

Question No : 1 of 26

Marks: 1 (Budgeted Time 1 Min)

In a liquid that is conducting current, the moving charges are

Answer (Please select your correct option)

- ☐ Electrons
- ☐ Protons
- ☐ Neutrons
- ☐ Ions

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Question No : 2 of 26

Marks: 1 (Budgeted Time 1 Min)

Current through a short circuit is

Answer (Please select your correct option)

- ☐ zero
- ☐ minimum
- ☐ Maximum
- ☐ leakage current

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Question No : 3 of 26

Marks: 1 (Budgeted Time 1 Min)

If we connect n inductances in series, total inductance will be

Answer (Please select your correct option)

- ☐ reciprocal of combined effect of all these inductances
- ☐ sum of individual inductance
- ☐ product of all these
- ☐ sum of first and last inductance

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Question No : 4 of 26

Marks: 1 (Budgeted Time 1 Min)

With high voltage, the Current can have a Low value when there is

Answer (Please select your correct option)

☐ High resistance

☐ Low resistance

☐ Constant resistance

☐ No resistance

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Question No : 5 of 26

Marks: 1 (Budgeted Time 1 Min)

The internal resistance of an ideal voltage source is

Answer (Please select your correct option)

☐ Maximum

☐ Minimum

☐ Zero

☐ Infinity

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Question No : 6 of 26

Marks: 1 (Budgeted Time 1 Min)

Total current flowing through this circuit will be



Answer (Please select your correct option)

☐ 5A

☐ 2A

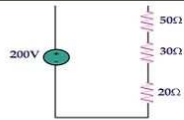
☐ 3A

☐ 0A

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Question No : 6 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

- ☐ 5A
- ☐ 2A
- ☐ 3A
- ☐ 0A

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Question No : 7 of 26

Marks: 1 (Budgeted Time 1 Min)

In a series circuit, if R is increased double, voltage drop across it will be

- ☐ increase four time
- ☐ same
- ☐ double
- ☐ half

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Question No : 8 of 26

Marks: 1 (Budgeted Time 1 Min)

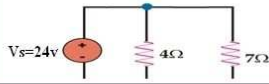
If R_1 and R_2 resistances are connected in series and V_s is source voltage , then voltage drop across R_1 can be calculated by which of the following formula.

- ☐ $V_1 = R_1 \times V_s / (R_1 + R_2)$
- ☐ $V_1 = R_2 \times V_s / (R_1 + R_2)$
- ☐ $V_1 = R_1 \times R_2 / V_s$
- ☐ $V_1 = R_1 \times V_s / R_1$

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Question No : 9 of 26

Marks: 1 (Budgeted Time 1 Min)

For the given circuit, Voltage drop across 4Ω resistance is

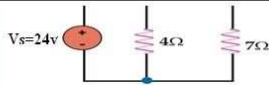
Answer (Please select your correct option)

- ☐ 6v
- ☐ 24v
- ☐ 8.72v
- ☐ 15.27v

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Question No : 9 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

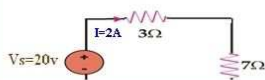
- ☐ 6v
- ☐ 24v
- ☐ 8.72v
- ☐ 15.27v

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Question No : 10 of 26

Marks: 1 (Budgeted Time 1 Min)

For the given figure, Power dissipated through voltage source is



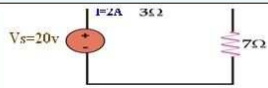
Answer (Please select your correct option)

- ☐ 20w
- ☐ 40w
- ☐ 80w
- ☐ 10w

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Question No : 10 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

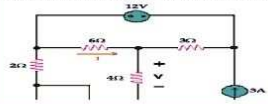
- ☐ 20w
- ☐ 40w
- ☐ 80w
- ☐ 10w

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Question No : 11 of 26

Marks: 1 (Budgeted Time 1 Min)

How many loops can be assigned to given figure?



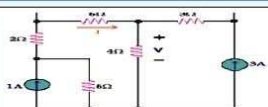
Answer (Please select your correct option)

- ☐ 2
- ☐ 4
- ☐ 3
- ☐ 5

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Question No : 11 of 26

Marks: 1 (Budgeted Time 1 Min)



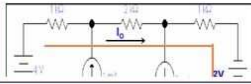
Answer (Please select your correct option)

- ☐ 2
- ☐ 4
- ☐ 3
- ☐ 5

Made By: Waqar Siddhu

Question No : 12 of 26

Marks: 1 (Budgeted Time 1 Min)

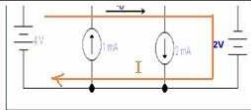
If value of I is 2.2mA , what will be the value of I_0 ?

Answer (Please select your correct option)

☐ 2mA☐ 1mA☐ 2.2mA☐ 10mA**Made By: Waqar Siddhu**

Question No : 12 of 26

Marks: 1 (Budgeted Time 1 Min)



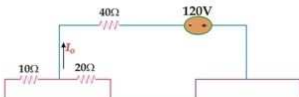
Answer (Please select your correct option)

☐ 2mA☐ 1mA☐ 2.2mA☐ 10mA**Made By: Waqar Siddhu**

Question No : 13 of 26

Marks: 1 (Budgeted Time 1 Min)

How many sources are dependent sources in given circuit?

