

Roll.No.

23UCGCT5006

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.Sc.Cs with CGS - END SEMESTER EXAMINATIONS - NOVEMBER 2025
SEMESTER - V

23UCGCT5006 - Software Engineering and Testing

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Define Software Engineering and explain the layered technology in software process.
2. Compare Waterfall and Incremental process models with suitable diagrams.
3. Explain the different tasks involved in Requirements Engineering.
4. Describe the process of developing use cases with an example.
5. Illustrate the various analysis modeling approaches in software engineering.
6. Explain any three design concepts that ensure good design quality.
7. Describe about translating the requirements model into design model.
8. Examine the differences between black box testing and white box testing.

Section C

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

9. Explain in detail the various software process models with neat diagrams.
10. Analyze the stages of the Requirements Engineering process and describe how requirement validation is performed.
11. Evaluate the importance of design concepts and explain how pattern-based design enhances software quality.
12. Write a detailed note on scenario based modeling.
13. Justify the need for various software testing strategies and differentiate between validation and system testing with suitable examples.
