# **Question Paper Preview**

#### **Notations:**

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with \* icon are incorrect.

Junior Operator Technician Cum Technical

Subject Name : Assistant

**Creation Date :** 2021-09-10 12:18:47

**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

No

be always auto saved ):

# **Junior Operator Technician Cum Technical Assistant**

1 **Group Number:** Group Id: 275228352 **Group Maximum Duration:** 0 **Group Minimum Duration:** 90 **Show Attended Group?:** No **Edit Attended Group?:** Nο Break time: 0 **Group Marks:** 85

# **General Intelligence and Reasoning**

No

**Section Id:** 275228509

Section Number: 1

Is this Group for Examiner?:

Section type: Online

Mandatory or Optional: Mandatory

Number of Questions: 5

Number of Questions to be attempted: 5

Section Marks: 5

**Enable Mark as Answered Mark for Review and** 

Yes Clear Response:

Sub-Section Number: 1

**Sub-Section Id:** 275228600

**Question Shuffling Allowed :** Yes

Question Number: 1 Question Id: 2752288689 Question Type: MCQ Option Shuffling: Yes Is

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

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

Select the option that is related to the third number in the same way as the second number is related to the first number.

8:57::11:?

#### **Options:**

- 1. \* 97
- 2. 🗸 111
- 3. \* 81
- 4. \* 79

Question Number: 2 Question Id: 2752288690 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, 'WRECK' is written as 'UTCEI'. How will 'MONTH' be written in that language?

## **Options:**

- 1. \* NPOUI
- 2. \* LPMUG
- 3. \* OMPRJ
- 4. **✓** KOLVF

Question Number: 3 Question Id: 2752288691 Question Type: MCQ Option Shuffling: Yes Is

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

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

Pointing to a man Shikha said, "He is the father of the granddaughter of my mother-in-law's husband." How is the man related to Shikha's son?

- 1. **✓** Father
- 2. \* Son
- 3. \* Husband
- 4. W Uncle

Question Number: 4 Question Id: 2752288692 Question Type: MCQ Option Shuffling: Yes Is

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

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

Select the figure from the options that can replace the question mark (?) and complete the pattern.



## **Options:**







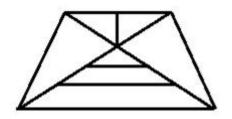


Question Number : 5 Question Id : 2752288693 Question Type : MCQ Option Shuffling : Yes Is

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

Correct Marks: 1 Wrong Marks: 0.33

Find the number of triangles in the given figure.



#### **Options:**

1. \* 10

2. \* 8

3. 🗸 12

4. \* 16

# **General English**

**Section Id:** 275228510

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:** 

Sub-Section Number: 1

**Sub-Section Id:** 275228601

**Question Shuffling Allowed :** Yes

Question Number: 6 Question Id: 2752288694 Question Type: MCQ Option Shuffling: Yes Is

Yes

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

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

The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.

Fold mountains are formed / when the Earths / tectonic plates collide.

#### **Options:**

- 1. Fold mountains are formed
- 2. when the Earths
- 3. \* tectonic plates collide.
- 4. \* No error

Question Number: 7 Question Id: 2752288695 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.

#### Quack

#### **Options:**

- 1. \* Virtuous
- 2. W Unfeigned
- 3. **✓** Pseudo
- 4. \* Ingenuous

Question Number: 8 Question Id: 2752288696 Question Type: MCQ Option Shuffling: Yes Is

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

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

Parts of a sentence are given below in jumbled order. Arrange the parts in the correct order to form a meaningful sentence.

- (a) monarchy, where the kings looked after
- (b) one of the oldest forms of government was
- (c) and order in the kingdom
- (d) the needs of the people and maintained law

1. \* c, a, d, b

2. \* a, d, c, b

3. **✓** b, a, d, c

4. \* d, c, b, a

Question Number: 9 Question Id: 2752288697 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.

#### Complicated

## **Options:**

1. **✓** Facile

2. \* Arduous

3. \* Profound

4. \* Intricate

Question Number: 10 Question Id: 2752288698 Question Type: MCQ Option Shuffling: Yes Is

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

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

Select the correctly spelt word.

#### **Options:**

- 1. V Convoluted
- 2. \* Laberinth
- 3. \* Perplaxing
- 4. \* Problematice

Question Number: 11 Question Id: 2752288699 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 divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.

Experts believe the Delta variant / sparking the huge wave in infections / seen across India over the past two months.

