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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

	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.
	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.

 $(10 \times 1 = 10 \text{ marks})$

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?

 $(5 \times 2 = 10 \text{ marks})$

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.

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

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?

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