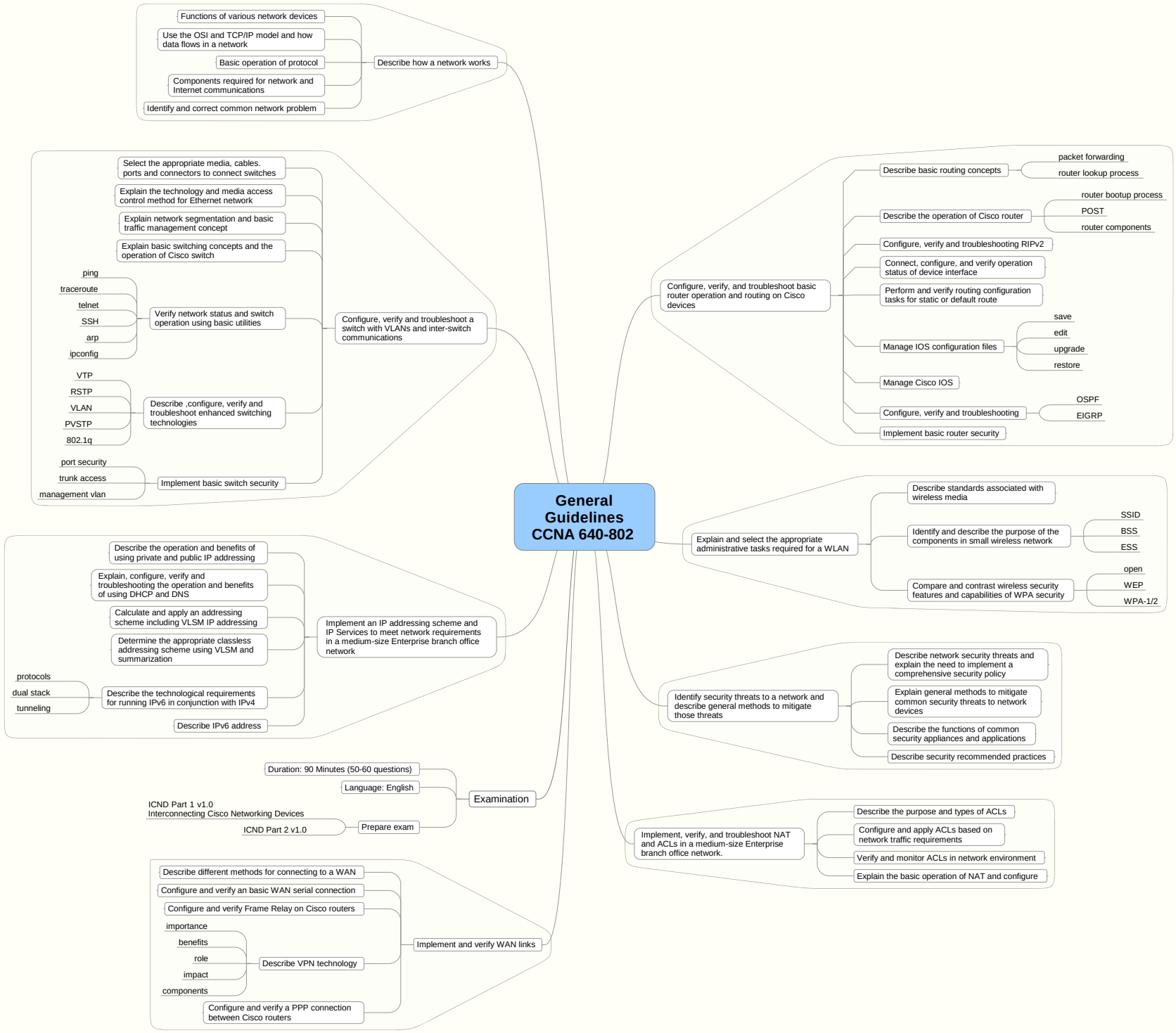
General Guidelines CCNA 640-802
Describe how a network works
Functions of various network devices
Use the OSI and TCP/IP model and how data flows in a network
Basic operation of protocol
Components required for network and Internet communications
Identify and correct common network problem
Configure, verify and troubleshoot a switch with VLANs and inter-switch communications
Select the appropriate media, cables. ports and connectors to connect switches
Explain the technology and media access control method for Ethernet network
Explain network segmentation and basic traffic management concept
Explain basic switching concepts and the operation of Cisco switch
Verify network status and switch operation using basic utilities
ping
traceroute
telnet
SSH
arp
ipconfig
Describe ,configure, verify and troubleshoot enhanced switching technologies
VTP
RSTP
VLAN
PVSTP
802.1q
Implement basic switch security
port security
trunk access
management vlan
Implement an IP addressing scheme and IP Services to meet network requirements in a medium-size Enterprise branch office network
Describe the operation and benefits of using private and public IP addressing
Explain, configure, verify and troubleshooting the operation and benefits of using DHCP and DNS
Calculate and apply an addressing scheme including VLSM IP addressing
Determine the appropriate classless addressing scheme using VLSM and summarization
Describe the technological requirements for running IPv6 in conjunction with IPv4
protocols
dual stack
tunneling
Describe IPv6 address
Examination
Duration: 90 Minutes (50-60 questions)
Language: English
Prepare exam
ICND Part 1 v1.0
Interconnecting Cisco Networking Devices
ICND Part 2 v1.0
Implement and verify WAN links
Describe different methods for connecting to a WAN
Configure and verify an basic WAN serial connection
Configure and verify Frame Relay on Cisco routers
Describe VPN technology
importance
benefits
role
impact
components
Configure and verify a PPP connection between Cisco routers
Configure, verify, and troubleshoot basic router operation and routing on Cisco devices
Describe basic routing concepts
packet forwarding
router lookup process
Describe the operation of Cisco router
router bootup process
POST
router components
Configure, verify and troubleshooting RIPv2
Connect, configure, and verify operation status of device interface
Perform and verify routing configuration tasks for static or default route
Manage IOS configuration files
save
edit
upgrade
restore
Manage Cisco IOS
Configure, verify and troubleshooting
OSPF
EIGRP
Implement basic router security
Explain and select the appropriate administrative tasks required for a WLAN
Describe standards associated with wireless media
Identify and describe the purpose of the components in small wireless network
SSID
BSS
ESS
Compare and contrast wireless security features and capabilities of WPA security
open
WEP
WPA-1/2
Identify security threats to a network and describe general methods to mitigate those threats
Describe network security threats and explain the need to implement a comprehensive security policy
Explain general methods to mitigate common security threats to network devices
Describe the functions of common security appliances and applications
Describe security recommended practices
Implement, verify, and troubleshoot NAT and ACLs in a medium-size Enterprise branch office network.
Describe the purpose and types of ACLs
Configure and apply ACLs based on network traffic requirements
Verify and monitor ACLs in network environment
Explain the basic operation of NAT and configure