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SIXTH SEMESTER B.A./B.Sc. DEGREE EXAMINATION, MARCH 2020

(CUCBCSS-UG)

B.C.A.

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

(2014 Admissions)

Time: Three Hours

Maximum: 80 Marks

Part A

Answer all questions.

Each question carries 1 mark.

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1.	Structural testing is also known as ———.
2.	Unit testing is an example for ———— box testing.
3.	testing takes place at the developer's site by the internal teams, before release to external customers.
4.	Name three approaches for regression testing.
5.	Name any two tools for performance testing.
6.	metrics can be used to improve software development and maintenance.
7.	A ————————————————————————————————————
8.	is the process of evaluating software at the end of the development process to determine whether software meets the customer expectations and requirements.
9.	Name any two life cycle models in software development.
0.	is an ad hoc testing where people performing different roles in an organization test the product together at the same time.

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

Part B

Answer all questions.

Each question carries 2 marks.

- 11. What do you mean by testing a software?
- 12. Differentiate error and fault.
- 13. What is a test oracle?

- 14. What is black box testing?
- 15. What is project metrics?

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

Part C

Answer any five questions.

Each question carries 4 marks.

- 16. Explain software quality assurance.
- 17. Explain statement coverage, path coverage, branch coverage in white box testing.
- 18. Explain static testing.
- 19. Explain the term Quality Control.
- 20. What is code inspection?
- 21. What is boundary value analysis?
- 22. What is acceptance testing?
- 23. What is data flow testing?

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

Part D

Answer any five questions.

Each question carries 8 marks.

- 24. Explain different phases in a software project.
- 25. Explain regression testing.
- 26. Compare and contrast alpha testing and beta testing.
- 27. Explain equivalence partitioning in black box testing.
- 28. Explain the advantages and disadvantages of white box testing.
- 29. Explain the decision table technique in black box testing.
- 30. Explain the concept of performance testing.
- 31. Explain different metrics used in software testing.

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