C 60099

(Pages : 2)

Name..................................

Reg. No..............................

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2019

(CUCBCSS)

B.C.A.

BCA 6B 14—SOFTWARE ENGINEERING

Time : Three Hours

Maximum : 80 Marks

Part A

Answer **all** *questions.*

Each question carries 1 mark.

1. Simplifying a problem by omitting unnecessary details is known as ————.

2. UML stands for ————.

3. The ———— is the final outcome of the requirements analysis and specification phase.

4. The relationship of data element in a module is called ————.

5. Level 0 DFD is similar to ————.

6. ———— diagram shows interaction among objects as a two dimensional chart.

7. A development style based on widgets is called ————.

8. Beta testing is carried out by ————.

9. Software mistakes found during coding are known as ————.

10. ———— measure the average time taken to track the errors causing the failure and to fix them.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*

Each question carries 2 marks.

11. State three important advantages of structured programming.

12. What are the features of function oriented design approach ?

13. Write short note on context diagram.

14. What do you mean by modeless interface ?

15. Discuss the term software reverse engineering.

(5 × 2 = 10 marks)

Turn over

Part C

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

16. What is data structure oriented software design methodology ? How it differs from the data flow oriented design methodology ?

17. Explain any *two* empirical estimation techniques.

18. What is coupling ? Explain the various types of coupling.

19. Discuss common mistakes committed in use case model development.

20. What is window management system ? Explain its components.

21. Distinguish between graphical user interface and Text based user interface.

22. Write the procedure to get ISO 9000 certification.

23. Identify the stages through which a reuse domain progress

$(5 \times 4 = 20 \text{ marks})$

Part D

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

24. What is project planning ? Explain various project estimation techniques.

25. What are the different categories of users of SRS document and what are the different categories of customer requirement ?

26. What is a formal technique ? Explain operational semantics of a formal method.

27. Explain requirement gathering techniques.

28. What are design patterns ? Explain common design patterns.

29. Explain component based GUI development.

30. Explain different approaches used in black box and white box testing.

31. What do you mean by software reliability ? Explain different reliability metrics.

$(5 \times 8 = 40 \text{ marks})$