

071306T4EEN

ELECTRICAL ENGINEERING (POWER OPTION) LEVEL 6

ENG/OS/PO/CR/09/6

DEMONSTRATE UNDERSTANDING OF ELECTRONICS

July/August 2024

Time: 3 Hours



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

PRACTICAL ASSESSMENT

3 HOURS

INSTRUCTIONS TO CANDIDATE:

1. Do not write on the question paper
2. **NO** circuits should be connected to **POWER** without the assessor permission
3. A separate plain paper will be provided

This paper consists of THREE (3) printed pages.

**Candidate should check the question paper to ascertain that all the pages are
printed as indicated and that no questions are missing.**

The following resources will be provided:

- (a) Electronic tool kit
- (b) Assorted Resistors
- (c) Rectifier Diodes
- (d) Transformer
- (e) An A.C voltage source of 240V
- (f) Zener diodes
- (g) 2 100 μ F Capacitors
- (h) Transistor BC 547
- (i) Digital voltmeter (Auto range)
- (j) Jumper wires
- (k) Soldering gun

PROJECT

Figure 1 shows a D.C power supply.

You are required to perform the following tasks:

TASK 1: Using the components and tools provided, fabricate the circuit on a strip board.

TASK 2: Power the circuit and measure the voltages at test points:

- i. TP1
- ii. TP2
- iii. TP3
- iv. TP4
- v. TP5
- vi. Measure the current flowing through R1

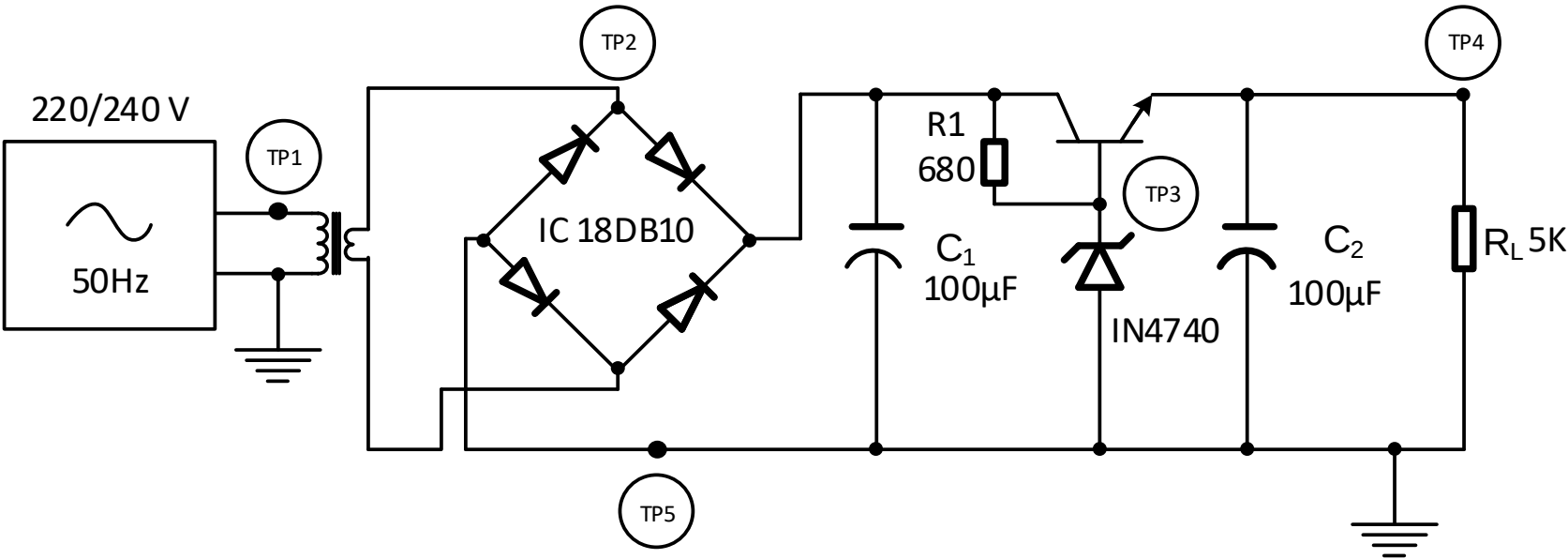


Figure 1

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