Area	Topic	Documentation	Practice Tasks	Time			
5% - Scheduling		https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/	Add label to a node	2 minutes			
		https://kubernetes.io/docs/concepts/configuration/assign-pod-node/	Remove label from a node	1 minutes			
		https://kubernetes.io/docs/concepts/configuration/assign-pod-node/	Add label to a pod				
			Remove label to a pod				
			Add label to a deployment				
			Remove label from a deployment				
			Use nodeSelector to schedule a pod on a particular node				
			Use nodeName to shcedule a pod on a particular node				
			Use taints to prevent pods from being scheduled on a particular node				
			Use tolerations to ignore taints				
			Use nodeAffinity to schedule a pod on a particular node				
			Use podAntiAffinity to make sure that pods in the same deployments are not scheduled on the same node				
	Use label selectors to schedule Pods.		Use podAffinity to make sure that pods from separate deployments are scheduled on the same node				
		https://kubernetes.io/docs/concepts/workloads/controllers/daemonset/	Create a DaemonSet				
			Edit a DaemonSet				
	Understand the role of DaemonSets.		Delete a DaemonSet				
		https://kubernetes.io/docs/concepts/configuration/manage-compute-resources-container/	Use requests and limits to make put resource restrictions on a Pod				
	Understand how resource limits can affect Pod scheduling.	https://kubernetes.io/docs/tasks/administer-cluster/manage-resources/memory-default-namespace/	Use LimitRange to set default requests and limits in a Namespace				
		https://kubernetes.io/docs/tasks/administer-cluster/manage-resources/cpu-default-namespace/	Use ResourceQuotas to limit total amount of CPU, Memory and Storage consumed by resources in a Namespace				
	Understand how to run multiple schedulers and how to configure Pods to use them.	https://kubernetes.io/docs/tasks/administer-cluster/configure-multiple-schedulers/	Deploy additional scheduler				
	Manually schedule a pod without a scheduler.	https://kubernetes.io/docs/tasks/administer-cluster/static-pod/	Create a static Pod				
	Know how to configure the Kubernetes scheduler.	https://kubernetes.io/docs/tasks/administer-cluster/configure-multiple-schedulers/	Deploy additional scheduler				
8% - Application Lifecycle Management	Understand Deployments and how to perform rolling updates and rollbacks.	https://kubernetes.io/docs/concepts/workloads/controllers/deployment/	Perform rolling update for a Deployment				
		https://kubernetes.io/docs/concepts/workloads/controllers/deployment/#updating-a-deployment	Perform rollback for a Deployment				
		https://kubernetes.io/docs/concepts/cluster-administration/manage-deployment/	Create a secret				
		https://kubernetes.io/docs/tasks/configure-pod-container/configure-pod-configmap/	Access a secret from a Pod				
		https://kubernetes.io/docs/concepts/configuration/secret/	Create a configmap				
	Know various ways to configure applications.	https://kubernetes.io/docs/concepts/services-networking/service/	Access a configmap from a Pod				
	Know how to scale applications.	https://kubernetes.io/docs/concepts/workloads/controllers/deployment/#scaling-a-deployment	Scale a deployment				
	Understand the primitives necessary to create a self-healing application.	https://kubernetes.io/docs/tasks/configure-pod-container/configure-liveness-readiness-probes/	Create a liveness probe				
			Create a readiness probe				
11% - Cluster	Understand Kubernetes cluster upgrade process.	https://kubernetes.io/docs/reference/setup-tools/kubeadm/kubeadm-upgrade/	Upgrade kubernetes version				
	Facilitate operating system upgrades.	https://kubernetes.io/docs/tasks/administer-cluster/cluster-management/#maintenance-on-a-node	Cordon a node, drain a node, uncordon a node				
	Implement backup and restore methodologies.	https://kubernetes.io/docs/tasks/administer-cluster/configure-upgrade-etcd/	Create a backup of etcd				
			Restore etcd				
12% - Security	Know how to configure authentication and authorization.	https://kubernetes.io/docs/reference/command-line-tools-reference/kubelet-authentication-authorization/	Create a user and a context				
		https://kubernetes.io/docs/reference/access-authn-authz/rbac/	Assign permissions for a user to use certain namespace				
	Know to configure network policies.	https://kubernetes.io/docs/concepts/services-networking/network-policies/	Create a deny all network policy				
			Create a deny all network policy that is assigned to a particular pod				
			Create a whitelist rule based on pod label				
			Create a whitelist rule based on ip range				
	Create and manage TLS certificates for cluster components.	https://kubernetes.io/docs/tasks/tls/managing-tls-in-a-cluster/	Connect a node to a cluster using TLS bootstrapping				
7% - Storage	Understand persistent volumes and know how to create them.	https://kubernetes.io/docs/concepts/storage/persistent-volumes/	Create a persistentVolume				
	Understand access modes for volumes.	https://kubernetes.io/docs/concepts/storage/persistent-volumes/#access-modes	Create a storageClass				
	Understand persistent volume claims primitive.	https://kubernetes.io/docs/concepts/storage/persistent-volumes/#access-modes	Create a persistentVolumeClaim				
		https://kubernetes.io/docs/concepts/storage/volumes/#types-of-volumes	Assign volume to Pods				
	Understand Kubernetes storage objects.	https://kubernetes.io/docs/concepts/storage/storage-classes/	Resize persistentVolumeClaim				
	Know how to configure applications with persistent storage.	https://kubernetes.io/docs/concepts/workloads/controllers/statefulset/	Create a statefulSet				
	Understand service networking.	https://kubernetes.io/docs/concepts/services-networking/service/	Create a service				
	Know how to use Ingress rules.	https://kubernetes.io/docs/concepts/services-networking/ingress/	Create an ingress controller				
	Install Kubernetes masters and nodes.	https://kubernetes.io/docs/setup/independent/create-cluster-kubeadm/	Install single-master Kubernetes manually				
		https://kubernetes.io/docs/setup/independent/control-plane-flags/	Retreive a join token and join a worker node				
			Reset an existing worker node				
	Configure a Highly-Available Kubernetes cluster.	https://kubernetes.io/docs/setup/independent/high-availability/	Install multi-master Kubernetes manually				
	Know where to get the Kubernetes release binaries.	https://kubernetes.io/docs/setup/release/building-from-source/#designing-and-preparing	Build Kubernetes binary locally				
			Deploy multi-container Pod				
			Create an init container				