2/251 **1605E684** Candidate's Seat No :_____

IMSc IT (C & AD) (NEP) Sem.-4 Examination

DSC-C-CAD-241T

Introduction to Cloud Computing

Time : 2-00 Hours] May-2025 [Max. Marks : 50

Instructions:
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Do not write anything on the question paper.

		Marks
Q.1	What is cloud computing, and what are its key principles, challenges, and different cloud computing models (Public, Private, Hybrid, and Community Cloud) with examples?	07
Q.2	List and explain at least five benefits and five challenges of cloud computing.	07
	OR	
Q.2	Explain the concept of a cloud file system in cloud computing. Discuss its advantages and challenges.	07
Q.3	What are the key security aspects in cloud computing, including data protection & Privacy, authentication, compliance, network security, multi-tenancy risks, and emerging threats? Discuss the common security risk in Cloud Computing	07
	OR	
Q.3	Explain the concept of a distributed file system in cloud computing. Discuss its advantages and challenges.	07
Q.4	What is Infrastructure as a Service (IaaS)? Explain the role of open-source tools in managing IaaS environments.	07
	OR	
Q.4	Explain the cloud storage architecture.	07
Q.5	Explain load balancing in cloud computing. How does it help in managing workloads efficiently?	07
Q.6	What is cloud computing? a) Using a local server for computing b) Storing and accessing data over the internet c) Using a personal computer to manage data d) Running applications offline	01
Q.7	Which of the following is a cloud deployment model? a) Local Cloud b) Private Cloud c) Internal Cloud d) Static Cloud	01
Q.8	Which virtualization technique separates storage from physical hardware? a) Network Virtualization b) Storage Virtualization c) Hardware Virtualization d) Cloud Virtualization	01

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Q.9	What is virtualization? a) Using multiple physical machines b) Creating a virtual version of resources c) Removing software from hardware d) Running applications without memory	01
Q.10	What is the primary function of a hypervisor? a) Manages cloud networks b) Enables virtualization of OS c) Secures cloud storage d) Monitors user activity	01
Q.11	Which open-source cloud platform is commonly used for virtualization? a) OpenStack b) Dropbox c) OneDrive d) iCloud	01
Q.12	Which open-source tool is used for cloud orchestration? a) Docker b) Kubernetes c) Microsoft Word d) Gmail	01
Q.13	Which company introduced the concept of virtualization? a) Microsoft b) IBM c) Google d) Amazon	01
Q.14	Which hypervisor type runs directly on hardware? a) Type 1 b) Type 2 c) Type 3 d) Cloud Hypervisor	01
Q.15	Which of the following is a cloud networking technology? a) SDN (Software Defined Networking) b) VPN c) IoT d) Firewalls	01
Q.16	Which of the following is an example of a cloud storage service? a) GitHub b) Google Drive c) IntelliJ IDEA d) Adobe Photoshop	01
Q.17	Which of the following is an example of a hybrid cloud? a) A private cloud used for local development b) A company using both public and private clouds c) A public cloud only d) A local network-based storage solution	01
Q.18	What does a Load Balancer do in cloud computing? a) Stores data b) Distributes traffic efficiently c) Reduces network security d) Increases processing time	01
Q.19	What is vertical scaling? a) Adding more machines b) Increasing the power of existing machines c) Reducing cloud services d) Decreasing the number of servers	01
Q.20	Which model provides hardware resources like virtual machines? a) SaaS b) PaaS c) IaaS d) DaaS	01