

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY GURAJADA VIZIANAGARAM
IV B. Tech I Semester Regular/Supplementary Examinations OCT/NOV 2025
CLOUD COMPUTING

(AI&DS, AI&ML, CSE(AI&DS), CSE(AI&ML), CSE(AI), CSE(DATA SCIENCE))

Time: 3 hours

Max. Marks: 70

Answer any **FIVE** Questions. **ONE** Question from **Each unit**

All Questions Carry Equal Marks

UNIT-I

1. a) What are different System models for Distributed and Cloud Computing? [7M]
b) List and describe the main characteristics of cloud computing systems. [7M]
(OR)
2. a) Explain in detail about the Multithreading Technology in Multicore CPU and Many-Core GPU Architectures. [7M]
b) What is Service Oriented Architecture? Explain the layered architecture for web services and the grids. [7M]

UNIT-II

3. a) Explain different Levels of Virtualization Implementation. [7M]
b) What is the purpose of Hypervisor? Explain the Xen Architecture. [7M]
(OR)
4. a) Write about Virtualization Support at the OS Level? [7M]
b) What is full virtualization and para virtualization? Write about their architectures. [7M]

UNIT-III

5. a) What is Service Oriented Architecture? Explain in detail. [7M]
b) Explain IaaS, PaaS and SaaS. Give examples. [7M]
(OR)
6. a) Differentiate Public, Private, and Hybrid Clouds? [7M]
b) Write about any three services of Amazon AWS and Microsoft Azure. [7M]

UNIT-IV

7. a) What are the five classes of Cloud resource management policies? [7M]
b) Describe about the two-level resource allocation architecture. [7M]
(OR)
8. a) How does fair queueing scheduling algorithm work for computing clouds. [7M]
b) What is Resource bundling? Explain the process of resource bundling. [7M]

UNIT-V

9. a) What are different distributed file systems available. Explain in detail. [7M]
b) Analyze the general parallel file systems in detail? [7M]
(OR)
10. a) What is a storage model? Describe different types of storage models and its implementation. [7M]
b) Write about Google file system in detail? [7M]
