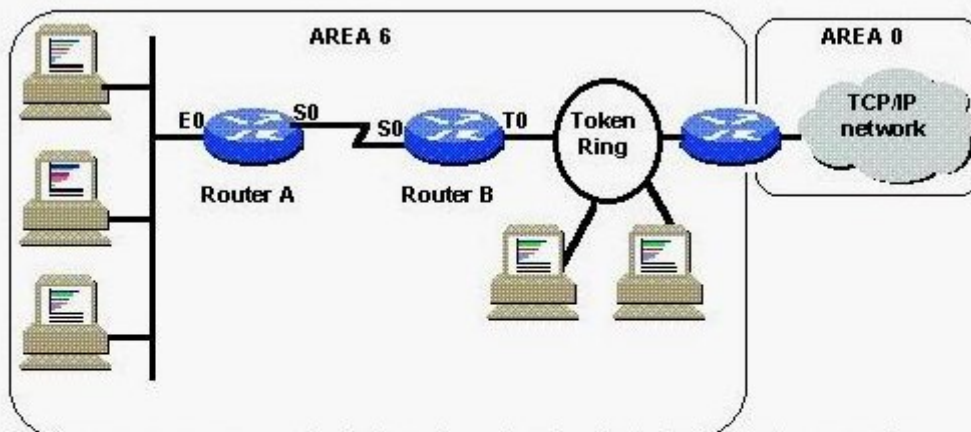# IT 认证电子书

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Exam : **350-022**

Title : CCIE Written, Service Provider: DSL

Version : DEMO

1.How should OSPF be configured on Router B?

In a move to support standards-based routing, the decision is made to use the OSPF routing protocol throughout the entire network. The areas are shown as in the picture, and the subnets are:

Ethernet on Router A: 108.3.1.0
Serial line between Router A and Router B: 108.3.100.0
Token ring on Router B: 108.3.2.0
A subnet mask of 255.255.255.0 is used for all the subnets.

A.router ospfnetwork 108.3.0.0

B.router ospf 1network 108.3.100.0 0.0.0.255 area 6network 108.3.2.0 0.0.0.255 area 6

C.router ospf 1network 108.3.100.0 0.0.0.255 area 6network 108.3.2.0 0.0.0.255 area 0

D.router ospf 1network 108.3.100.0 255.255.255.0 area 6network 108.3.2.0 255.255.255.0 area 6

E.router ospf 1network 108.3.1.0 0.0.0.255 area 6network 108.3.100.0 0.0.0.255 area 6network 108.3.2.0 0.0.0.255 area 6

Correct:B

2.OSPF is defined on a Frame Relay interface providing point-to-multipoint connections. The remote neighbors can reach this central site, but are complaining of routing failures between each of the remote sites. The central router has all the routes for each remote site. Based on this information, what can be diagnosed as the biggest potential problem?

A.An over-subscribed Frame Relay switch will cause some packet loss.

B.There are problems in the use of OSPF Authentication.

C.There is an incorrect selection of the Designated Router.

D.There is an incorrect DLCI assigned on a point-to-point sub-interface.

Correct:D

3.CIDR is primarily used:

A.In BGP only

B.For classless routing

C.In OSPF only

D.In EIGRP only

Correct:B

4.Within OSPF, what functionality best defines the use of a 'stub' area?

A.It appears only on remote areas to provide connectivity to the OSPF backbone.

B.It is used to inject the default route for OSPF.

C.It uses the no-summary keyword to explicitly block external routes, defines the non-transit area, and

uses the default route to reach external networks.

D.It is a non-transit area that does not allow flooding of external networks and uses the default route to reach external networks.

Correct:C

5.What is Forwarding Equivalence Class assignment NOT likelyto be based upon?

