

**071305T4EOP**

**ELECTRICAL OPERATION (POWER OPTION) LEVEL 5**

**ENG/OS/PO/CR/04/5**

**Demonstrate Understanding of Electronics**

**July/August 2025**



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

**PRACTICAL ASSESSMENT**

**Time: 3 HOURS**

**INSTRUCTIONS TO CANDIDATE:**

1. Figure 1 shows a circuit diagram of a regulated power supply. You are required to perform the following tasks;

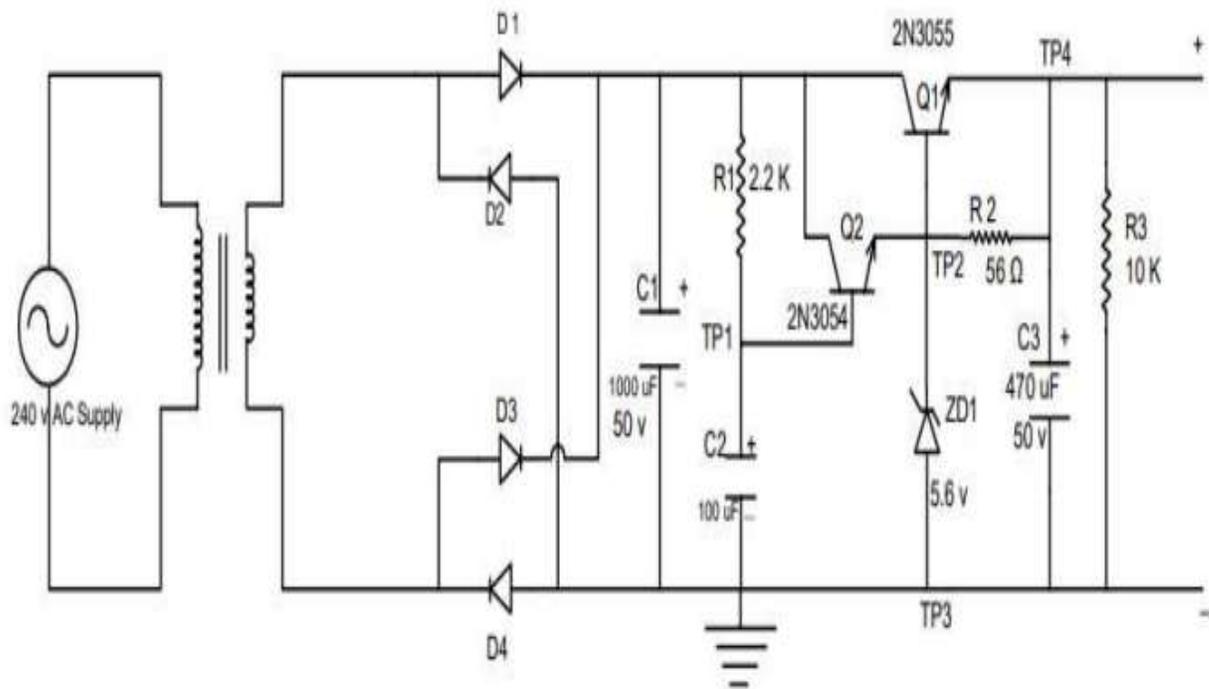
**TASK 1:** Use the components provided to assemble and mount the above circuit on a copper strip board.

**TASK 2:** Solder the circuit.

**TASK 3:** Power the circuit.

**TASK 4:** Measure voltages at the following test points and record the results.

- i. TP1
- ii. TP2
- iii. TP3
- iv. TP4



**Figure 1**

2. You have been provided with the following resources for the practical tasks:

- i. 240V Transformer
- ii. 4 diodes
- iii. 1000µF capacitor
- iv. 100µF capacitor
- v. 470µF capacitor
- vi. 5.6V Zener diode
- vii. 2.2KΩ resistor
- viii. 2N 3054 Transistor
- ix. 2N3055 Transistor
- x. 10KΩ Resistor
- xi. 56Ω resistor
- xii. Copper strip board
- xiii. Solder wire
- xiv. Jumper wires
- xv. 240V AC power supply