**EX200**

**Red Hat Certified System Administrator (RHCSA) exam**

**Understand and use essential tools**

* Access a shell prompt and issue commands with correct syntax
* Use input-output redirection (>, >>, |, 2>, etc.)
* Use grep and regular expressions to analyze text
* Access remote systems using ssh
* Log in and switch users in multiuser targets
* Archive, compress, unpack, and uncompress files using tar, star, gzip, and bzip2
* Create and edit text files
* Create, delete, copy, and move files and directories
* Create hard and soft links
* List, set, and change standard ugo/rwx permissions
* Locate, read, and use system documentation including man, info, and files in /usr/share/doc

**Operate running systems**

* Boot, reboot, and shut down a system normally
* Boot systems into different targets manually
* Interrupt the boot process in order to gain access to a system
* Identify CPU/memory intensive processes, adjust process priority with renice, and kill processes
* Locate and interpret system log files and journals
* Access a virtual machine's console
* Start and stop virtual machines
* Start, stop, and check the status of network services
* Securely transfer files between systems

**Configure local storage**

* List, create, delete partitions on MBR and GPT disks
* Create and remove physical volumes, assign physical volumes to volume groups, and create and delete logical volumes
* Configure systems to mount file systems at boot by Universally Unique ID (UUID) or label
* Add new partitions and logical volumes, and swap to a system non-destructively

**Create and configure file systems**

* Create, mount, unmount, and use vfat, ext4, and xfs file systems
* Mount and unmount CIFS and NFS network file systems
* Extend existing logical volumes
* Create and configure set-GID directories for collaboration
* Create and manage Access Control Lists (ACLs)
* Diagnose and correct file permission problems

**Deploy, configure, and maintain systems**

* Configure networking and hostname resolution statically or dynamically
* Schedule tasks using at and cron
* Start and stop services and configure services to start automatically at boot
* Configure systems to boot into a specific target automatically
* Install Red Hat Enterprise Linux systems as virtual guests
* Configure systems to launch virtual machines at boot
* Configure network services to start automatically at boot
* Configure a system to use time services
* Install and update software packages from Red Hat Network, a remote repository, or from the local file system
* Update the kernel package appropriately to ensure a bootable system
* Modify the system bootloader

**Manage users and groups**

* Create, delete, and modify local user accounts
* Change passwords and adjust password aging for local user accounts
* Create, delete, and modify local groups and group memberships
* Configure a system to use an existing authentication service for user and group information

**Manage security**

* Configure firewall settings using firewall-config, firewall-cmd, or iptables
* Configure key-based authentication for SSH
* Set enforcing and permissive modes for SELinux
* List and identify SELinux file and process context
* Restore default file contexts
* Use boolean settings to modify system SELinux settings
* Diagnose and address routine SELinux policy violations