

Intg. M.Sc. IT CAD Semester 4 Examination**BSCCAD 24****Introduction to Cloud Computing****Time : 2-30 Hours]****June-2024****[Max. Marks : 70****Instructions:**

- 1. Figures to the right indicates full marks*
- 2. Neat diagrams must be drawn wherever necessary.*

Section I**(1 X 15 =15)**

- 1. Which term describes the ability to adjust resources in cloud computing to meet demand?**
(a). Virtualization (b). Scaling (c) Hypervising (d). Pooling
- 2. Which type of hypervisor runs directly on the physical hardware?**
(a). Type 1 hypervisor (b) Type 2 hypervisor
(c). Container-based hypervisor (d). Network hypervisor
- 3. What is the primary function of a Content Delivery Network (CDN) in cloud computing?**
(a). Secure data storage (b). Load balancing
(c). Distributing content closer to users (d). Managing virtual machines
- 4. What does CDN stand for in cloud computing?**
(a) Cloud Data Network (b). Centralized Data Node
(c). Content Delivery Network (d). Cloud Distribution Network
- 5. What aspect of cloud security focuses on controlling user access and permissions?**
(a). Physical security (b). Network security
(c). Platform security (d). Identity and Access Management (IAM)
- 6. Which category of open-source tools is primarily used for managing infrastructure resources in cloud computing?**
(a). Open source tools for PaaS (b). Open source tools for SaaS
(c). Open source tools for IaaS (d). Open source tools for research
- 7. The concept of cloud computing can be traced back to the idea of:**
(a) Mainframe computers (b) Personal computers
(c) Distributed computing (d) Supercomputers
- 8. NoSQL databases are designed to process**
(a) Structured data only (b) Unstructured data only
(c) Both structured and unstructured data (d) Big size data
- 9. Map Reduce framework was built to efficiently process unstructured data in parallel in**
(a) Cloud environment (b) Centralized environment
(c) Distributed environment (d) Non-cloud environment
- 10. Which among the following problem(s) may be caused by centralized load balancing?**
(a) Too many messages (b) Bottleneck
(c) No feedback (d) None of these
- 11. Load balancing helps to implement the**
(a) System over-utilization (b) System under-utilization
(c) System scaling (d) All of these

12. Resource pools are organized in
 - (a) Heap structure
 - (b) Hierarchical structure
 - (c) Hash structure
 - (d) None of these
13. Virtual machine monitor (VMM) is the other name of
 - (a) Guest system
 - (b) Host system
 - (c) Host operating system
 - (d) Hypervisor
14. NoSQL database Cassandra was initially developed by
 - (a) Google
 - (b) Amazon
 - (c) Apache
 - (d) Facebook
15. . Dynamic resource provisioning approach eliminates the problem(s) of
 - (a) Resource under-provisioning
 - (b) Resource over-provisioning
 - (c) Both a and b
 - (d) System speed

Section II

(2 X 10 = 20)

1. What are Open Source Tools for IaaS?
2. What are Open Source Tools for PaaS?
3. What are Open Source Tools for SaaS?
4. Explain Google Drive?
5. Explain Google Docs?
6. Explain Dropbox?
7. Explain Hadoop?
8. Explain Storage Pool?
9. Explain Network Pool?
10. What is Recourse Pooling?

Section III

(3 X 5 = 15)

1. What is Public Cloud? Advantages and Disadvantages of Public Cloud?
2. What is Private Cloud, Advantages and Disadvantages of Private Cloud?
3. What is Hybrid Cloud Advantages and Disadvantages of Hybrid Cloud?
4. Explain the concept of 'multi-tenancy' in cloud computing.
5. Describe the principle of elasticity in cloud computing and its importance

Section IV

(5 X 4 = 20)

1. What is Recourse Provisioning? Static Provisioning, Dynamic Provisioning difference?
2. How does the Data Security issue in cloud compare with that in Traditional Computing system?
3. What can a cloud service consumer do to ensure compliance?
4. Why will anyone move to cloud if such portability and interoperability issues exist?