

Question No : 1 of 26

Marks: 1 (Budgeted Time 1 Min)

The SI unit of amount of substance is

Answer (Please select your correct option)

- ☐ kelvin
- ☐ Candela
- ☐ Mole
- ☐ Ampere

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Question No : 2 of 26

Marks: 1 (Budgeted Time 1 Min)

Which battery applies a greater potential difference?

Answer (Please select your correct option)

- ☐ 12v
- ☐ 1.5v
- ☐ 10v
- ☐ 0.5v

Made By: Waqar Siddhu

Question No : 3 of 26

Marks: 1 (Budgeted Time 1 Min)

Current through open circuit is

Answer (Please select your correct option)

- ☐ high
- ☐ minimum
- ☐ zero
- ☐ infinite

Made By: Waqar Siddhu

Question No : 4 of 26

Marks: 1 (Budgeted Time 1 Min)

Power dissipation is measured in

Answer (Please select your correct option)

- ☐ ohm
- ☐ ampere
- ☐ watts
- ☐ volt

Made By: Waqar Siddhu

Question No : 5 of 26

Marks: 1 (Budgeted Time 1 Min)

If magnitude of the current is controlled by input current the source is called

Answer (Please select your correct option)

- ☐ Current controlled current source
- ☐ Current controlled voltage source
- ☐ Voltage controlled voltage source
- ☐ Voltage controlled current source

Made By: Waqar Siddhu

Question No : 6 of 26

Marks: 1 (Budgeted Time 1 Min)

Sum of all currents entering in the node is equal to sum of currents leaving the node, is statement of

Answer (Please select your correct option)

- ☐ Ohm's law
- ☐ Kirchhof's current law
- ☐ Jame's law
- ☐ Rutherford's law

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Question No : 7 of 26

Marks: 1 (Budgeted Time 1 Min)

Junction of two or more than two elements in a circuit is called

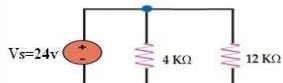
Answer (Please select your correct option)

- ☐ ground
- ☐ node
- ☐ joint
- ☐ Loop

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Question No : 8 of 26

Marks: 1 (Budgeted Time 1 Min)

For the given figure current flowing through $12\text{k}\Omega$ is

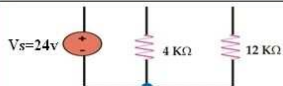
Answer (Please select your correct option)

- ☐ 3mA
- ☐ 2mA
- ☐ 6mA
- ☐ 5mA

Made By: Waqar Siddhu

Question No : 8 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

- ☐ 3mA
- ☐ 2mA
- ☐ 6mA
- ☐ 5mA

Made By: Waqar Siddhu

Question No : 9 of 26

Marks: 1 (Budgeted Time 1 Min)

Through which resistance least current will flow



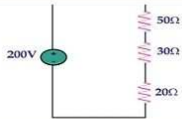
Answer (Please select your correct option)

- ☐ 50Ω
- ☐ 30Ω
- ☐ 20Ω
- ☐ same through all resistance

Made By: Waqar Siddhu

Question No : 9 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

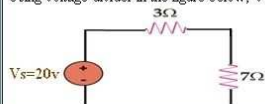
- ☐ 50Ω
- ☐ 30Ω
- ☐ 20Ω
- ☐ same through all resistance

Made By: Waqar Siddhu

Question No : 10 of 26

Marks: 1 (Budgeted Time 1 Min)

Using voltage divider in the figure below, Voltage drop across 3Ω will be



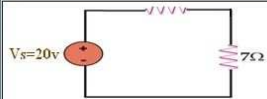
Answer (Please select your correct option)

- ☐ 20v
- ☐ 14v
- ☐ 6v
- ☐ 7v

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Question No : 10 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

☐ 20v

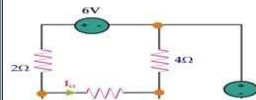
☐ 14v

☐ 6v

☐ 7v
Made By: Waqar Siddhu

Question No : 11 of 26

Marks: 1 (Budgeted Time 1 Min)

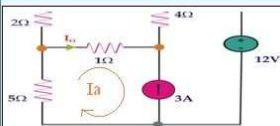
The value of I_a for given circuit is

Answer (Please select your correct option)

☐ $I_a = 10$
☐ $I_a = 3\text{A}$
☐ $I_a = -3\text{A}$
☐ $I_a = 6\text{V}$
Made By: Waqar Siddhu

Question No : 11 of 26

Marks: 1 (Budgeted Time 1 Min)

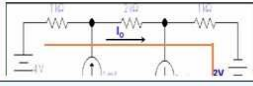


Answer (Please select your correct option)

☐ $I_a = 10$
☐ $I_a = 3\text{A}$
☐ $I_a = -3\text{A}$
☐ $I_a = 6\text{V}$
Made By: Waqar Siddhu

Question No : 12 of 26

Marks: 1 (Budgeted Time 1 Min)

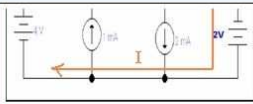
If value of I is 2.2mA , what will be the value of I_0 ?

