



TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

INSTRUCTIONS TO CANDIDATES: PART I (Answer Booklet)

1. A candidate should fill in the actual names and the index number on the cover of this questions and answer booklet on the provided place (Black Box).
2. It is illegal for a candidate to write any of his/her names, index number or a school name inside the answer booklet.
3. A candidate should check if all pages of the answer booklet are complete. No candidate should remove or tear any pages or part of it from the answer booklet.
4. A candidate should answer in the language in which the examination is set. (See page **(ii)**)
5. A candidate should sign on the sitting plan when submitting the answer booklet. He/she has also to check if the answer booklet is well sealed.
6. No extra paper is allowed in the examinations room. If a candidate is caught with it his/her results will be nullified.
7. No candidate is allowed to write answers not related to the subject being sat for, otherwise it will be considered as a cheating case.
8. Write your answers on the 12 lined pages (From page 1 of 12 to page 12 of 12).
9. Use the last non-lined pages as draft.
10. Results for any candidate who is caught in examination malpractices are nullified. The cheating can be recognized during examinations administration, marking exercise or even thereafter.

TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

OPTION/TRADE: NETWORKING

Subject: Install and Configure Wireless Network

DURATION: 3 hours

INSTRUCTIONS TO CANDIDATES:PART II

The paper is composed of two (2) main Sections as follows:

Section I: Attempt all the Twelve (12) questions

(60 marks)

Section II: Attempt any Four (4) questions out of Six (6)

(40 marks)

Allowed materials:

- Ruler and square
- Calculator

Note:

Every candidate is required to carefully comply with the provided assessment instructions.

Section I: Attempt all the Twelve (12) questions**(60 marks)**

- 01.** What does Access Point mean? **(5 marks)**
- 02.** Differentiate IBSS from BSS. **(5 marks)**
- 03.** What are the wireless infrastructure components? **(5 marks)**
- 04.** What is the access point AP in wireless LAN? **(5 marks)**
- 05.** Define "A Wi-Fi hotspot. **(5 marks)**
- 06.** When you are going to make a wireless for an organization you need to plan the work. Enumerate the wireless Site Planning process. **(5 marks)**
- 07.** When the access point is not sharing wireless network how are you going to troubleshoot that AP? **(5 marks)**
- 08.** What is bandwidth? **(5 marks)**
- 09.** Explain the two (2) main functions of antenna. **(5 marks)**
- 10.** What are the different modes of an Access Point (AP) operation? **(5 marks)**
- 11.** Explain Wi-Fi encryption modes. **(5 marks)**
- 12.** Choose the best answer: **(5 marks)**

1. What is the access point (AP) in a wireless LAN?

- a) A device that allows wireless devices to connect to a wired network
- b) Wireless devices itself
- c) Both device that allows wireless devices to connect to a wired network and wireless devices itself
- d) All the nodes in the network

2. In wireless ad-hoc network _____
- a) access point is not required
 - b) access point is must
 - c) nodes are not required
 - d) all nodes are access points
3. Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?
- a) CDMA
 - b) CSMA/CA
 - c) ALOHA
 - d) CSMA/CD
4. In wireless distribution system _____
- a) multiple access points are inter-connected with each other
 - b) there is no access point
 - c) only one access point exists
 - d) access points are not required
5. A wireless network interface controller can work in _____
- a) infrastructure mode
 - b) ad-hoc mode
 - c) both infrastructure mode and ad-hoc mode
 - d) WDS mode

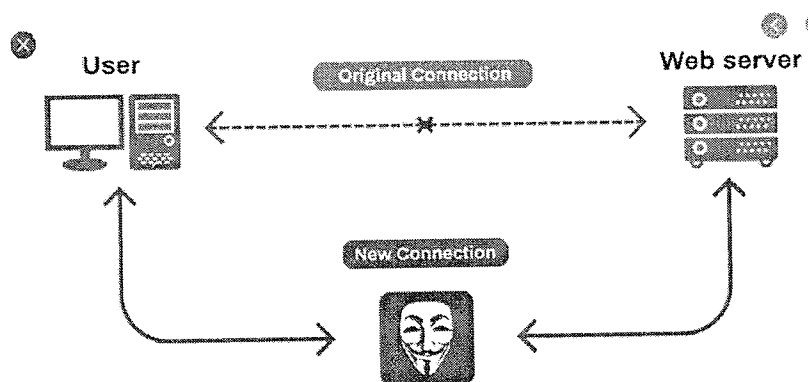
Section II: Attempt any Four (4) questions out of Six (6)

(40 marks)

13. Explain at least five (5) different Wireless Technologies. **(10 marks)**

14. Differentiate Wi-Fi from WIMAX. **(10 marks)**

15. Observe the following figure then explain which kind of security attack is about? **(10 marks)**



16. Rwanda Development board has deployed a new wireless network generation in its building, and you are appointed as wireless network consultant in Rwanda Development board building. What are the testing Considerations are you going to apply to? **(10 marks)**

17. Explain the benefits of a wireless network. **(10 marks)**

18. Fill in the following table with corresponding devices. **(10 marks)**

- Mini-PCI cards
- Access points
- PC Cards
- switches and controllers
- USB,
- Power over Ethernet injectors
- bridges
- Compact Flash,
- SD devices
- Residential gateways
- PCI
- Enterprise encryption gateways
- Wireless presentation gateways
- Mesh routers

WLAN devices	WLAN clients' devices

Do not write anything on this page !

