December 2023

B.Tech (ECE) VII SEMESTER

Introduction to Cloud Computing (OEL-710)

Time: 3 Hours   Max. Marks:75

Instructions: 1.   *It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.*

2.   *Answer any four questions from Part -B in detail.*

3.   *Different sub-parts of a question are to be attempted adjacent to each other.*

PART -A

Q1 (a) Write 2 differences between Distributed and Cloud Computing.   (1.5)

(b) Define Privacy.   (1.5)

(c) Explain Service Oriented Architecture (SOA).   (1.5)

(d) What is the full form of VMM.   (1.5)

(e) Explain Platform as a Service (PaaS).   (1.5)

(f) What is event driven resource provisioning?   (1.5)

(g) What is a Hybrid cloud?   (1.5)

(h) What do you understand by multitenancy in cloud?   (1.5)

(i) What is Amazon Machine Images (AMI) in Amazon EC2?   (1.5)

(j) What do you mean by data loss prevention in cloud security?   (1.5)

PART -B

Q2 (a) What are web services? Describe Service Oriented Architecture (SOA) and   (10)
discuss its advantages and disadvantages.

(b) Differentiate between cluster computing and grid computing.   (5)

Q3 (a) Elaborate the three types of cloud service models.   (10)

(b) What is hypervisor? Describe Xen-architecture for hypervisor supported   (5)
hardware-level virtualization with diagram.

Q4   Explain the five implementation levels of virtualization with a diagram.   (15)

Q5 (a) Describe Hadoop Distributed File System (HDFS) and Map-Reduce framework.   (5)

(b) Describe intercloud architecture with diagram. What is the role of cloud   (10)
exchange in intercloud resource management?

Q6 (a) Draw and explain the shared security responsibility model in cloud   (8)

(b) Explain Identity and Access Management (IAM) in cloud security.   (7)

Q7   Explain the structure and working of Google App Engine (GAE). Explain the   (15)
importance of Chubby and Bigtable in GAE.

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