

1521/206
1601/206
TRADE PRACTICE II
June/July 2016
Time: 8 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

**CRAFT CERTIFICATE IN ELECTRICAL AND
ELECTRONIC TECHNOLOGY
(POWER OPTION)
MODULE II**

TRADE PRACTICE II

8 hours

INSTRUCTIONS TO CANDIDATES

Each candidate will carry out ALL exercises as directed by the examiner.

Time allowed for each exercise is 2 hours.

Performance of each candidate will be assessed during and at the end of every exercise.

*No circuit should be connected to **POWER** without the approval of the examiner.*

All dimensions are in millimetres.

All installation work should be carried out according to IEE regulations

This paper consists of 5 printed pages.

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

1. Figure 1 shows the layout of equipment and three final circuits at the consumers' intake point. The control gear/equipment and distribution board are pre-installed.

- (a) Draw the wiring diagram.
- (b) Using P.V.C Heavy gauge conduits, install and wire the following:
 - (i) the lamp to be controlled from two positions;
 - (ii) industrial three phase socket from the isolator;
 - (iii) socket outlets in ring.
- (c) Carry out polarity and installation resistance test.

(25 marks)

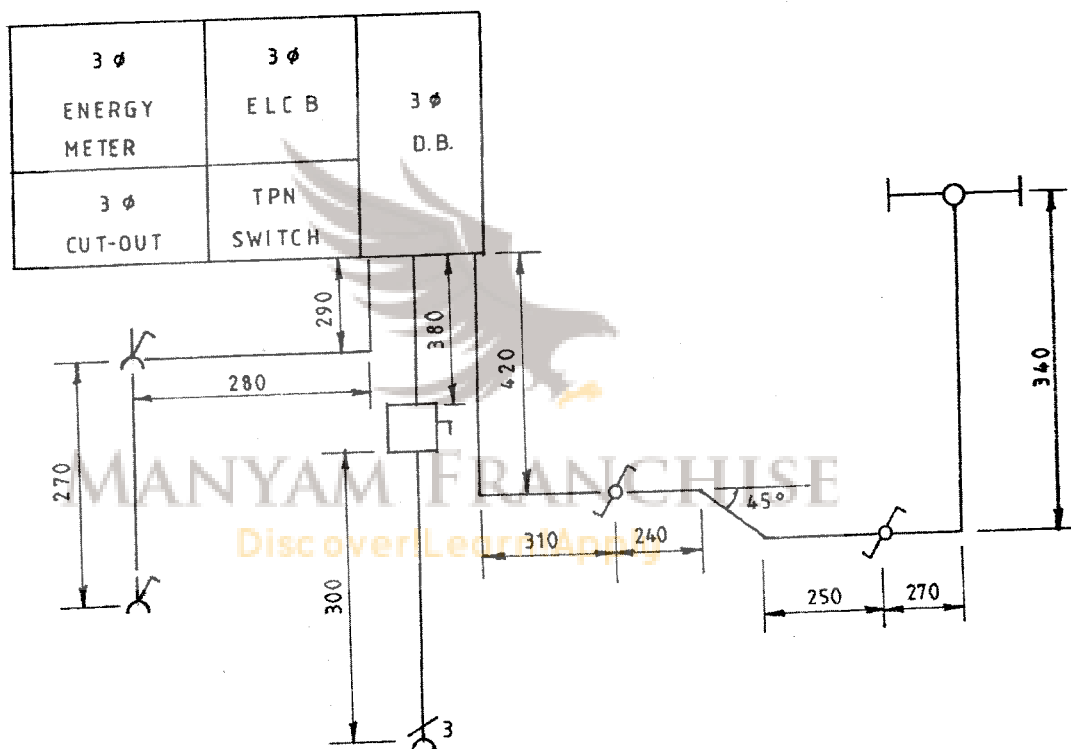


Fig. 1

2. Figure 2 shows a common emitter amplifier circuit.

Using the components and equipment provided,

- (a) mount the circuit on the bread board;
- (b) power the circuit and carry out voltage measurements at the following test points:
 - (i) TP1;
 - (ii) TP2;
 - (iii) TP3;
 - (iv) TP4.

