

Roll.No.

25UCCCT5015

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai - 600 044.

B.Com CA- END SEMESTER EXAMINATIONS - NOVEMBER 2025

SEMESTER - V

25UCCCT5015 - Software Testing

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Differentiate between Black-box and White-box testing with suitable examples.
2. Explain the working function of walk through and Inspection in a product.
3. Classify and compare functional testing and system testing. Prepare a test scenario for each and predict the impact of skipping either during development.
4. Explain key challenges in object-oriented testing. Illustrate how encapsulation, inheritance, and polymorphism influence test design. Sketch a basic test strategy for a banking class hierarchy.
5. Compare the Structural and Detailed design.
6. Illustrate Cohesion and coupling.
7. Explain the role of functional and system testing in the software life cycle. Classify defect types each method detects and illustrate with examples.
8. Identify major challenges in object-oriented testing and justify how state-based testing and decision tables can address them. Include examples.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. (a) Explain software testing techniques and strategies used across the software development life cycle.
(b) Apply automated unit testing to a sample module and illustrate how it enhances defect detection and code reliability.
10. Apply and Decision table, Sate, Structured English in student data table, to relate one another.

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11. A layered banking application built using Agile methodology requires integration testing.
 - (a) Justify the role of integration testing in identifying early interaction issues between modules.
 - (b) Diagnose Top-down vs Bottom-up integration strategies and infer which is more effective for layered systems.
12. Apply for system testing in a software product to validate end-to-end functionality and relate its importance of RAD model.
13. Explain the process of Transition state and State Graph with relevant example.
