EM1 Module Mock Theory Exam

Time:

29:38

Points:

27/50

1.Name Of NSTI

Calicut

Howrah

Kolkata

Vidhyanagar

2.Name Of Student



**Incorrect**

0/1 Points

3.What is the primary characteristic of the Infrastructure as a Service (IaaS) model?



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**Correct**

1/1 Points

4.Which cloud service model provides a complete software solution that is accessed over the internet?



𝐼𝑛𝑓𝑟𝑎𝑠𝑡𝑟𝑢𝑐𝑡𝑢𝑟𝑒𝑎𝑠𝑎𝑆𝑒𝑟𝑣𝑖𝑐𝑒(𝐼𝑎𝑎𝑆)������������������������(����)



𝑃𝑙𝑎𝑡𝑓𝑜𝑟𝑚𝑎𝑠𝑎𝑆𝑒𝑟𝑣𝑖𝑐𝑒(𝑃𝑎𝑎𝑆)������������������(����)



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𝐹𝑢𝑛𝑐𝑡𝑖𝑜𝑛𝑎𝑠𝑎𝑆𝑒𝑟𝑣𝑖𝑐𝑒(𝐹𝑎𝑎𝑆)������������������(����)

**Correct**

1/1 Points

5.In the context of cloud computing, what does "elasticity" refer to?

Ability to scale resources up and down based on demand

Ability to secure data in transit

Ability to maintain consistent performance

Ability to integrate with on-premises systems

**Incorrect**

0/1 Points

6.Which cloud model allows developers to focus on writing code without worrying about the underlying infrastructure?

Infrastructure as a Service (IaaS)

Platform as a Service (PaaS)

Software as a Service (SaaS)

Network as a Service (NaaS)

**Correct**

1/1 Points

7.What is a characteristic of the Hybrid Cloud model?

Single, unified environment

Use of both on-premises and cloud resources

Exclusive reliance on public cloud services

Limited scalability options

**Correct**

1/1 Points

8.Which cloud service model involves providing discrete functions as individual services?

Infrastructure as a Service (IaaS)

Platform as a Service (PaaS)

Software as a Service (SaaS)

Function as a Service (FaaS)

**Incorrect**

0/1 Points

9.What is a benefit of the Pay-as-You-Go pricing model in cloud computing?

Fixed monthly subscription fees

Predictable costs regardless of usage

Cost based on actual usage

Unlimited resources at a fixed cost

**Correct**

1/1 Points

10.Which cloud deployment model provides dedicated resources for a single organization?

Public Cloud

Private Cloud

Hybrid Cloud

Community Cloud

**Incorrect**

0/1 Points

11.What is a characteristic of the Community Cloud model?

Shared resources among different organizations

Exclusive use by a single organization

Combination of public and private resources

No access to external networks

**Incorrect**

0/1 Points

12.What is a primary concern when it comes to the security of cloud services?

Limited scalability

Data portability

Loss of control over data

Decreased collaboration capabilities

**Correct**

1/1 Points

13.What is the key feature of IBM Cloud that provides scalable and secure virtual servers in the cloud?

IBM Cloud Functions

IBM Cloud Kubernetes Service

IBM Cloud Virtual Servers

IBM Cloud Object Storage

**Correct**

1/1 Points

14.Which IBM Cloud feature allows users to deploy, manage, and scale containerized applications using Kubernetes?

IBM Cloud Functions

IBM Cloud Kubernetes Service

IBM Cloud Virtual Servers

IBM Cloud Object Storage

**Incorrect**

0/1 Points

15.What IBM Cloud service provides serverless computing to execute code in response to events without the need for server management?

IBM Cloud Functions

IBM Cloud Kubernetes Service

IBM Cloud Virtual Servers

IBM Cloud Object Storage

**Correct**

1/1 Points

16.Which IBM Cloud feature is designed for storing and accessing data through an API on the cloud?

IBM Cloud Functions

IBM Cloud Kubernetes Service

IBM Cloud Virtual Servers

IBM Cloud Object Storage

**Correct**

1/1 Points

17.What IBM Cloud feature provides a platform for building, running, and managing AI and machine learning applications?

