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BACHELOR OF COMPUTER APPLICATIONS (CYBER SECURITY)
EXAMINATION: DECEMBER-2025
SEMESTER – IV

Sub: Software Testing & Quality Assurance
(BCA –23-403/BCAC23-403)

Date : 31/12/2025

Total Marks : 60

Time: 2.00 pm to 4.30 pm

Instructions:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labeled diagrams wherever necessary.

Q.1. Fill in the blanks. (5)

1. Unit testing is usually performed by_____
 - a) Testers
 - b) End users
 - c) Developers
 - d) Project managers
2. _____ is NOT a part of the software testing life cycle STLC
 - a) Test planning
 - b) Test case development
 - c) Debugging
 - d)) Test execution
3. Beta testing is done by_____
 - a) Internal developers
 - b) QA team
 - c) End users
 - d) Project managers
4. QA stand for _____
 - a) Quick Automation
 - b) Quality Adjustment
 - c) Quality Assurance
 - d) Question Analysis
5. A defect is the result of _____
 - a) A user error
 - b) A hardware issue
 - c) A programming mistake
 - d) A feature request

Q.2. State True/False. (5)

1. Non-Functional testing ensures that the software behaves as expected and meets specified requirements.
2. Defect tracking is the process of identifying, documenting, and verifying that corrections have been made to the software.
3. Verification testing ensures that the software has been built according to the design specifications
4. System testing evaluates how the software behaves under extreme conditions or stress
5. User Acceptance Testing (UAT) is performed by end-users to ensure the software meets their needs and requirements.

Q.3. Answer the following. (Solve any 5) (10)

1. Define QA.
2. What is test case?
3. Define Alpha testing and Beta testing.
4. Define Reviews.
5. Define Unit Testing.
6. What is meant by test coverage?

Q. 4. Answer the following in detail. (Solve any 6) (30)

1. How do you know when to stop testing?
2. Explain Code and data coverage in case of dynamic white box testing
3. Explain Defect life cycle.
4. Explain Load testing and stress testing in details.
5. Difference between static and dynamic testing.
6. Differentiate between black box testing and white box testing.
7. Difference between manual and automatic testing

Q. 5. Answer the following in detail. (Solve any 1) (10)

1. Describe the following:
 - a) Informal Review
 - b) Technical or peer review
 - c) Walkthrough
 - d) Inspection
 - e) Static analysis
 - f) Review Meeting
 - g) Review Reporting & Record keeping
 - h) Review guidelines
 - i) Review checklist
 - j) Process Quality
 2. Describe 11 steps for testing process
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