Started on	Friday, 30 September 2022, 1:00 PM
State	Finished
Completed on	Friday, 30 September 2022, 1:29 PM
Time taken	29 mins 42 secs
Marks	18.00/24.00
Grade	**4.50** out of 6.00 (**75**%)

Question 1

Complete

Mark 1.00 out of 1.00

True or False?

- In the DNS iterative resolution the local DNS server will contact only one server, which is the root server.

  Answer: False

The correct answer is:
True or False?

- In the DNS iterative resolution the local DNS server will contact only one server, which is the root server.
  Answer: [False]

Question 2

Complete

Mark 1.00 out of 1.00

Which routing protocol uses the Bellman-Ford equation?

Answer: RIP

The correct answer is:
Which routing protocol uses the Bellman-Ford equation?

Answer: [RIP]

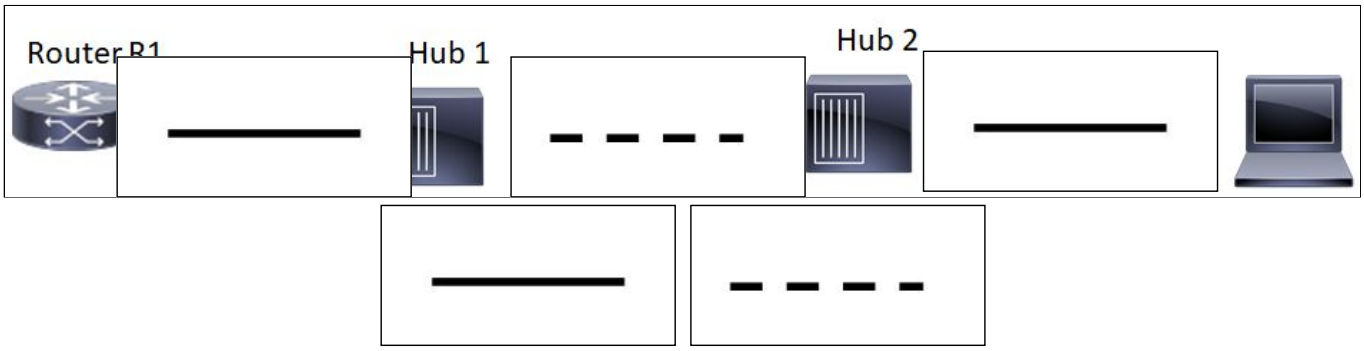
Question 3

Complete

Mark 2.00 out of 2.00

Select appropriate cable types to link between R1 and Hub1, Hub1 and Hub2, and Hub2 with the notebook.

Note that, the solid line represents the copper straight cable, while the dash line represents the copper cross-over cable.



Question 4

Complete

Mark 3.00 out of 4.00

Considering the topology below, where N represents the network address, and L represents the link-local address.

- L_A = 37-E2-2D-92-6A-A3 and N_A = 10.22.10.5
- L_1 = 37-E2-2D-93-61-53 and N_1 = 10.22.10.1
- L_2 = 47-E2-2D-93-6A-A3 and N_2 = 10.34.10.1
- L_3 = 45-A2-2D-00-22-A3 and N_3 = 10.34.10.2
- L_4 = AA-E2-2D-92-6A-A3 and N_4 = 10.28.3.1
- L_B = BB-E2-2D-92-6A-A3 and N_B = 10.28.3.200

When the data is sent from Bob to Alice and forwarded from R1 to Alice, what will be the source and destination addresses?

- Source IP address =

  10.28.3.200

- Destination IP address =

  10.22.10.5

- Source MAC address =

  BB-E2-2D-92-6A-A3

- Destination MAC address =

  37-E2-2D-92-6A-A3

Question 5

Complete

Mark 0.00 out of 1.00

True or False?

- DNS uses a MySQL server to maintain the database.

  Answer: True

The correct answer is:
True or False?

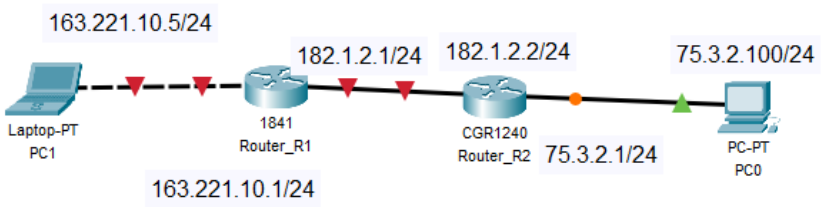
- DNS uses a MySQL server to maintain the database.
  Answer: [False]

Question 6

Complete

Mark 1.00 out of 2.00

In order to make PC0 and PC1 can connect to each other, we have to configure Router_R1 in the figure with the command as below.



Router_R1# configure terminal
Router_R1(config)# router **XXX**
Router_R1(config-router)# network 163.221.10.0
Router_R1(config-router)# network **YYYY**

- What should be the routing protocol XXX in the above command? Answer:

  rip

- The above protocol is an interior routing protocol (intra-domain) or an exterior (inter-domain) routing protocol? Answer:

  intra-domain routing protocol

- What should be the string in YYYY above? Answer:

  163.221.10.5

Question 7

Complete

Mark 0.00 out of 1.00

Which statement is NOT true about ICMP?

a. ICMP can be used to report the liveliness of a host.

b. ICMP can inform the source node that it used a wrong router to send its message.

c. ICMP can report to the source that not all fragments arrive in time.

d. ICMP can help report the current workload status of a server.

