



Student:

ID:

Each question well answered will have a grade of 12%. Select the best one that fits with the requirement.

1) Which one is not a switch port state in Spanning Tree Protocol (STP):

- a) Blocking.
- b) Forwarding.
- c) Disabled.
- d) All of the above options are switch port states in STP.

Option chosen:

2) Concerning to Bridge Protocol Data Unit (BPDU) in STP:

- a) Switches send BPDUs using a unique MAC address from its origin port and a multicast address as destination MAC.
- b) Switches do not send BPDUs using a unique MAC address from its origin port and a multicast address as destination MAC.
- c) Switches send BPDUs using a unique MAC address from its origin port and a unicast address as destination MAC.
- d) None of the above options are correct.

Option chosen:

3) Which one of the following statements is not true concerning to STP:

- a) The Root Bridge serves as the central reference point for an STP topology. .
- b) After a Root Bridge in elected, both root ports and designated ports are identified through the STP multistep convergence process.
- c) A blocked port can be reactivated if another port goes down.
- d) STP enables ports to create loops through some segments across a network topology.

Option chosen:

4) Trying to set an inter-VLAN communication on a Router, which one of the following commands could be wrong:

- I. R1(config)#**interface fastethernet 0/1**
- II. R1(config-if)#**shutdown**
- III. R1(config-if)#**interface fastethernet 0/1.1**
- IV. R1(config-subif)#**encapsulation dot1q 1**
- V. R1(config-subif)#**no ip address 172.17.1.1 255.255.255.0**

- a) II, III.
- b) I, V.
- c) II, IV, V.
- d) II, V.

Option chosen:

- 5) In order to set an inter-VLAN configuration, first is necessary to set the VLANs. Complete the followings commands in the order presented:

```
SW(config) #interface _____ fa0/5-10
SW(config-if-range) #switchport _____ vlan 30
SW(config-if-range) #interface _____ fa0/11-17
SW(config-if-range) #end
```

- a) range, range, access
- b) access, access, range
- c) range, range, access
- d) range, access, range

Option chosen:

- 6) The following topology is composed only by switches. The Bridge ID values in each one is set as $SW0 < SW1 < SW2 < \dots < SW5$. All the links have a cost of 19, but one of the links between SW3 and SW4 has a cost of 100. Determine the Root Bridge, the root ports, the designated ports and the non-designated ports (40 points).

