Module 10 CCNA - Infrastructure Security and Wan technologies

# Beginner Question

### 1 Explain Security, Introduction to Password, Username & Password, Console, AUX,VTY,Enable Password, Enable Secret,

Security refers to keeping things safe and protected. In the context of networking, it means making sure that only authorized people can access and use the network devices. Passwords are like keys that allow access to these devices. Network devices have different doors, like a main door (console port), a backdoor (AUX port), and windows (VTY lines) for remote access. The enable password and enable secret are like extra locks that protect the most important parts of the device. Enable password will activate the use of password and enable secret will hide the characters as well when entering the password.

### 2 Describe SSH

It is a network protocol that provides secure remote access to devices over a network by encrypting data transmission.

### 3 Access Control List, Purpose of ACL, Types and Classification of ACL, Diff betweenStandard and Extended ACLs

ACL are rules used to control incoming traffic in the network by permitting or denying packets bsed on predefined criteria. Its purpose is to set security policies, manage traffic and control the access on network. There are 2 types of ACL: Standard and Extended ACL. The main difference is that Std will filter traffic based on the source IP sending data packets where as Extended ACL uses multiple parameters to filter the traffic.

### 4 Numbered Access Control Lists

ACLs can be identified in 2 ways. One of them is identifying by numbers. Standard ACLs can be numbered 0-99 and extension ACLs can be numbered from 100-199.

### 5 Named Access Control Lists,

ACLs used to identify the list based on the defined name instead of numbers.

### 6 WAN Technologies, Fundamentals of WAN

Wide Area network is a type of network that connects over offices, countries, data centres, cloud, etc. The fundamental behind WAN is to facilitate communication, information sharing and much more around the world. WAN is created by 3 types of connection: Dedicated Network, Circuit switched and Packet-switched.

### 7 2 WAN Device, DSL, Asymmetrical DSL, Symmetric DSL

Router and modem are two of the many devices that are used to create WAN.

DSL is type of broadband service which uses telephone connection to transmit digital data. It is usually used for home purpose.Asymmetrical DSL is usually used in residential area or small businesses. It provides high speed internet using telephone lines. Symmetrical DSL is not widely used anymore. It focuses on providing equal bandwidth for uploading and downloading unlike ADSL.

### 8 Describe VPN

VPN is a tunneling process to transport data from a device or network by creating a logical connection to the destination in an unsecured environment. It repacks data to make it secure. It goes through the same route by being invisible to data traffic by encapsulating and encrypting data.

# Intermediate Question

### 1 Configure Switch Port Security, Protect Mode, Restrict Mode - Done in Lab

### 2 Standard ACL Configuration, Extended ACL Configuration - Done in Lab

### 3 Name Standard ACL Configuration, Name Extended ACL Configuration4 Vpn Configuration with cisco practical’s - Done in Lab

# Advance Question

### 1 Point-to-Point Protocol (PPP) PPP Configure, - Done in Lab

### 2 SSH Configure, Radius server configuration AAA server, DNS configure, HTTPconfigure - Done in Lab