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 loop equations can be written for this circuit?

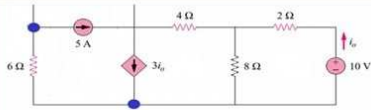


Answer (Please select your correct option)

☐ 2☐ 4☐ 3☐ 5**Made By: Waqar Siddhu**

Question No : 13 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

C 2

C 4

C 3

C 5

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Question No : 14 of 26

Marks: 1 (Budgeted Time 1 Min)

How many sources are dependent sources in given circuit?



Answer (Please select your correct option)

C 3

C 2

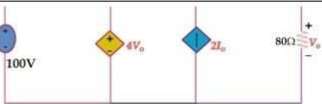
C 4

C 1

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Question No : 14 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

C 3

C 2

C 4

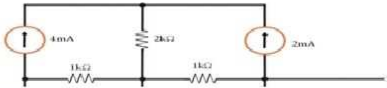
C 1

Made By: Waqar Siddhu

Question No : 15 of 26

Marks: 1 (Budgeted Time 1 Min)

Which current source will be used for super mesh?



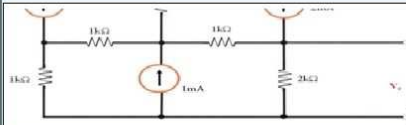
Answer (Please select your correct option)

- ☐ 4mA
- ☐ 2mA
- ☐ 1mA
- ☐ 2mA and 4mA

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Question No : 15 of 26

Marks: 1 (Budgeted Time 1 Min)



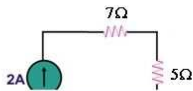
Answer (Please select your correct option)

- ☐ 4mA
- ☐ 2mA
- ☐ 1mA
- ☐ 2mA and 4mA

Made By: Waqar Siddhu

Question No : 16 of 26

Marks: 1 (Budgeted Time 1 Min)

Current flowing through 5Ω resistance will be

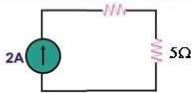
Answer (Please select your correct option)

- ☐ 1.1A
- ☐ 2A
- ☐ 10A
- ☐ 14A

Made By: Waqar Siddhu

Question No : 16 of 26

Marks: 1 (Budgeted Time 1 Min)



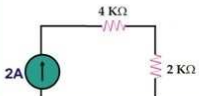
Answer (Please select your correct option)

☐ 1.1A☐ 2A☐ 10A☐ 14A**Made By: Waqar Siddhu**

Question No : 17 of 26

Marks: 1 (Budgeted Time 1 Min)

In the given fig. Current flowing through 4kΩ resistance will be



Answer (Please select your correct option)

☐ 8A☐ 2A☐ 4A☐ 0.6A**Made By: Waqar Siddhu**

Question No : 17 of 26

Marks: 1 (Budgeted Time 1 Min)

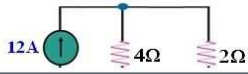


Answer (Please select your correct option)

☐ 8A☐ 2A☐ 4A☐ 0.6A**Made By: Waqar Siddhu**

Question No : 18 of 26

Marks: 1 (Budgeted Time 1 Min)

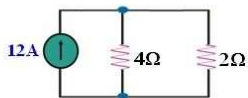
Using current divider rule, current flowing through 4Ω is

Answer (Please select your correct option)

☐ 4A☐ 8A☐ 12A☐ 3A**Made By: Waqar Siddhu**

Question No : 18 of 26

Marks: 1 (Budgeted Time 1 Min)

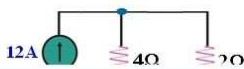


Answer (Please select your correct option)

☐ 4A☐ 8A☐ 12A☐ 3A**Made By: Waqar Siddhu**

Question No : 19 of 26

Marks: 1 (Budgeted Time 1 Min)

