



# Teachingninja.in



**Latest Govt Job updates**



**Private Job updates**



**Free Mock tests available**

**Visit - [teachingninja.in](http://teachingninja.in)**



Teachingninja.in

**WBSEDCL**  
**Previous Year Paper**  
**JOT**  
**10 Sept, 2021 Shift 2**



# Question Paper Preview

## Notations :

- Options shown in **green** color and with  icon are correct.
- Options shown in **red** color and with  icon are incorrect.

**Subject Name :**

Junior Operator Technician Cum Technical Assistant

**Creation Date :**

2021-09-10 15:18:06

**Duration :**

90

**Total Marks :**

85

**Display Marks:**

Yes

**Share Answer Key With Delivery Engine :**

No

**Actual Answer Key :**

Yes

**Calculator :**

None

**Magnifying Glass Required? :**

No

**Ruler Required? :**

No

**Eraser Required? :**

No

**Scratch Pad Required? :**

No

**Rough Sketch/Notepad Required? :**

No

**Protractor Required? :**

No

**Show Watermark on Console? :**

Yes

**Highlighter :**

No

**Auto Save on Console? ( SA type of questions will be always auto saved ) :**

No

**Junior Operator Technician Cum Technical Assistant**

<b>Group Number :</b>	1
<b>Group Id :</b>	275228353
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	90
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	85
<b>Is this Group for Examiner? :</b>	No

## General Intelligence and Reasoning

<b>Section Id :</b>	275228515
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	5
<b>Number of Questions to be attempted :</b>	5
<b>Section Marks :</b>	5
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	275228606
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 1 Question Id : 2752288774 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the number from among the given options that can replace the question mark (?) in the following series.

13, 17, 25, ?, 37

**Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.**

**Options :**

- 1. 32
- 2. 21
- 3. 35
- 4. 29

**Question Number : 2 Question Id : 2752288775 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

In a certain code language, if LET = 148 and TAIL = 210, then what will be the value of CREED?

**Options :**

- 1. ✘ 175
- 2. ✘ 150
- 3. ✓ 210
- 4. ✘ 190



**Question Number : 3 Question Id : 2752288776 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Ayush walks 2 km towards the east, then turns left and walks for 4 km. He then turns right and walks for 1 km before taking a left turn. In which direction is he facing now?

**Options :**

- 1. ✘ South

2. ✗ West

3. ✗ East

4. ✓ North

**Question Number : 4 Question Id : 2752288777 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

All sheets are papers.

Some papers are books.

All books are red.

Conclusions:

I. Some papers are red.

II. All papers are red.

III. Some sheets are red.

**Options :**

1. ✓ Only conclusion I follows

2. ✗ Only conclusion II follows

3. ✗ Only conclusion III follows

4. ✗ Both conclusions I and II follow

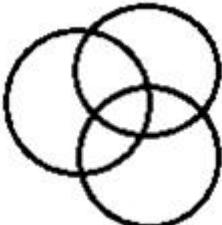
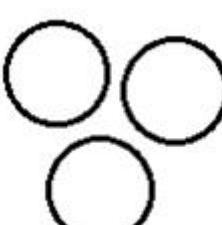
**Question Number : 5 Question Id : 2752288778 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the Venn diagram that best represents the relationship between the following classes.

Hexagon, Octagon, Polygon

Options :

- 1.  \*
- 2.  ✓
- 3.  \*
- 4.  \*

## General English

Section Id :	275228516
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	10
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1



**Sub-Section Id :** 275228607

**Question Shuffling Allowed :** Yes

**Question Number : 6 Question Id : 2752288779 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The following sentence has been split into four segments. Identify the segment that contains a grammatical error.

He is / suffering from / fever since / Tuesday.

**Options :**

1. ✓ He is
2. ✗ suffering from
3. ✗ fever since
4. ✗ Tuesday.