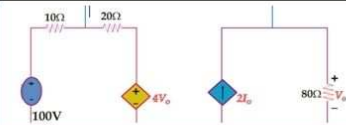


Answer (Please select your correct option)

☐ 3☐ 2☐ 4☐ 1**Made By: Waqar Siddhu**

Question No : 13 of 26

Marks: 1 (Budgeted Time 1 Min)



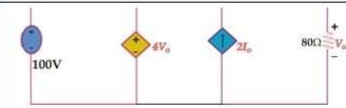
Answer (Please select your correct option)

- ☐ 3
- ☐ 2
- ☐ 4
- ☐ 1

Made By: Waqar Siddhu

Question No : 13 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

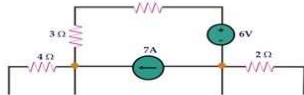
- ☐ 3
- ☐ 2
- ☐ 4
- ☐ 1

Made By: Waqar Siddhu

Question No : 14 of 26

Marks: 1 (Budgeted Time 1 Min)

For the given diagram, value of coupling equation may be



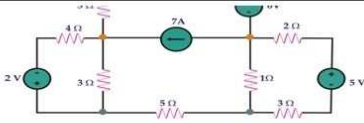
Answer (Please select your correct option)

- ☐ $V_1 - V_2 = 6V$
- ☐ $V_1 - V_2 = 2V$
- ☐ $I_A - I_B = 7A$
- ☐ $V_1 - V_2 = 7V$

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Question No : 14 of 26

Marks: 1 (Budgeted Time 1 Min)



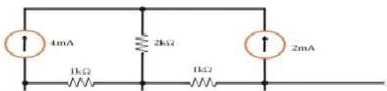
Answer (Please select your correct option)

☐ $V_1 - V_2 = 6V$
☐ $V_1 - V_2 = 2V$
☐ $I_A - I_B = 7A$
☐ $V_1 - V_2 = 7V$
Made By: Waqar Siddhu

Question No : 15 of 26

Marks: 1 (Budgeted Time 1 Min)

Which current source will be used for super mesh?



Answer (Please select your correct option)

☐ 4mA

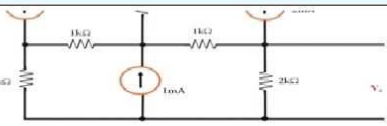
☐ 2mA

☐ 1mA

☐ 2mA and 4mA
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Question No : 15 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

☐ 4mA

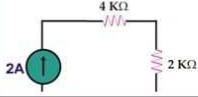
☐ 2mA

☐ 1mA

☐ 2mA and 4mA
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Question No : 16 of 26

Marks: 1 (Budgeted Time 1 Min)

In the given fig. Current flowing through $4k\Omega$ resistance will be

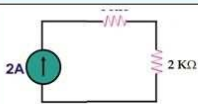
Answer (Please select your correct option)

- ☐ 0.6A
- ☐ 8A
- ☐ 2A
- ☐ 4A

Made By: Waqar Siddhu

Question No : 16 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

- ☐ 0.6A
- ☐ 8A
- ☐ 2A
- ☐ 4A

Made By: Waqar Siddhu

Question No : 17 of 26

Marks: 1 (Budgeted Time 1 Min)

The algebraic sum of the voltages around any loop is zero, is statement of

- ☐ Kirchhof, s voltage law
- ☐ Kirchhof, s current law
- ☐ Ohm, s law
- ☐ Farady law

Made By: Waqar Siddhu

Question No : 18 of 26

Marks: 1 (Budgeted Time 1 Min)

Three bulbs are connected in series of a battery, what would happen if any one bulb is opened.



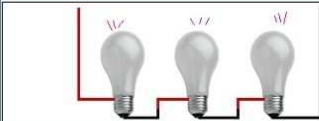
Answer (Please select your correct option)

- ☐ half of current will flow
- ☐ same current will flow
- ☐ no current will flow
- ☐ 2/3 current will flow

Made By: Waqar Siddhu

Question No : 18 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

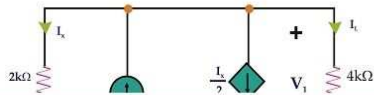
- ☐ half of current will flow
- ☐ same current will flow
- ☐ no current will flow
- ☐ 2/3 current will flow

Made By: Waqar Siddhu

Question No : 19 of 26

Marks: 1 (Budgeted Time 1 Min)

In the given circuit, the value of dependent current source is



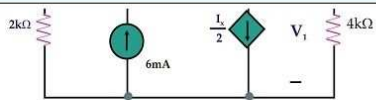
Answer (Please select your correct option)

- ☐ 6mA
- ☐ 6
- ☐ $\frac{I_x}{2}$
- ☐ I_L

Made By: Waqar Siddhu

Question No : 19 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

☐ 6mA

☐ I_x
☐ $\frac{I_x}{2}$
☐ I_L
Made By: Waqar Siddhu

Question No : 20 of 26

Marks: 1 (Budgeted Time 1 Min)

In a loop analysis , which of the following is true?

