**EXERCISE 1**

1. variable power supply ( 0-30v)
2. Ten 470 ohms carbon resistors
3. Ten 10K carbon resistors
4. Ten 47k variable resistors
5. Ten BC 101 NPN resistors
6. Enough Connecting wires
7. Enough Jumper wires
8. five milli-ammmeters (0-100mA)
9. five micro-ammeters 0-500µA
10. bread board

**EXERCISE 2**

1. tin snips
2. scriber
3. drilling machine
4. bench vice
5. mallet
6. steel nail
7. soldering gun
8. solder wire

**EXERCISE 3**

1. iron box (in good condition)
2. multimeters
3. tester
4. screw driver

**EXERCISE 4**

1. ten 100 ohms resistors
2. ten 470 ohms resistors
3. ten 560 ohms resistors
4. ten 220 ohms resistors
5. power supply
6. enough connecting wires
7. enough jumper wires
8. bread board
9. voltmeters (0-999v)
10. ammeters (0-100mA)

**EXERCISE 5**

1. consumer control unit
2. transformer 240v/12v
3. two push buttons
4. 12v bell
5. 1.5mm2 cable twin with earth
6. Electrician tool box
7. Two Shallow patresses