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

084 ELECTRICAL DRAUGHTING
(For Both School and Private Candidates)

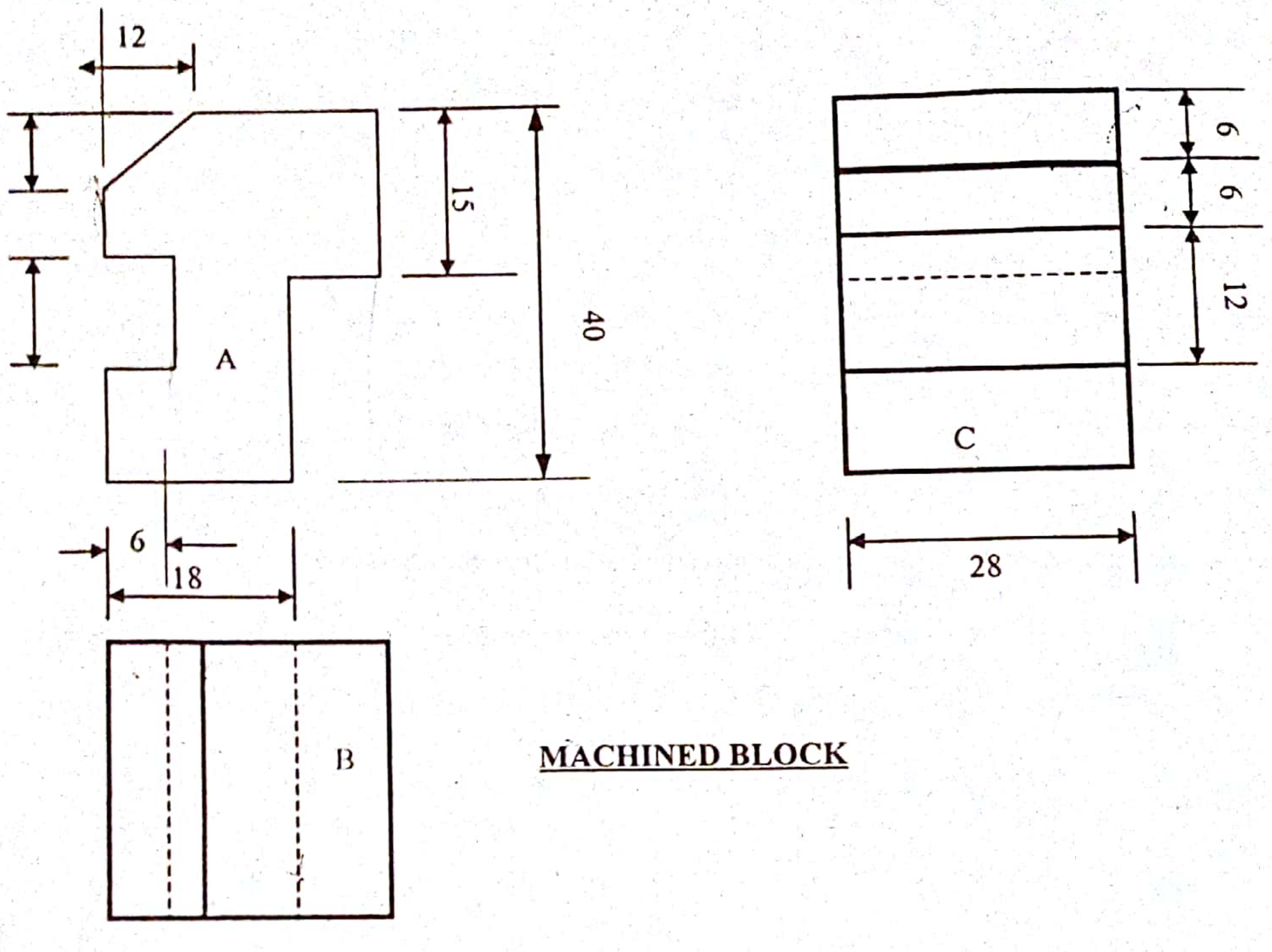
Time: 3 Hours **05 November 2002 a.m.**

Instructions

1. This paper consists of **SIX (6)** questions.
2. Answer **FOUR (4)** questions including question **Number 1.**
3. Cellular phones are **not** allowed in the examination room.
4. Electronic calculators are **not** allowed in the examination room.
5. Write your Examination Number on every page of your answer booklet(s).

