**CKA Questions:**

PODS:

1. How many pods exist on the system?

In the current(default) namespace.

1. Create a new pod with the nginx image.
2. Which node is the nginx pod placed on?
3. What does the READY column in the output of the kubectl get pods command indicate?
4. Delete the nginx Pod.
5. Create a new pod with the name redis and with the image redis123.
6. Now change the image on this pod to redis.

Replicaset:

1. How many PODs exist on the system?

In the current(default) namespace.

Kubernetes Core Concepts tasks

Create a pod (httpd), list the pods in the default namespace.

Get the image name, pod name, and other details about the pod.

Delete the pod.

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Create a pod and name it "mywebapp" and use the Nginx1 image.

Fix the pod with the correct image name.

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 Create a replicaset(4 pods) and list pods and replicaset separately.

Delete one pod in replicaset.

Scale up the replicaset to 5.

Scale down the replicaset to 2.

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Create a deployment with 3 pods with an Nginx image.

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List all the namespaces

List all the pods running in kube-system

Create a new namespace and create pods in the newly created namespace

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List all the services.

Create a node port service.

Kubernetes Scheduling tasks

List the nodes available on the cluster, make sure there is a minimum of 2 worker nodes.

Create a pod in node1/node2 using a pod YAML file.

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Create an Nginx YAML for creating a pod with labels Ex app=myapp

List all the pods with the label filter.

Create a replicaset YAML with 5 pods and multiple labels Ex app=myapp, type=frontend.

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Create a taint on one of the worker nodes with a noschedule type.

Create a pod without toleration, create a pod with toleration.

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Label the node, create a pod with node selector feature to assign a pod to the node.

Lable the node and create a pod with node affinity rules to deploy the pod using IN and NOTIN types.

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Create a pod using resources and limits.

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Create 3 nodes and deploy Nginx pod on all three nodes using daemon sets.

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Connect to worker node and create a pod without using master node/master components(static pod)

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Enable the metric server on the cluster, use basic commands to get the details of nodes and pods.

Kubernetes Application lifecycle management.

Create a deployment with 3 replicas of nginx:1.7.1, update the image to Nginx:1.9.1 using rolling updates.

Undo the rolling updates using rollback.

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Create a pod with env variables with the help of a config map.

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Create a secret YAML and encrypt the values and pass the same to the pod YAML file and create a pod.