**Question Number : 7 Question Id : 2752288780 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the option that expresses the given sentence in passive voice.

He gave me a book.

**Options :**

1. ✗ I am given a book by him.
2. ✗ A book is given to me by him.
3. ✓ I was given a book by him.
4. ✗ A book was been given to me by him.

**Question Number : 8 Question Id : 2752288781 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the option that expresses the given sentence in indirect speech.

The teacher said to Rohan, "Why are you late?"

**Options :**

1. ✘ The teacher said to Rohan that why he was late.
2. ✘ The teacher asked Rohan why he is late.
3. ✓ The teacher asked Rohan why he was late.
4. ✘ The teacher told Rohan that why he was late?

**Question Number : 9 Question Id : 2752288782 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the option that will improve the underlined part of the given sentence. In case no improvement is needed, select 'No improvement required'.

You may appoint whoever you think can do the job most efficiently.

**Options :**

1. ✘ whatever you think
2. ✘ however you think
3. ✘ whomever you think
4. ✓ No improvement required

**Question Number : 10 Question Id : 2752288783 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the option that will improve the underlined part of the given sentence. In case no improvement is needed, select 'No improvement required'.

If you will pray, God will listen to your prayers.

**Options :**

1. ✘ you are praying

- 2. ✓ you pray
- 3. ✗ you will be praying
- 4. ✗ No improvement required

**Question Number : 11 Question Id : 2752288784 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the option that will improve the underlined part of the given sentence. In case no improvement is needed, select 'No Improvement required'.

The burglars broke in Mr. Roy's house last night.

**Options :**

- 1. ✗ broke through
- 2. ✓ broke into
- 3. ✗ broke up
- 4. ✗ No improvement required

**Question Number : 12 Question Id : 2752288785 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the most appropriate synonym of the given word.

Profound

**Options :**

- 1. ✓ Thoughtful
- 2. ✗ Superficial
- 3. ✗ Artificial
- 4. ✗ Fictional

**Question Number : 13 Question Id : 2752288786 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the most appropriate ANTONYM of the given word.

Jubilant

**Options :**

1. ❌ Joyous
2. ✓ Depressed
3. ❌ Happy
4. ❌ Energetic

**Question Number : 14 Question Id : 2752288787 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the most appropriate meaning of the given idiom.

Turn a blind eye

**Options :**

1. ❌ To notice a blind person
2. ❌ To be very cautious
3. ❌ To trust everyone
4. ✓ To pretend not to notice

**Question Number : 15 Question Id : 2752288788 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Select the option that can be used as a one-word substitute for the given group of words.

A person who is skilled in horsemanship

**Options :**

1. ❌ Craftsman
2. ✓ Equestrian

- 3. ✘ Pedestrian
- 4. ✘ Sportsman

## Quantitative Aptitude

Section Id :	275228517
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	10
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	275228608
Question Shuffling Allowed :	Yes

**Question Number : 16 Question Id : 2752288789 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The value of  $15 \div 10 - \left(\frac{7}{4} \times \frac{1}{3}\right)$  of  $\frac{6}{5} + \frac{14}{3} \times \frac{9}{10} - \left(\frac{1}{5} \div \frac{1}{25}\right)$  is:

**Options :**

1. ✓ 0

2. ✘ 1

3. ✘ 1.5

4. ✘ 0.5

**Question Number : 17 Question Id : 2752288790 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Suppose a, b, c, d are positive natural numbers having exactly three factors including 1 and the number itself. If a > b

and both are two-digit numbers, and c > d and both are one-digit numbers, then the value of the expression  $\frac{a+b-38}{c-d+1}$  is:

**Options :**

1. ✘ 4

2. ✘ 7

3. ✓ 6

4. ✘ 5

**Question Number : 18 Question Id : 2752288791 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The value of  $\frac{(3.17+7.12)^2+(3.17-7.12)^2}{3.17 \times 3.17+7.12 \times 7.12} = ?$

**Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.**

**Options :**

1. 1

2. -1



3. -2

4. 2

**Question Number : 19 Question Id : 2752288792 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

What is the sum of the numbers between 400 and 500 such that when they are divided by 6, 12 and 16, they leave no remainder?

