

**2020-1-HR01-KA226-HE-094713**

**O3 - Two distance learning curricula in machine learning and cloud computing**

**Cloud Computing - Assessments**

October 2022

**2020-1-HR01-KA226-HE-094713**

**CODEIN**

Cloud cOmputing for Digital Education INnovation

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| Work Package: | Intellectual Outputs |
| Product/Deliverable: | O3 - Two distance learning curricula in machine learning and cloud computing - Assessments |

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| Version: | 1 | Date: | October, 2022 |
| Type: | e-book | | |
| Distribution: | Project Partners | | |
| Responsible Partner: | Polytechnic of Šibenik | | |
| Author: | All Partners | | |
| Contributors: | All Partners | | |
| Approved by: | Quality Assurance Team | Date: | 30/11/2022 |

**Identification Sheet**

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| **Project Code** | **2020-1-HR01-KA226-HE-094713** |
| **Project Acronym** | **CODEIN** |
| **Project Full Title** | **Cloud cOmputing for Digital Education INnovation** |

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| **Keywords** | distance learning, cloud computing |
| **Abstract** |  |

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| **Disclaimer** | This project has been funded with support from the European Commission. This publication reflects the author's views only, and the Commission cannot be held responsible for any use which may be made of the information contained therein. |

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## INTRODUCTION

Please find below a set of assessment questions designed to help you evaluate your knowledge. These questions, along with others like them, were previously posted on the Oracle Academy Member Hub platform as interactive assessment quizzes, midterms, and final exams.

## ASSESSMENT QUESTIONS: EVALUATE YOUR KNOWLEDGE

1. Which of the following statement is true?

* Each fault domain consists of three availability domains
* Each availability domains consists of three fault domains
* Availability domains are isolated from each other
* All OCI regions are a single AD region

2. A company has developed an web application in Oracle Cloud Infrastructure.What should they do to ensure that the application has the highest level of resilience?

* Deploy the application across multiple Virtual Cloud Networks.
* Deploy the application across multiple Availability Domains and Fault Domains.
* Deploy the application across multiple Regions and Availability Domains.
* Deploy the application across multiple Availability Domains and subnets.

3. Which of the following virtualization moves storage and network IO out of the hypervisor and enables lower overhead and bare metal instances?

* Storage Virtualization
* Network Virtualization
* Off-box Network Virtualization
* Application Virtualization

4. What are the maximum numbers of availability domains in an cloud region?

* 2
* 10
* 3
* 1

5. Which of the following represents the IP address range within the network 192.168.2.0/25?

* 192.168.2.0 – 192.168.2.31
* 192.168.2.0 – 192.168.2.65
* 192.168.2.0 – 192.168.2.127
* 192.168.2.0 – 192.168.2.7

6. Which of the following protocol does Fastconnect use for exchange of routing information?

* BGP
* ICMP
* OSPF
* RIP

7. Which gateway can be used to provide internet access to the workloads deployed in private subnet of a VCN?

* Service Gateway
* Dynamic Routing Gateway
* NAT Gateway
* Internet Gateway

8. State whether the statement is True or False: Local Peering Gateway is required to connect two VCN’s within a region?

* True
* False

9. State whether the statement is True or False: BGP is a Static routing protocol.

* True
* False

10. Which of the following represents the amount of free outbound data transfer in an OCI tenancy?

* 50TB
* 20TB
* 5TB
* 10TB

11. Which of the following can be used to connect a customer on-premise network to the cloud?

* Service Gateway
* VPN
* Internet Gateway
* DRG

12. State whether the statement is True or False: Bare Metal Servers are used for performance intensive workloads.

* True
* False

13. State whether the following statement is True or False: Object storage supports private access from Oracle Cloud Infrastructure resources in a VCN through an Internet Gateway.

* True
* False

14. Which of the following is the default username created on a compute instance created from Oracle Linux/CentOS?

* root
* opc
* usr
* opcusr

15. Which of the following OCI storage services is used to store unstructured data?

* File Storage
* Archive Storage
* Block Volume
* Object Storage

16. State whether the statement is True or False: By default, block volumes are read-only.

* True
* False

17. Which of the following OCI storage services is used for storing data that is seldom accessed, but requires long retention periods?

* Archive Storage
* Object Storage
* Block Volume
* File storage

18. State whether the statement is True or False: The File Storage service encrypts all file system and snapshot data at rest.

