

# Cisco

## Exam 642-832

### Troubleshooting and Maintaining Cisco IP Networks (TSHOOT)

Version: 21.1

[ Total Questions: 72 ]

**Topic 1, Multiple Choice Questions****Question No : 1 - (Topic 1)**

The following commands are issued on a Cisco Router:

```
Router(configuration)#access-list 199 permit tcp host 10.1.1.1 host 172.16.1.1
```

```
Router(configuration)#access-list 199 permit tcp host 172.16.1.1 host 10.1.1.1
```

```
Router(configuration)#exit
```

```
Router#debug ip packet 199
```

What will the debug output on the console show?

- A. All IP packets passing through the router
- B. Only IP packets with the source address of 10.1.1.1
- C. All IP packets from 10.1.1.1 to 172.16.1.1
- D. All IP Packets between 10.1.1.1 and 172.16.1.1

**Answer: D**

**Explanation:**

In this example, the “debug ip packet” command is tied to access list 199, specifying which IP packets should be debugged. Access list 199 contains two lines, one going from the host with IP address 10.1.1.1 to 172.16.1.1 and the other specifying all TCP packets from host 172.16.1.1 to 10.1.1.1.

**Question No : 2 - (Topic 1)**

What level of logging is enabled on a Router where the following logs are seen?

```
%LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
```

- A. alerts

- B. critical
- C. errors
- D. notifications

**Answer: D**

**Explanation:**

Cisco routers, switches, PIX and ASA firewalls prioritize log messages into 8 levels (0-7), as shown below:

Level	Level Name	Description
0	Emergencies	System is unusable
1	Alerts	Immediate action needed
2	Critical	Critical conditions
3	Errors	Error conditions
4	Warnings	Warning conditions
5	Notifications	Informational messages
6	Informational	Normal but significant conditions
7	Debugging	Debugging messages

When you enable logging for a specific level, all logs of that severity and greater (numerically less) will be logged. In this case we can see that logging level of 3 (as seen by the 3 in “LINK-3-UPDOWN”) and level 5 (as seen by the 5 in “LINEPROTO-5-UPDOWN”) are shown, which means that logging level 5 must have been configured. As shown by the table, logging level 5 is Notifications.

**Question No : 3 - (Topic 1)**

You have the followings commands on your Cisco Router:

```
ip ftp username admin
```

```
ip ftp password backup
```

You have been asked to switch from FTP to HTTP. Which two commands will you use to replace the existing commands?

- A. ip http username admin
- B. ip http client username admin

- C. ip http password backup
- D. ip http client password backup
- E. ip http server username admin
- F. ip http server password backup

**Answer: B,D**

**Explanation:**

Configuring the HTTP Client

Perform this task to enable the HTTP client and configure optional client characteristics.

The standard HTTP 1.1 client and the secure HTTP client are always enabled. No commands exist to disable the HTTP client. For information about configuring optional characteristics for the HTTPS client, see the HTTPS-HTTP Server and Client with SSL 3.0, Release 12.2(15)T, feature module.

SUMMARY STEPS

1.

enable

2.

configure terminal

3.

ip http client cache {ager interval minutes | memory {file file-size-limit | pool pool-size-limit}}

4.

ip http client connection {forceclose | idle timeout seconds | retry count | timeout seconds}

5.

ip http client password password

6.

ip http client proxy-server proxy-name proxy-port port-number

7.

ip http client response timeout seconds

8.

**Question No : 4 - (Topic 1)**

ip http client source-interface type number

9.

ip http client username username

References:

- B. ntp server 10.1.1.1 ntp server 10.1.1.2 primary
- C. ntp server 10.1.1.1 ntp server 10.1.1.2 prefer
- D. ntp server 10.1.1.1 fallback ntp server 10.1.1.2

**Answer: C**

**Explanation:**

Preferred server

A router can be configured to prefer an NTP source over another. A preferred server's responses are discarded only if they vary dramatically from the other time sources.

Otherwise, the preferred server is used for synchronization without consideration of the other time sources. Preferred servers are usually specified when they are known to be extremely accurate. To specify a preferred server, use the prefer keyword appended to the ntp server command. The following example tells the router to prefer TimeServerOne over TimeServerTwo:

```
Router#config terminal
```

Enter configuration commands, one per line. End with CNTL/Z.

```
Router(config)#ntp server TimeServerOne prefer
```

```
Router(config)#ntp server TimeServerTwo
```

```
Router(config)#^Z
```

### Question No : 5 - (Topic 1)

The following command is issued on a Cisco Router:

```
Router(configuration)#logging console warnings
```

Which alerts will be seen on the console?

- A. Warnings only
- B. debugging, informational, notifications, warnings
- C. warnings, errors, critical, alerts, emergencies
- D. notifications, warnings, errors
- E. warnings, errors, critical, alerts

**Answer: C**

**Explanation:**

Cisco routers prioritize log messages into 8 levels (0-7), as shown below:

Level	Level Name	Description
0	Emergencies	System is unusable
1	Alerts	Immediate action needed
2	Critical	Critical conditions
3	Errors	Error conditions
4	Warnings	Warning conditions
5	Notifications	Informational messages
6	Informational	Normal but significant conditions
7	Debugging	Debugging messages

When you enable logging for a specific level, all logs of that severity and greater (numerically less) will be logged. In this case, when you enable console logging of warning messages (level 4), it will log levels 0-4, making the correct answer warnings, errors, critical, alerts, and emergencies.