This paper consists of 3 printed pages

1. The views shown below are full size first angle orthographic projections of a machined block. View B is a plan view projected from view A. Draw the block in isometric projection.



MACHINED BLOCK

2. Sketch the symbols for the following electronic components:

   (a) PNP transistor
   (b) Diode
   (c) Zener diode
   (d) AND gate
   (e) NOT gate

3. Define the following terms:

   (a) Dogleg
   (b) Crossover
   (c) Artwork
   (d) Logic gate

4. Study the schematic diagram shown in figure 1 below then draw its line diagram indicating the number of conductors used in each section.

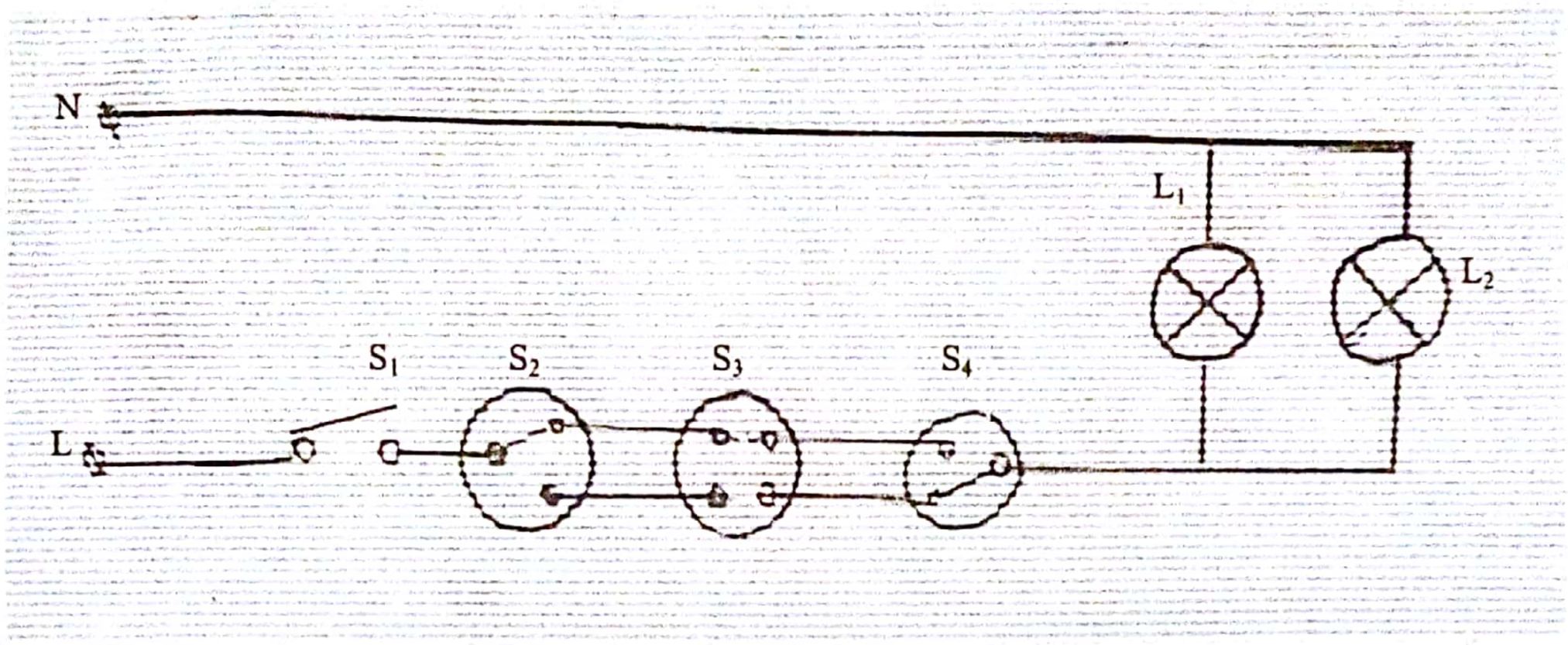


Figure 1

5. Sketch the symbol of the following electrical components:

   (a) Battery

   (b) Delta connection

   (c) Combined switch and socket out let

   (d) Fan regulator

   (e) Three phase motor.

