

**THE UNITED REPUBLIC OF TANZANIA  
NATIONAL EXAMINATIONS COUNCIL  
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION**

**084**

**ELECTRICAL DRAUGHTING  
(For Both School and Private Candidates)**

**TIME: 3 Hours**

**2006/10/11 p.m.**

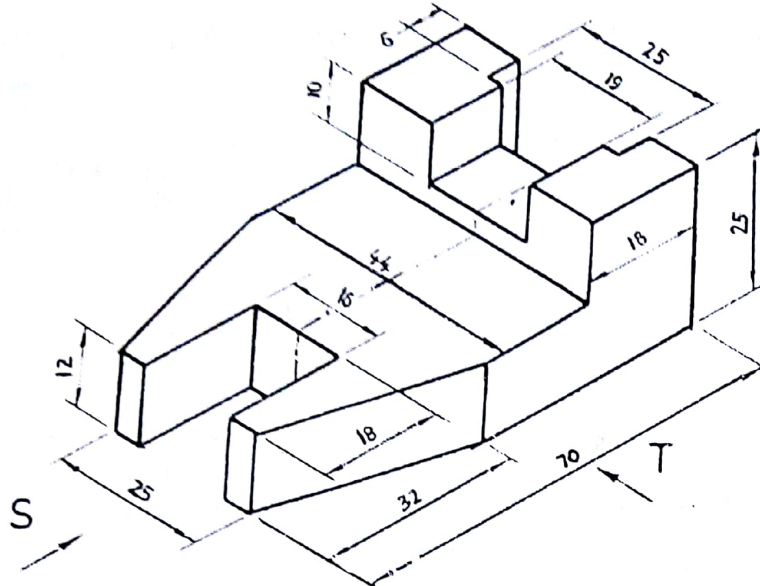
**Instructions**

1. This paper consists of six questions.
2. Answer question **number 1** and any other **three (3)** questions.
3. Electronic calculators are **not** allowed in the examination room.
4. Cellular phones are **not** allowed in the examination room.
5. Write your **Examination Number** on every page of your answer booklet(s).

CS\_06

This paper consists of 2 printed pages.

1. The pictorial diagram shown below is a guide. Draw full size in **THIRD ANGLE** orthographic projection, the following views as shown:
- Front elevation in direction of arrow T.
  - End elevation in direction of arrow S.
  - Plan view projected from view (a).



(40 marks)

2. Make sketches of the following electronic logic circuit gates and electronic devices:
- NOR
  - AND
  - NAND
  - OR
  - Zener diode
  - Capacitor
  - Diode
  - Transformer.
- (20 marks)
3. Draw a one-line diagram of a single light/bulb controlled from two different positions (stations). (20 marks)
4. (a) List **eight (8)** major types of drawings commonly used in the electronics industry.  
(b) Name **four (4)** sizes of drawing papers. (20 marks)
5. Sketch a cable laying schemes using the correct symbols. (20 marks)
6. (a) State six logical sequence of steps used to draw a block diagram.  
(b) Define the following terms:
- Reference designator
  - Crossover
  - Dogleg.
- (20 marks)