**Options :**

1. ✘ 880

2. ✘ 832

3. ✓ 912

4. ✘ 932

**Question Number : 20 Question Id : 2752288793 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

A, B and C started a business by investing ₹ 1,00,000, ₹ 1,50,000 and ₹ 1,75,000, respectively. The share (in ₹) of B out of an annual profit of ₹ 51,000 is:

**Options :**

1. ✘ 11,000

2. ✘ 21,000

3. ✘ 12,000

4. ✓ 18,000

**Question Number : 21 Question Id : 2752288794 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The average age of A and B is 24 years. If A is replaced by C, then the average age becomes 21 years, and if B is replaced by C, then the average age becomes 26 years. The age of B (in years) is:

**Options :**

1. ✗ 25

2. ✗ 23

3. ✓ 19

4. ✗ 29

**Question Number : 22 Question Id : 2752288795 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

For every 18 oranges that a shopkeeper buys, three oranges turn out to be rotten. At this rate, how many good oranges will the shopkeeper have if she buys 654 oranges?

**Options :**

1. ✗ 550

2. ✓ 545

3. ✗ 540

4. ✗ 520

**Question Number : 23 Question Id : 2752288796 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

If the price of rice is increased by 10%, by what percentage should a household reduce its consumption of rice so that the budget remains the same?

**Options :**

1.   $9\frac{1}{11}\%$

2.   $11\frac{1}{11}\%$

3.   $11\frac{1}{9}\%$

4.   $9\frac{1}{9}\%$

**Question Number : 24 Question Id : 2752288797 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

By selling an article for ₹ 1,360, the dealer loses 15%. At what price (in ₹) should he sell the article to gain 15%?

**Options :**

1.  1,960

2.  1,840

3.  1,600

4.  1,500

**Question Number : 25 Question Id : 2752288798 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

If a wire of length 84 cm is bent in the form of a square, what is the area of the square (in  $\text{cm}^2$ )?

**Options :**

1. ✓ 441

2. ✗ 882

3. ✗ 121

4. ✗ 221

## General Knowledge

<b>Section Id :</b>	275228518
<b>Section Number :</b>	4
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	5
<b>Number of Questions to be attempted :</b>	5
<b>Section Marks :</b>	5
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	275228609
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 26 Question Id : 2752288799 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The Bengali novel GANADEBATA is authored by:

**Options :**

1. ✘ Michael Madhusudan Dutta
2. ✓ Tarashankar Bandyopadhyay
3. ✘ Sarat Chandra Chattopadhyay
4. ✘ Jibanananda Das

**Question Number : 27 Question Id : 2752288800 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The Bengali play NABANNA is authored by:

**Options :**

1. ✘ Rabindranath Tagore
2. ✓ Bijan Bhattacharyya
3. ✘ Sanjibchandra Cattpadhyay
4. ✘ Rituparno Ghosh

**Question Number : 28 Question Id : 2752288801 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

'Srinath Bahurupi' features in which of the following novel.

**Options :**

1. ✘ Pather Dabi
2. ✘ Rajlaxmi O Srikanta
3. ✘ Pally Samaj
4. ✓ Srikanta

**Question Number : 29 Question Id : 2752288802 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The battle of Plassey was fought in the year?

**Options :**

1. ✓ 1757
2. ✗ 1736
3. ✗ 1780
4. ✗ 1832

**Question Number : 30 Question Id : 2752288803 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which is the main character of the novel Chander Pahar?

