Network Security: NS Final Prcatical-03-Configure an IP-Sec and Advance Security

Devices Name	Interface	Connect with	Interface	Remark	IP
R-01	Gig 0/0	SW-01	Gig 0/1		192.168.10.1/24
	Gig 0/1	SW-02	Gig 0/1		192.168.11.1/24
	Se 0/0/1	R-02	Se 0/0/1	DTE	192.168.13.1/30
R-02	Gig 0/0	SW-03	Gig 0/1		192.168.12.1/24
	Se 0/0/0	ISP	Se 0/0/0	DTE	100.100.10.2/30
	Se 0/0/1	R-01	Se 0/0/1	DCE	192.168.13.2/30
ISP	Se 0/0/0	R-02	Se 0/0/0	DCE	100.100.10.1/30
	Se 0/0/1	B -01	Se 0/0/1	DCE	100.100.10.5/30
B-01	Gig 0/0	SWB-01	Gig 0/1		10.10.10.1/24
	Se 0/0/0	B-02	Se 0/0/0	DCE	10.10.13.1/30
	Se 0/0/1	ISP	Se 0/0/1	DTE	100.100.10.6/30
B-02	Gig 0/0	SWB-02	Gig 0/1		10.10.11.1/24
	Gig 0/1	SWB-03	Gig 0/1		10.10.12.1/24
	Se 0/0/0	B-01	Se 0/0/0	DTE	10.10.13.2/30
Amanda-PC	Fa 0	SW-01	Fa 0/1	Amanda Perera	192.168.10.10/24
Dhanushka-PC	Fa 0	SW-01	Fa 0/2	Dhanushaka Herath	192.168.10.11/24
Kasun-PC	Fa 0	SW-02	Fa 0/1	Kasun Jayakody	192.168.11.10/24
Thushnaga-PC	Fa 0	SW-02	Fa 0/2	Thushanga Madushan	192.168.11.11/24
NTP | SysLog	Fa 0	SW-03	Fa 0/1	NTP | SysLog - Server	192.168.12.10/24
DNS | TFTP	Fa 0	SW-03	Fa 0/1	DNS | TFTP- Server	192.168.12.11/24
Nayantha-PC	Fa 0	SWB-01	Fa 0/1	Nayantha Methraja	10.10.10.10/24
Keshawa-PC	Fa 0	SWB-01	Fa 0/2	Keshawa Bingushan	10.10.10.11/24
Saneep-PC	Fa 0	SWB-02	Fa 0/1	Sandeep Perea	10.10.11.10/24
Ruwan-PC	Fa 0	SWB-03	Fa 0/2	Ruwan Wasantha	10.10.12.10/24

01. Basic Configuration (Every Router). Set date and time using NTPserver.

NTP Server IP: 192.168.12.10/24
NTP Authentication-key: 2
Secret: md5 NTP@Cisco

02. Set Banner message

##
This is Secure area. Please enter your Authentication.
##

03. Password:

Enable Secret: YourNamewith @2025.1k (First Letter Capital)
Console Password: YourNamewith @2025.1k (Second Letter Capital)

04.SSH Configuration

Username: Admin
Secret: yourname@s$H.1k (First and Second LettersCapital)
RSACrypto key Module: 2048
Domain-name:sltsc.lk

05. Everypassword must be Encrypted.

06. Password minimum lengthis 08 digits.

07. Blocking Brute-force attack
Failed Attempts - 03
Within - 01minits
Block for – 06 mints

08. Site to Site IP Sec Details

Key Distribution Method: ISAKAMP POLICY -01
Encryption Algorithm: AES 256
Transform-Set: IP-Sec
Crypto-Map: Site-Map
0Access-List: 100

09. Routing Using OSPF
OSPF Process ID: 10
Area: 0
Authentication Key: MD5OSAK