The correct answer is:
ICMP can help report the current workload status of a server.

Question 8

Complete

Mark 2.00 out of 2.00

Consider the following information obtained from ping command below:

C:\>ping www.cmu.edu

Pinging WWW.R53.cmu.edu [128.2.42.52] with 32 bytes of data:
Reply from 128.2.42.52: bytes=32 time=273ms TTL=233
Reply from 128.2.42.52: bytes=32 time=274ms TTL=233
Reply from 128.2.42.52: bytes=32 time=275ms TTL=233
Reply from 128.2.42.52: bytes=32 time=274ms TTL=233

Ping statistics for 128.2.42.52:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 273ms, Maximum = 275ms, Average = 274ms

1. On average, how long it takes to reach the destination? (answer the RTT: round-trip time) Answer:
   274
   ms
2. If the original TTL value is set to be 256, how many hops has this ping message traveled to reach the destination? Answer:
   23

Question 9

Complete

Mark 2.00 out of 3.00

Consider the information received from tracert command below:

C:\>tracert student.ict.mahidol.ac.th

Tracing route to student.ict.mahidol.ac.th [202.28.153.46]
over a maximum of 30 hops:

1	<1 ms	<1 ms	<1 ms	192.168.1.1
2	4 ms	3 ms	3 ms	100.115.0.1
3	4 ms	4 ms	4 ms	ae8.myinternet.com [49.128.4.97]
4	4 ms	4 ms	3 ms	ve454.ae8.myinternet.com [49.128.4.52]
5	4 ms	4 ms	4 ms	aex7.myinternet.com [49.128.4.62]
6	6 ms	5 ms	7 ms	mx-ll.4bb.co.th [110.64.1.142]
7	6 ms	7 ms	8 ms	202.28.153.46

Trace complete.

Answer below questions:

- What is the IP address of the default gateway of the computer that run the tracert command? Answer:
  192.168.1.1
- How many hops do we need to arrive the google.com? Answer:
  7
- What is the average time to reach the target host? Answer:
  4
  ms

Question 10

Complete

Mark 1.00 out of 1.00

What is the full name of the platform that provides the e-learning of Cisco?

a. Cisco Program Tracer

b. Cisco Packet Tracer

c. Cisco Networking Academy

d. Cisco Netacad

e. Cisco Packet Tracker

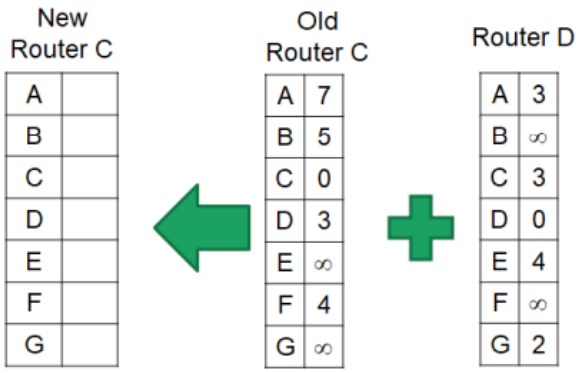
The correct answer is:
Cisco Networking Academy

Question 11

Complete

Mark 4.00 out of 4.00

Suppose the cost from Router C to D is 3 (C_{DC} = 3). Router D advertises its distance vector to Router C. Find a new distance vector of Router C.



What is the new cost of Router B for the destination A? 6

What is the new cost of Router B for the destination B? 5

What is the new cost of Router B for the destination C? 0

What is the new cost of Router B for the destination D? 3

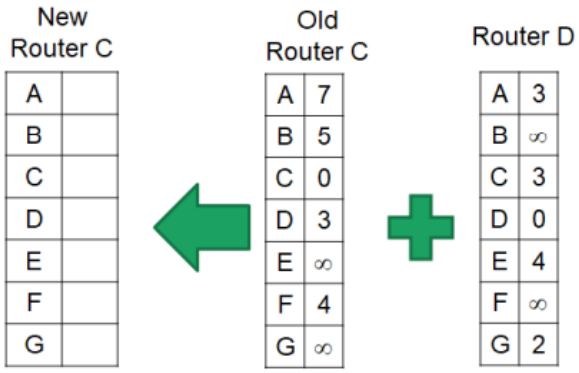
What is the new cost of Router B for the destination E? 7

What is the new cost of Router B for the destination F? 4

What is the new cost of Router B for the destination G? 5

The correct answer is:

Suppose the cost from Router C to D is 3 (C_{DC} = 3). Router D advertises its distance vector to Router C. Find a new distance vector of Router C.



What is the new cost of Router B for the destination A? [6]

What is the new cost of Router B for the destination B? [5]

What is the new cost of Router B for the destination C? [0]

What is the new cost of Router B for the destination D? [3]

What is the new cost of Router B for the destination E? [7]

What is the new cost of Router B for the destination F? [4]

What is the new cost of Router B for the destination G? [5]

Question 12

Complete

Mark 1.00 out of 2.00

Consider DHCP, suppose the DHCP server's IP address is 181.14.15.67.

- What is the source IP address of the DHCP request packet? 181.14.15.67
- What is the destination port number of the DHCP request packet? 67

The correct answer is:
Consider DHCP, suppose the DHCP server's IP address is 181.14.15.67.

- What is the source IP address of the DHCP request packet? [0.0.0.0]
- What is the destination port number of the DHCP request packet? [67]