**Options :**

1. ✗ Shambhu
2. ✓ Shankar
3. ✗ Alvarej
4. ✗ Atteleo Gatti

## Domain Knowledge

<b>Section Id :</b>	275228519
<b>Section Number :</b>	5
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	45
<b>Number of Questions to be attempted :</b>	45
<b>Section Marks :</b>	45
<b>Enable Mark as Answered Mark for Review and</b>	Yes

**Clear Response :**

**Sub-Section Number :**

1

**Sub-Section Id :**

275228610

**Question Shuffling Allowed :**

Yes

**Question Number : 31 Question Id : 2752288804 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Six light bulbs, each rated for 100 W, are connected in parallel across a 200-V, 50-Hz AC supply.

What is the amount of current flowing through each bulb?

**Options :**

- 1. ✘ 1.5 A
- 2. ✘ 3 A
- 3. ✓ 0.5 A
- 4. ✘ 1 A

**Question Number : 32 Question Id : 2752288805 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

An electric shock experienced by a person is independent of which of the following quantities?

**Options :**

- 1. ✘ Magnitude of current
- 2. ✘ Path of current flow
- 3. ✘ Duration of current flow
- 4. ✓ Body temperature of the person

**Question Number : 33 Question Id : 2752288806 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

A person standing near the point where fault current enters the earth may have a large potential

difference from foot to foot. What is this potential called?

**Options :**

1. ✘ Touch potential
2. ✓ Step potential
3. ✘ Ramp potential
4. ✘ Trigger potential

**Question Number : 34 Question Id : 2752288807 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following is a device used to protect people working with electricity?

**Options :**

1. ✘ Transformer
2. ✘ Circuit breaker
3. ✘ Fuse
4. ✓ Ground-fault circuit-interrupter

**Question Number : 35 Question Id : 2752288808 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following is/are used to ensure protection of electric wiring and equipment?

- 1) Fuse wire
- 2) Earthing
- 3) Insulation

**Options :**

1. ✘ Only 1 and 2
2. ✓ 1, 2 and 3
3. ✘ Only 2
4. ✘ Only 1

**Question Number : 36 Question Id : 2752288809 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which machine tool is used to produce holes into or through the work piece material?

**Options :**

1. ❌ Soldering equipment
2. ✓ Drilling equipment
3. ❌ Punching equipment
4. ❌ Cutting equipment

**Question Number : 37 Question Id : 2752288810 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Earth tester is which type of meter?

**Options :**

1. ❌ Frequency meter
2. ✓ Ohmmeter
3. ❌ Voltmeter
4. ❌ Ammeter

**Question Number : 38 Question Id : 2752288811 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

If Switch 1 and Switch 2 are connected in series with a lamp and connected across an AC source, then:

**Options :**

1. ❌ any one switch needs to be switched ON to energise the load
2. ✓ both the switches need to be switched ON to energise the load
3. ❌ only the switch on the supply side needs to be switched ON to energise the load
4. ❌ only the switch on the load side needs to be switched ON to energise the load

**Question Number : 39 Question Id : 2752288812 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

What is the maximum safe current that can be allowed to flow through a resistor of  $5 \Omega$ , rated for 500 W?

**Options :**

1. ✗ 100 A
2. ✓ 10 A
3. ✗ 50 A
4. ✗ 5 A

**Question Number : 40 Question Id : 2752288813 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

How much time is taken by a charge of  $100 \mu\text{C}$  to pass through a point in a certain circuit if the current flowing in the circuit is 10 mA?

**Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.**

**Options :**

1. 10 min
2. 10 s
3. 100 min
4. 1 min

**Question Number : 41 Question Id : 2752288814 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Three resistors  $10\ \Omega$ ,  $20\ \Omega$  and  $40\ \Omega$  are all connected in parallel across a DC supply. What is the applied voltage if the current flowing through the  $10\text{-}\Omega$  resistor is  $100\text{ mA}$ ?

