



Republic of Rwanda
City of Kigali



Module/Competence Detail		Trainee's Detail	
SECTOR:	ICT	Names:	
SUB-SECTOR	Networking	Class	
Qualification Title:	TVET Certificate IV	Date:	
MODULE (Code & Name):	NEWPS401: SWITCHING	Trainer's Detail	
Competence Title:	Perform switching	Names:	
School:		DECISION/ 100 Marks
		Signature	

End of second term comprehensive assessment

Instructions

This exam has three section A, B and C

- ◆ **Answer all Question in provided answer space**
- ◆ **Section A:** Answer all questions **55Marks**
- ◆ **Section B:** Choose Only Three Questions **30Marks**
- ◆ **Section C:** Choose Any One Question **15Marks**



Republic of Rwanda
City of Kigali



SECTION A: Attempt all questions in section A/ 55 marks

Q1. choose and the write the correct answers [18Marks]

I. Which frame completes the entries in switching

- A. Acknowledgment frame
- B. Setup frame
- C. Routing frame
- D. None

II. Which one of the following switch functions is needed to pass data between two PCs, each connected to a different VLAN?

- A. Layer 2 switch
- B. Layer 3 switch
- C. Trunk
- D. Tunnel

III. Which VLANs are allowed on a trunk link by default ?

- A. None
- B. Only the native VLAN
- C. All active VLANs
- D. Only negotiated VLANs

IV. Which one of the following is a valid VTP advertisement?

- A. Triggered update
- B. VLAN database
- C. Subset
- D. Domain

Q2. What are Ethernet frame fields? [7Marks]

Q3. What is the difference between broadcast domain and collision domain? [4Marks]

Q4. In different ways of accessing either Router or switches, we use different lines. Namely, VTY, CONSOLE or AUX lines. Give the difference between VTY and CONSOLE lines. [4Marks]

Q5. Why is network segmentation a good idea when managing a large network? [5Marks]



Republic of Rwanda
City of Kigali



Q6. What are the two ports of switches? **[4Marks]**

Q7. Why is it said that the switch ports are under some Broadcast domain by Default? **[4Marks]**

Q8. what is sub interfaces? **[4Marks]**

Q9. What is MAC Address? **[5Marks]**

SECTION B: Choose one (3) question in section B/ 30 marks

Q10: Switches are made in different platforms/ form factors

A. Give different types of switch form factors. **[6Marks]**

B. The information in switch is in the form of Frames. What is the difference between Tagged frame and Untagged Frame? **[4Marks]**

Q11: Router and Switches are both networking devices that perform packet forwarding techniques

A. What is Packet forwarding / **4 Marks**

B. Give and Explain 2 Types of packet forwarding as used in either Switches or routers / **6 Marks**

Q12: Apart from Cut-Through Versus Store-and-Forward Switching features state other five Switching features. **[10Marks]**

Q13: In some cases, different network administrators find the need in configuring VTP. (VLAN TRUNKING PROTOCOL).

A. What is VTP? **[1marks]**

B. VTP performs in three (3) main modes. What are they? **[3marks]**

C. Write down the commands needed for VTP Client, and VTP Server switches to begin VLAN advertisement process. **[6marks]**

SECTION C: Choose one (1) question in section C /15 MARKS

Q17: LAN traffic can be managed through assigning the network users in different VLANs

A. Give any three benefits of VLAN in a certain Network. **[3Marks]**



Republic of Rwanda
City of Kigali



- B. Give five (5) types of VLAN you know. **[4Marks]**
- C. What is inter-VLAN **[2Marks]**
- D. Differentiate the type of inter-VLAN in detail **[6Marks]**

Q18: A certain company needs to setup the network and configure 2 VLANs in it as VLAN 5 with ICT as the name and VLAN 10 with STAFF as the name/

- A. Write down the commands to create the above VLANs **[5Marks]**
- B. Write down the commands needed for interfaces FastEthernet 0/1 and FastEthernet 0/2 to be assigned in VLAN 5 and FastEthernet 0/3 in VLAN 10 **[5Marks]**
- C. Write down the commands required to create as Switch Virtual Interface (SVI) into VLAN 5 with the IP of 192.168.10.10/24 **[5Marks]**