

Q1. Which Cisco command displays the IOS version currently running on the router?

- A. show memory
- B. show version
- C. show ip route
- D. show startup-config

Q2. Which configuration mode is entered using the command `configure terminal`?

- A. ROMMON mode
- B. Global configuration mode
- C. User EXEC mode
- D. Privileged EXEC mode

Q3. What is the default console password method for a new router?

- A. No password
- B. admin/admin
- C. cisco/cisco
- D. Password must be created during setup

Q4. Which protocol does Telnet use?

- A. UDP port 161
- B. TCP port 23
- C. TCP port 80
- D. UDP port 69

Q5. The Cisco SDM tool is used mainly for:

- A. GUI-based Router configuration
- B. Resetting IOS image
- C. Monitoring switch MAC table
- D. Configuring DHCP snooping

Q6. The configuration register value that loads the startup-config normally is:

- A. 0x2102
- B. 0x2142
- C. 0x2120
- D. 0x0000

Q7. To resolve remote hostnames, the router must be configured with:

- A. ip dns server
- B. ip host resolve
- C. ip name-server
- D. dns lookup auto

Q8. The command to enable password encryption on a router is:

- A. service password-encryption
- B. encrypt password all
- C. enable encryption password
- D. crypto passwords

Q9. Which command shows active Telnet sessions?

- A. show line
- B. show sessions
- C. show users
- D. show vty

Q10. Which IOS mode allows running basic router commands (ping, show)?

- A. Setup mode
 - B. Privileged EXEC
 - C. User EXEC
 - D. ROMMON
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MEDIUM LEVEL (15 Questions)

Q11. Which command copies the running configuration to NVRAM?

- A. copy startup-config flash
- B. write memory
- C. copy running-config tftp
- D. copy flash running-config

Q12. What does the configuration register value 0x2142 do?

- A. Boots from ROMMON
- B. Bypasses startup-config
- C. Boots without IOS
- D. Forces router to load golden image

Q13. Which command sets a router's domain name?

- A. set domain name example.com
- B. hostname example.com
- C. ip domain-name example.com
- D. router domain example.com

Q14. The command `debug ip packet` is considered dangerous because:

- A. It deletes routing tables
- B. It causes high CPU utilization
- C. It stops all traffic
- D. It reloads the IOS

Q15. SDM primarily manages which of the following features?

- A. Power supply monitoring
- B. Network and security configuration
- C. VLAN trunking protocol
- D. Linux kernel modules

Q16. Which router boot sequence is correct?

- A. POST → Load startup-config → Load IOS → Bootstrap
- B. Bootstrap → POST → Load IOS → Load startup-config
- C. POST → Bootstrap → Load IOS → Load startup-config
- D. Load IOS → POST → Load startup-config → Bootstrap

Q17. The purpose of the bootstrap program in a router is to:

- A. Start Telnet sessions
- B. Load the IOS from flash
- C. Compile configuration files
- D. Apply routing updates

Q18. Which command tests basic hostname/IP resolution on the router?

- A. nslookup
- B. name-resolve
- C. show hosts
- D. dns-test

Q19. A router in ROMMON mode indicates:

- A. IOS crashed or missing
- B. Hardware failure in RAM
- C. DNS misconfiguration
- D. VTY lines overloaded

Q20. Which configuration mode is used to set VTY passwords?

- A. Interface configuration mode
- B. Line configuration mode
- C. Privileged EXEC mode
- D. ROMMON mode

Q21. To restrict Telnet access based on IP addresses, what feature is used?

- A. SPAN
- B. ACLs
- C. STP
- D. DHCP Relay

Q22. When the router is booting, holding down the Break key causes:

- A. Delete startup-config
- B. Enter ROMMON mode
- C. Enter global config mode
- D. Reset configuration register

Q23. Which command deletes the startup configuration?

- A. erase nvram:startup-config
- B. no startup-config
- C. delete startup-config
- D. remove config memory

Q24. The command `show ip interface brief` is used to:

- A. Display routing table
- B. Display brief interface status
- C. Display IOS version
- D. Display DNS entries

Q25. Which IOS file type contains the complete router operating system?

- A. .cfg
 - B. .ios
 - C. .bin
 - D. .txt
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HARD LEVEL (15 Questions)

Q26. A router continuously reloads and enters ROMMON mode each time. The most likely cause is:

- A. Wrong VTY configuration
- B. Corrupted IOS in flash
- C. Incorrect hostname
- D. ACL blocking Telnet

Q27. You want the router to ignore NVRAM at next boot. Which command sequence is correct?

- A. config-register 0x2102
- B. config-register 0x2142
- C. set-register ignore
- D. boot no-nvram

Q28. You need to load a new IOS image via TFTP. What must be done first?

- A. Enable debug mode
- B. Set TFTP server password
- C. Ensure router has IP connectivity to TFTP server
- D. Erase flash

Q29. A router is configured with:

```
ip domain-name lab.local
crypto key generate rsa
ip ssh version 2
line vty 0 4
transport input ssh
```

What is the effect?

- A. Only Telnet login allowed
- B. SSH access with RSA encryption allowed
- C. Router disables remote access
- D. Router boots into secure mode

Q30. Which command shows IOS booting errors, CRC failures, or memory allocation errors?

- A. show buffers
- B. show bootlog
- C. show log
- D. debug ios-crash

Q31. You need to resolve hostnames without a DNS server. Which feature do you configure?

- A. Static hostname table
- B. DHCP relay
- C. SDM hostname wizard
- D. IP helper-address

Q32. A router is stuck in a boot loop because startup-config contains an invalid command. How do you recover?

- A. Change hostname
- B. Modify config-register to bypass startup-config
- C. Reinstall SDM
- D. Use Telnet to fix it

Q33. Which Cisco IOS memory type stores the IOS image permanently?

- A. RAM
- B. Flash
- C. NVRAM
- D. ROM

Q34. You need the router to boot from a backup IOS in slot 1 instead of the primary. Which command is correct?

- A. boot system flash backup
- B. boot system flash0:backup.bin
- C. use backup IOS
- D. set ios secondary

Q35. A router shows %SYS-2-MALLOCFAIL during heavy debugging. What does it indicate?

- A. DNS failure
- B. Out of memory
- C. Wrong register setting
- D. Invalid IOS

Q36. Which command stops all active debugging?

- A. undebug all
- B. no debug all
- C. stop debug
- D. cancel debugging

Q37. A router has a config-register of 0x2100. What does it mean?

- A. Normal boot
- B. Boot from ROMMON
- C. Ignore startup-config
- D. Boot using TFTP

Q38. To secure SDM GUI access, which protocol must be configured?

- A. HTTPS
- B. HTTP
- C. FTP
- D. Telnet

Q39. You want to prevent unauthorized Telnet attempts. Which method is most effective?

- A. Disable console
- B. Apply ACLs on VTY lines
- C. Use debug telnet events
- D. Change configuration register

Q40. Router hostname resolution fails even though DNS server is configured. Which additional command is required?

- A. ip dns enable
- B. ip domain lookup
- C. enable dns-server
- D. dns on