(25 marks)

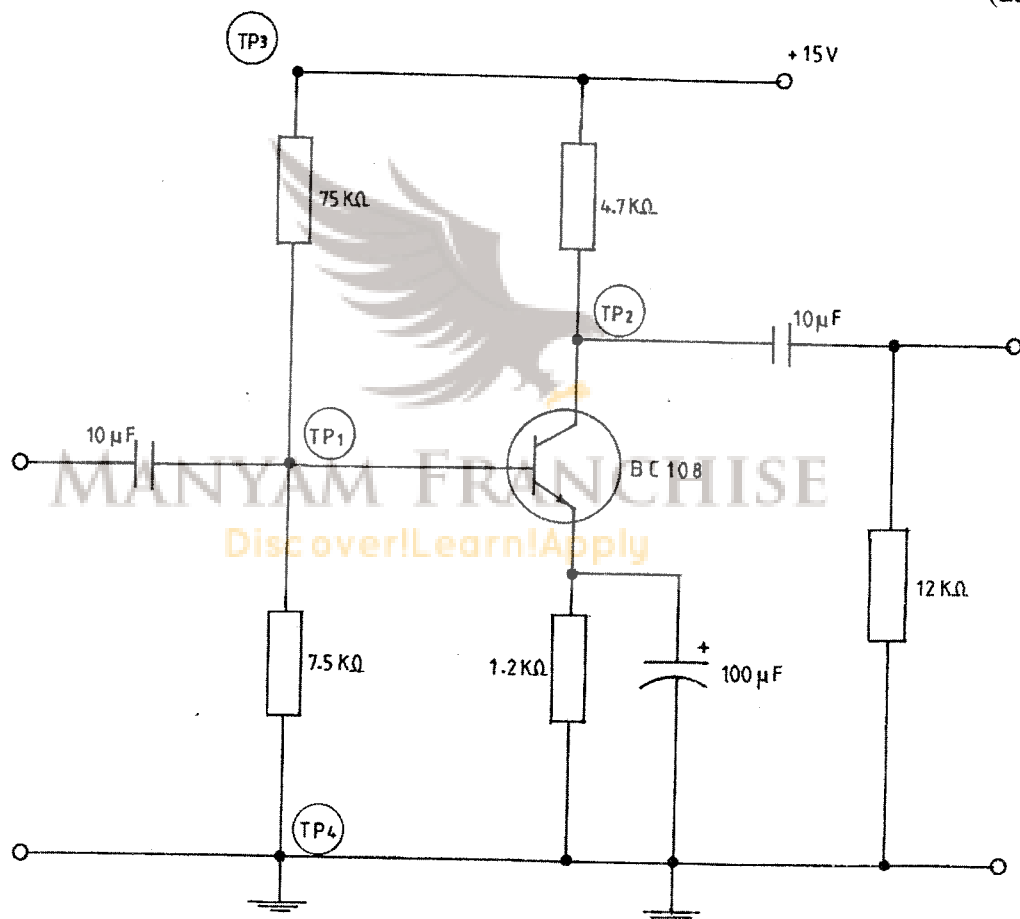


Fig. 2

3. Figure 3 shows the layout of a three phase electric motor installation.

- (a) Draw the power and control circuits.
- (b) Using heavy gauge steel conduit wiring systems, install the motor final circuit for forward-reverse operation.

(25 marks)

