw use case diagram for Supermarket Prize Scheme.
31. Define cohesion ? Explain about different types of cohesion.

(5 × 8 = 40 marks)

