

Roll.No.

24UCSET5A01

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.Computer Science - END SEMESTER EXAMINATIONS - NOVEMBER 2025
SEMESTER - V

24UCSET5A01 - Cloud Computing

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Define cloud computing and list its essential characteristics.
2. Explain the differences between IaaS, PaaS, and SaaS with examples.
3. Illustrate the concept of virtualization and its role in cloud infrastructure.
4. State any four advantages of cloud deployment models (public, private, hybrid, community).
5. Describe the key components of cloud networking architecture.
6. Apply the concept of load balancing in cloud networking to improve performance.
7. Identify major cloud service providers and their unique offerings.
8. Explain the working of SDN (Software Defined Networking) in cloud environments.
9. Apply the concept of cloud security to protect data and resources.
10. Define cloud orchestration and its importance in automation.
11. Interpret how API gateways facilitate communication in cloud systems.
12. Demonstrate how resource provisioning can be optimized in a cloud setup.

Section C

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

13. Apply the concepts of cloud deployment and service models to design a cloud solution for an e-commerce business.
14. Analyze how virtualization and containerization enhance resource utilization in cloud environments.

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15. Justify the need for elasticity and scalability in cloud applications with suitable examples.
16. Examine the role of network automation and SDN in improving cloud service efficiency.
17. Evaluate various cloud security strategies to ensure data privacy and compliance.
18. Analyze how cost optimization techniques are applied in cloud resource management.