IBM Cloud Functions

IBM Cloud Kubernetes Service

IBM Cloud Watson Studio

IBM Cloud Object Storage

**Incorrect**

0/1 Points

18.What is IBM Cloud Block Storage primarily designed for?

File storage

Object storage

Database storage

Container storage

**Incorrect**

0/1 Points

19.Which of the following best describes the performance characteristics of IBM Cloud Block Storage?

Low-latency, high-throughput storage

Long-term archival storage

Variable performance based on usage

Limited storage capacity

**Correct**

1/1 Points

20.In IBM Cloud Block Storage, what feature allows for dynamically adjusting the storage capacity based on demand?

Block Storage Replication

Block Storage Snapshot

Block Storage Scaling

Block Storage Encryption

**Correct**

1/1 Points

21.Which IBM Cloud Block Storage feature provides a point-in-time copy of a volume for data backup or analysis?

Block Storage Replication

Block Storage Snapshot

Block Storage Scaling

Block Storage Encryption

**Incorrect**

0/1 Points

22.How does IBM Cloud Block Storage enhance data security?

By encrypting data at rest

By compressing data during storage

By limiting access to specific IP addresses

By enabling multi-cloud replication

**Incorrect**

0/1 Points

23.What feature of IBM Cloud Block Storage allows you to create a duplicate copy of data in a different geographic location for disaster recovery purposes?

Block Storage Replication

Block Storage Snapshot

Block Storage Scaling

Block Storage Encryption

**Incorrect**

0/1 Points

24.Which of the following is a benefit of using IBM Cloud Block Storage for database applications?

High-latency storage

Low-throughput storage

Scalable performance

Limited storage capacity

**Incorrect**

0/1 Points

25.In IBM Cloud Block Storage, what does the term "IOPS" stand for?

Internet of Private Storage

Input/Output Per Second

Integrated Object Processing System

In-memory Object Persistence Service

**Incorrect**

0/1 Points

26.Which IBM Cloud Block Storage feature allows you to protect sensitive data by converting it into unreadable code that can only be deciphered by authorized users?

Block Storage Replication

Block Storage Snapshot

Block Storage Scaling

Block Storage Encryption

**Correct**

1/1 Points

27.How does IBM Cloud Block Storage contribute to business continuity and data availability?

By restricting access to specific users

By providing unlimited storage capacity

By replicating data across multiple servers

By compressing data for efficient storage

**Correct**

1/1 Points

28.What is the primary purpose of a Virtual Private Cloud (VPC)?

To store large volumes of unstructured data

To create isolated and customizable network environments in the cloud

To deploy serverless applications

To provide file-level storage services

**Incorrect**

0/1 Points

29.In the context of VPC, what is a subnet?

A public IP address assigned to a virtual machine

A range of IP addresses in your private network

A virtual machine instance in the cloud

A protocol for secure data transmission

**Correct**

1/1 Points

30.What is the significance of security groups in a VPC?

To control traffic at the subnet level

To manage access to instances within a subnet

To control traffic at the network level

To restrict access to VPC resources based on IP addresses

**Incorrect**

0/1 Points

31.How does a Virtual Private Cloud (VPC) differ from a traditional on-premises network?

VPCs have limited scalability compared to on-premises networks

VPCs rely solely on physical infrastructure

VPCs provide on-demand resources in a virtualized environment

VPCs do not support private networking

**Incorrect**

0/1 Points

32.What AWS service is commonly used for connecting on-premises data centers to Virtual Private Clouds (VPCs)?

AWS Lambda

Amazon S3

AWS Direct Connect

Amazon RDS

**Incorrect**

0/1 Points

33.What is the primary purpose of Docker in the context of software development and deployment?

To manage and orchestrate containerized applications

To create isolated and lightweight application environments

To provide version control for source code

To automate the deployment of virtual machines

**Correct**

1/1 Points

34.In Docker, what is the role of a Dockerfile?

To define the network configuration of a container

To specify the dependencies and steps to build a Docker image

To manage the runtime environment of a container

To orchestrate multiple Docker containers

**Correct**

1/1 Points

35.What is Kubernetes primarily used for in the context of container orchestration?