* True
* False

19. Which of the following is not a use case for File storage service?

* Big Data and Analytics
* General Purpose File Storage
* High Performance Workloads
* MicroServices and Docker

20. Which of the following doesn’t represent the default NFS export options while creating a File System?

* Source: 0.0.0.0/0 (All)
* Access: Read Write
* Require Privileged Source Port: True
* Identity Squash: None

21. Which of the following represent the features supported by object storage?

* Pre-authenticated requests for accessing the object without credential
* Multipart upload for a single object
* Lifecycle rules to automatically archive or delete objects after a specified number of days
* All of the above

22. Which one of the following statements is false about object storage?

* Ideal for storing an unlimited amount of unstructured data
* Minimum retention requirement for Archive Storage is 30 days
* Offers two distinct storage classes, “hot storage” and “cold storage”
* Employs 256-bit Advanced Encryption Standard (AES-256) to encrypt object data

23. State whether the following statement is True or False: Object storage supports private access from Oracle Cloud Infrastructure resources in a VCN through an Internet Gateway.

* True
* False

24. Which among the following are common load balancing policies in OCI?

* Round Robin
* Least Connections
* IP Connection
* All of the Above

25. Which among the following is not a supported load balancer shape in OCI?

* 1000 Mbps
* 400 Mbps
* 100 Mbps
* 8000 Mbps

26. Which among the following is not a protocol supported in the OCI load balancer?

* WebSocket
* TCP
* UDP
* HTTP/1.1

27. Which among the following protocols is used by application servers for connecting to the OCI object storage through storage gateway?

* NFSv1
* NFSv4
* NFSv2
* NFSv3

28. Which among the following is not a way to transfer data from customer on-premise to Oracle Cloud?

* Service Gateway
* Storage Gateway
* VPN over Internet
* FastConnect

29. State whether the following statement is True or False: Storage Gateway can be used as a general purpose Network Attached Storage server.

* True
* False

30. Which of the following is not one of the versions for Exadata database?

* Half Rack
* Full Rack
* Quarter Rack
* Sixteenth Rack

31. You want to leverage a managed RAC offering in OCI. Which managed DB service would you choose?

* Bare Metal
* 1-node Virtual machine
* Exadata
* 2-node Virtual machine

32. Which among the following represents the correct metrics used for the pricing of a VM based Database on OCI?

* OCPU per Minute
* OCPU per Hour
* OCPU per Month
* OCPU per Year

33. Which of the following is the default port used by autonomous database?

* 1524
* 1520
* 1522
* 1521

34. How many pre-defined service names are configured in tnsnames.ora for a single Autonomous Transaction Processing database instance, and what are they called?

* Two - They are ATP and ADW.
* Five - They are tpurgent, tp, high, medium and low.
* None - There are no pre-defined service names in tnsnames.ora.
* Three - They are high, medium and low.

35. Which of the below statements is false about autonomous database?

* Supports connectivity via SQL\*Net, JDBC, ODBC
* Oracle Autonomous Database can be deployed in 2 ways – dedicated and serveries
* Supports Oracle Cloud Services such as Analytics Cloud Service, GoldenGate Cloud Service, Integration Cloud Service, and others
* On-demand scaling is not supported for Autonomous Database

36. State whether the following statement is True or False: ATP storing data in column format is ideal for transaction processing.

* True
* False

37. Which among the following is not a characteristic of user activity auditing?

* Collect audit data from databases, and track sensitive operation
* Comprehensive assessment of security parameters
* Provision audit, compliance, and alert policies
* Collect audit data from databases, and track sensitive operation

38. Which among the following is not one of the use cases for DataSafe?

* Security and User Assessment
* Data Protection
* Disaster Recovery
* Sensitive Data Recovery

39. State whether the following statement is True or False: Data Masking is necessary to analyze what types of data are present in the database and what are the sensitive data.

* True
* False

40. State whether the following statement is True or False: Default NS and SOA records are automatically generated when a Zone is created.

* True
* False

41. Which among the following is not one of the supported DNS records for DNS service?

* CERT
* DNSKEY
* NAPTR
* TXT

42. Which among the following is the DNS server that takes website name or URL requests from users and checks the records attained obtained from authoritative DNS servers for the associated IP address?

