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Exam Code: JN0-213

Exam Name: Cloud, Associate

Exam A

QUESTION 1
Which term identifies to which network a virtual machine interface is connected?

A. Virtual Extensible LAN (VXLAN)
B. machine access control (MAC)
C. virtual tunnel endpoint (VTEP)
D. virtual network ID (VNID)

Correct Answer: D
Section:
Explanation:
The term that identifies to which network a virtual machine interface is connected is the virtual network ID (VNID). The VNID is a unique identifier assigned to each virtual network. It is used to differentiate between different virtual networks and to ensure that each virtual machine interface is connected to the correct network.

QUESTION 2
Which virtualization technique is used by containers?

A. OS-level virtualization
B. full visualization
C. hardware-assisted virtualization
D. paravirtualization

Correct Answer: A
Section:
Explanation:
This technique allows multiple isolated user-space instances to be created by the host operating system.Unlike full virtualization, where the entire system's hardware is emulated, OS-level virtualization shares the host's operating system kernel but isolates the application processes12.

QUESTION 3
Which two statements are true regarding isolated namespaces in Juniper Cloud-Native Contrail Networking (CN2)? (Choose two.)

A. Pods in isolated namespaces can only communicate with pods in the same namespace.
B. Pods in isolated namespaces can reach services in non-isolated namespaces.
C. Pods in isolated namespaces can only reach services in the same namespace.
D. Pods in isolated namespaces can communicate with pods in non-isolated namespaces.

Correct Answer: A, C
Section:
Explanation:
In Juniper Cloud-Native Contrail Networking (CN2), isolated namespaces are used to isolate a pod from other pods without explicitly configuring a network policy3.Pods in an isolated namespace can only communicate with pods in the same namespace3.They cannot reach pods or services in other isolated or non-isolated namespaces3.

QUESTION 4
You must provide tunneling in the overlay that supports multipath capabilities.
Which two protocols provide this function? (Choose two.)

A. MPLSoUDP
B. VPN
C. VXLAN
D. MPLSoGRE

Correct Answer: A, C
Section:
Explanation:
MPLSoUDP (Multiprotocol Label Switching over User Datagram Protocol) and VXLAN (Virtual Extensible LAN) are two protocols that provide tunneling in the overlay and support multipath capabilities45.
MPLSoUDP is an encapsulation protocol that allows MPLS packets to be encapsulated in UDP packets.VXLAN is a network virtualization technology that attempts to address the scalability problems associated with large cloud computing deployments

QUESTION 5
You want to limit the memory, CPU, and network utilization of a set of processes running on a Linux host.
Which Linux feature would you configure in this scenario?

A. network namespaces
B. slicing
C. virtual routing and forwarding instances
D. control groups

Correct Answer: D
Section:
Explanation:
Control groups (cgroups) is a Linux kernel feature that limits, accounts for, and isolates the CPU, memory, disk I/O, and network usage of one or more processes678. It allows you to allocate resources among user-defined groups of processes running on a system.You can monitor the groups of processes, deny the groups of processes access to certain resources, or even freeze groups of processes

QUESTION 6
Which component of Kubernetes runs on all nodes and ensures that the containers are running in a pod?

A. kube-proxy
B. kubelel
C. container runtime
D. kube controller

Correct Answer: B
Section:
Explanation:
The kubelet is a component of Kubernetes that runs on all nodes in the cluster and ensures that containers are running in a pod910.It takes a set of PodSpecs that are provided through various mechanisms and ensures that the containers described in those PodSpecs are running and healthy

QUESTION 7

Which two statements are correct about containers? (Choose two.)

A. Containers include the entire operating system.
B. Containers reduce deployment efficiency.
C. Containers have faster boot times than VMs. www*
D. Containers require an underlying operating system.

Correct Answer: C, D
Section:
Explanation:
Containers are lightweight because they don't need the extra load of a hypervisor, but run directly within the host machine's kernel1. This means they start up almost instantly and use less RAM.Images are constructed from layered filesystems and share common files, making disk usage and image downloads much more efficient1. Containers are isolated from each other and the host system.They have their own filesystem and networking, and can be constrained to not allow root access outside the container1.They run on top of a host operating system1.

QUESTION 8
What are two Kubernetes objects? (Choose two.)

A. cluster
B. namespace
C. pod
D. service

Correct Answer: C, D
Section:
Explanation:
In Kubernetes, a Pod is the smallest and simplest unit in the Kubernetes object model that you create or deploy23.A Pod represents processes running on your cluster23.A Service in Kubernetes is an abstraction which defines a logical set of Pods and a policy by which to access them23.