To build and package containerized applications

To create isolated and lightweight application environments

To automate the deployment, scaling, and management of containerized applications

To monitor the performance of virtual machines

**Correct**

1/1 Points

36.In Kubernetes, what is a Pod?

A group of containerized applications

A unit of storage in a Kubernetes cluster

The smallest deployable unit that can be created, scheduled, and managed

A configuration file for defining cluster settings

**Correct**

1/1 Points

37.What is the primary goal of DevOps in the software development lifecycle?

To focus exclusively on development tasks

To automate testing processes

To foster collaboration between development and operations teams

To ensure manual deployment of applications

**Correct**

1/1 Points

38.What is the purpose of Docker Compose in the Docker ecosystem?

To build Docker images

To manage and orchestrate multiple containers as a single service

To monitor container performance

To create isolated network environments

**Correct**

1/1 Points

39.In Kubernetes, what is the role of a Service?

To define the network configuration of a Pod

To scale applications horizontally by adding or removing instances

To manage the runtime environment of a container

To specify dependencies in a Dockerfile

**Correct**

1/1 Points

40.What does the term "Continuous Integration" (CI) refer to in the context of DevOps?

Automating the deployment of applications

Merging code changes frequently into a shared repository

Continuous monitoring of application performance

Ensuring security in production environments

**Incorrect**

0/1 Points

41.In a CI/CD pipeline, what does "Continuous Deployment" (CD) involve?

Automating the testing process

Deploying code changes to production automatically

Continuous monitoring of application logs

Regularly updating development environments

**Correct**

1/1 Points

42.What is the primary goal of Infrastructure as Code (IaC) in DevOps practices?

To manually configure infrastructure components

To automate the provisioning and management of infrastructure through code

To monitor and analyze application logs

To manage containerized applications

**Correct**

1/1 Points

43.What is the fundamental principle of the Shared Responsibility Model in cloud computing?

Cloud providers are solely responsible for security

Security is the sole responsibility of the customer

Security responsibilities are shared between the cloud provider and the customer

Security is outsourced to third-party vendors

**Correct**

1/1 Points

44.According to the Shared Responsibility Model, which of the following is typically the responsibility of the cloud provider?

Data encryption and access management

Physical security of data centers

Configuration of customer applications

Patching and updating customer applications

**Incorrect**

0/1 Points

45.In the Shared Responsibility Model, what is a responsibility typically assigned to the cloud customer?

Monitoring and managing physical infrastructure

Securing the underlying hypervisor

Managing network connectivity within the data center

Configuring security settings for cloud services

**Correct**

1/1 Points

46.Which of the following is an example of a customer's responsibility in the Shared Responsibility Model?

Securing the physical data center

Ensuring availability of cloud services

Implementing network-level security controls

Managing the hypervisor layer

**Correct**

1/1 Points

47.How does the Shared Responsibility Model contribute to a secure cloud environment?

By placing all security responsibilities on the cloud provider

By minimizing the involvement of the customer in security matters

By clearly defining and allocating security responsibilities between the provider and the customer

By outsourcing security decisions to external consultants

**Incorrect**

0/1 Points

48.What is a key principle in securing cloud resources that involves limiting access only to authorized users and systems?

Least Privilege

Single Sign-On (SSO)

Multi-Factor Authentication (MFA)

Role-Based Access Control (RBAC)

**Incorrect**

0/1 Points

49.In the context of cloud security, what is the purpose of encryption?

To increase data transfer speed

To hide data from cloud providers

To protect data confidentiality and integrity

To reduce storage costs

**Incorrect**

0/1 Points

50.What best practice involves regularly updating and patching software to address vulnerabilities and enhance security?

Least Privilege

Data Encryption

Regular Auditing

Patch Management

**Correct**

1/1 Points

51.What security measure helps detect and respond to potential security incidents by analyzing log data from various cloud services?

Least Privilege

Network Segmentation

Intrusion Detection and Prevention System (IDPS)

Disaster Recovery Planning

**Incorrect**

0/1 Points

52.What best practice involves creating and regularly testing backups to ensure data recovery in the event of data loss or system failure?

Regular Auditing

Disaster Recovery Planning

Multi-Factor Authentication (MFA)

Role-Based Access Control (RBAC)