* TLD Nameservers
* Recursive DNS
* Root DNS Server
* DNS Stub Resolver Server

43. Which among the following is not the common use case for DNS Traffic Management?

* Transaction based Steering
* Zero-Rating Service
* Cloud Migration
* Hybrid Environment

44. Which among the following is not one of the components of the health checks service?

* Child Zone
* Monitors
* Vantage Points
* On-Demand Probes

45. State whether the following statement is True or False: Conditional steering can be used for zero rating services so that preferred ASNs can be directed to free resources while all other traffic can be directed to paid resources.

* True
* False

46. Which among the following is not the common use case for OCI WAF?

* Protection against layer 7 distributed denial-of service (DDoS) attacks
* Bot management – dynamically blocking bad bots
* Protection against SYN flooding
* Protect against cross-site scripting (XSS) and SQL injection, activities

47. State whether the following statement is True or False: OCI WAF uses OWASP ModSecurity Core Rule Set (CRS) to protect against the most common web vulnerabilities.

* True
* False

48. State whether the following statement is True or False: OCI WAF cannot protect the workloads against a missing function-level access control vulnerability.

* True
* False

49. Which of the following are is a resource manager job type?

* Plan
* Destroy
* Stack
* Apply

50. Which Oracle Cloud Infrastructure (OCI) service can you use to create and manage your infrastructure?

* OCI Event Service
* OCI Resource Manager
* OCI API Gateway
* OCI Container Engine for Kubernetes

51. Which of the following represents the job lifecycle state?

* Accepted
* Terminated
* Canceling
* In Progress

52. Which of the following represents the maximum duration for which messages are retained in an OCI streaming service?

* 10 Days
* 30 Days
* 7 Days
* 15 Days

53. State whether the following statement is True or False: OCI streaming service is based on Apache ActiveMQ.

* True
* False

54. Which of the following represents the benefit of streams?

* Configurable message persistence
* Replay
* Order guarantees
* All of Above

55. The Monitoring service uses which service to monitor resources?

* State of the Resources
* Health Check
* Metrics
* Notifications

56. The Monitoring service uses which of the following to notify you when metrics qualifies a specified rule threshold?

* Health Check
* Metrics
* Alarms
* Notifications

57. The Alarms feature of the Monitoring service works with which OCI services to inform you when metrics meet alarm-specified trigger?

* Notifications
* Health Check
* Email Delivery
* Functions

58. Events can only be delivered to certain Oracle Cloud Infrastructure services with a rule. Name these rules.

*(Choose all correct answers)*

* Notifications
* Object Storage
* Functions
* Streaming

59. State whether the following statement is True or False: Oracle Cloud Infrastructure Events enables you to create automation based on the state changes of resources throughout your tenancy.

* True
* False

60. The Events service has a limitation of how many rules per tenancy?

* 300
* 100
* 50
* 200

61. When starting a container to run Oracle functions, the container runs processes as which user?

* Oracle functions do not use any default user, it’s the responsibility of the admin to specify one.
* Oracle functions use fn user to run the process inside the container with no added privileges.
* Oracle functions use the same OCI user to run any process inside the container with no added privileges.
* Oracle functions use root to run any process inside the container.

62. What is the maximum memory threshold for Oracle functions?

* 512 MB
* 2048 MB
* 4096 MB
* 1024 MB

63. What is the maximum execution timeout for Oracle functions?

* 120 Seconds
* 60 Seconds
* 3600 Seconds
* 60 Minutes

64. Which of the following docker commands is not required for saving an image to OCIR?

* docker push
* docker login
* docker tag
* docker save

65. Which of the following is required to login to the OCIR Container Registry?

* API keys
* Auth Tokens
* Secret Keys
* OAuth 2.0 Client Credentials

66. A DevOps engineer wants to push an image to OCIR and that image needs to be tagged appropriately so as to identify the docker registry where image needs to be pushed. Which of the following will be added to image tag?

* Object Storage Namespace
* Tenancy OCID
* Tenancy Name
* Auth Tokens

67. Which of the following statements is incorrect about the Oracle Container Engine for kubernetes (OKE)?

* Worker nodes in node pool can be of different shapes
* It is possible to scale up the number of nodes in a node pool
* Quick create option for kubernetes cluster creates VCN, NAT Gateway and Internet Gateway along with kubernetes cluster and worker nodes
* You have to only pay for the worker nodes; you do not need to pay for the master node

68. Which of the following is not a method to create a kubernetes cluster?

* OCI SDK
* Quick Create-Console
* Terraform Script
* Custom Create-Console

69. State whether the following statement is True or False: Kubernetes cluster worker nodes should be placed in private subnet of the VCN.

