

Started on	Friday, 5 December 2025, 12:40 PM
State	Finished
Completed on	Friday, 5 December 2025, 12:43 PM
Time taken	3 mins 26 secs
Marks	15.00/25.00
Grade	60.00 out of 100.00

Question 1

Complete

Mark 0.00 out of 1.00

How to run multiple versions of an app simultaneously in Kubernetes?

- ☐ a. ConfigMap
- ☐ b. Deployment
- ☒ c. ReplicaSet
- ☐ d. StatefulSet

Question 2

Complete

Mark 1.00 out of 1.00

In Horizontal Pod Autoscaler (HPA), which metric is used by default?

- ☐ a. Network I/O
- ☒ b. CPU utilization
- ☐ c. Disk usage
- ☐ d. Memory usage

Question 3

Complete

Mark 1.00 out of 1.00

In Kubernetes, which component is responsible for assigning Pods to Nodes?

- ☐ a. kube-controller-manager
- ☐ b. kubelet
- ☒ c. kube-scheduler
- ☐ d. kube-apiserver

Question 4

Complete

Mark 1.00 out of 1.00

Kube-Proxy operates at which OSI layer in IPVS mode?

- ☐ a. Layer 7
- ☒ b. Layer 4
- ☐ c. Layer 3
- ☐ d. Layer 2

Question 5

Complete

Mark 0.00 out of 1.00

What does a DaemonSet ensure?

- ☐ a. Pods run only on master nodes
- ☒ b. One Pod across the entire cluster
- ☐ c. One Pod on each worker node
- ☐ d. Pods only run when manually scheduled

Question 6

Complete

Mark 1.00 out of 1.00

What does ETCD primarily store?

- ☐ a. Container images
- ☐ b. Node logs
- ☐ c. Pod metrics
- ☒ d. Cluster state

Question 7

Complete

Mark 1.00 out of 1.00

What does the kube-controller-manager do?

- ☐ a. Stores cluster state
- ☐ b. Routes API traffic
- ☒ c. Runs controllers like Deployment, Node, Replication
- ☐ d. Schedules Pods

Question 8

Complete

Mark 1.00 out of 1.00

What does the status CrashLoopBackOff indicate?

- ☐ a. ImagePullBackOff due to missing image
- ☒ b. Container repeatedly crashes and restarts
- ☐ c. Node is out of memory
- ☐ d. Liveness probe disabled

Question 9

Complete

Mark 1.00 out of 1.00

What happens when a Node remains NotReady for a long time?

- ☐ a. Node is automatically drained
- ☒ b. Pods on the node may be evicted and scheduled elsewhere
- ☐ c. Scheduler stops working
- ☐ d. All pods are deleted immediately

Question 10

Complete

Mark 0.00 out of 1.00

What happens when Pod affinity rules cannot be satisfied?

- ☐ a. Pod stays in Pending state
- ☒ b. Scheduler rejects the Pod permanently
- ☐ c. Pod runs with lower priority
- ☐ d. Pod schedules on any available node

Question 11

Complete

Mark 1.00 out of 1.00

What is the default behavior when a Deployment's Pod template is updated?

- ☒ a. A new ReplicaSet is created and old Pods are gradually replaced
- ☐ b. Pods restart automatically with no ReplicaSet change
- ☐ c. All old Pods are immediately deleted
- ☐ d. The existing ReplicaSet is patched in place

Question 12

Complete

Mark 1.00 out of 1.00

What is the default restart policy for Pods in a Deployment?

- ☐ a. Manual
- ☐ b. OnFailure
- ☒ c. Always
- ☐ d. Never

Question 13

Complete

Mark 1.00 out of 1.00

What is the role of the kubelet?

- ☐ a. Store cluster state
- ☐ b. Execute kubectl commands
- ☒ c. Ensure containers in PodSpecs are running
- ☐ d. Enforce Pod quotas

Question 14

Complete

Mark 0.00 out of 1.00

Which API group contains Deployments and ReplicaSets?

- ☐ a. core/v1
- ☐ b. rbac.authorization.k8s.io/v1
- ☐ c. apps/v1
- ☒ d. networking.k8s.io/v1

Question 15

Complete

Mark 0.00 out of 1.00

Which authentication method is NOT supported by Kubernetes API server?

- ☐ a. OIDC
- ☐ b. SSH keys
- ☐ c. X.509 Client Certificates
- ☒ d. Static token file

Question 16

Complete

Mark 0.00 out of 1.00

Which command generates a manifest without applying it?

- ☐ a. `kubectl dry-run=client -o yaml`
- ☒ b. `kubectl manifest --generate`
- ☐ c. `kubectl simulate=apply`
- ☐ d. `kubectl create --file-only`

Question 17

Complete

Mark 0.00 out of 1.00

Which command lists all API resource types in the cluster?

- ☒ a. `kubectl get all --all-namespaces`
- ☐ b. `kubectl api-resources`
- ☐ c. `kubectl get resources`
- ☐ d. `kubectl list kinds`

Question 18

Complete

Mark 0.00 out of 1.00

Which component ensures cross-node Pod-to-Pod networking?

- ☐ a. CNI plugin
- ☒ b. kube-proxy
- ☐ c. API server
- ☐ d. Kubelet

Question 19

Complete

Mark 1.00 out of 1.00

Which Kubernetes object provides persistent storage across Pod restarts?

- ☒ a. PersistentVolumeClaim
- ☐ b. HostPath
- ☐ c. ConfigMap
- ☐ d. EmptyDir

Question 20

Complete

Mark 0.00 out of 1.00

Which object controls communication rules between Pods at Layer-3/4?

- ☒ a. ServiceAccount
- ☐ b. ConfigMap
- ☐ c. RoleBinding
- ☐ d. NetworkPolicy

Question 21

Complete

Mark 1.00 out of 1.00

Which object provides stable identity and persistent storage for replicas?

- ☐ a. DaemonSet
- ☒ b. StatefulSet
- ☐ c. ReplicaSet
- ☐ d. Deployment

Question 22

Complete

Mark 1.00 out of 1.00

Which policy prevents voluntary disruptions of Pods?

- ☐ a. ResourceQuota
- ☒ b. PodDisruptionBudget
- ☐ c. NetworkPolicy
- ☐ d. RBAC Policy

Question 23

Complete

Mark 0.00 out of 1.00

Which Service type creates an externally accessible load-balanced IP?

- ☐ a. LoadBalancer
- ☐ b. Headless
- ☐ c. ClusterIP
- ☒ d. NodePort

Question 24

Complete

Mark 1.00 out of 1.00

Which Service type provides DNS but no cluster IP or load balancer?

- ☐ a. Ingress
- ☐ b. ExternalName
- ☒ c. Headless Service (ClusterIP: None)
- ☐ d. NodePort

Question 25

Complete

Mark 1.00 out of 1.00

Which volume type enables dynamic provisioning?

- ☒ a. StorageClass-backed PersistentVolume
- ☐ b. HostPath
- ☐ c. EmptyDir
- ☐ d. Manually created PersistentVolume