Certified Kubernetes Administrator (CKA) Official Curriculum – 2025

CERTIFIED KUBERNETES ADMINISTRATOR (CKA) – OFFICIAL CURRICULUM 2025

Domain 1: Cluster Architecture, Installation & Configuration (25%)
• Manage Kubernetes API objects
• Use RBAC to control access
• Upgrade Kubernetes clusters
• Backup and restore etcd
• Install Kubernetes using kubeadm
• Configure High Availability clusters
• Manage cluster lifecycle
• Configure CNI, CSI, and CRI

Domain 2: Workloads & Scheduling (15%)
• Deploy applications with Deployments, DaemonSets, StatefulSets
• Configure Pod scheduling
• Use taints, tolerations, node affinity
• Perform rolling updates and rollbacks
• Configure resource limits and requests
• Manage ConfigMaps and Secrets

Domain 3: Services & Networking (20%)
• Configure ClusterIP, NodePort, LoadBalancer services
• Implement Ingress controllers
• Configure DNS and service discovery
• Apply Network Policies
• Manage Pod-to-Pod networking

Domain 4: Storage (10%)
• Configure Persistent Volumes and Persistent Volume Claims
• Manage StorageClasses
• Configure dynamic provisioning
• Use different volume access modes

Domain 5: Troubleshooting (30%)
• Troubleshoot node and cluster failures
• Analyze Pod and Service failures
• Debug networking issues
• Perform disaster recovery
• Restore etcd data
• Diagnose control plane failures

Exam Details:
• Duration: 2 Hours
• Passing Score: 66%
• Type: Performance-based
• Validity: 2 Years