061006T4ICT

ICT TECHNICIAN LEVEL 6

IT/OS/ICT/CR/10/6 DEVELOP COMPUTER PROGRAM

MAY 2025



PRACTICAL ASSESSMENT

TIME: 3 Hours

CANDIDATES INSTRUCTIONS

- 1. In this assessment, you will be required to perform the following tasks:
 - a) **Task 1**: Write a C program that helps a traffic police officer decide what action to take based on the **speed of a vehicle**. The program should prompt the police officer to enter the maximum speed.

Rules:

- ✓ If the speed is less than or equal to $40 \text{ km/h} \rightarrow \text{Print "Safe driving."}$
- ✓ If the speed is more than 40 and up to $60 \text{ km/h} \rightarrow \text{Print}$ "Warning: Maintain a lower speed."
- ✓ If the speed is more than 60 and up to 100 km/h \rightarrow Print "Fine: KSH5000."
- ✓ If the speed is above 100 km/h → Print "License Suspended."
- b) **Task 2**: Create a program for a vending machine that displays the selected drink based on the user's choice. Use a switch statement.

Available Options:

- ✓ $1 \rightarrow \text{Tea}$
- \checkmark 2 \rightarrow Coffee
- \checkmark 3 → Juice
- \checkmark 4 \rightarrow Water
- \checkmark Any other number \rightarrow "Invalid selection."

You will be provided with the following resources

Windows- based Personal Computer with:

> Compilers for C