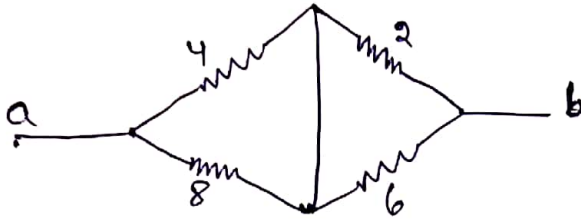


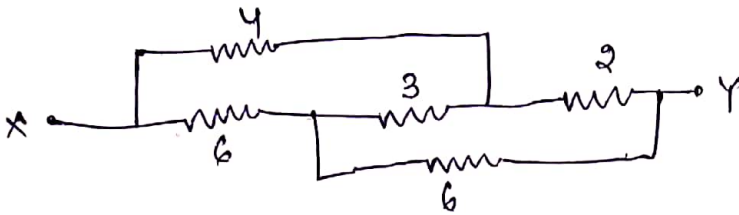
# Basic Electrical Engg. (Question Bank)

2 Mark

- ① state ohm's law.
- ② state and explain kirchhoff's current law.
- ③ state and explain kirchhoff's voltage law.
- ④ Explain law of Resistance
- ⑤ Find Equivalent.



⑥



find equivalent resistance.

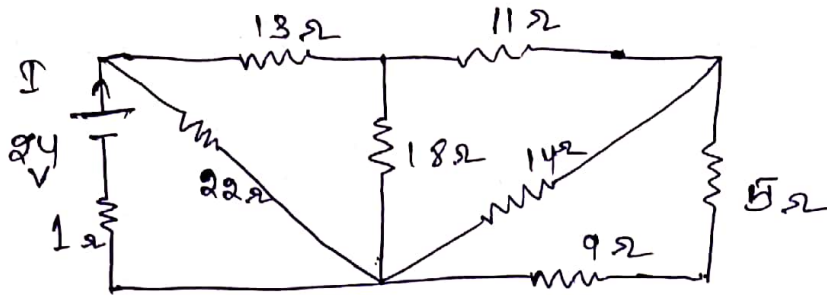
- ⑦ Define power triangle.
- ⑧ Define amplitude and frequency.
- ⑨ Define cycle and time period.
- ⑩ What is phase difference??
- ⑪ what is R.M.S value.
- ⑫ what is average value.
- ⑬ Define form factor.
- ⑭ Define Amplitude factor.
- ⑮ Define power factor.
- ⑯ Define impedance triangle.
- ⑰ Mainpart of dc machine.

- 18) which type of motor is basically used for hair dryer and ceiling fan.
- 19) what is the function of brush in a D.C generator?
- 20) State the basic difference between a D.C generator and D.C Motor.
- 21) Define lumen?
- 22) List the basic protective devices used in house hold wiring.
- 23) Name types of wiring.
- 24) what is fuse.
- 25) what is the function of controlling torque in indicating instrument.
- 26) Draw the connection diagram of wattmeter.
- 27) Draw the connection diagram of Energy meter.

5 MARK

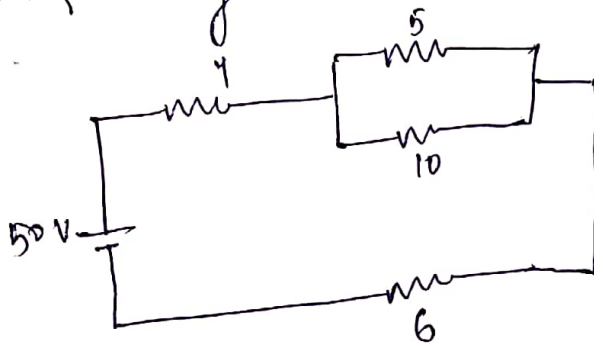
①

Find the value of 'I'



②

Find voltage drop in 10Ω using Kirchhoff's Law.



③

Difference between A.C and D.C

④

Two inductive impedance 'A' and 'B' are connected in series. A has  $R = 5\Omega$  and  $L = 0.01H$ , B has  $R = 3\Omega$  and  $L = 0.02H$ . If a sinusoidal voltage of 230V at 50Hz is applied to the whole circuit, calculate (i) current (ii) power factor.

⑤

A coil is connected in series with a resistor and capacitor across 200V, 50Hz supply. Calculate (a) current (b) power factor of the circuit (c) voltage drops across resistance, inductance and capacitance (d) draw the complete phasor diagram of the circuit. where  $R = 12\Omega$ ,  $L = 0.15H$ ,  $C = 100\mu F$

⑥

Explain hydro power station with block diagram.

⑦

Explain Thermal power station with block diagram.

⑧

Explain Nuclear power station with block diagram.

⑨

Classification of DC generation and DC Motor.

⑩

Explain construction and operation of filament type lamp.

(11) Explain construction and operation of Fluorescent tube.

(12) Following are the details of load on a domestic house, connected through a supply meter.

(1) 8 lamps 60 W, each working 6 hrs per day.

(2) 8 tubes 40 W, each working 8 hrs per day.

(3) 8 Refrigerator 80 watt each working 24 hrs per day.

(4) 1 lamp 0.5 HP, each working 2 hrs per day.

If the cost of each unit of energy is Rs. 2.40 for first 50 unit and rest of the amount is Rs. 4.00. What will be the electricity bill for the month of January.

(13) Explain the working of a P.M.M.C type instruments

(14) Explain different types of torque in an indicating type instruments.