

# 1. Capacity Planning

- **Measure and Troubleshoot Resource Usage**
- **Predict Future Resource Needs**

# 2. Linux Kernel

- **Kernel Components**
- **Compiling a kernel**
- **Kernel runtime management and troubleshooting**

# 3. System Startup

- **Customizing SysV-init system startup**
- **System Recovery**
- **Alternate Bootloaders**

# 4. Filesystem and Devices

- **Operating the Linux filesystem**
- **Maintaining a Linux filesystem**
- **Creating and configuring filesystem options**

# 5. Advanced Storage Device Administration

- **Configuring RAID**
- **Adjusting Storage Device Access**
- **Logical Volume Manager**

# 6. Network Configuration

- **Basic networking configuration**
- **Advanced Network Configuration and Troubleshooting**
- **Troubleshooting Network Issues**

# 7. System Maintenance

- **Make and install programs from source**
- **Backup operations**
- **Notify users on system-related issues**

## **8. Domain Name Server**

- **Basic DNS server configuration**
- **Create and maintain DNS zones**
- **Securing a DNS server**

## **9. Web Services**

- **Implementing a web server**
- **Apache configuration for HTTPS**
- **Implementing a proxy server**
- **Implementing Nginx as a web server and a reverse proxy**

## **10. File Sharing**

- **SAMBA Server Configuration**
- **NFS Server Configuration**

## **11. Network Client Management**

- **DHCP configuration**
- **OpenLDAP**

## **12. E-Mail Services**

- **Using e-mail servers**
- **Managing E-Mail Delivery**
- **Managing Remote E-Mail Delivery**

## **13. System Security**

- **Configuring a router**
- **Securing FTP servers**

- **Secure shell (SSH)**
- **Security tasks**
- **OpenVPN**

