



# DON BOSCO COLLEGE

(Affiliated to the University of Calicut)

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## SECOND INTERNAL EXAMINATION OCTOBER 2018

### FIFTH SEMESTER BCA

### BCA5B10:PRINCIPLES OF SOFTWARE ENGINEERING

Time: 3 hours

Max. Marks: 80

#### *Part-A*

*Answer all questions*

*(Each carries one mark)*

1. A \_\_\_\_\_ diagram shows both structural and behavioral aspects explicitly
2. COCOMO stands for \_\_\_\_\_
3. Another name for clear box testing is \_\_\_\_\_
4. The outcome of a requirement specification is called \_\_\_\_\_
5. Level 0 DFD is also called \_\_\_\_\_ diagram.
6. Alpha testing is done by \_\_\_\_\_
  - a. customer
  - b. developer
  - c. tester
  - d. all of the above
7. The set of test cases is called \_\_\_\_\_
8. Cyclomatic complexity is defined by \_\_\_\_\_
9. What is RAD?
10. Which model can be selected if user is involved in all the phases of SDLC?
  - a) Waterfall Model
  - b) Prototyping Model
  - c) RAD Model
  - d) both Prototyping Model & RAD Model

**(10\*1=10 marks)**

#### *Part-B*

*Answer all questions*

*(Each carries 2 marks)*

11. Explain the characteristics of waterfall model.
12. Discuss the role of requirement gathering in software engineering
13. What is an SRS?
14. What is regression testing?
15. What is software engineering?

**(5\*2=10 marks)**



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## *Part – C*

*Answer any five*

*(Each carries 4 marks)*

16. Discuss the prototyping model.
17. Explain reverse engineering.
18. What are the three most common relationships in ER model?
19. State the difference between quality assurance and quality control.
20. Explain difference between verification and validation.
21. State the difference between DFD and flowchart.
22. Explain product metrics.
23. What is COCOMO model?
24. Differentiate between waterfall model and incremental model.
25. Explain black box testing.

**(5\*4=20 marks)**

## *Part- D*

*Answer any five*

*(Each carries 8 mark)*

26. Write a note on test planning.
27. Explain the cost estimation techniques of software in detail
28. Describe white-box testing in detail.
29. Explain Cohesion and coupling with its types.
30. Define UML diagram. Explain different types with example.
31. Explain User interface. Describe its classification.
32. What is cohesion? What are the different types of cohesion?

**(5\*8=40 marks)**

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