* True
* False

70. You have the following compartment structure in your tenancy: Root Compartment->Training->Training-sub1->Training-sub2 You create a policy in the Root compartment to allow the default admin of the account (Administrator) to manage block volumes in compartment Training-sub2. What policy would you write to meet this requirement?

* Allow group Administrator to manage volume-family in compartment Training-sub2
* Allow group Administrator to manage volume-family in compartment Training-sub1: Training-sub2
* Allow group Administrator to manage volume-family in root compartment
* Allow group Administrator to manage volume-family in compartment Training: Training-sub1: Training-sub2

71. You have created a new compartment called production to host some Production apps. You have also created users in Your Tenancy and added them to a group called “Production\_Group”. Your Users are still unable to access Production Compartment. How can you resolve this situation?

* Write IAM policy for each specific user granting them access to production compartment
* Write an IAM Policy for Production Group granting it access to production compartment
* Every compartment you create by default gets a certain set of policies. No further action is needed
* Your users get automatic access to all compartments. No further action needed

72. You have an instance running in a development compartment that needs to make API calls against other OCI services, but you do not want to configure user credentials or a store a configuration file on the instance. How can you meet this requirement?

* Create a dynamic group with matching rules to include your instance
* Instances are secure principals hence they cannot make calls to other services
* Instances can automatically make calls to other OCI services
* Create a dynamic group with matching rules to include your instance and write a policy for this dynamic group

73. You can use the OCI Vault service to create and manage which of the following resources?

*(Choose all correct answers)*

* Vaults
* Block Storage Volumes and Object Storage Buckets
* Keys
* Secrets

74. State whether the following statement is True or False: After a key vault is deleted, it cannot be recovered.

* True
* False

75. Which of the following are Key Management (OCI Vault) capabilities? Choose all that apply.

*(Choose all correct answers)*

* Rotating a key automatically re-encrypts data that was previously encrypted with the old key version
* Create keys/quickly disable keys (so they can’t be used by anyone)/re-enable disabled keys
* Rotate your keys to meet your security governance and regulatory compliance needs
* Create highly available key vaults to durably store your encryption keys

76. OCI Budgets are used to achieve which of the following? Choose the 2 best options.

*(Choose all correct answers)*

* Suspend the account upon exceeding budget threshold
* Do not allow creation of additional resources
* Set alerts on your budgets at predefined thresholds to get notified
* Track actual and forecasted spending for the entire tenancy or per compartment

77. Using compartment quotas administrators can limit usage of resources per which of the following?

*(Choose all correct answers)*

* Fault Domain
* Availability Domain
* Compartment
* Region
* Tenancy

78. You can Filter Costs by which of the following? Choose all that apply.

*(Choose all correct answers)*

* Region
* Availability Domain
* Tags
* Compartment

79. Oracle Cloud Infrastructure SLA covers which of the following?

*(Choose all correct answers)*

* Availability
* Sustainability
* Manageability
* Performance

80. State whether the following statement is True or False: You must have a Valid CSI and Support Account in order to submit a Service Request.

* True
* False

81. Where will you find your Customer Support Identifier?

*(Choose all correct answers)*

* Welcome Letter
* In your contract document
* Tenancy Details Page in OCI Console
* None of the above

82. Which of the following design principles you will apply to deploy, operate, and use your applications securely in Oracle Cloud Infrastructure?

*(Choose all correct answers)*

* Implement the principles of least privilege and separation of duties
* Protect data at rest and in transit
* Understand the shared security responsibility model
* Implement multi-layer security mechanisms
* All of the above

83. When Customers deploy their workload on Oracle Cloud Infrastructure, they are responsible for which of the following? Choose all that apply.

*(Choose all correct answers)*

* Setting up strong IAM policies
* User credentials including strong password, password renewal, secure user access to OCI
* Key management
* Isolation of compute, Virtual cloud network and storage and physical security

84. Which of the following OCI Components will you use to implement Network Security?

*(Choose all correct answers)*

* Gateways
* DNS
* Virtual Cloud Network
* Security Lists

## REFERENCES

[1] Cloud cOmputing for Digital Education INnovation, Accessed: 18.09.2022. [Online]. Available: <https://code-in.org>