C 21124 (Pages : 2) Name.....

Reg. No.....

SIXTH SEMESTER B.C.A. DEGREE EXAMINATION, MARCH 2017

(CUCBCSS—UG)

BCA 6B 14—SOFTWARE ENGINEERING

Time : Three Hours Maximum : 80 Marks

Part A

Answer **all** *questions.*

Each question carries 1 *mark.*

1. ———— is a superset of programs.
2. Project risk factor is considered in ———— model.
3. The worst type of cohesion is ————.
4. The extent to which different modules are dependent upon each other is called ————.
5. ———— is a special type of association relation where the involved classes are not only associated to each other but a whole part relationship exists between them.
6. A ———— diagram shows both structural and behavioral aspects explicitly
7. The set of test cases is called ————.
8. Alpha testing is done by ————.
9. ———— help to measure the characteristics of a product being developed.
10. ———— level of CMM is for process management.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*

Each question carries 2 *mark.*

11. What do you mean by software engineering ?
12. Why is the SRS document also known as the black box specification of a system?
13. What is antipatterno ?
14. Write a short note on white box testing.
15. Distinguish product metrics and process metrics.

(5 × 2 = 10 marks)

Turn over

Part C

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

16. What are the principles deployed by software engineering to overcome human cognitive limitations ?
17. List the important items that a software project management plan document should discuss.
18. Explain characteristics of good SRS.
19. Write the merit and limitations of formal methods.
20. What are the advantages of oops concept ?
21. Explain various debugging approaches
22. Discuss different types of software failures
23. What are the main advantages of using CASE tools ?

(5 × 4 = 20 marks)

Part D

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

24. Explain different phases of the classical waterfall model.
25. What do you mean by software design ? Explain different approaches to software design.
26. Write the importance of identification of entity objects. Explain Grady Booch Object identification approach.
27. Explain the main constituents of a class diagram.
28. What is user interface ? Explain different type of user interface.
29. Explain system testing.
30. Explain SEI capability maturity model.
31. Explain software maintenance process models.

(5 × 8 = 40 marks)