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D6BCA2204

Reg. No.....

Name:

SIXTH SEMESTER UG DEGREE EXAMINATION, APRIL 2025

(Regular/Improvement/Supplementary)

BCA

GBCA6E03T: SOFTWARE TESTING AND QUALITY ASSURANCE

Time: 2 Hours

Maximum Marks: 60

**SECTION A: Answer the following questions. Each carries *two* marks.
(Ceiling 20 marks)**

1. Why System Testing important in software development?
2. What is the advantage of Black-Box testing over White-Box testing?
3. Define the term 'Quality Assurance' in software testing.
4. Differentiate between test incident reports and test summary reports.
5. Why base lining a test plan considered as an essential step in the test process?
6. Define regression testing problem.
7. Define the term "Entry/Exit Criteria" in the context of testing
8. What is the key challenge associated with a developer performing white-box testing on their own code?
9. Explain the purpose of the V Model in software development.
10. Define the term "Validation" in software testing.
11. What are the two main aspects evaluated in system testing?
12. Define structural testing.

**SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 marks)**

13. Describe the different processes involved in performance testing.
14. Briefly discuss two common strategies used in integration testing.
15. Provide an in-depth analysis of test defect metrics.
16. Discuss the role of productivity metrics in assessing the efficiency of the testing team.
17. Elaborate on the factors considered while setting up the configuration for non-functional testing and its impact on test repeatability.

(PTO)

18. Explain the concept of the V Model in software development and how it differs from the Waterfall model.
19. What is a Defect Bash in software testing? How does it help in identifying and resolving integration-related issues?

SECTION C: Answer any *one* question. The question carries *ten* marks.

20. Why test reporting and metrics essential in software testing? Explain the metrics and how they evaluate project progress, productivity, and software quality.
21. What is the difference between:
- i. Alpha testing and beta testing?
 - ii. Development and regression testing?

(1 × 10 = 10 Marks)