**Options :**

1. ✘ 10 V
2. ✓ 1 V
3. ✘ 100 V
4. ✘ 200 V

**Question Number : 42 Question Id : 2752288815 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Two resistors  $10\ \Omega$  and  $40\ \Omega$  are connected in series across a DC source. If the power dissipated in the  $40\text{-}\Omega$  resistor is  $160\text{ W}$ , what is the power dissipated in the  $10\text{-}\Omega$  resistor?

**Options :**

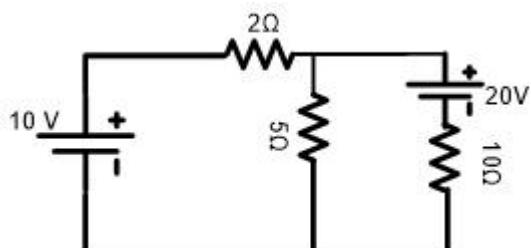
1. ✘ 10 W
2. ✓ 40 W
3. ✘ 80 W
4. ✘ 20 W

**Question Number : 43 Question Id : 2752288816 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

How much current is flowing through the  $5\text{-}\Omega$  resistor in the circuit shown here?



**Options :**

1. ✘ 0.625 A

2. ✗ 1.12 A

3. ✓ 1.75 A

4. ✗ 0.5 A

**Question Number : 44 Question Id : 2752288817 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Three resistors  $10\ \Omega$ ,  $5\ \Omega$  and  $20\ \Omega$  are all connected in parallel. What is the total conductance of the parallel circuit?

**Options :**

1. ✗ 3.5 S

2. ✓ 0.35 S

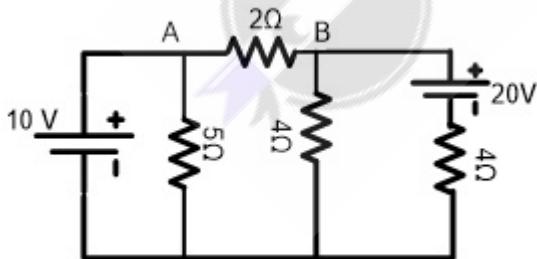
3. ✗ 2.85 S

4. ✗ 0.285 S

**Question Number : 45 Question Id : 2752288818 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

What is the Thevenin-equivalent resistance of the circuit as shown between the terminals A and B in the given figure?



**Options :**

1. ✗ 4 Ω

2. ✓ 2 Ω

3. ✗ 6 Ω

4. ✗ 1 Ω

**Question Number : 46 Question Id : 2752288819 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following is the best current-controlled device for detecting and taking care of electric leakage currents?

**Options :**

1. ✘ MCB
2. ✘ MCCB
3. ✘ ELCB
4. ✓ RCCB

**Question Number : 47 Question Id : 2752288820 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

If 10 A of current deposits 1 g of copper in 10 min in an electrolytic process, how much copper will 20 A of current deposit in 20 min?

**Options :**

1. ✘ 2 g
2. ✓ 4 g
3. ✘ 0.5 g
4. ✘ 8 g



**Question Number : 48 Question Id : 2752288821 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

According to Faraday's law of electrolysis, the mass of an element deposited at an electrode is:

**Options :**

1. ✓ directly proportional to the quantity of electricity passing through the electrolyte
2. ✘ inversely proportional to the quantity of electricity passing through the electrolyte

- 3. ✘ directly proportional to the square of the quantity of electricity passing through the electrolyte
- 4. ✘ inversely proportional to the square of the quantity of electricity passing through the electrolyte

**Question Number : 49 Question Id : 2752288822 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

A battery cell having an EMF of 4 V supplies current of 2 A when connected to a load having resistance of 1  $\Omega$ . What is its internal resistance?

**Options :**

- 1. ✘ 2  $\Omega$
- 2. ✓ 1  $\Omega$
- 3. ✘ 8  $\Omega$
- 4. ✘ 4  $\Omega$

**Question Number : 50 Question Id : 2752288823 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following is an example of a secondary cell?

