

# Dumpsgate

TOTAL QUESTIONS: 124

## QUESTION 1

What authorization modes does Kubernetes support?

- A. Attribute-based access control (ABAC)
- B. Risked-based policy roles (RBRC)
- C. Role-based access controls (RBAC)
- D. OpenID
- E. OAuth
- F. Webhooks

**Correct Answer: A**

### Explanation/Reference:

Kubernetes supports multiple authorization modules, such as ABAC mode, RBAC Mode, and Webhook mode.

<https://kubernetes.io/docs/concepts/security/controlling-access/#authorization>

## QUESTION 2

A \_\_\_\_\_ is a ready-to-run software package, containing everything needed to run an application:

- A. container runtime
- B. container image
- C. Docker
- D. container repository

**Correct Answer: B**

### Explanation/Reference:

A container image is a ready-to-run software package, containing everything needed to run an application: the code and any runtime it requires, application and system libraries, and default values for any essential settings.

<https://kubernetes.io/docs/concepts/containers/#container-images>

### QUESTION 3

Which deployment method rolls out front-end features to a small subset of users initially?

- A. red / black deployments
- B. dark deployments
- C. blue / green deployments
- D. recreate deployments
- E. canary deployments

**Correct Answer: B**

#### Explanation/Reference:

Read about the different kinds of deployment.

<https://www.weave.works/blog/kubernetes-deployment-strategies>

dark deployments

Also known as A/B Testing.

### QUESTION 4

What Kubernetes component will continue to retry execution of the Pods until a specified number of them successfully terminate?

- A. DaemonJobs
- B. CronJobs
- C. Jobs
- D. RetryJobs

**Correct Answer: C**

#### Explanation/Reference:

<https://kubernetes.io/docs/concepts/workloads/controllers/job/>

## QUESTION 5

What kubectl command is used to edit a resource on the server?

- A. kubectl update resource
- B. kubectl resource modify
- C. kubectl edit
- D. kubectl resource edit
- E. kubectl modify resource

Correct Answer: C

### Explanation/Reference:

kubectl edit

Edit a resource from the default editor.

The edit command allows you to directly edit any API resource you can retrieve via the command line tools. It will open the editor defined by your KUBE\_EDITOR, or EDITOR environment variables, or fall back to `vi`™ for Linux or `notepad`™ for Windows. You can edit multiple objects, although changes are applied one at a time. The command accepts filenames as well as command line arguments, although the files you point to must be previously saved versions of resources.

[https://jamesdefabia.github.io/docs/user-guide/kubectl/kubectl\\_edit/](https://jamesdefabia.github.io/docs/user-guide/kubectl/kubectl_edit/)

kubectl resource edit (Incorrect)

No such command.

kubectl resource modify (Incorrect)

No such command.

kubectl modify resource (Incorrect)

No such command.

kubectl update resource (Incorrect)

No such command.

## QUESTION 6

An organization has a 24/7 production service with a load that is variable in time, where it's very busy during the day in the US, and relatively low at night.

Ideally, the organization would want the number of nodes in the cluster and the number of pods in deployment to dynamically adjust to the load to meet end user demand.

What two features would be able to meet this requirement?

- A. Cluster Autoscaling
- B. Horizontal Pod Autoscaler
- C. Vertical Pod Autoscaler
- D. Cluster API

**Correct Answer: A,B**

### Explanation/Reference:

To understand better where autoscaling would provide the most value, let's start with an example. Imagine you have a 24/7 production service with a load that is variable in time, where it's very busy during the day in the US, and relatively low at night. Ideally, we would want the number of nodes in the cluster and the number of pods in deployment to dynamically adjust to the load to meet end user demand. The new Cluster Autoscaling feature together with Horizontal Pod Autoscaler can handle this for you automatically.

<https://kubernetes.io/blog/2016/07/autoscaling-in-kubernetes/#benefits-of-autoscaling>

On the actual exam, there was a couple of very word questions that were out of character. So this is the reason for the inclusion of this scenario based question.

