

Started on	Monday, 2 June 2025, 5:18 PM
State	Finished
Completed on	Monday, 2 June 2025, 5:26 PM
Time taken	7 mins 49 secs
Marks	9.00/15.00
Grade	60.00 out of 100.00

Question 1

Complete

Mark 1.00 out of 1.00

Which component is responsible for assigning Pods to nodes?

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

Question 2

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

Question 3

Complete

Mark 1.00 out of 1.00

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

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

Question 4

Complete

Mark 1.00 out of 1.00

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

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

Question 5

Complete

Mark 1.00 out of 1.00

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

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

Question 6

Complete

Mark 1.00 out of 1.00

Which component verifies authentication and authorization of kubectl commands?

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

Question 7

Complete

Mark 0.00 out of 1.00

What happens if the kube-apiserver becomes unavailable?

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

Question 8

Complete

Mark 0.00 out of 1.00

How does kubelet discover which Pods to run?

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

Question 9

Complete

Mark 1.00 out of 1.00

What is the role of the kube-proxy?

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

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

Question 11

Complete

Mark 0.00 out of 1.00

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

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

Question 12

Complete

Mark 1.00 out of 1.00

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

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

Question 13

Not answered

Marked out of 1.00

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

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

Question 14

Complete

Mark 1.00 out of 1.00

What is stored in etcd?

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

Question 15

Complete

Mark 0.00 out of 1.00

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

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