**Options :**

- 1. ✘ Daniell cell
- 2. ✘ Dry cell
- 3. ✘ Voltaic cell
- 4. ✓ Lead-acid cell

**Question Number : 51 Question Id : 2752288824 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

What is the typical value of internal resistance of a lead-acid cell?

**Options :**

1. ✗ 0.1  $\Omega$
2. ✗ 0.1 m $\Omega$
3. ✓ 0.01  $\Omega$
4. ✗ 0.01 m $\Omega$

**Question Number : 52 Question Id : 2752288825 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which tool is used for the operation of finishing an already-drilled hole?

**Options :**

1. ✗ Drill
2. ✗ Counter sink
3. ✓ Reamer
4. ✗ Counter bore

**Question Number : 53 Question Id : 2752288826 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Magnetic flux in a magnetic circuit is analogous to which of the following quantities in an electric circuit?

**Options :**

1. ✗ EMF
2. ✓ Current
3. ✗ Resistance
4. ✗ Current density

**Question Number : 54 Question Id : 2752288827 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Magnetisation curve of a material is plotted between which of the following quantities?

**Options :**

1. ✘ Flux density and reluctance
2. ✓ Flux density and magnetising force
3. ✘ Flux density and MMF
4. ✘ Flux density and relative permeability

**Question Number : 55 Question Id : 2752288828 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

A conductor of length 100 m and cross-sectional area of  $5 \text{ mm}^2$  offers resistance of  $20 \Omega$ . What is its conductivity?

**Options :**

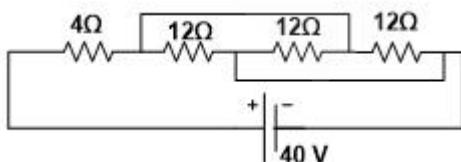
1. ✘  $2 \text{ mS/m}$
2. ✓  $1 \text{ MS/m}$
3. ✘  $100 \text{ S/m}$
4. ✘  $1 \mu\text{S/m}$

**Question Number : 56 Question Id : 2752288829 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Find the power consumed by the given circuit.



**Options :**

1. ✘ 500 W
2. ✘ 50 W
3. ✓ 200 W
4. ✘ 4 W

**Question Number : 57 Question Id : 2752288830 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following is the process of making threads in a drilled hole?

**Options :**

1.  Tapping
2.  Boring
3.  Reaming
4.  Counter-boring

**Question Number : 58 Question Id : 2752288831 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

A DC shunt motor develops a back EMF of 250 V when the line current is 52 A. What is its armature resistance if the field current is 2 A and the resistance of the field winding is 150  $\Omega$ ?

**Options :**

1.  1  $\Omega$
2.  2  $\Omega$
3.  0.5  $\Omega$
4.  0.25  $\Omega$

**Question Number : 59 Question Id : 2752288832 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

A 250-V, separately excited motor develops a back EMF of 220 V when loaded fully. What is the amount of the full load armature current if the armature resistance is 2  $\Omega$ ?

**Options :**

1.  15 A
2.  30 A

- 3. ✘ 60 A
- 4. ✘ 50 A

**Question Number : 60 Question Id : 2752288833 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

What is the maximum load that a power sub-circuit can handle?

**Options :**

- 1. ✓ 3 kW
- 2. ✘ 5 kW
- 3. ✘ 10 kW
- 4. ✘ 1 kW

**Question Number : 61 Question Id : 2752288834 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following options is the safest in case of domestic wiring?

**Options :**

- 1. ✘ Cleat wiring
- 2. ✘ CTS wiring
- 3. ✓ Conduit wiring
- 4. ✘ Wooden casing wiring

**Question Number : 62 Question Id : 2752288835 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following devices provides protection to the equipment and also to the person operating the equipment from leakage current?

