Started on	Tuesday, 4 November 2025, 1:06 PM
State	Finished
Completed on	Tuesday, 4 November 2025, 1:10 PM
Time taken	4 mins 6 secs
Marks	5.00/5.00
Grade	**100.00** out of 100.00

Question 1

Complete

Mark 1.00 out of 1.00

A ClusterIP Service routes requests among multiple pods. Which component actually implements the load balancing?

- a. kube-scheduler
- b. etcd
- c. kube-apiserver
- d. kube-proxy

Question 2

Complete

Mark 1.00 out of 1.00

If a NetworkPolicy is applied that allows only ingress from pods with label role=frontend, what happens to all other ingress traffic?

- a. It is rerouted through kube-proxy.
- b. It is denied because Kubernetes enforces a “default deny” once any policy exists.
- c. It depends on the CNI plugin.
- d. It is ignored by the policy and allowed.

Question 3

Complete

Mark 1.00 out of 1.00

When a container in a pod repeatedly crashes and Kubernetes continuously restarts it, which field determines the interval before each retry?

- a. restartPolicy
- b. backoffLimit in CrashLoopBackOff
- c. livenessProbe.initialDelaySeconds
- d. terminationGracePeriodSeconds

Question 4

Complete

Mark 1.00 out of 1.00

When updating a DaemonSet with the RollingUpdate strategy, what determines how pods are replaced?

a. The update order is random.
b. All nodes are updated simultaneously if they have capacity.
c. The new DaemonSet pods are deployed first, then old pods are deleted.
d. One node is updated at a time; the next only starts after the previous is ready.

Question 5

Complete

Mark 1.00 out of 1.00

Which statement best describes how etcd ensures Kubernetes' data consistency?

a. It uses transactional SQL ACID compliance through SQLite backend.
b. It uses a simple master-slave replication model.
c. It uses the Raft consensus algorithm for leader election and log replication.
d. It uses eventual consistency similar to NoSQL databases.