QUESTION 9
Which two statements are correct about an overlay network? (Choose two.)

A. The overlay network can only be built using a Layer 3 underlay network.
B. The overlay network provides physical connectivity between devices.
C. The overlay network is built using encapsulation tunnels.
D. The overlay network is the virtual network used to connect multiple virtual machines (VMs).

Correct Answer: C, D
Section:
Explanation:
An overlay network is a virtual network that is built on top of another network.Nodes in the overlay network are connected by virtual or logical links, each of which corresponds to a path, perhaps through many physical links, in the underlying network45.For example, distributed systems such as peer-to-peer networks and client-server applications often overlay their own network connections over the physical network connections provided by the Internet

QUESTION 10
Your company has a Web app hosted in Kubernetes with a fluctuating number of pods.
In this scenario, which Kubernetes service type would provide equal access to all nodes using a single URL?

A. ExternalName
B. NodePort
C. LoadBalancer
D. ClusterIP

Correct Answer: C
Section:
Explanation:
The LoadBalancer service type in Kubernetes exposes the service externally using a cloud provider's load balancer67.NodePort and ClusterIP services, to which the external load balancer routes, are automatically created

QUESTION 11
Which two Linux commands would you use to show the amount of RAM in your system? (Choose two.)

A. cat /proc/cpuinfo
B. free -h
C. cat /proc/meminto
D. df -h

Correct Answer: B, C
Section:
Explanation:
hefree -hcommand in Linux displays the total amount of free and used physical and swap memory in the system, as well as the buffers used by the kernel89.Thecat /proc/meminfocommand displays real-time information about the system's memory usage as well as the buffers and shared memory used by the kernel1

QUESTION 12
Which statement is correct about overlay or underlay networks or fabrics?

A. Underlay fabrics decouple network services from the overlay infrastructure.
B. Overlay networks are Layer 3 networks that must use OSPF for routing purposes.
C. Underlay fabrics enable multitenancy through virtualization.
D. Overlay networks are virtual networks.

Correct Answer: D
Section:
Explanation:
Overlay networks are indeed virtual networks.They are logical constructs that stitch together disparate, dispersed network infrastructure, often referred to as underlay1.Underlay networks refer to the physical network infrastructure, while overlay networks implement network virtualization concepts2. Reference from Juniper site:Baeldung on Computer Science,PacketFabric,Cisco,HPE Aruba Networking

QUESTION 13
Which two statements are correct about Kubernetes resources? (Choose two.)

A. A deploymentConfig is a Kubernetes resource.
B. A daemonSet ensures that a replica of a pod is running on all nodes.

C. A ClusterIP type service can only be accessed within a Kubernetes cluster.
D. NodePort service exposes the service externally by using a cloud provider load balancer.

Correct Answer: B, C
Section:
Explanation:
A daemonSet in Kubernetes ensures that a replica of a pod is running on all nodes3.A ClusterIP type service can only be accessed within a Kubernetes cluster3. Reference from Juniper site:Kubernetes Documentation

QUESTION 14
Which Docker component builds, runs, and distributes Docker containers?

A. docker cli
B. containerd
C. dockerd
D. docker registry

Correct Answer: C
Section:
Explanation:
The Docker component that builds, runs, and distributes Docker containers is dockerd. Dockerd is the persistent process that manages containers. Docker uses different binaries for different tasks. For example, it uses the docker binary for CLI commands and dockerd for the daemon process.

QUESTION 15
In OpenShift, which node type is used to host your application containers?

A. miner node
B. worker node
C. full node
D. control plane node

Correct Answer: B
Section:
Explanation:
In OpenShift, theworker nodeis used to host your application containers1.Worker nodes are where all your coding adventures happen, and they can be virtual or physical1. Reference from Juniper site:IBM Developer

QUESTION 16
Which SDN model provisions tunnels between the virtual endpoints within and across data centers?

A. SDN by APIs
B. open SDN
C. switch-based SDN
D. SDN overlay

Correct Answer: D

Section:
Explanation:
TheSDN overlaymodel provisions tunnels between the virtual endpoints within and across data centers2.This model uses network overlays to support private communication between instances3. Reference from Juniper site:Microsoft Learn,Red Hat Customer Portal

QUESTION 17
Which two statements are correct about OpenShift monitoring? (Choose two.)

A. OpenShifis not able to configure customized alerts.
B. OpenShifhas its own monitoring framework.
C. OpenShifmonitoring is not compatible with Grafana.
D. OpenShifis able to configure customized alerts.