**Options :**

- 1. ✘ Fuse

2. ✘ MCB
3. ✘ MCCB
4. ✓ ELCB

**Question Number : 63 Question Id : 2752288836 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The addition of which of the following substances along with water to the soil will NOT cause decrease in the resistivity of the soil?

**Options :**

1. ✓  $C_6H_{12}O_6$
2. ✘ NaCl
3. ✘  $Na_2CO_3$
4. ✘  $CuSO_4$

**Question Number : 64 Question Id : 2752288837 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

An alternating current is represented as  $i = 100\sqrt{2}\sin 2\pi \times 50t$  A. What is its RMS value?

**Options :**

1. ✓ 100 V
2. ✘  $100\sqrt{2}$  V
3. ✘  $50\sqrt{2}$  V
4. ✘ 200 V

**Question Number : 65 Question Id : 2752288838 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

An AC voltage of  $v = 50\sqrt{2} \sin 2\pi \times 50t$  is applied to a resistive network of resistance  $10 \Omega$ . What is the phase angle of the current?

**Options :**

1. ✘  $50^\circ$  lag
2. ✘  $90^\circ$  lead
3. ✘  $90^\circ$  lag
4. ✓  $0^\circ$

**Question Number : 66 Question Id : 2752288839 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Mechanical loss in a transformer is:

**Options :**

1. ✘ 5 percent of the total loss
2. ✘ 10 percent of the total loss
3. ✘ 15 percent of the total loss
4. ✓ 0 percent of the total loss

**Question Number : 67 Question Id : 2752288840 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The maximum flux density produced in the core of a transformer excited from a sinusoidal voltage is related to the frequency and the applied voltage in which of the following manners?

**Options :**

1. ✘ It is directly proportional to the frequency and directly proportional to the RMS value of the applied voltage.

2. ✓ It is inversely proportional to the frequency and directly proportional to the RMS value of the applied voltage.
3. ✗ It is directly proportional to the frequency and inversely proportional to the RMS value of the applied voltage.
4. ✗ It is inversely proportional to the frequency and inversely proportional to the RMS value of the applied voltage.

**Question Number : 68 Question Id : 2752288841 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following motors runs at a constant speed, irrespective of the load on it?

**Options :**

1. ✗ DC motor
2. ✗ Single-phase induction motor
3. ✗ Three-phase induction motor
4. ✓ Synchronous motor

**Question Number : 69 Question Id : 2752288842 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following statements is true with regard to high-speed alternators?

**Options :**

1. ✓ Field structure is of cylindrical rotor type.
2. ✗ Armature is the rotating part.
3. ✗ Field structure is a salient pole type.
4. ✗ Field structure is a stationary part.

**Question Number : 70 Question Id : 2752288843 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following motors can be used as a power factor correcting device?

**Options :**

1. ✘ Induction motor
2. ✘ Stepper motor
3. ✘ Universal motor
4. ✓ Synchronous motor

**Question Number : 71 Question Id : 2752288844 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

The actual current through a resistor is 80 A. An ammeter connected in series with the resistor reads 81 A. What is the absolute error in measurement?

**Options :**

1. ✘ 0.875 A
2. ✘ 0.125 A
3. ✘ 1.25 A
4. ✓ 1 A

**Question Number : 72 Question Id : 2752288845 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

According to the code of practice for earthing, what should be the minimum thickness of copper plate in plate earthing?

**Options :**

1. ✘ 0.5 mm
2. ✓ 3.15 mm
3. ✘ 5 mm
4. ✘ 10 mm

**Question Number : 73 Question Id : 2752288846 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

What should be the rating of a switch used for control of power sub-circuits in domestic appliances?

**Options :**

1. ✘ 10 A
2. ✓ 15 A
3. ✘ 5 A
4. ✘ 50 A

**Question Number : 74 Question Id : 2752288847 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

What is the function of an inverter?

