Tumkur University
Skill Enhancement Course

IT Helpdesk Attendant

Credit: 2   Duration: 45 hrs

Sl.#	Sessions
1.	Session: 1 **Basics of Computer Hardware and Portables & Motherboards, Processors and Adapter Cards** The Essential Parts of Any Computer. Hardware, Software, and Firmware. Inside Your PC. Hardware Resources. Motherboards and Their Components. Processors and CPUs. Installing Adapter Cards.
2.	Session: 2 **BIOS & Storage Devices** Understanding BIOS, CMOS, and Firmware. Configuring the System BIOS. Power-On Self-Test and Error Reporting. Storage Devices Floppy Disk Drives. Hard Disk Drives. Hard Disk drive types and technologies Partitioning and formatting the disk
3.	Session: 3 **Storage Devices & RAM** CD and DVD Optical Drives. Removable Storage. Flash Memory and Card Readers. USB Flash Memory Drives. External Hard Disks. RAM Basics. RAM Types. Operational Characteristics. Installing Memory Modules.
4.	Session: 4 **I/O and Multimedia Ports and Devices & Video Displays & Graphic Cards** Understanding I/O Ports. Understanding Input Devices. Understanding Multimedia Devices. Installing Input and Multimedia Devices. Installing a Video Card. Display Types. Installing and configuring display drivers
5.	Session: 5 **Printers & Laptops and Portable Devices** Printing Fundamentals. Printer and Scanner Control.

	Print Processes. Printer Installation. Optimizing Printer Performance. Fundamental Features of Laptops and Portable Devices. Configuring Power Management. Applications for Portable and Laptop Hardware. Safe Removal of Laptop-Specific Hardware.
6.	Session: 6 **Windows Desktop Operating System & Managing Files** Operating Systems Introduction to Operating System Types of an Operating System Functions of an Operating System Installing the operating system Installation planning Clean installations of Windows 7 Installation troubleshooting. The Windows 7 Boot Process Using the Windows Explorer Changing Window View Options Using the Toolbar Copying and Moving Files Using Windows Explorer Viewing Drives and Folder Contents Creating and Deleting Folders Copying and Moving Files Using Cut, Copy & Paste Finding a File
7.	Session: 7 **Using Utilities & Networks and Sharing** Accessing the Hard Drive Utilities Running Check Disk Defragmenting a Drive Creating a System Repair Disk Using a System Repair Disk Creating a System Restore Point Restoring your System to a Previous State File compression overview NTFS compression versus Compressed (zipped) Folders The Network and Sharing Centre Identifying Your Computer on the Network Determining What is Shared on your Network Determining Who is on your Network Sharing Folders Mapping a Network Drive Disconnecting a Mapped Network Drive Stopping Folder Sharing Sharing Printers Stopping Printer Sharing
8.	Session: 8 **Configuring and troubleshooting devices Configuring and troubleshooting printing** Storage devices Input/output devices Removable storage

	Power Management. LAN cards Wireless cards Scaners Plug and play devices Print troubleshooting. Troubleshooting Network related issues Remote Assistance PC optimisation tools - Temp files, Cache
9.	Session: 9 **Networking Basics & OSI Model** Network Components Networking Models Centralized and Distributed Computing Different Network Types Peer-to-Peer Networking and Server-Based Networks Network Services Differences Between LANs, MANs, and WANs What Is a Protocol Protocol Stacks What Is the OSI Model Physical Layer Data Link Layer Media Access Control Logical Link Control Network Layer Transport Layer Session Layer Presentation Layer Application Layer
10.	Session: 10 **Network Media and Topology & Network Designs** Understanding Network Adapters Adapter Settings Hardware Configuration Interfacing the Adapter Adapter Drivers Network Adapter Ports Bounded Media and Unbounded Media Physical Topologies Bus Star Ring Mesh Network Types Ethernet Token Ring FDDI
11.	Session: 11 **Introduction to TCP/IP & Internetworking and Transport Layer Protocols** The TCP/IP Architectural Model Transmission Control Protocol

	User Datagram Protocol Internet Protocol Internet Control Message Protocol Internet Group Management Protocol Address Resolution Protocol Internet Protocol (IP) IP Addressing IP Subnets IP Routing Address Resolution Protocol (ARP) Ports and Sockets User Datagram Protocol (UDP) Transmission Control Protocol (TCP)
12.	Session: 12 **Using Web Browsers, Email, and the Internet & Configuring and Managing Web Browsers** Introduction to the Internet Uses of the Internet Requirements of an Internet Connection Internet Connection Types Connections and Bandwidths What Is World Wide Web? Search Engines Configuring Internet Explorer Configuring Internet Tools Options in explorer Working with other browsers like Chrome and Firefox
13.	Session: 13 **Communicating On the Internet & Confuguring Email Client Application** Introduction to Email Create an email account Write and send an email message Introduction to POP3 and SMTP Understanding Secure communication using SSL Configuring MS-Outlook Working with MS-Outlook
14.	Session: 14 **Configuring Email Client Application Using Internet Based Application** Configuring Microsoft Mail Working with Microsoft Mail Working with Internet Application Introduction to Facebook and other social communication media Using Social media
15.	Session: 15 **Working with Online Services Security Components** Using Google apps Using Microsoft online Applications Anti Virus File & Data Recovery using standard Tools
16.	Session: 16 **Understanding Server Hardware & Exploring the Server Hardware** Introduction to Servers

