Homework 5: Kubernetes

Q1: At the highest level, Kubernetes is two things:

(This is a multi-answer question. You can select one or more options as the answer.)

A. A cluster for running applications.
B. A container for running applications.
C. An orchestrator of cloud-native microservices apps.
D. An orchestrator of hardware distribution for microservices apps.

Q2: What must all communications between components in Control Plane go through?

A. Etcd.
B. Controller manager.
C. API server.
D. Scheduler.

Q3: Which of the following will be shared by all the containers in a pod?

(This is a multi-answer question. You can select one or more options as the answer.)

A. A hostname.
B. An IP address.
C. A memory address space.
D. A volume.

Q4: Two containers in the same Pod cannot use the same port.

A. True.
B. False.

Q5: Which command will POST pod.yml to the API server?

A. `kubectl apply -f pod.yml`
B. `kubectl post -f pod.yml`
C. `kubectl app -f pod.yml`
D. `kubectl manifest -f pod.yml`

Q6: Which command will delete the Pod deployed from pod.yml?

A. `kubectl remove -f pod.yml`
B. `kubectl delete -f pod.yml`
C. `kubectl not -f pod.yml`
D. `kubectl erase -f pod.yml`

Q7: Deployments use _____ to provide self-healing and scaling.

A. ReplicaSet
B. Pod
C. Service
D. Controller

Q8: What is the Kubernetes default Service type?

A. NodeIP.
B. ClusterIP.
C. PodIP.
D. PortIP.

Q9: What is the purpose of the NodePort Service?

A. It enables access from outside of the cluster.
B. It enables access from inside of the cluster.
C. It enables access from ClusterIP.
D. It enables access from PortIP.

Q10: The command to **imperatively** create a Kubernetes Service is:

A. `kubectl apply`
B. `kubectl expose`
C. `kubectl set`
D. `kubectl deploy`