# Electrical Appliance

Exercise one:

1)False, the voltage across a closed switch is zero.

2)False, there are two types of connections: Parallel connection and series connection

3)False, if two lamps are connected in parallel, then they will have same voltage.

4)False, the law of uniqueness of voltage is applied in parallel connection.

5)False, the voltage across an open switch is equal to the voltage of the generator.
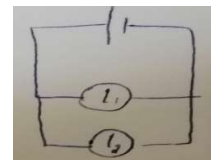
Exercise two:

1)
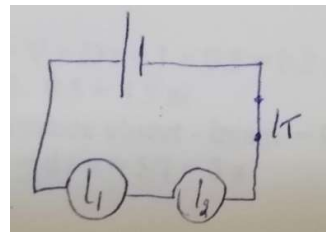
2)It is a closed circuit, because the switch is closed.

3)Because the voltage across closed switch is zero.

4)according to the law of addition of voltage in series connection:

$$U_G = U_1 + U_2$$

=7V+2V = 9V

Exercise 3: A circuit is composed of a battery, two lamps and a connection wire. these two lamps are connected **_in parallel._** The voltage across lamp (2) is 9V.

1)

2)According to the law of uniqueness of voltage in parallel connection:

$$U_G = U_1 = U_2 = 9V$$