Exam Code: 642-052
Routing and Switching SE/FE Exam (RSS/FE)

QUESTION 1
You are configuring a VLAN interface on an internal route processor. You defined
the VLAN interface. What should you do next?

A. define the network number
B. define the default gateway
C. assign IP routing to the interface
D. assign a unique IP address to the interface

Answer: D

QUESTION 2
Which command associates a map class with an interface or sub
interface when configuring frame relay traffic shaping?

A. frame-relay map
B. frame-relay class
C. map-class frame-relay
D. frame-relay map-class
E. map frame-relay class

Answer: B

QUESTION 3
You have a Catalyst 5000 switch with a large network. Broadcasts are consuming
too much bandwidth. You want to create VLANs and need inter VLAN
communication.
Which hardware accomplishes this?

A.   MLS
B.   RSM
C. MSFC
D. VLAN interswitch

Answer: B

QUESTION 4
Which device allows communication between VLANs?

A. IP translator
B. route processor
C. switching engine
D. VLAN interswitch

Answer: B

QUESTION 5
A VLAN, implemented in switching equipment, corresponds to which concept in legacy network equipment?

A.VTP	domain
B.LAN	segment
C. routed network
D. ISL trunk interface

Answer: B

QUESTION 6
Which statements are true above VLANs? (Choose two.)

A. VLANs have connected members located anywhere in the switched network.
B. VLANs improve network segmentation by determining the next network point to which a frame should be forwarded.
C. VLANs allow a Layer 1 protocoll to determine intelligently the best path to a destination when multiple paths exist.
D. VLANs solve the scalability problems found in large, flat networks by dividing the network into smaller broadcast domains or subnets.

Answer: AD

QUESTION 7
How many VLANs can s single RSM support?

A. 1
B. 16
C. 256
D. 1024

Answer: C

QUESTION 8
Which command configures a default gateway on a Catalyst 3500XL switch?

A. Switch(config) ip route ip address
B. Switch(config) set ip route address
C. Switch(config) ip route-default-gateway ip address
D. Switch(enable) set default-gateway ip address

Answer: D

QUESTION 9
What is a reason for aerating VLANs on switches?

A. to simply management
B. to simple configuration
C. to enhance Layer 2 functionality
D. to create smaller broadcast domains

Answer: D

QUESTION 10
Which tree are responsibilities of IKE in the IPsec protocol? (Choose tree)

A. negotiating protocol parameters
B. packet encryption
C. exchanging public keys
D. integrity checking using hashes
E. authenticating both sides of a connection
F. implementing tunnel mode

Answer: A, E, F
Note:
IKE is a protocol used to automatically negotiate the security
parameters, authenticate identified parameters, and secure and
establish an agreement between IPsec routers. Multiple IKE policies
can be defined between two IPsec peers; however, there must be at
least one matching IKE policy between them to establish the IPsec
tunnels.

QUESTION 11
Which router command is used to reverse telnet to a modem locally connected to
line 8?

A. telnet 10.1.1.1 1008
B. telnet 10.1.1.1 2008
C. telnet 10.1.1.1 8
D. telnet 8 10.1.1.1

Answer: B

QUESTION 12
You have a large flat network that is experiencing congestion. You want to create
VLANs with smaller subnets Layer 2 switch to increase performance. You only
router is equipped with 10BaseT Ethernet ports.
How can you accomplish the assigned task?

A. use separate physical links from the router to the switch for each VLAN
B. move each new subnet to a separate router interface and route all traffic
C. enable ISL trunking on the router and pass all VLAN traffic on a single link
D. enable 802.1Q trunking on the router to pass all VLAN traffic on a single link

Answer: A

QUESTION 13
What is a VLAN?