	Examine the Network Architecture Identify Common Server Types and Functions Identify Server System Board Components Explore System Processing Core Explore Server Memory Examine Server Cooling and Power Systems
17.	Session: 17 **Introduction to Server Software & Examine Storage Devices Used for Servers** Describe Server Software NOS Management Features NOS Security Features Network Essentials for Servers Exploring the Server Storage System Exploring IDE and SCSI Describe RAID
18.	Session: 18 **Administering Windows Server Operating System & Working with Active Directory Snap-ins** Active Directory Domain Services on Server Core Understanding Server Core Installing Server Core Performing Initial Configuration Tasks Adding AD DS to a Server Core Installation Removing Domain Controllers Installing a Server Core Domain Controller Understanding the Microsoft Management Console Active Directory Administration Tools F inding the Active Directory Administrative Tools Adding the Administrative Tools to Your Start Menu Running Administrative Tools with Alternate Credentials
19.	Session: 19 **Creating a User Object & Creating and Managing Groups** Creating a Group Object Creating a Computer Object Finding Objects in Active Directory Finding Objects by Using Dsquery Understanding DNs, RDNs, and CNs Creating and Locating Objects in Active Directory Managing an Enterprise with Groups Defining Group Naming Conventions Understanding Group Types Understanding Group Scope Converting Group Scope and Type Managing Group Membership Developing a Group Management Strategy
20.	Session: 20 **Group Policy Infrastructure & Deploying a DNS Server** Lesson 1: Implementing Group Policy An Overview and Review of Group Policy Group Policy Objects Policy Settings Administrative Templates Node

	Implementing Group Policy Deploying a DNS Server on a Domain Controller Deploying a DNS Server on a Stand-alone or Member Server Deploying a DNS Server on a Server Core Installation of Windows Server 2008 Configuring a Caching-only DNS Server
21.	Session: 21 **Server Application & Introduction to Messaging Services** Fundamentals of Web Site Management Web Sites, Applications, and Virtual Directories Creating a New Web Site Configuring Logging Configuring Host Headers Administering Applications Administering Virtual Directories Basic Administrative Tasks Deploying Microsoft Exchange Server 2010 Overview of Exchange Server 2010 Requirements Installing Exchange Server 2010 Server Roles Completing an Exchange Server 2010 Installation Verifying an Exchange Server 2010 Installation
22.	Session: 22 **Configuring Mailbox Servers & Implementing Backup and Recovery** Overview of Exchange Server 2010 Administrative Tools Configuring Mailbox Server Roles Configuring Public Folders Planning Backup and Recovery Backing Up Exchange Server 2010 Restoring Exchange Server 2010
23.	Session: 23 **SQL Server 2008 & Installing SQL Server 2008** An Overview of SQL Server 2008 SQL Server 2008 Architecture Available Features and Tools New Capabilities SQL Services Product Editions Choosing Appropriate Features Specifying Service User Accounts Choosing Licensing Mode Choosing Appropriate Collation Installing Multiple Instances
24.	Session: 24 **Creating and Configuring a Database** Creating Databases Creating Tables Specifying Data Types Creating Indexes Describing Data File Structure
25.	Session: 25 **Network Security Devices** Network Devices and Technologies Network Design Elements and Components

	Implement Networking Protocols
26.	Session: 26 **Maintain a Heathly, Safe, & Secure Working Environment** General Safety, Electrical Safety, Procedure to Protect Equipments & Data, Power Fluctuation Types Power Detection Devices, Equpiment Disposal, Demonstrate Proper Use Of Tools General Health & Safety, Risk Management Process, First Aid Facilities & Procedures Incident & Hazard Reporting Service Desk Overview Introduction Processes Technology Information Customer Service
27.	Session: 27 **Service Desk Activities** Introduction Service Desk Roles & Responsibilities Business Skills Industry Knowledge Soft Skills
28.	Session: 28 **Manage your work to meet requirement** Introduction, Communication Skills, Relationship between Communication Skills & Professional Behaviour Working with a customer, Professional Behaviour with customers, Keeping Focused on the problem Following Business Policies, Ethical & Legal Issues, Cyber Law & First Response
29.	Session: 29 **Network Security Fundamentals** Introduction to Network Security Security Fundamentals The Information Security Cycle Information Security Controls Authentication Methods Cryptography Fundamentals Security Policy Fundamentals
30.	Session: 30 **Service Desk Process & Procedures** Introduction The Anatomy of process Using process framework & standards IT Service Management Framework & Standards
31.	Session: 31 **Domestic IT helpdesk Attendant** Candidates will be able to: Analyze automated alerts to accurately identify the nature of incidents
32.	Session: 32 **Deal directly with IT service requests/incidents**

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38.	Session: 38 **Deal directly with IT service requests/incidents** Candidates will be able to: Access their organizations knowledge base to identify solutions/workarounds for service requests/incidents
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45.	Session: 45 **Deal directly with IT service requests/incidents** Candidates will be able to: Evaluate the suitability of solutions/workarounds, where available
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