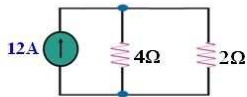
In the fig. below current flowing through 2Ω is

Answer (Please select your correct option)

☐ 4A☐ 8A☐ 12A☐ 6A**Made By: Waqar Siddhu**

Question No : 19 of 26

Marks: 1 (Budgeted Time 1 Min)



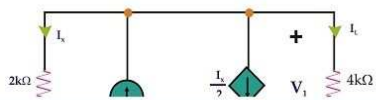
Answer (Please select your correct option)

☐ 4A☐ 8A☐ 12A☐ 6A**Made By: Waqar Siddhu**

Question No : 20 of 26

Marks: 1 (Budgeted Time 1 Min)

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

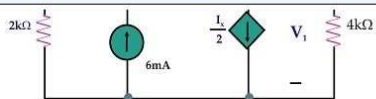


Answer (Please select your correct option)

☐ 6mA☐ 1x☐ $\frac{I_x}{2}$ ☐ 1L**Made By: Waqar Siddhu**

Question No : 20 of 26

Marks: 1 (Budgeted Time 1 Min)



Answer (Please select your correct option)

☐ 6mA☐ 1x☐ $\frac{I_x}{2}$ ☐ 1L**Made By: Waqar Siddhu**

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 Adj(A)?

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

Rich text editor toolbar with options for text formatting (Normal, Arial, 12, Bold, Italic, Underline) and a 100% zoom level.

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Question No : 22 of 26

Marks: 2 (Budgeted Time 4 Min)



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

Rich text editor toolbar with options for text formatting (Normal, Arial, 12, Bold, Italic, Underline) and a 100% zoom level.

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Question No : 23 of 26

Marks: 3 (Budgeted Time 6 Min)

For the given figure, prove that $I_2 = I_3$



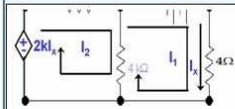
Answer (Please [click here](#) to Add Answer)

Rich text editor toolbar with options for text formatting (Normal, Arial, 12, Bold, Italic, Underline) 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)

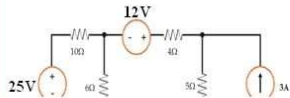
Rich text editor toolbar with options for Bold, Italic, Underline, and other formatting tools.

Made By: Waqar Siddhu

Question No : 24 of 26

Marks: 3 (Budgeted Time 6 Min)

Identify and label all possible loops and write kvl for central loop.



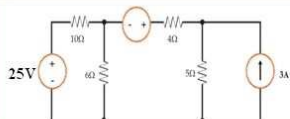
Answer (Please [click here](#) to Add Answer)

Rich text editor toolbar with options for Bold, Italic, Underline, and other formatting tools.

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Question No : 24 of 26

Marks: 3 (Budgeted Time 6 Min)



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

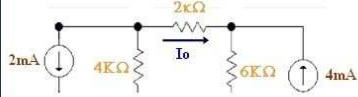
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Made By: Waqar Siddhu

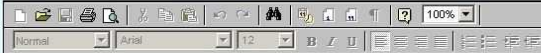
Question No : 25 of 26

Marks: 5 (Budgeted Time 10 Min)

Find I_o by KVL. Identify and label each mesh otherwise you will lose your marks. Write each step of the calculation to get maximum marks and also mention the units of each derived value.



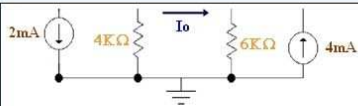
Answer (Please [click here](#) to Add Answer)



Made By: Waqar Siddhu

Question No : 25 of 26

Marks: 5 (Budgeted Time 10 Min)



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

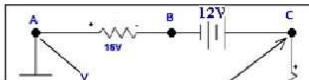


Made By: Waqar Siddhu

Question No : 26 of 26

Marks: 5 (Budgeted Time 10 Min)

Just write KVL equations for path AEFA and ABCDEA.



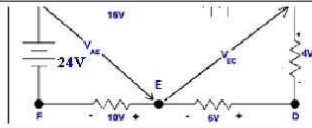
Answer (Please [click here](#) to Add Answer)



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Question No : 26 of 26

Marks: 5 (Budgeted Time 10 Min)



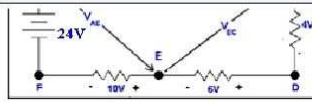
Answer (Please [click here](#) to Add Answer)



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Question No : 26 of 26

Marks: 5 (Budgeted Time 10 Min)



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



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