

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

(CUCBCSS—UG)

BCA 6B 18 (E3)—SOFTWARE TESTING AND QUALITY ASSURANCE

Time : Three Hours

Maximum : 80 Marks

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

1. \_\_\_\_\_ Testing focuses on the functional requirements of the software
2. SQA stands for \_\_\_\_\_.
3. Testing is based on the functionality of program is known as \_\_\_\_\_.
4. Which testing is the re-execution of some subset of tests that have already been conducted ?
5. 3M in testing stands for \_\_\_\_\_.
6. Which one is not the verification activity ?
  - (a) Reviews.
  - (b) Path testing.
  - (c) Walkthrough.
  - (d) Acceptance testing.
7. Integration testing techniques are :
  - (a) Top down.
  - (b) Bottom up
  - (b) Sandwich.
  - (d) All of the above
8. During validation :
  - (a) Process is checked.
  - (b) Product is checked.
  - (b) Developer's performance is evaluated.
  - (d) Customer checks the product.
9. Acceptance testing is done by :
  - (a) Developers.
  - (b) Customers.
  - (b) Testers.
  - (d) All of the above.

10. One fault may lead to :

- (a) One failure. (b) No failure.  
(b) Many failure. (d) All of the above.

(10 × 1 = 10 marks)

### Part B

*Answer all questions.*

*Each question carries 2 mark.*

11. Define Software quality.
12. What is system testing ?
13. What errors are commonly found during unit testing ?
14. Define test Management ?
15. What are the Factors of performance testing ?

(5 × 2 = 10 marks)

### Part C

*Answer any five questions.*

*Each question carries 4 mark.*

16. What are the steps for top-down integration ?
17. What is the role of an SQA group ?
18. Explain how we can do black box testing.
19. Explain types of system testing.
20. Explain verification and validation.
21. Explain the categories of test metrics.
22. Explain how to do regression testing.
23. What is test planning and test management ?

(5 × 4 = 20 marks)

### Part D

*Answer any five questions.*

*Each question carries 8 mark.*

24. Explain the different type integration testing.
25. What is white-box testing ? Explain techniques for control structure testing.

26. Explain in detail the different types of functional testing.
27. Explain regression testing and types of regression testing.
28. What is testing ? Explain the characteristics of testing.
29. What is the difference between load testing and stress testing ?
30. Write a detailed description about testing tools.
31. What is the difference between :
  - (i) Alpha testing and beta testing.
  - (ii) Development and regression testing.
  - (iii) Functional and Structural testing.

(5 × 8 = 40 marks)