A.Fragment offset

B.Destination address

C.Application protocol

D.Class of service

Correct:A

6.The two label distribution protocols that provide support for MPLS traffic engineering are:

A.RSVP and OSPF

B.CR-LDP and IBGP

C.RSVP and CR-LDP

D.LPS and LDS

Correct:C

7.MPLS traffic engineering routing information is carried by:

A.BGP MEDs

B.MP-BGP

C.OSPF Opaque LSAs or IS-IS TLVs

D.RTP or RTCP packets

Correct:C

8.MPLS does not support:

A.Multicast

B.OSPF

C.BGP

D.Multicast and OSPF

Correct:A

9.A DSL customer has subscribed to a service that provides 2 mbps downstream and 256 kbps upstream. The cable length is 10 kft (3 km). The customer reports that file transfers on the DSL line seem slower than normal in recent days. After reviewing the DSL profile parameters for the DSL port, and the actual status of the line, what is the possible reason why the subscriber's data rates are slower than usual?DSLAM#show dsl int atm 1/1DMT profile parametersMaximum Bitrates:Interleave Path: downstream: 2048 kb/s, upstream: 256 kb/sFast Path: downstream: 0 kb/s, upstream: 0 kb/sMinimum Bitrates:Interleave Path: downstream: 0 kb/s, upstream: 0 kb/sFast Path: downstream: 0 kb/s, upstream: 0 kb/sMargin: downstream: 6 dB, upstream: 6 dBInterleaving Delay: downstream: 16000 usecs, upstream: 16000 usecsCheck Bytes (FEC):Interleave Path: downstream: 16, upstream: 16Fast Path: downstream: 0, upstream: 0R-S Codeword Size: downstream: auto, upstream: autoTrellis Coding: DisabledOverhead Framing: Mode 3Operating Mode: AutomaticTraining Mode: QuickMinrate blocking: DisabledSNR Monitoring: DisabledStatus:Bitrates:Interleave Path: downstream: 640 kb/s, upstream: 256 kb/sFast Path: downstream: 0 kb/s, upstream: 0 kb/sMargin: downstream: 6 dB, upstream: 9 dBAttenuation: downstream: 45 dB, upstream: 31 dBInterleave Delay: downstream: 16000 usecs, upstream: 16000 usecTransmit Power: downstream: 19.4 dB, upstream: 12.0 dBCheck Bytes

(FEC):Interleave Path: downstream: 16, upstream: 16Fast Path: downstream: 0, upstream: 0R-S Codeword Size: downstream: 1, upstream: 8Trellis Coding: Not In UseOverhead Framing: Mode 3Line Fault: NONEOperating Mode: ITU G dmt Issue 1Line Type: Interleaved Only

A.The signal-to-noise margin on the line will not allow downstream DSL rates faster than 640 kbps. If the subscriber's service was in fact faster at some time, then something has changed in the line characteristics or noise spectrum.

B.The subscriber is provisioned for 640 kbps downstream, and the service appears to be working normally. The problem is apparently not related to the DSL (physical layer) part of the service.

C.The service is running in G.DMT, and 640 kbps is normal for the subscriber's cable length. Change the mode to ANSI T1.413 for faster rates.

D.The DSL profile is set for 16 milliseconds interleave delay. Change the interleave delay to 0, or change the profile to fastpath for faster line rates.

Correct:A

10.What effect do load coils in a telephone line have on DSL service?

A.Load coils cause low trained rates for ADSL (CAP or DMT), but do not degrade SDSL, SHDSL, or IDSL transmission.

B.Load coils in the telephone line can prevent any DSL modem from training up to an ATU-C port.

C.Load coils cause low upstream rates, but do not degrade downstream rates.

D.Load coils cause low downstream rates, but do not degrade upstream rates.

E.Load coils cause low trained rates for SDSL, SHDSL, or IDSL, but do not degrade ADSL (CAP or DMT) transmission.

Correct:B

11.The following are wire sizes used in telephone company cables. Which will allow the greatest "reach" (distance) in DSL service?

A.24 AWG (0.5 mm)

B.26 AWG (0.4 mm)

C.A line that is 50% of #24 (0.5mm) and 50 % of #26 (0.4mm).

D.None of the above will allow enough reach for DSL service.

Correct:A

12.What is the effect of changing DMT interleaved delay from 16 milliseconds to 2 milliseconds?

