



**ST. JOSEPH'S COLLEGE (AUTONOMOUS) ,BENGALURU -27**  
**M.SC (BIG DATA ANALYTICS) – III SEMESTER**  
**SEMESTER EXAMINATION: OCTOBER 2022**  
**(Examination conducted in December 2022)**  
**BDA 3421 – DATA ANALYTICS ON CLOUD**

Registration Number:

Date & session:

**Time: 2 ½ Hours**

**Max Marks: 70**

**This paper contains THREE printed pages and THREE parts**

**PART-A**

**Answer ALL Questions**

**10X1 =10**

1. A cloud environment comprised of two or more different cloud deployment models are known as
  - a. Public cloud
  - b. Private cloud
  - c. Community cloud
  - d. Hybrid cloud
  
2. Applications and services that run on a distributed network using virtualized resources are referred as
  - a. Soft computing
  - b. Distributed Computing
  - c. Parallel Computing
  - d. Cloud Computing
  
3. ....is the host operating system for Windows Server
  - a. Kernel based virtual machine
  - b. Microsoft Hyper-V
  - c. Xen
  - d. Virtual box
  
4. Name the method used to distribute service request to resources
  - a. Load scheduling
  - b. Virtual infrastructure monitoring
  - c. Load balancing
  - d. SLA monitoring

5. The mechanism used to facilitate runtime data transformation make the cloud service accessible by a wide range of cloud service consumers and devices
  - a. Virtual server
  - b. Multi-device broker
  - c. Failover system
  - d. Hypervisor
  
6. A cloud consumer is granted very limited administrative control over a .....implementation
  - a. PaaS
  - b. IaaS
  - c. SaaS
  - d. CaaS
  
7. .... separates the operating system layer from the application and libraries
  - a. Instruction set architecture
  - b. Application binary interface
  - c. Application programming interface
  - d. Hypervisor
  
8. Which of the following cloud security characteristic states that data not been altered by an unauthorized party?
  - a. Integrity
  - b. Confidentiality
  - c. Authenticity
  - d. Availability
  
9. .... represents the ability of the IT resource to handle increased or decreased usage demands.
  - a. Virtualization
  - b. Cloud service
  - c. Scaling
  - d. Multitenancy

10. The mechanism defining the component of the PaaS cloud delivery model
  - a. Pay-per-use monitor
  - b. SLA management system
  - c. Ready-made environment
  - d. Resource replication

### **PART- B**

**Answer any SIX of the following**

**6X5=30**

11. Explain the Hypervisor reference Architecture.
12. Differentiate Elasticity and Multitenancy.
13. Describe Host-Guest communication through virtualization layer with diagram.
14. Define failover system. Discuss about its configurations.
15. Differentiate symmetric and asymmetric encryption used in cloud security.
16. Explain digital signature and hashing on cloud security mechanism.
17. Write short note on Cloud management mechanism .
18. Explain the Hardened Virtual Server Images of Cloud security mechanism.

### **PART C**

**Answer any THREE of the following**

**3X10=30**

19. What is virtualization? Elaborate the taxonomy of Virtualization technique.
20. Explain the components of cloud computing architecture with neat diagram.
21. Discuss in detail any two-cloud delivery model with an example .
22. Explain any four specialized cloud mechanism in detail.