

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech. IV Year I Semester Regular & Supplementary Examinations October/November-2025

CLOUD COMPUTING

(Common to CSIT & CSE)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a Explain the evolution of distributed computing highlighting key milestones and technologies involved. CO1 L2 6M
- b Compare and contrast parallel computing and distributed computing paradigms with suitable examples. CO1 L4 6M

OR

- 2 a Differentiate between computational grid, data grid, and network grid with examples. CO1 L4 6M
- b Explain the architecture of Service-Oriented Architecture (SOA) with its main components. CO1 L2 6M

UNIT-II

- 3 a Define Cloud Computing and explain in detail about the XaaS (Everything as a Service) concept. CO2 L2 6M
- b Determine and explain the different Service Models in Cloud Computing with examples. CO2 L4 6M

OR

- 4 a Explain in detail the Software as a Service (SaaS) model with suitable examples. CO2 L2 6M
- b Compare and contrast IaaS, PaaS, and SaaS in terms of functionality and user control. CO2 L4 6M

UNIT-III

- 5 a Explain in detail the different implementation levels of virtualization with examples. CO3 L2 6M
- b Illustrate the various virtualization structures available with neat diagram. CO3 L3 6M

OR

- 6 a Summarize the concept of memory virtualization and its importance. CO3 L2 6M
- b Illustrate I/O virtualization with an example and explain its significance. CO3 L3 6M

UNIT-IV

- 7 a Explain about various Authentication Methods used in Cloud Security. CO4 L2 6M
- b Interpret the different Authorization Methods used in cloud environments. CO4 L3 6M

OR

- 8 a Describe the Life Cycle of Identity Management in detail. CO4 L2 6M
- b List and explain the major activities supported by Identity and Access Management (IAM). CO4 L2 6M

UNIT-V

- 9 a Give the factors that promote the adoption of Mobile Cloud Computing (MCC). CO5 L2 6M
- b State and explain the characteristics of Mobile Cloud Computing applications. CO5 L1 6M

OR

- 10 a Explain the concept of Offloading in Static and Dynamic Environments. CO5 L2 6M
- b What do Partitioning Strategies mean? How is Adaptive Dynamic Partitioning Strategy (ADPS) implemented for program partitioning? CO5 L1 6M

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