

Windows Server Administrator Training Syllabus

- **Windows Fundamentals** Difference between windows 7,8 and 10. Installation of Operating Systems. Configuring Hardware and Hardware basic troubleshooting Installing and configuring printers, routers, system. Identifying bad sectors; diagnosing memory issues; updating the BIOS Port numbers Configure Internet Explorer and firewall Difference between PST and OST Overview of AD, DNS, DHCP and Domains and client structure. Install and configure DNS servers Create and configure DNS zones and records Install and configure, Manage and maintain DHCP Implement and Maintain IP Address Management (IPAM) File and folder access & Configure shared resources Configure user account control (UAC) and Understanding of local group policy with respect to password policy Creating local users and user management Joining workgroup to Domain MS outlook configuration, and Microsoft Office 365 configuration Ticketing tools and SLA. Bit locker, PAV, PST and OST, SCCM, EPO, BSOD
- **Functions of an OS** Basic DOS/Windows/Unix commands and tools History of System Administration. System Administration Roles Basic Info and Account Management. File and directory layout File Systems (NTFS, FAT, UFS). File permissions. ACL Command Line vs. Gui Start up (booting) and Shutdown. Task Manager. More Account Management Networking configuration Preventative maintenance and upgrading of OS Troubleshooting computer operating systems using utilities Configuring disk and system resources
- **Security Features of an OS** System Processes. Scheduling jobs (scheduler/cron), job monitoring, start and stop jobs At command vs. scheduled Tasks Gui tool. More Task Manager Disk administration. File systems/partitions. Disk DeFragmentation RAID. Basic client/server file sharing Files, Directories and Memory Management. Permissions Security and Backups. Patches, passwords, kerberos, enigma Tools (tcpwrappers and others). Backup methods
- **Network Fundamentals** What is networking. Types of area networks - LAN, MAN and WAN OSI Layers and TCP/IP TCP/UDP Different ports Ethernet cable Routers and switches Function of Switches and Router Configure and verify Ipv4 address and its classes IDS and IPS Types of communication Optical fiber (single mode & multi-mode) MAC address VPN VLAN Firewall
- **L1 Troubleshooting** Application related issue VPN issue, types of Network issue discussion Connectivity issue troubleshooting How to create VM's on systems through Virtual application IP Classes, IP Sub-netting and Super netting IP flow through DHCP Switching-Routing basic concepts Basic concept of DNS
- **Introducing Windows Server 2016** Installing and Configuring Windows Server 2016 Administering Windows Server 2016 Configuring Advanced Windows Server 2016 Services Preparing and installing Server Core Preparing for upgrades and migrations Migrating server roles and workloads & Windows Server activation models Installing Server Core Completing post-installation tasks on Windows Server 2016 Core Performing remote management Managing disks in Windows Server & Managing volumes in Windows Server Installing Data Deduplication & Configuring Data Deduplication
- **VMware** Introduction to virtualization types, vSphere & Cloud Computing, VMware vSphere. Discussion of vSphere components vSphere Licensing and pricing What is Cloud Computing (IaaS, SaaS, PaaS), Lab Setup Installing and configuration of ESXi Install and configure vCenter Server, and use the VMware vSphere Client to manage vCenter Server inventory hierarchies
- **Advanced Topics** (if needed) Printing Installing/upgrading hardware/software/O.S Email server, web server, dns/dhcp server, telnet/ftp/ssh Unix-windows interoperability (samba) User communications and documentation Problems resolution and solutions raid, san, nas