6. Re-draw the circuit diagram of Fig. 2 as a formal diagram.

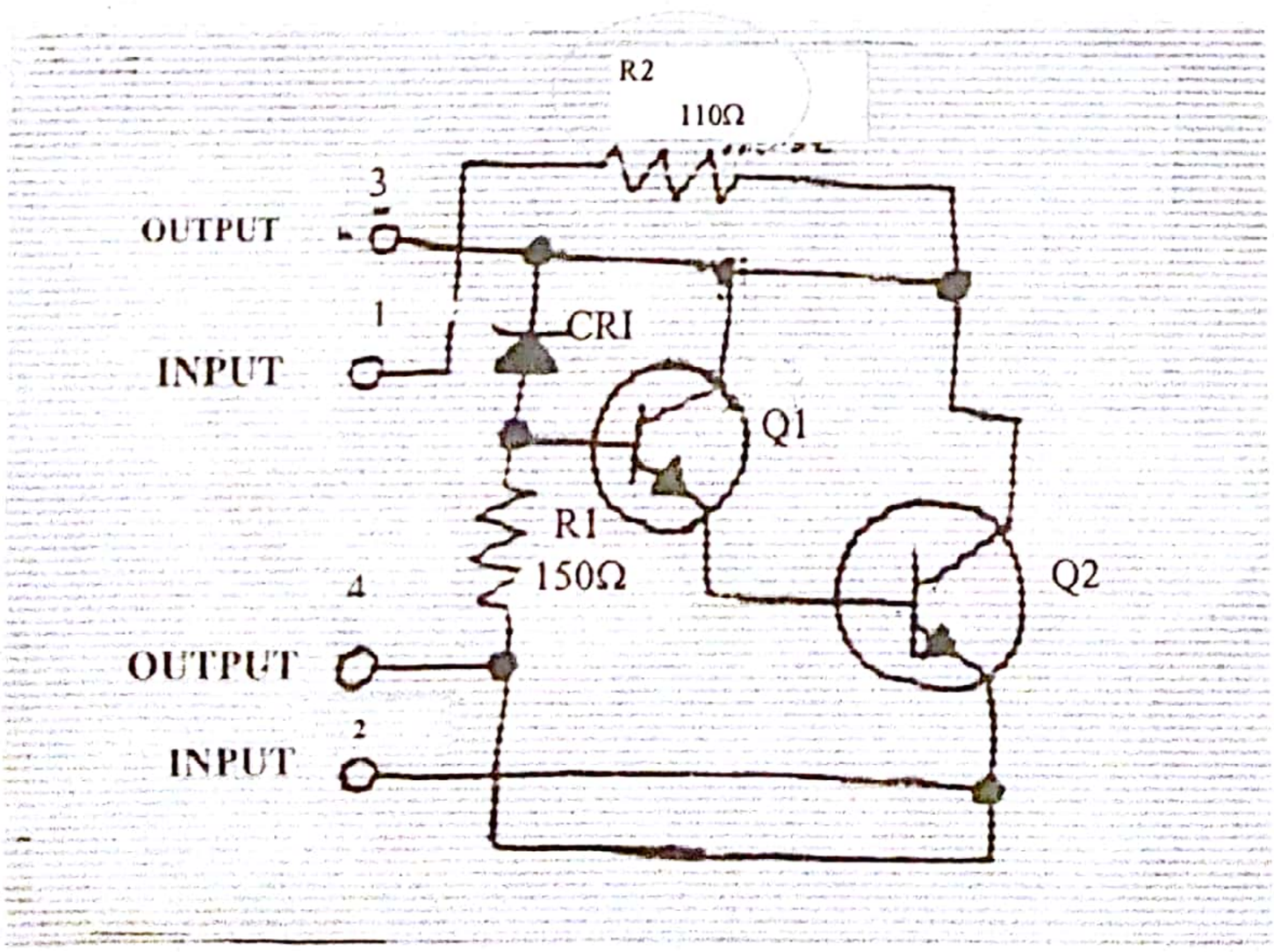


Figure 2