

**SIXTH SEMESTER B.C.A. DEGREE EXAMINATION, MARCH/APRIL 2018**

(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 Strategy should start at the \_\_\_\_\_ module level and expand towards the whole system.
2. Software validation is achieved through a series of \_\_\_\_\_ tests that demonstrate conformity with requirements.
3. \_\_\_\_\_ Testing focuses on the functional requirements of the software.
4. SQA stands for \_\_\_\_\_.
5. Acceptance testing must occur at the \_\_\_\_\_ of the development process.
6. Alpha testing is done by :
  - (a) Customer.
  - (b) Tester.
  - (c) Developer.
  - (d) All of the above.
7. Every design feature and its corresponding code is checked logically with every possible path execution in \_\_\_\_\_.
  - (a) Black-box testing.
  - (b) White-box testing.
  - (c) Testing tool.
  - (d) None of the above.
8. What is the relation between static and dynamic testing techniques ?
  - (a) Mutually Exclusive.
  - (b) Complementary.
  - (c) Independent.
  - (d) None.

9. Equivalence class partitioning is related to :

- (a) Structural testing. (b) Black-box testing.  
(c) Mutation testing. (d) All of the above.

10. Which one is not a verification activity ?

- (a) Reviews. (b) Path testing.  
(c) Walkthrough. (d) Acceptance testing.

(10 × 1 = 10 marks)

### Part B

*Answer all questions.*

*Each question carries 2 marks.*

11. What is the need of verification ?  
12. What is testing ?  
13. What is the difference between alpha and beta testing ?  
14. What is regression number ?  
15. What are the major activities of a testing group ?

(5 × 2 = 10 marks)

### Part C

*Answer any five questions.*

*Each question carries 4 marks.*

16. Evaluate the benefits of Validation in a project.  
17. How does testing help in producing quality software ?  
18. Explain regression testing problem with an example.  
19. What is the purpose of integration testing ? How is it done ?  
20. Detailed description about testing tools.  
21. Explain how to do acceptance testing and what is its use ?  
22. Explain challenges in performance testing.  
23. Define defect Bash.

(5 × 4 = 20 marks)

**Part D**

*Answer any five questions.*

*Each question carries 8 marks.*

- ~~24.~~ What is the difference between system testing and acceptance testing ?
- ~~25.~~ Describe White-box testing in detail.
26. Define Software testing. Give few generic characteristics to it.
27. Write a detailed description about testing tools.
- ~~28.~~ What are the situations to perform regression testing ?
- ~~29.~~ What is the difference between :
  - ~~(a)~~ Verification and Validation.
  - ~~(b)~~ Alpha and Beta testing.
30. Explain test planning and test management.
- ~~31.~~ Define SQA. What is the role of an SQA group ?

(5 × 8 = 40 marks)