A.Fewer ATM PVCs can be provisioned on the DSL line.

B.Latency is reduced, but error correction effectiveness may also be reduced.

C.Latency remains the same, but faster error correction occurs.

D.Latency remains the same, but throughput is increased.

Correct:B

13.Three of the following are common symptoms of a bridge tap ("half tap") on a DSL line. Which three are symptoms that result from placing a bride tap on a DSL line?

A.The line may not train.

B.The DSL service will interfere with telephone (POTS) service on the same line.

C.DSL line rates will be lower than expected (lower than provisioned).

D.The line may have degraded DSL service, but POTS service may appear normal.

Correct:A C D

14.The telephone company has placed a bridge-tap (half-tap) on all the pairs in a cable in preparation to reroute the cable. DSL customers are served by this cable. Three of the following

five statements are correct. Which three of the following statements describes the possible effect of placing bride-taps on a DSL line? (multiple answer)

A.It may not cause a problem, depending on the location and length of the half taps.

B.It can cause the DSL modems to train at lower line rates.

C.It will degrade upstream rates (lower frequencies), but will not degrade downstream rates (higher frequencies).

D.DSL modems operating at 15 kft (4.5 km) of cable may not train after the bridge-taps are installed.

E.Bridge-taps will not cause a problem for DSL service unless a telephone or modem is connected at the end of the new cable (half-tap) section, or unless the new section is shorted.

Correct:A B D

15.A DSL modem will not train up. It is on a "shared line" (DSL and POTS), and the telephone on the shared line is working normally. Nine of the ten conditions are possible causes of the symptom, and one is not. What is NOT a possible cause of the problem?

A.A defective DSL line card in the DSLAM

B.A defective DSL CPE modem

C.An open (cut or broken) tip or ring lead on the phone line between the customer premises and the telco C.O

D.The DSL port in the DSLAM is in "shutdown" state

E.The DSL port in the CPE DSL modem is in "shutdown" state

F.The DSL operating mode in the DSLAM does not match the operating mode of the CPE DSL modem

G.A loose cable between the telco POTS splitter and DSLAM

H.A loose or broken connection between the DSL modem and telephone line

I.An incorrectly connected POTS splitter between the DSL modem and telephone line

J.A DSL microfilter was accidentally installed in the DSL line between the DSL modem and DSL line

Correct:C

16.What best describes RADSL?

A.The DSL line trains at the highest rate possible, limited mainly by line conditions and provisioning options.

B.The DSL line rate (bandwidth) is automatically increased when data queues are filled to a predetermined threshold.

C.The DSL line rate remains constant while noise margins are automatically adjusted.

D.The DSL modems detect the presence of CAP, DMT, SDSL, or G.SHDSL modulation at the receiver input and automatically select the appropriate mode to transmit.

Correct:A

17.The function of the ATU-R is:

A.To multiplex xDSL signals into the network core.

B.To provide a network connection for the end-user.

C.To split ADSL bandwidth from telephony bandwidth.

D.To switch ATM cells received from CPE.

E.To extend xDSL signals past the distance limitation.

Correct:B

18.What will significantly degrade DSL performance, regardless of DSL rate or line length?

A.POTS splitters at the subscriber's end of the DSL line

B.POTS splitters at the telco C.O

C.Microfilters installed between a telephone and shared line

D.Radio-frequency filters on the telephone line

Correct:D

19.Which three are major inhibitors of ADSL line quality? (multiple answer)

A.Bridge Taps

B.Distance

C.Squirrels

D.Load Coils

E.Line shared by a telephone

Correct:A B D

20.The following are wire sizes used in telephone company cables. What will allow the best overall DSL performance?

A.7 kft (2.1 km) of #26 AWG (0.4 mm) cable

B.9 kft (2.75 km) of #26 AWG (0.4 mm) cable

C.7 kft (2.1 km) of #24 AWG (0.5 mm) cable

D.9 kft (2.75 km) of #24 AWG (0.5 mm) cable

Correct:C