

Started on	Monday, 2 June 2025, 5:17 PM
State	Finished
Completed on	Monday, 2 June 2025, 5:20 PM
Time taken	3 mins
Marks	10.00/15.00
Grade	66.67 out of 100.00

Question 1

Complete

Mark 1.00 out of 1.00

Which of the following components operate on a watch-reconcile-update loop?

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

Question 2

Complete

Mark 1.00 out of 1.00

What is stored in etcd?

- ☐ a. Running processes
- ☐ b. Container images
- ☐ c. Only logs
- ☒ d. Desired and observed state of all objects in the cluster

Question 3

Complete

Mark 0.00 out of 1.00

Which of the following would lead the scheduler to not schedule a Pod on a node?

- ☐ a. Pod has nodeSelector not matching any node
- ☐ b. Pod is already running
- ☒ c. Pod is in CrashLoopBackOff
- ☐ d. Node is tainted with tolerations

Question 4

Complete

Mark 1.00 out of 1.00

How does kubelet discover which Pods to run?

- ☐ a. Listens to controller-manager
- ☒ b. Watches kube-apiserver
- ☐ c. Watches kube-proxy
- ☐ d. Polls etcd

Question 5

Complete

Mark 0.00 out of 1.00

When a Deployment is created, who creates the ReplicaSet and Pods?

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

Question 6

Complete

Mark 1.00 out of 1.00

What is the role of the kube-proxy?

- ☐ a. Launching containers
- ☒ b. Managing network rules and forwarding traffic
- ☐ c. Scheduling Pods
- ☐ d. Encrypting etcd

Question 7

Complete

Mark 1.00 out of 1.00

Which component writes and persists the desired state of a Pod?

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

Question 8

Complete

Mark 1.00 out of 1.00

What happens if the kube-apiserver becomes unavailable?

- ☐ a. Existing Pods are terminated
- ☒ b. New deployments via kubectl will fail
- ☐ c. kubelet stops functioning
- ☐ d. etcd loses data

Question 9

Complete

Mark 0.00 out of 1.00

In the Pod creation lifecycle, which component updates the Pod's spec.nodeName field?

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

Question 10

Complete

Mark 1.00 out of 1.00

If a user deletes a Pod that is part of a Deployment, what happens?

- ☐ a. API server removes ReplicaSet
- ☐ b. Scheduler stops scheduling
- ☐ c. Pod is gone permanently
- ☒ d. Controller-manager recreates the Pod

Question 11

Complete

Mark 1.00 out of 1.00

What does kubelet do when it detects a new Pod object scheduled to its node?

- ☒ a. Pulls container image and starts the Pod
- ☐ b. Updates etcd
- ☐ c. Runs admission control
- ☐ d. Modifies the pod spec

Question 12

Complete

Mark 0.00 out of 1.00

Which component is responsible for assigning Pods to nodes?

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

Question 13

Complete

Mark 1.00 out of 1.00

What type of requests does kubectl generate to the API server?

- ☐ a. DNS
- ☐ b. gRPC
- ☒ c. HTTPS REST API
- ☐ d. WebSockets

Question 14

Complete

Mark 0.00 out of 1.00

Which Kubernetes component is solely responsible for all REST API interactions within the cluster?

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

Question 15

Complete

Mark 1.00 out of 1.00

Which component verifies authentication and authorization of kubectl commands?

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