Correct Answer: B, D
Section:
Explanation:
OpenShift includes a preconfigured, preinstalled, and self-updating monitoring stack that provides monitoring for core platform components4.You also have the option to enable monitoring for user-defined projects4. This means OpenShift has its own monitoring framework (B) and is able to configure customized alerts (D). Reference from Juniper site:OpenShift Container Platform

QUESTION 18
Your business has optimized its applications to leverage a cloud-native microservices-based architecture.
In this architecture, how do the various modules of an application communicate?

A. Application modules communicate through application programming interface (API) calls.
B. Application modules communicate through interprocess communication
C. Application modules communicate through remote direct memory access
D. Application modules communicate through shared data structures (DB/files).

Correct Answer: A
Section:
Explanation:
In a cloud-native microservices-based architecture, the various modules of an application communicate throughapplication programming interface (API) calls5.Each service is autonomous and self-contained and runs a unique process6. Reference from Juniper site:Microsoft Learn,Palo Alto Networks

QUESTION 19
Which two statements are correct about OpenStack networks? (Choose two.)

A. It is not possible to add host routes in the DHCP settings in an OpenStack network.
B. It is possible to share networks with other projects in an OpenStack network.
C. It is possible to enable DHCP for a subnet in an OpenStack network.
D. It is not possible to specify a subnet address in an OpenStack network.

Correct Answer: B, C
Section:
Explanation:
In OpenStack networks, it is possible to share networks with other projects7.Also, it is possible to enable DHCP for a subnet in an OpenStack network7. Reference from Juniper site:OpenStack Documentation

QUESTION 20
What is the networking service of OpenStack?

A. Barbican
B. ironic
C. Neutron
D. Heat

Correct Answer: C
Section:
Explanation:
OpenStack's networking service is known as Neutron. Neutron provides a scalable, API-driven, web services-based model for network connectivity as a service. It is designed to manage and configure networking services for both simple and complex network topologies. Neutron allows users to create their own networks, control traffic and connect servers and devices to one or multiple networks.

QUESTION 21
You are deploying CN2 using Kubernetes as your orchestrator.
In this scenario, which component contains the vRouter agent?

A. kube-manager
B. worker node
C. Contrail controller
D. Ikube-scheduler

Correct Answer: B
Section:
Explanation:
In a CN2 deployment using Kubernetes as the orchestrator, the vRouter agent is contained in the worker node. The vRouter agent is responsible for managing the forwarding plane on each node in a Contrail cluster. It interacts with the kernel to manage the services and interfaces within the virtual networks.

QUESTION 22
What is the function that enables CN2 to manage its resources and interact with the kube-api?

A. the configuration plane
B. the data plane
C. the control plane
D. the management plane

Correct Answer: A
Section:
Explanation:
The configuration plane is the function that enables CN2 to manage its resources and interact with the kube-api. The configuration plane is responsible for storing and managing all configuration data in a Contrail cluster. It provides APIs for other components to retrieve this data. This allows CN2 to manage its resources and interact with the kube-api.

QUESTION 23
You are provisioning workloads on worker nodes in a Kubernetes cluster.
Which CN2 component is responsible for generating associated routes?

A. Contrail kube-manager
B. vRouter agent microservice
C. vRouter forwarding plane
D. Configuration Resource (CR) controllers

Correct Answer: B
Section:
Explanation:
The vRouter agent microservice is the CN2 component responsible for generating associated routes. When a pod is scheduled on a node, the vRouter agent on that node programs the necessary routes in the kernel routing table to ensure that traffic destined for that pod is properly routed.

QUESTION 24
Which virtualization method requires less duplication of hardware resources?

A. paravirtualization
B. hardware-assisted virtualization
C. full virtualization
D. OS-level virtualization

Correct Answer: D
Section:
Explanation:
OS-level virtualization requires less duplication of hardware resources. This method allows multiple instances of an operating system or multiple different operating systems to run on a single physical server, sharing the same hardware resources. This results in more efficient use of hardware resources compared to other virtualization methods such as full virtualization or paravirtualization

QUESTION 25
What is the most privileged protection ring?

A. 3
B. 2
C. 0
D. 1

Correct Answer: C
Section:
Explanation:
In computer science, hierarchical protection domains, often called protection rings, are mechanisms to protect data and functionality from faults and malicious behavior. Rings are arranged in a hierarchy from most privileged (most trusted, usually numbered zero) to least privileged (least trusted, usually with the highest ring number).On most operating systems, Ring 0 is the level with the most privileges and interacts most directly with the physical hardware12. Reference from Juniper site:Wikipedia,GeeksforGeeks,Notes

QUESTION 26
Which two statements are correct about Network Functions Virtualization (NFV)? (Choose two.)

