Raosaheb Wangde Master Charitable Trust's
DNYANSHREE
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Founder & Chairman
Hon.Dnyaneshwar B. Wangde (Bhai)
B+ NAAC 1st Cycle

Tech Nexus Competition 2023-24

Organized by IETE Student Forum, DIET, Satara

Date: 07/03/2024 Time: 10 Min Marks:10

1. The current I_y flowing through 660Ω resistance is (Refer Figure 1):

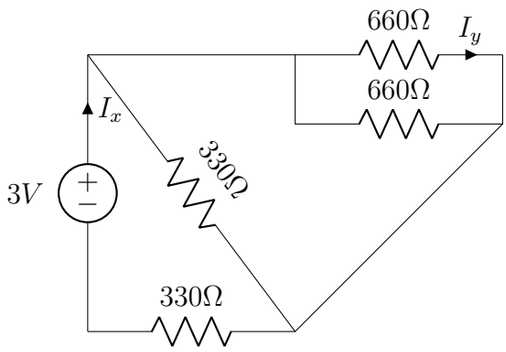


Figure 1: Q.No.1

A. I_x B. $I_x/2$ C. $I_x/4$ D. $I_x/3$

2. The voltage across 660Ω resistance is (refer Figure 2):

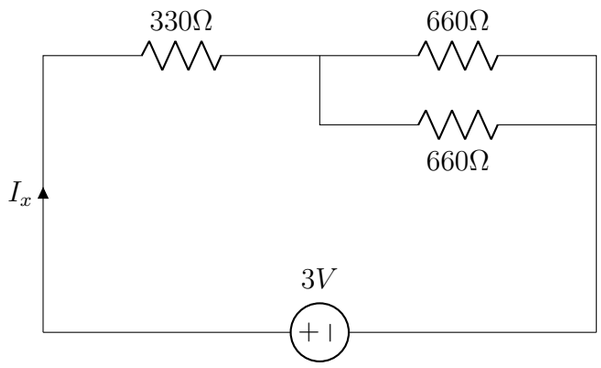


Figure 2: Q.No.2

A. $0.65V$ B. $1.5V$ C. $0.72V$ D. $0.75V$

3. The current I_x and I_y are (refer Figure 3).

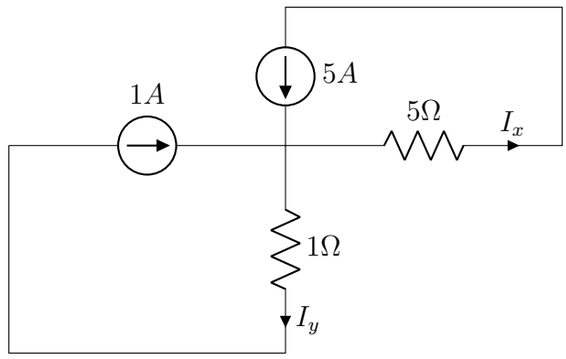


Figure 3: Q.No.3

A. $-1A, 5A$ B. $5A, 1A$ C. $1A, 5A$ D. $5A, -1A$

4. The current I_1 and I_2 of the circuit shown in Figure 4 are giving by:

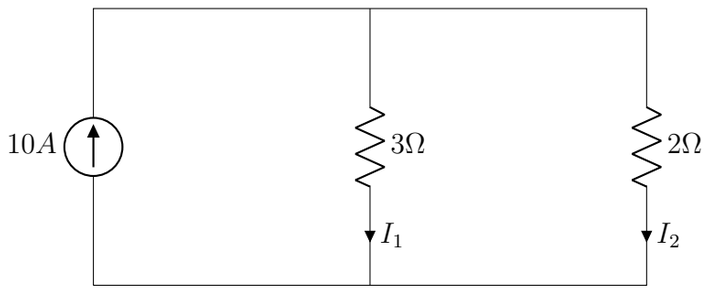


Figure 4: Q.No.4

A. $4A, 4A$ B. $6A, 6A$ C. $4A, 6A$ D. $6A, 4A$

5. Referring to the circuit of the Figure 5, a $35V$ source is connected to a series circuit of 600Ω and R. If a voltmeter of internal resistance $1.2\text{k}\Omega$ is connected across 600Ω, it reads $5V$. The value of R is

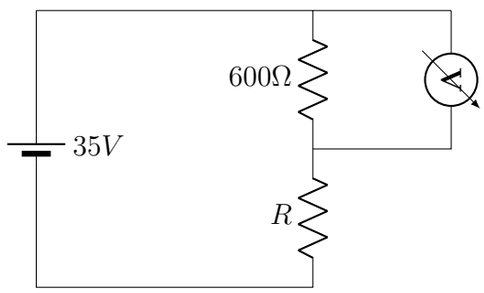


Figure 5: Q.No.5

A. $1.2\text{k}\Omega$ B. $2.4\text{k}\Omega$ C. $1.4\text{k}\Omega$ D. $3.4\text{k}\Omega$

6. The equivalent resistance of the circuit given in Figure 6 is given by

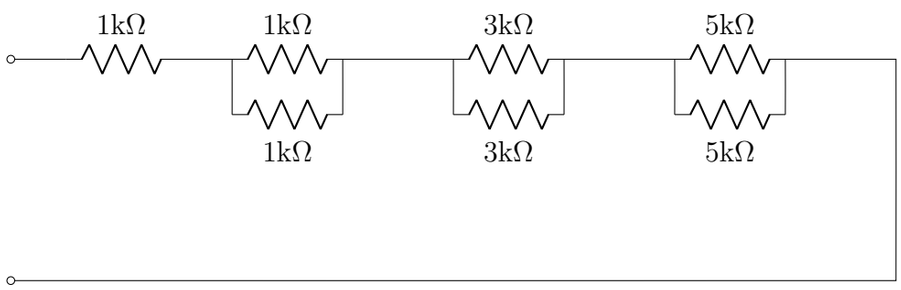
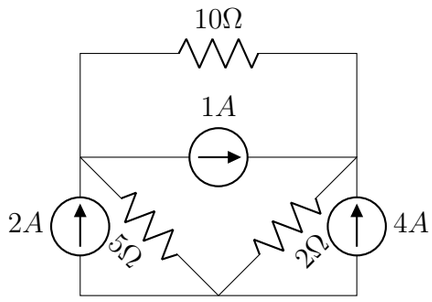


Figure 6: Q.No.6

A. $4\,\text{k}\Omega$ B. $10\,\text{k}\Omega$ C. $5.5\,\text{k}\Omega$ D. $5\,\text{k}\Omega$

7. Find current I, (refer Figure reffig:7).



A. $\frac{17}{12}$ B. $\frac{11}{17}$ C. $\frac{12}{17}$ D. $\frac{17}{11}$