Cluster Autoscaling

<https://cloud.google.com/kubernetes-engine/docs/concepts/cluster-autoscaler>

Horizontal Pod Autoscaler

<https://kubernetes.io/docs/tasks/run-application/horizontal-pod-autoscale/>

Vertical Pod Autoscaler (Incorrect)

<https://cloud.google.com/kubernetes-engine/docs/concepts/verticalpodautoscaler>

Cluster API (Incorrect)

<https://kubernetes.io/blog/2020/04/21/cluster-api-v1alpha3-delivers-new-features-and-an-improved-user-experience/#:~:text=The Cluster API is a,lifecycle of a Kubernetes cluster.>

### QUESTION 7

The cluster autoscaler only functions correctly with kubernetes node groups/instance groups, that have nodes with the same capacity.

Is the following statement True or False?

- A. False
- B. True

**Correct Answer: B**

### Explanation/Reference:

The cluster autoscaler only functions correctly with kubernetes node groups/instance groups that have nodes with the same capacity. One reason for this is the underlying cluster autoscaler assumption that each individual node in the node group has the same CPU and memory capacity. Based on these assumptions, it creates template nodes for each node group and makes autoscaling decisions based on that template node.

<https://www.replex.io/blog/kubernetes-in-production-best-practices-for-cluster-autoscaler-hpa-and-vpa>

### QUESTION 8

A \_\_\_\_\_ is an application running on Kubernetes.

- A. node
- B. container
- C. workload
- D. pod

**Correct Answer: C**

### Explanation/Reference:

A workload is an application running on Kubernetes. Whether your workload is a single component or several that work together, on Kubernetes you run it inside a set of pods. In Kubernetes, a Pod represents a set of running containers on your cluster.

<https://kubernetes.io/docs/concepts/workloads/>

### QUESTION 9

When using the kubectl command how do you output in plain-text format any additional information?

- A. -o=yaml
- B. -o=json
- C. -o=wide
- D. -o=plain

**Correct Answer: C**

### Explanation/Reference:

<https://kubernetes.io/docs/reference/kubectl/cheatsheet/#formatting-output>

-o=wide

Output in the plain-text format with any additional information, and for pods, the node name is included.

-o=yaml (Incorrect)

Output a YAML formatted API object.

-o=json (Incorrect)

Output a JSON formatted API object.

-o=plain (Incorrect)

There no is such format as plain.

### QUESTION 10

What feature is used for selecting the container runtime configuration?

- A. RuntimeClass
- B. RuntimeConfig
- C. RuntimeContainer
- D. Runtime

**Correct Answer: A**

RuntimeClass is a feature for selecting the container runtime configuration. The container runtime configuration is used to run a Pod's containers.

You can set a different RuntimeClass between different Pods to provide a balance of performance versus security.

<https://kubernetes.io/docs/concepts/containers/runtime-class/>

**QUESTION 11**

What plugin enables the kubelet to use a wide variety of container runtimes?

- A. Container Operator Interface
- B. Container Runtime Interface (CRI)
- C. Container Storage Interface (CSI)
- D. Container Networking Interface (CNI)

**Correct Answer: B**

**Explanation/Reference:**

Container Runtime Interface (CRI)

The CRI is a plugin interface which enables the kubelet to use a wide variety of container runtimes, without having a need to recompile the cluster components.

<https://kubernetes.io/docs/concepts/architecture/cri/>

Container Storage Interface (CSI) (Incorrect)

<https://kubernetes.io/blog/2019/01/15/container-storage-interface-ga/>

Container Networking Interface (CNI) (Incorrect)

<https://github.com/containernetworking/cni>

**QUESTION 12**

What command can you run to view the Kubeconfig?

- A. kubectl view config
- B. kubectl config view

- C. kubectl get kubeconfig
- D. kubectl get kubeletconfig

**Correct Answer: B**