061006T4ICT

ICT TECHNICIAN LEVEL 6

IT/OS/ICT/CR/1/6

PERFORM COMPUTER NETWORKING

NOV/DEC 2023

TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL (TVET CDACC)

PRACTICAL ASSESSMENT

TIME: 3 Hours

CANDIDATES INSTRUCTIONS

1. In this practical assessment you are required to Perform computer networking

2. You are given **10 minutes** to read through the tasks and confirm the availability of the resources

3. The assessor will record your performance at critical points using audio-visual means

4. All tasks carry **50** marks

You are provided with the following resources

- Cat6/cat5 Ethernet cable

- Crimping tool

- A set of RJ45

- Cable termination testing tool

- Router, R1

- Switch, S1

- Computer installed with a network administration software and browser, PC

Task 1: Perform a straight-through cable termination for 3 sets of cable.

Task 2: Set up LAN network with a minimum of two computers

Task 3: Configure the devices on the LAN with the following IP addresses.

Device	Interface	IP Address	Subnet Mask
R1	Fa0/0	192.168.99.2	255.255.255.0
S1	Fa0/1	192.168.99.11	255.255.255.0
PC1	NIC	192.168.99.21	255.255.255.0
PC2	NIC	192.168.99.22	255.255.255.0

Task 4: Set up the router on the LAN to route traffic from the LAN to the internet.

Task 5: Configure the router to use the default gateway 192.168.66.1 and enable port security.

Task 6: Test the connection from PC1 to PC2

Task 7: Configure the router to provide a secure connection to the internet.

Task 8: Test the connection by sending and receiving data between the devices and the
internet.