**Question No : 6 - (Topic 1)**

Which two of the following options are categories of Network Maintenance tasks?

- A. Firefighting
- B. Interrupt-driven
- C. Policy-based
- D. Structured
- E. Foundational

**Answer: B,D**

**Explanation:**

Proactive Versus Reactive Network Maintenance:

Network maintenance tasks can be categorized as one of the following:

Structured tasks: Performed as a predefined plan.

Interrupt-driven tasks: Involve resolving issues as they are reported.

References:

**Question No : 7 - (Topic 1)**

You enabled CDP on two Cisco Routers which are connected to each other. The Line and Protocol status for the interfaces on both routers show as UP but the routers do not see each other a CDP neighbors. Which layer of the OSI model does the problem most likely exist?

- A. Physical
- B. Session
- C. Application
- D. Data-Link
- E. Network

**Answer: D**

**Explanation:**

CDP is a protocol that runs over Layer 2 (the data link layer) on all Cisco routers, bridges, access servers, and switches. CDP allows network management applications to discover Cisco devices that are neighbors of already known devices, in particular, neighbors running lower-layer, transparent protocols. With CDP, network management applications can learn the device type and the SNMP agent address of neighboring devices. This feature enables applications to send SNMP queries to neighboring devices. In this case, the line protocol is up which means that the physical layer is operational (layer 1) but the data link layer is not.

References:

**Question No : 8 - (Topic 1)**

FCAPS is a network maintenance model defined by ISO. It stands for which of the following ?

- A. Fault Management
- B. Action Management
- C. Configuration Management
- D. Protocol Management
- E. Security Management

**Answer: A,C,E**

**Explanation:**

The FCAPS maintenance model consists of the following:

FCAPS Maintenance Tasks:

**Question No : 9 - (Topic 1)**

Which three management categories are contained in the FCAPS network maintenance model? (Choose three.)

- A. Config
- B. Fault
- C. Storage
- D. Accounting
- E. Redundancy
- F. Telecommunications

**Answer: A,B,D**

**Question No : 10 - (Topic 1)**

What is the result of configuring the logging console warning command?

- A. Messages with a severity level of 4 and higher will be logged to all available TTY lines.
- B. Only warning messages will be logged on the console.
- C. Warning, error, critical, and informational messages will be logged on the console.
- D. Warning, critical, alert, and emergency messages will be logged on the console.
- E. The logging console warning command needs to be followed in the configuration with logging buffered byte size to specify the message buffer size for the console.

**Answer: D**

**Question No : 11 - (Topic 1)**

Refer to the shown below.



%LINK-3-UPDOWN: Interface Serial0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed state to up

What statement is correct regarding the output shown in the graphic?

- A. These two log messages will not have a severity level. They are not errors but are just informational messages.
- B. The first log message is categorized as a warning message.
- C. These messages regarding interface status are normal output and will always be displayed when you exit config mode.
- D. The first log message is an error message with a severity level of 3.
- E. The second message would be shown if the logging console warning command had been issued.

**Answer: D**

**Question No : 12 - (Topic 1)**

Refer to the configuration statements shown in the graphic above.

```
R1(config)#access-list 199 permit tcp host 10.1.1.1 host 172.16.1.1
```

```
R1(config)#access-list 199 permit tcp host 172.16.1.1 host 10.1.1.1
```

```
R1(config)#end
```

```
R1#debug ip packet 199 detail
```

Which statement reflects what the effect is of this configuration sequence?

- A. These commands will generate an error message because you cannot use an access list with any debug commands.
- B. These commands will have no effect at all. The debug ip packet command will work as normal and display info for all IP packets.
- C. These commands turn on debug ip packet only for packets between hosts 10.1.1.1 and 172.16.1.1.
- D. These commands will only work when you specify only one host rather than two.

**Answer: C**

**Question No : 13 - (Topic 1)**

What is the result if you configure two devices with the ntp server command?

- A. Nothing will happen until one of the devices is configured with the prefer parameter.
- B. The NTP protocol will determine which server is most reliable and will synchronize to that server.
- C. The device with the highest priority will become the active server and the other device will become the backup server.
- D. The device with the lowest MAC address will become the active server and the other device will become the backup server.

**Answer: B**

**Question No : 14 - (Topic 1)**

A technician is troubleshooting connectivity problems between two routers that are directly connected through a serial line. The technician notices that the serial line is up, but cannot see any neighbors displayed in the output of the show cdp neighbors command.

In which OSI layer is the problem most likely occurring?

- A. physical
- B. data link
- C. network
- D. transport
- E. application

**Answer: B**

**Question No : 15 - (Topic 1)**

What are two approaches to maintaining a network?(Choose two.)