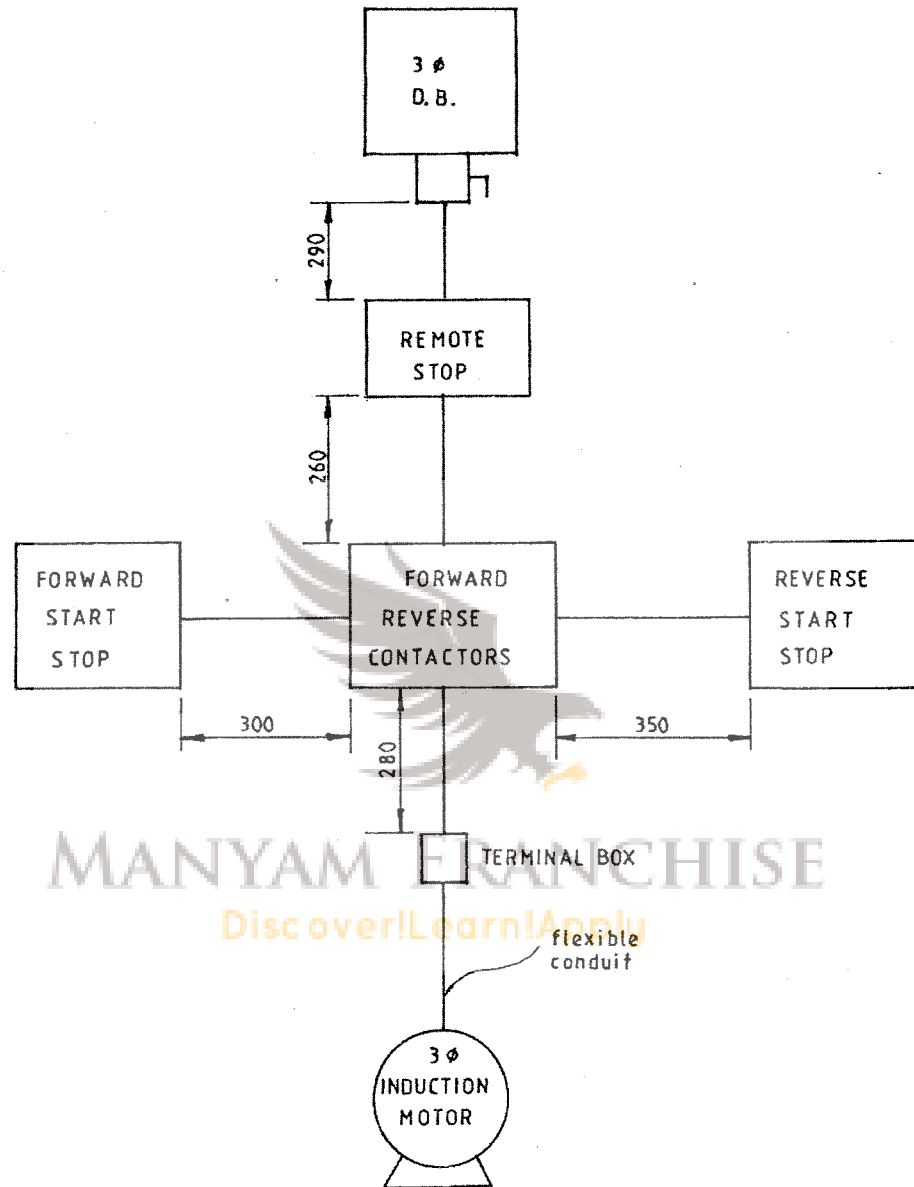


Fig. 3

4. Figure 4 shows the layout of a bell circuit.

- (a) Draw the wiring diagram.
- (b) Install the circuit such that:
 - (i) push button A controls Bell 1;
 - (ii) push button B controls B2 via indicator board;
 - (iii) push button C is the reset button.

(25 marks)

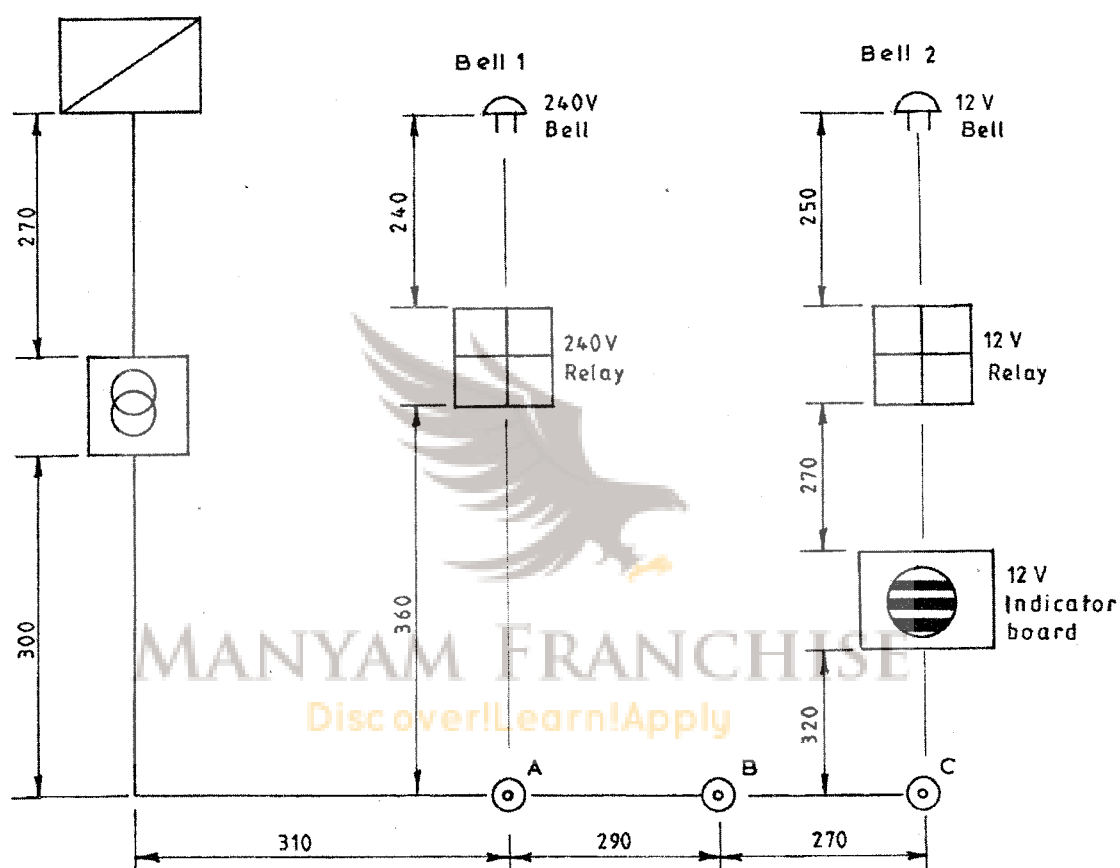


Fig. 4

THIS IS THE LAST PRINTED PAGE.