☐ No. of equations to be written is equal to No. of loops

☐ No. of equations to be written is equal to 1 minus No. of loops

☐ No. of equations to be written is equal to twice the No. of loops

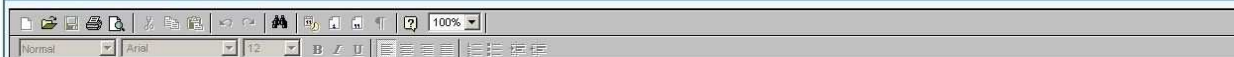
☐ No. of equations to be written is equal to half the No. of loops
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Question No : 21 of 26

Marks: 2 (Budgeted Time 4 Min)

If

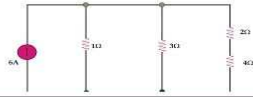
$$A = \begin{bmatrix} 1/4 & 1/2 \\ -1/6 & 1/3 \end{bmatrix}$$

What will be $\text{Adj}(A)$?Answer (Please [click here](#) to Add Answer)**Made By: Waqar Siddhu**

Question No : 22 of 26

Marks: 2 (Budgeted Time 4 Min)

How many loops are possible for given circuit.



Answer (Please [click here](#) to Add Answer)

Rich text editor toolbar with options: Bold, Italic, Underline, Text color, Background color, Bulleted list, Numbered list, Indent, Outdent, Link, Unlink, Source code, Undo, Redo, and a 100% zoom level.

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Question No : 22 of 26

Marks: 2 (Budgeted Time 4 Min)

How many loops are possible for given circuit.



Answer (Please [click here](#) to Add Answer)

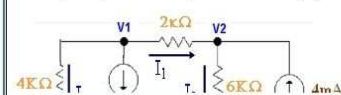
Rich text editor toolbar with options: Bold, Italic, Underline, Text color, Background color, Bulleted list, Numbered list, Indent, Outdent, Link, Unlink, Source code, Undo, Redo, and a 100% zoom level.

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Question No : 23 of 26

Marks: 3 (Budgeted Time 6 Min)

For the given figure, write only formula to find I_1 , I_2 and I_3 .



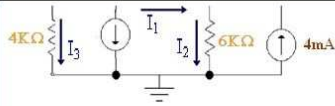
Answer (Please [click here](#) to Add Answer)

Rich text editor toolbar with options: Bold, Italic, Underline, Text color, Background color, Bulleted list, Numbered list, Indent, Outdent, Link, Unlink, Source code, Undo, Redo, and a 100% zoom level.

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Question No : 23 of 26

Marks: 3 (Budgeted Time 6 Min)



Answer (Please [click here](#) to Add Answer)

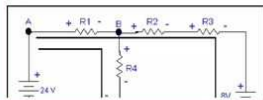
Normal Arial 12 B I U 100%

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Question No : 24 of 26

Marks: 3 (Budgeted Time 6 Min)

Write KVL equation for the outer loop.



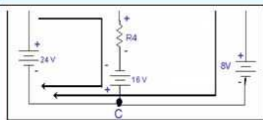
Answer (Please [click here](#) to Add Answer)

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Question No : 24 of 26

Marks: 3 (Budgeted Time 6 Min)



Answer (Please [click here](#) to Add Answer)

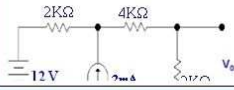
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Question No : 25 of 26

Marks: 5 (Budgeted Time 10 Min)

Calculate V_o using KVL for given circuit.



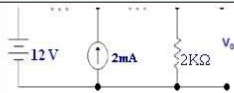
Answer (Please [click here](#) to Add Answer)

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Question No : 25 of 26

Marks: 5 (Budgeted Time 10 Min)



Answer (Please [click here](#) to Add Answer)

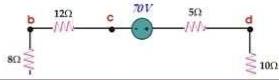
Rich text editor toolbar with options: Bold, Italic, Underline, Text Color, Background Color, Bulleted List, Numbered List, Indent, Outdent, Link, Unlink, Undo, Redo, and a 100% zoom level.

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Question No : 26 of 26

Marks: 5 (Budgeted Time 10 Min)

Find V_{ab} for the given circuit, if 1A current is flowing through circuit.



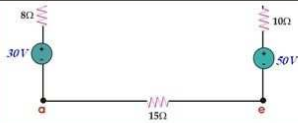
Answer (Please [click here](#) to Add Answer)

Normal Arial 12 B I U

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Question No : 26 of 26

Marks: 5 (Budgeted Time 10 Min)



Answer (Please [click here](#) to Add Answer)

Normal Arial 12 B I U

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