

Name :

Group :

Note :

Exam

MCQs (7.5 points, -0.5 for incorrect answer):

1- NV-RAM means :

- ☐ Non Volatile Random Access Memory ☐ No-Volatile ReAl Memories ☐ Non Variable Random Access Memory

2- What is a secure configuration option for remote access to a network device?

- ☐ Configure an ACL and apply it to the VTY lines ☐ Configure 802.1x
☐ Configure SSH ☐ Configure Telnet.

3- Which option shows a correctly configured IPv4 default static route?

- ☐ ip route 0.0.0.0 255.255.255.0 S0/0/0 ☐ ip route 0.0.0.0 0.0.0.0 S0/0/0
☐ ip route 0.0.0.0 255.0.0.0 S0/0/0

4- ip route 192.168.10.0 255.255.255.0 173.1.1.3 10, What does the number **10** signify?

- ☐ exit interface ☐ maximum number of hops to the 192.168.10.0/24
☐ metric ☐ administrative distance

5- Identify the possible routes that can be summarized

Type	Network	Next hop
C	10.0.2.132 /30	10.0.2.134
C	10.0.0.0 /24	10.0.0.1
C	10.0.1.0 /24	10.0.1.1
<u>S</u>	<u>10.0.2.0 /25</u>	<u>10.0.2.133</u>
<u>S</u>	<u>10.0.2.128 /30</u>	<u>10.0.2.133</u>

6- When configuring inter-vlan routing, we use encapsulation dot1q ? . What is the missing parameter highlighted by a question mark? It

- ☐ Identifies the subinterface ☐ Identifies the VLAN number
☐ Identifies the native VLAN number ☐ Identifies the type of encapsulation that is used

7- Which of the following is true regarding RIPv2?

- ☐ It is more secure than RIPv1 ☐ It does not support for authentications.
☐ It has a lower administrative distance than RIPv1 ☐ It support vlsm

8- Which two (2) characteristics describe the protocol OSPF

- ☐ Classful ☐ classless ☐ link state ☐ distance vector

9. What is the Administrative Distance for External EIGRP Routes?

☐ 1 ☐ 90 ☐ 170 ☐ 255

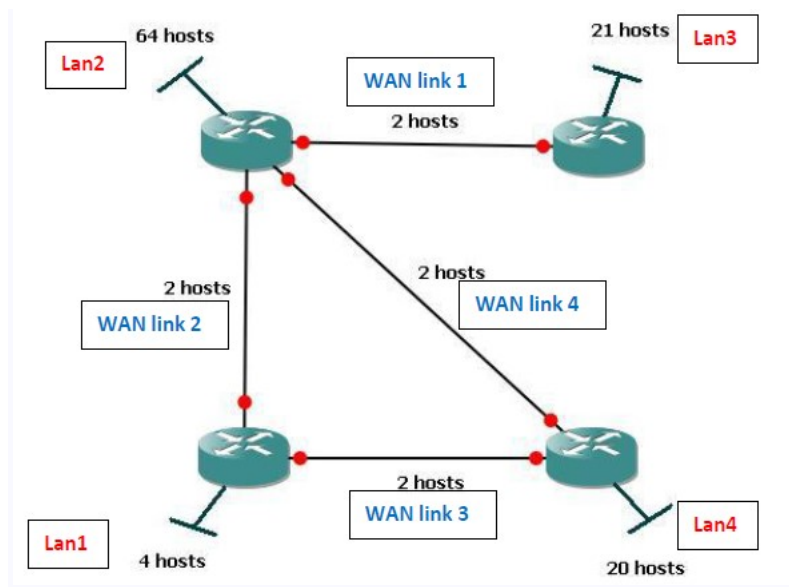
10. ISIS are similar ABR in OSPF?

☐ L1 routers ☐ L2 routers ☐ L1/L2 routers ☐ All answers are true

Exercise 2(4points): complete the table bellow

Protocol	RIP	OSPF	EIGRP	IS-IS
AD	120	110	90-170	115
maximum routers in the network.	15	unlimited	255	unlimited
metric	Hop Count	bandwidth	bandwidth and delay	<ul style="list-style-type: none"> • Default Metric: every interface has a default metric of 10. • Delay: similar to how EIGRP uses delay. • Expense: the actual monetary cost of a link. • Error: similar to how EIGRP uses reliability.
Algorithm	RIP works on Bellman Ford algorithm.	OSPF works on DIJKSTRA Algorithm.	DUAL algorithm	DIJKSTRA Algorithm.
Protocol type	Distance vector	Link State	Both	Link State

Exercise 01:



X

1. How many networks in the figure? 8
2. Identify stub routers and stub networks. 4 stub networks and 1 stub router (R1)
3. Using R2 address **10.23.22.0/24**, determine the class of this network
4. Order the networks from the largest size to the smallest
5. Using subnet masks with variable length (VLSM) propose an addressing plan for the networks using the table below (starting from the biggest network to the smallest).

Network	Net@	Mask	Broadcast @	Number of hosts per subnet	Hosts @ range