A. The NFV framework is defined by the W3C.
B. The NFV framework explains how VNFs fits into the whole solution.

C. The NFV infrastructure (NFVI) is a component of NFV.
D. The NFV infrastructure (NFVI) is not a component of NFV.

Correct Answer: B, C
Section:
Explanation:
Network Functions Virtualization (NFV) is a network architecture concept that uses IT virtualization technologies to virtualize entire classes of network node functions into building blocks that may connect or chain together to create communication services3.The NFV framework explains how Virtual Network Functions (VNFs) fit into the whole solution4.The NFV Infrastructure (NFVI) is a component of NFV that consists of the infrastructure components ---compute, storage, networking---on a platform to support software4. Reference from Juniper site:Red Hat,VMware,Wikipedia

QUESTION 27
What are two available installation methods for an OpenShift cluster? (Choose two.)

A. installer-provisioned infrastructure
B. kubesprav
C. user-provisioned infrastructure
D. kubeadm

Correct Answer: A, C
Section:
Explanation:
There are two available installation methods for an OpenShift cluster.One is the installer-provisioned infrastructure method56, and the other is the user-provisioned infrastructure method56. Reference from Juniper site:VMware NSX Container Plugin,OpenShift Container Platform 4.10 Documentation

QUESTION 28
Which two statements about Kubernetes are correct? (Choose two.)

A. A ClusterIP service exposes pods to internal and external traffic.
B. All containers within a pod share the same IP address.
C. Each container within a pod has a unique IP address.
D. A ClusterIP service exposes pods to internal traffic only

Correct Answer: B, D
Section:
Explanation:
In Kubernetes, all containers within a pod share the same IP address7.A ClusterIP service exposes pods to internal traffic only87. Reference from Juniper site:IBM,Kubernetes Documentation

QUESTION 29
Which cloud service model provides access to networking, storage, servers, and virtualization in a cloud environment?

A. Infrastructure as a Service (IaaS)
B. Platform as a Service (Paa)
C. Software as a Service (Saa)
D. Database as a Service (Daa)

Correct Answer: A

Section:
Explanation:
Infrastructure as a Service (IaaS) is a cloud service model that provides access to networking, storage, servers, and virtualization in a cloud environment91011. Reference from Juniper site:IBM,Google Cloud,Stackscale

QUESTION 30
What are two reasons to create a Kubernetes deployment rather than work with pods directly? (Choose two.)

A. A deployment is ephemeral and therefore requires less configuration.
B. A deployment contains imperative instructions on how to re-create a pod if a pod dies unexpectedly.
C. A deployment ensures that the desired number of pods is running at all times.
D. A deployment simplifies pod updates and roll-outs.

Correct Answer: C, D
Section:
Explanation:
A Kubernetes deployment is a resource object in Kubernetes that provides declarative updates to applications.It allows you to describe an application's life cycle, such as which images to use for the app, the number of pods there should be, and the way in which they should be updated1. Two reasons to create a Kubernetes deployment rather than work with pods directly are:
A deployment ensures that the desired number of pods is running at all times1. If a pod crashes, the Deployment will automatically re-create it.
A deployment simplifies pod updates and roll-outs1.It allows you to describe a desired state in its specification and the Deployment controller changes the actual state to the desired state at a controlled rate1. Reference from Juniper site:Kubernetes Documentation

QUESTION 31
You want to view pods with their IP addresses in OpenShift.
Which command would you use to accomplish this task?

A. oc get pods -o yaml
B. oc get pods
C. oc get all
D. oc get pods -o wide

Correct Answer: D
Section:
Explanation:
To view pods with their IP addresses in OpenShift, you would use the commandoc get pods -o wide23.This command provides additional information such as the IP address and the node where the pod is located23. Reference from Juniper site:OpenShift Documentation,Stack Overflow

QUESTION 32
Which two statements about overlay virtual networks are true? (Choose two.)

A. Overlay virtual networks work well on an IP spine-and-leaf topology.
B. Overlay virtual networks only allow Layer 3 communication.
C. Overlay virtual networks allow both Layer 2 and Layer 3 communication.
D. Overlay virtual networks use Juniper proprietary protocols.

