Considering two all optical subnetworks (say A and B) interconnected through an OXC. Assuming that there is a fiber cut in the subnetwork A, then:

- ● a. all the FDI signals are propagated from A to B
- ○ b. only OTS-FDI are propagated from A to B
- ○ c. no FDI signals are propagated from A to B
- ○ d. only ODU-FDI are propagated from A to B

Clear my choice

Indicate which one, among the following options, represents a shortest compression of the IPv6 address ba20:0000:5678:0300:aaaa:0000:0000:2200

○ a. ba2:0:5678:3:aaaa::22

⦿ b. ba20:0:5678:300:aaaa::2200

○ c. ba20::5678:300:aaaa:0:0:2200

○ d. ba20::5678:300:aaaa::2200

Clear my choice

With reference to the Forward Defect Indicator

○ a. it is sent to notify that there is a failure to the rest of the network elements

○ b. it can be generated only in the electrical domain

○ c. it is sent by the upstream node with respect to the failing link

● d. it is used to suppress redundant alarm

Clear my choice

Considering the network scenario shown in the picture, which depicts an SR domain with the link weights, specify the shortest Segment List that allows the router R1 to steer the traffic along the selected path. Assume that the SID of a node is the ID of the node itself, while the SID associated to a link is represented by the concatenation of the ID of the nodes connected by the link.
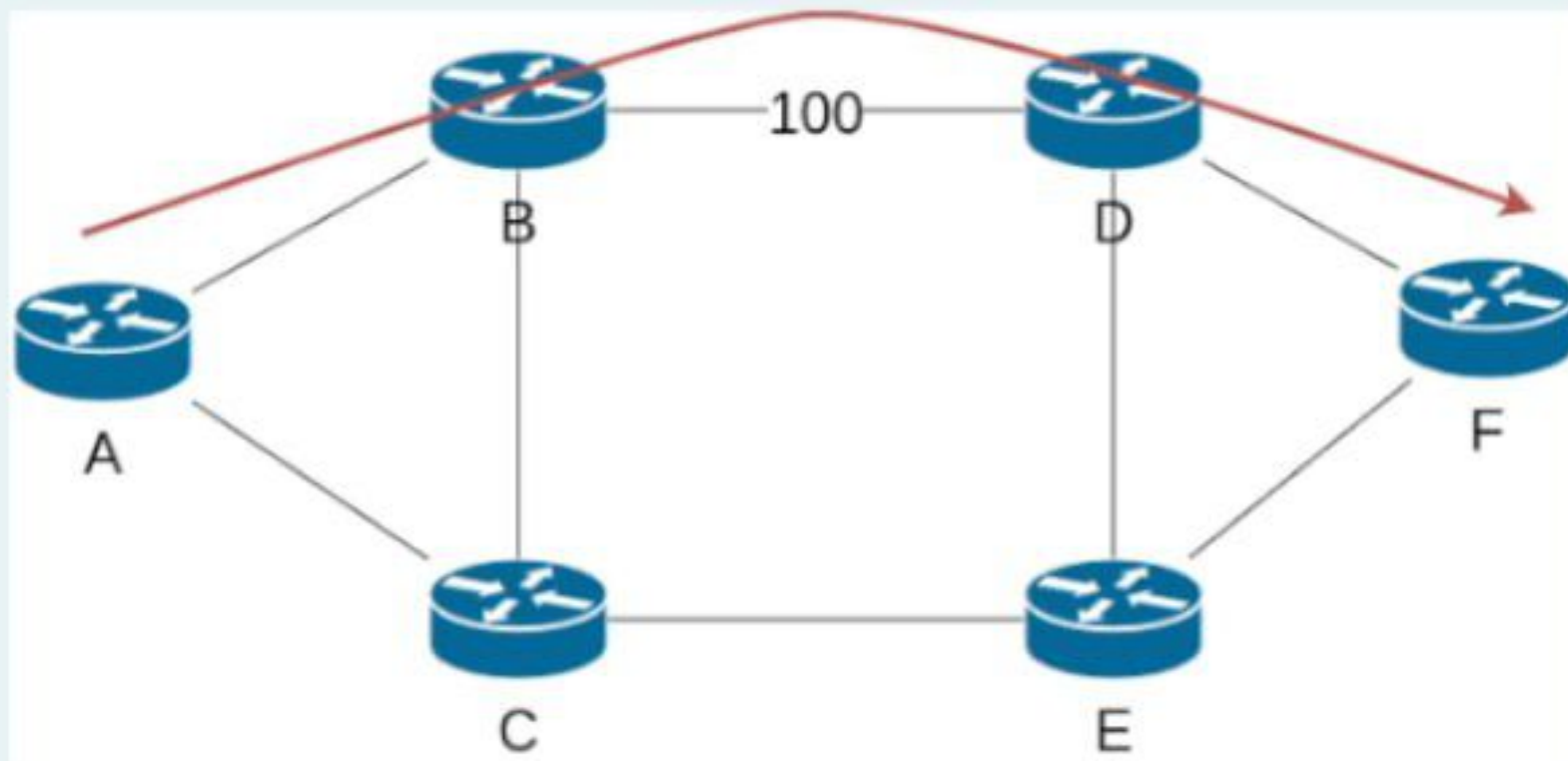
- a. B-F
- b. B-BD-F
- c. F
- d. D-F

Considering a VPN realized according to the BGP/MPLS model

Select one:

○ a. a Provider Edge router keeps a singe VPN Routing & Forwarding table where it stores the informations related to all the VPNs it is serving

○ b. MPLS provides security services related to confidentiality and authentication of messages exchanged between two private networks

○ c. two different VPNs must use non overlapping addressing schemes (i.e., two subnets belonging to different VPNs cannot have the same network prefix)

● d. the ingress Provide Edge exploits the MPLS label stacking to indicate to the egress Provider Edge over which output port it has to send the traffic out

Clear my choice

With reference to Multi Protocol Label Switching (MPLS)

Select one:

- ● a. an ingress Label Edge Router always performs the PUSH operation

- ○ b. when the label stacking is used, the MPLS routers perform the switching by looking at all the labels included in the stack

- ○ c. requires the classification of the traffic at each hop of a Label Switched Path (LSP)

- ○ d. is adopted in the transport networks to overcome the limit imposed on the data rate due to the switching capacity of IP routers

Clear my choice

With reference to the IPv6 network scenario shown in the picture, where each link is labeled with its MTU in Byte, indicate how many attemps the source node has to do, before being able to correctly deliver a packet to the destination host, under the assumption that Hs always generates packet of the maximum allowed size.

Hs —1000B— R1 —1300B— R2 —900B— R3 —800B— Hd

- a. 1
- b. 2
- c. 4
- d. 3

Clear my choice

what is the role of the Segment Routing Policy Database?

- ○ a. it contains the associations between the local SIDs and a specific behavior
- ○ b. it maintains the association between the identity of each node and its locator
- ○ c. given a pair of ingress-egress nodes, it is possible to specify only a single SR policy
- ● d. it is used by the ingress node in the process of selecting the appropriate Segment List to use to steer the incoming packets across the SR domain

Clear my choice

Considering two all optical subnetworks (say A and B) interconnected through an OXC. Assuming that there is a fiber cut in the subnetwork A, then:

- ⦿ a. all the FDI signals are propagated from A to B ✖
- ○ b. only OTS-FDI are propagated from A to B
- ○ c. no FDI signals are propagated from A to B
- ○ d. only ODU-FDI are propagated from A to B

Risposta errata.

The correct answer is:
only ODU-FDI are propagated from A to B