O.P.Code: 20CS0537

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H.T.No.

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

B.Tech. IV Year I Semester Regular & Supplementary Examinations December-2024 CLOUD COMPUTING

(Common to CSE & CSIT) Time: 3 Hours Max. Marks: 60 (Answer all Five Units $5 \times 12 = 60$ Marks) UNIT-I a Explain the evolution of distributed computing and its role in scalable CO1 **6M** computing over the Internet. **b** List and discuss the elements of grid. CO₁ L1 **6M OR** a Explain the Cloud Computing Stack. CO₁ L₂ **6M b** What are the primary components of fundamental cloud architectures? **CO1 L4 6M** Discuss their roles in cloud computing. UNIT-II a Compare and contrast the different types of cloud deployment models: CO₂ L3 **6M** Public cloud, Private cloud, and Hybrid cloud. **b** Explain Briefly about Deployment Models. CO₂ L2 **6M** a What is SLA management, and how does it ensure the reliability and CO2 L2 **6M** quality of cloud services? b How do deployment models differ in terms of security, cost, and CO2 **L4 6M** scalability? Provide examples. UNIT-III a Explain the different implementation levels of virtualization and their CO3 **6M** L2 role in cloud computing. **b** Describe virtual clusters with its advantages. CO₃ L2 **6M** OR a What are virtual clusters, and how do they aid in resource management CO3 L3 **6M** in cloud environments? **b** Interpret Live VM Migration Steps and Performance Effects. CO₃ L4 **6M** UNIT-IV a Explain the importance of authentication and authorization in cloud **CO4** L₅ **6M** infrastructure security. Discuss methods used at network, host, and application levels. b Compare and contrast the security challenges at the network, host, and L3 **6M** application levels in a cloud environment. a Interpret the various Authorization Methods. **CO4** L3 **6M b** Describe the Life cycle of identity management. CO4 L2 **6M** UNIT-V a State the Characteristics of Mobile Cloud Computing Application. **CO5** L2 **6M** b Explain how Mobile Cloud Computing enhances the performance and L4 **6M** usability of mobile applications. OR a Explain about general security in mobile cloud computing. CO₅ L2 **6M b** Illustrate a typical mobile cloud computing environment. CO₅ L2 **6M**

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