Correct Answer: A, C

Section:
Explanation:
Overlay virtual networks are virtual logical networks constructed on top of an existing network using network virtualization technologies45.They decouple network services from the physical networking and interconnection technologies on the underlay network45. Two true statements about overlay virtual networks are:
Overlay virtual networks work well on an IP spine-and-leaf topology6.They can be created over underlay networks using network virtualization technologies4.
Overlay virtual networks allow both Layer 2 and Layer 3 communication65.They can serve not only different services (such as multiple departments) of the same tenant but also different tenants4. Reference from Juniper site:Microsoft Learn,Huawei IP Encyclopedia,Network Insight

QUESTION 33
Which two functions does CN2 provide? (Choose two.)

A. It performs SDN functions in an NFV solution.
B. It provides enhanced networking capabilities to private clouds.
C. It provides an orchestration solution for VMs and containers.
D. It provides underlay network management capabilities.

Correct Answer: B, C
Section:
Explanation:
CN2 (Cranial Nerve II), also known as the optic nerve, controls the special sense of vision.It transmits visual information from the retina to the vision centers of the brain78. Two functions that CN2 provides are:
It provides enhanced networking capabilities to private clouds78.It transmits special afferent impulses of light to the brain and is involved in several reflex arcs related to the ocular system7.
It provides an orchestration solution for VMs and containers78.It is a unique structure that functions as the bridge between the retinal layer of the eyes and the visual cortex of the brain7. Reference from Juniper site:Kenhub,Geeky Medics

QUESTION 34
You have started a container in Docker, made configuration changes to it, and stopped the container. You notice the next time that you execute the docker run command, the changes have not persisted.
What is the problem?

A. The docker load command must be used to persist the change.
B. Docker images need to be recompiled to make any changes.
C. The docker run command starts a new copy of the container, not the existing version.
D. The docker exec command needs to be run first to save and exit the running container.

Correct Answer: C
Section:
Explanation:
Docker containers are designed to be ephemeral, meaning they run based on their current configuration. When a Docker container is stopped, it does not automatically save changes made during its runtime. When you executedocker run, it starts a new instance of the container, not an existing version with its changes[14-16]. If you want to persist changes between runs, you need to commit changes to a new Docker image or use Docker volumes for data persistence[14-16]. Reference from Juniper site: Stack Overflow, Docker Docs

QUESTION 35
Which component of an SDN architecture is responsible for configuring and maintaining devices and their state?

A. the operational plane
B. the forwarding plane
C. the management plane

D. the data plane

Correct Answer: C
Section:
Explanation:
The management plane in an SDN architecture is responsible for configuring and maintaining devices and their state1. It provides the functions that manage the network, such as configuration, monitoring, and management of network devices.It is the layer of the network that carries administrative traffic, which is used for the network management1.

QUESTION 36
You are asked to run a container in a Kubernetes environment.
What should you do to accomplish this task?

A. Define a YAML manifest for the container and its resources.
B. Create a JINJA2 template for the container and its resources.
C. Create a WYSYG definition for the container and its resources.
D. Define an XML configuration for the container and its resources.

Correct Answer: A
Section:
Explanation:
To run a container in a Kubernetes environment, you should define a YAML manifest for the container and its resources2. YAML manifests are used to define Kubernetes objects, such as pods or services.These manifests describe the desired state of the system2.

QUESTION 37
Which container runtime engine is used by default in OpenShift?

A. cri-o
B. containerd
C. Docker
D. runC

Correct Answer: A
Section:
Explanation:
The default container runtime engine used by OpenShift is cri-o. CRI-O is an open source, community-driven container engine.Its primary goal is to replace the Docker service as the container engine for Kubernetes implementations, such as OpenShift Container Platform3.

QUESTION 38
Juniper Cloud-Native Contrail Networking (CN2) is able to be integrated with which orchestrator?

A. Kubernetes
B. CloudStack
C. Marathon
D. Mesosphere

Correct Answer: A

Section:
Explanation:
Juniper Cloud-Native Contrail Networking (CN2) can be integrated with Kubernetes.CN2 is optimized for Kubernetes-orchestrated environments and can be used to connect, isolate, and secure cloud workloads and services seamlessly across private, public, and hybrid clouds.

QUESTION 39
You just uploaded a qcow2 image of a vSRX virtual machine in OpenStack.
In this scenario, which service stores the virtual machine (VM) image?

A. Nova
B. Ironic
C. Neutron
D. Glance

Correct Answer: D
Section:
Explanation:
The service that stores the virtual machine (VM) image in OpenStack is Glance91011.Glance is the image service in OpenStack that allows you to discover, register, retrieve, and store virtual machine images