**Options :**

1. ✘ To convert AC voltage into DC voltage
2. ✓ To convert DC voltage into AC voltage
3. ✘ To convert fixed AC voltage into variable AC voltage
4. ✘ To convert fixed DC voltage into variable DC voltage

**Question Number : 75 Question Id : 2752288848 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Identify the logic gate given here.



**Options :**

1. ✘ NAND
2. ✓ EX-OR

- 3. ✘ NOR
- 4. ✘ EX-NOR

## Computer Proficiency (MS-Office)

Section Id :	275228520
Section Number :	6
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	10
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	275228611
Question Shuffling Allowed :	Yes

**Question Number : 76 Question Id : 2752288849 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following keyboard shortcuts is used to make text superscript in Microsoft Word 2019?

**Options :**

- 1. ✘ Ctrl+=
- 2. ✓ Ctrl+Shift + +
- 3. ✘ Ctrl+Shift+#
- 4. ✘ Ctrl + #

**Question Number : 77 Question Id : 2752288850 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following keyboard shortcuts aligns a paragraph to the right in Microsoft Word 2016?

**Options :**

1. ❌ Ctrl+L
2. ❌ Ctrl+S
3. ✓ Ctrl+R
4. ❌ Ctrl+F

**Question Number : 78 Question Id : 2752288851 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following is the correct sequence of steps that enables you to add a watermark in Microsoft Word 2019?

**Options :**

1. ✓ Design > Watermark
2. ❌ Insert > Watermark
3. ❌ Layout > Watermark
4. ❌ View > Watermark

**Question Number : 79 Question Id : 2752288852 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

A formula in Microsoft Excel 2019 should always begin with a/an \_\_\_\_\_ sign.

**Options :**

1. ✓ = (equal sign)
2. ❌ & (ampersand sign)
3. ❌ # (hash sign)
4. ❌ - (minus sign)



**Question Number : 80 Question Id : 2752288853 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following keyboard shortcuts enters the current time in Microsoft Excel 2016?

**Options :**

1. ❌ Ctrl+T
2. ✓ Ctrl+Shift+;
3. ❌ Shift+T
4. ❌ Ctrl+;

**Question Number : 81 Question Id : 2752288854 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the given statements is/are true?

Statement 1:

A row or column of numbers that are plotted in a chart is called a 'data series' in Microsoft Excel.

Statement 2:

An array of cells is called a 'cell address' in Microsoft Excel.

**Options :**

1. ✓ Only statement 1 is true
2. ❌ Neither statement 1 nor statement 2 is true
3. ❌ Only statement 2 is true
4. ❌ Both, statements 1 and 2 are true

**Question Number : 82 Question Id : 2752288855 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

In Microsoft Excel by default, placing a \$ symbol in front of the row and column number of a cell reference makes it a/an \_\_\_\_\_ cell reference.

**Options :**

1. ✘ relative
2. ✘ anonymous
3. ✘ static
4. ✓ absolute

**Question Number : 83 Question Id : 2752288856 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following keyboard shortcuts inserts a new slide in Microsoft PowerPoint 2016?

**Options :**

1. ✘ Ctrl+A
2. ✘ Ctrl+N
3. ✘ Ctrl+W
4. ✓ Ctrl+M

**Question Number : 84 Question Id : 2752288857 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

A/an \_\_\_\_\_ is a slide with a specified set of characteristics which is used as the beginning point for creating other slides in Microsoft PowerPoint 2016.

**Options :**

1. ✓ Slide Master
2. ✘ Slide sorter
3. ✘ Notes Master
4. ✘ Outline

**Question Number : 85 Question Id : 2752288858 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Option Orientation : Vertical**

**Correct Marks : 1 Wrong Marks : 0.33**

Which of the following effects is a blend of multiple colours in Microsoft PowerPoint 2019?

**Options :**

1. ✘ Solid Fill
2. ✘ Auto Fill
3. ✓ Gradient Fill
4. ✘ Transparent Fill