A. a routed internetwork
B. a single broadcast domain
C. a group of switch ports that communicate through an RSM
D. a group of switch ports that are member of the same multicast group

Answer: B

QUESTION 14
Which two commands could you use to view a new entry to the modem
capability database on a fixed chassis 8-port asynchronous access
server? (Choose two)

A. modem entry
B. show modemcap
C. show modem entry
D. show running-config
E. show entry modemcap

Answer: B,D
Note:
show modemcap
To display the values set for the current modem, use the show
modemcap command. This display lists the modems for which the router
has entries. To display the attributes associated with a specific
modem, use the show modemcap modem-name command.
Show running-config
-cut- modemcap entry lasat:FD=&FM1L2S7=55:HFL=&K3:SPD=&Q6:
BCP=%C3:NER=&Q0:TPL=default
-cut-

QUESTION 15
Which statement about ISDN is true?
A. The B channel is governed by DDR
B. DSS1 operates as a subset of Q.931
C. ITU-T Q.931 defines call control between the TE and the LE.

D. ITU-T Q.931 is specified as the protocol for layer2 of the ISDN D channel

Answer: C
Note: System processing of ISDN D-channel messages generally follows
the International Telecommunications Union guidelines documented in
ITU-T Q.931.

QUESTION 16
Catalyst switches support which two methods of assigning members to VLANS?
(Choose two.)

A. static VLANs
B.   dynamic   VLANs
C.   automatic   VLANs
D. host-based VLANs
E. source-based VLANs

Answer: AB

QUESTION 17
Which DTP switchport mode parameter sets the switch port actively send and
respond to DTP frames?

A. access
B. trunk
C. no negotiate
D. dynamic desirable
E. dynamic auto

Answer: D
Note: switchport mode dynamic desirable: Makes the interface
actively attempt to convert the link to a trunking link. The
interface becomes a trunk interface if the neighboring interface is
set to trunk, desirable, or auto mode.
switchport mode dynamic auto: Makes the interface convert the link
to a trunking link if the neighboring interface is set to trunk or
desirable mode. This is the default mode for all Ethernet interfaces.

QUESTION 18
Which command removes certain VLANs from an existing trunk?

A. set   vlan
B. clear   vtp
C. clear port
D. clear trunk

Answer: D

QUESTION 19
As a contractor, you have been asked by a local telco to assist in the install of CPE for their ADSL network. They are using Cisco DSLAMs in their core network and want to use Cisco CPE for their customers. They inform you that they want you to select from several routers depending on customer needs as they have several levels of service.
At your first customer location, the customer informs you that they want to use the router to make a direct, continuous, encrypted connection to their corporate headquarters with no split tunnelling. Which Cisco ADSL router should you install?

A. Cisco 831
B. Cisco 837
C. Cisco SOHO 91
D. Cisco SOHO 97

Answer: B
Note: The Cisco 837 and SOHO 97 routers are asymmetric digital subscriber line (ADSL)-over-plain old telephone service (POTS) routing devices. They have an integrated 4-port Ethernet switch for the LAN and an ADSL physical interface for the WAN, allowing the routers to connect a corporate telecommuter or small office to corporate LANs and the Internet.
The Cisco 837 router is designed with both hardware-based and software-based encryption, while the SOHO 97 router supports only software-based encryption. The Cisco 837 routers support the addition of Flash memory or DRAM, either as a factory upgrade or a field-installed option. SOHO 97 routers have a fixed memory configuration.

QUESTION 20
What is the maximum Ethernet frame size on a trunk link configured using IEEE 802.1Q encapsulation?

A. 1496
B. 1500
C. 1518
D. 1522
E. 1548

Answer: D
Note: IEEE 802.1q uses an internal tagging mechanism which inserts a

4 byte tag field in the original Ethernet frame itself between the
Source Address and Type/Length fields. Since the frame is altered,
the trunking device recomputes the frame check sequence (FCS) on the
modified frame
The 802.1q tag is 4 bytes, hence the resulting Ethernet frame can be
as large as 1522 bytes . The minimum size of the Ethernet frame with
802.1q tagging is 68 bytes.
ISL: The biggest implication for systems using ISL encapsulation is
that the encapsulation is a total of 30 bytes and fragmentation is
not required. Therefore, if the encapsulated packet is 1518 bytes
long, the ISL packet will be 1548 bytes long for Ethernet.
Additionally, if packets other than Ethernet packets are
encapsulated, the maximum length can be greatly increased. This
length change must be considered when evaluating whether a topology
can support ISL packets size.