

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 - APRIL 2025

SEMESTER - V

**24UCSET5A01 - Cloud Computing**

Total Duration : 1 Hrs.30 Mins.

Total Marks : 40

**Section B**

Answer any **TEN** questions (10 × 2 = 20 Marks)

1. What is Cloud Computing?
2. Write down the advantages of using cloud computing for business.
3. What is the difference between Public cloud and Private cloud?
4. What does on-demand self-service mean in cloud computing?
5. What is virtualization in cloud computing?
6. What is the role of a hypervisor in virtualization?
7. Name two security challenges in cloud computing.
8. What is the function of a firewall in cloud security?
9. Define latency in cloud networking.
10. What is the function of a Virtual Private Cloud (VPC)?
11. Define data replication in cloud storage.
12. What is the advantage of serverless computing ?

**Section C**

Answer any **FOUR** questions (4 × 5 = 20 Marks)

13. Compare and contrast Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS) with examples.
14. Explain the five essential characteristics of cloud computing as defined by NIST (National Institute of Standards and Technology).
15. How does virtualization enable cloud computing, and what are its main advantages?
16. What are the major security challenges in cloud networking, and how can they be mitigated?
17. Describe how Content Delivery Networks (CDNs) work and their role in optimizing cloud network performance.
18. How does serverless computing work, and what are its advantages and limitations?

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