## **Options:**

- 1. \* Experts believe the Delta variant
- 2. ✓ sparking the huge wave in infections
- 3. \* seen across India over the past two months.
- 4. \* No error

Question Number: 12 Question Id: 2752288700 Question Type: MCQ Option Shuffling: Yes Is

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

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

Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

It has been raining since morning, is it?

#### **Options:**

- 1. \* weren't it?
- 2. \* was it?
- 3. ✓ hasn't it?
- 4. No substitution required

Question Number: 13 Question Id: 2752288701 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.

Sweep under the rug

#### **Options:**

- 1. \* To do a deep cleaning of the home
- 2. V Keep a problem secret instead of dealing with it
- 3. \* Argue jealously and violently all the time
- 4. \* To be in a difficult situation

Question Number: 14 Question Id: 2752288702 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 phrase.

A government that is run by two agencies

## **Options:**

- 1. \* Autocracy
- 2. \* Monarchy
- 3. **✓** Diarchy
- 4. \* Oligarchy

Question Number: 15 Question Id: 2752288703 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 phrase.

The fear of going to school

- 1. \* Dentophobia
- 2. \* Domatophobia
- 3. \* Dystychiphobia
- 4. ✓ Didaskaleinophobia

# **Quantitative Aptitude**

Section Id :	275228511
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 :	275228602
Question Shuffling Allowed :	Yes
Question Number : 16 Question Id : 2752288704 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0.33	
If the ten-digit number M37151269N (where M and N are single digit integers) is divisible by 88, then the value of $N-M$ is:	
Options :	
1. 🗸 1	
2. * -1	
3. * 0	
4. * 2	

Question Number: 17 Question Id: 2752288705 Question Type: MCQ Option Shuffling: Yes Is

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

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

The sum of two fractions is  $\frac{3}{4}$  and the difference is  $\frac{1}{4}$ . The product of the two fractions is:

## **Options:**

$$\frac{1}{2}$$

$$\frac{1}{3}$$

Question Number: 18 Question Id: 2752288706 Question Type: MCQ Option Shuffling: Yes Is

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

## Correct Marks: 1 Wrong Marks: 0.33

The value of 
$$\frac{(1+3+5.....93)}{2} \left(1-\frac{1}{3}\right) \left(1-\frac{1}{4}\right) \left(1-\frac{1}{5}\right) ... \left(1-\frac{1}{2209}\right)$$
 is:

$$\frac{1}{3}$$

Question Number: 19 Question Id: 2752288707 Question Type: MCQ Option Shuffling: Yes Is

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

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

24 mango trees, 40 apple trees and 72 orange trees have to be planted in rows, such that each row contains the same number of trees of one variety only. What is the minimum number of rows in which the given trees can be planted?

## **Options:**

- 1. 17
- 2. \* 8
- 3. \* 15
- 4. \* 21

Question Number: 20 Question Id: 2752288708 Question Type: MCQ Option Shuffling: Yes Is

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

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

Two business partners A and B, invested in a business and gained a profit which was divided in the ratio of 2 : 3. If B invested  $\stackrel{?}{\stackrel{?}{$\sim}}$  60,000, then what was the amount (in  $\stackrel{?}{\stackrel{?}{\stackrel{?}{$\sim}}}$ ) invested by A?

## **Options:**

- 1. 20,000
- 2. 40,000
- 3. \* 50,000
- 4. \* 25,000

Question Number: 21 Question Id: 2752288709 Question Type: MCQ Option Shuffling: Yes Is

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

## Correct Marks: 1 Wrong Marks: 0.33

The average monthly expenditure of a family was  $\stackrel{?}{\underset{?}{?}}$  26,000 during the first three months,  $\stackrel{?}{\underset{?}{?}}$  27,500 during the next four months, and  $\stackrel{?}{\underset{?}{?}}$  28,400 during the last five months of a year. If the total savings during the year was  $\stackrel{?}{\underset{?}{?}}$  1,44,000, the average monthly income (in  $\stackrel{?}{\underset{?}{?}}$ ) of the family was:

## **Options:**

- 1. 38,750
- 2. \* 41,500
- 3, 39,500
- 4. \* 40,000

Question Number: 22 Question Id: 2752288710 Question Type: MCQ Option Shuffling: Yes Is

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

Correct Marks: 1 Wrong Marks: 0.33

A lent ₹ 9,600 to B for 3 years and ₹ 8,400 to C for 4 years on simple interest at the same rate of interest, and received ₹ 5,928 in total from both of them as interest. The rate of interest per annum is:

#### **Options:**

- 1 \* 9%
- 2. 4 9.5%
- 3. \* 10%
- 4. \* 8.5%

Question Number: 23 Question Id: 2752288711 Question Type: MCQ Option Shuffling: Yes Is

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

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

A sells eight articles to B at 12% profit. B sells all of them to C at 9% loss. If C pays ₹ 2,038.40 for eight articles, then at what price (in ₹) did A purchase one article? **Options:** 1. \* 225 2. \* 200 3 🗸 250 4. \* 275 Question Number: 24 Question Id: 2752288712 Question Type: MCQ Option Shuffling: Yes Is **Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0.33** A train travels at a speed of 62 km/h and halts at 5 junctions for a certain time. It covers a distance of 1395 km in one day. For how long (in minutes) does the train stop at each junction if it halts for the same period of time at all the junctions? **Options:** 1 \* 12 2 \* 15 3. \* 20

Question Number: 25 Question Id: 2752288713 Question Type: MCQ Option Shuffling: Yes Is

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

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

4. 🗸 18

When folded into two equal halves, a rectangular sheet has a perimeter of 48 cm for each part folded along one set of sides and the same is 72 cm when folded along the other set of sides. The area (in  $cm^2$ ) of the sheet is:

# 3. \* 1420 4. \* 1042 **General Knowledge** Section Id: 275228512 **Section Number:** 4 Online **Section type: Mandatory or Optional:** Mandatory **Number of Questions:** 5 5 Number of Questions to be attempted : **Section Marks:** 5 **Enable Mark as Answered Mark for Review and** Yes **Clear Response: Sub-Section Number:** Sub-Section Id: 275228603 **Question Shuffling Allowed:** Yes Question Number: 26 Question Id: 2752288714 Question Type: MCQ Option Shuffling: Yes Is

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

The collection of poems RUPASHI BANGLA is authored by:

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

**Options:** 

**Options:** 

1 \* 1240

2. 1024

- 1. \* Rabindranath Tagore
- 2. \* Satyajit Roy
- 3. V Jibanananda Das
- 4. Michael Madhusudan Dutta

Question Number: 27 Question Id: 2752288715 Question Type: MCQ Option Shuffling: Yes Is

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

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

The Bengali movie MEGHE DHAKA TARA was directed by:

#### **Options:**

- 1. \* Satyajit Roy
- 2. ✓ Ritwik Ghatak
- 3. \* Mrinal Sen
- 4. \* Rituparno Ghosh

Question Number: 28 Question Id: 2752288716 Question Type: MCQ Option Shuffling: Yes Is

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

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

Who wrote the story 'Ajantrick'?

#### **Options:**

- 1. Manik Bnadopadhyay
- 2. \* Tarashankar Bnadopadhyay
- 3. \* Bibhuti Bhushan Bnadopadhyay
- 4. V Subodh Ghosh

Question Number: 29 Question Id: 2752288717 Question Type: MCQ Option Shuffling: Yes Is

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

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

Who is known as the last independent Nawab of Bengal?

2. Siraj-Ud-Doulah 3. Mir Zafar 4. Mir Kasem Question Number: 30 Question Id: 2752288718 Question Type: MCQ Option Shuffling: Yes Is **Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0.33** Kandari Husiyar was written by: **Options:** 1. \* Rabindranath Tagore 2. \* Kaji Sabyasachi 3. V Kazi Najrul Islam 4. \* Kaji Anirban **Domain Knowledge** Section Id: 275228513 **Section Number:** 5 Online Section type: **Mandatory or Optional:** Mandatory **Number of Questions:** 45 Number of Questions to be attempted : 45

45

Yes

**Sub-Section Id :** 275228604

**Question Shuffling Allowed :** Yes

**Enable Mark as Answered Mark for Review and** 

1. \* Sarfaraz Khan

**Section Marks:** 

**Clear Response:** 

**Sub-Section Number:** 

Question Number: 31 Question Id: 2752288719 Question Type: MCQ Option Shuffling: Yes Is

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

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

Although let-go currents are unpleasant to sustain in the human body, they generally do not impair the ability of a person to control his muscles. What is the range of let-go currents?

## Options:

- 1. **✓** 1 6 mA
- 2. \* 1 20 mA
- 3. \* 1 40 mA
- 4. \* 1 60 mA

Question Number: 32 Question Id: 2752288720 Question Type: MCQ Option Shuffling: Yes Is

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

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

Identify the tool (used by an electrician) that is shown in the given image.



## **Options:**

- 1. \* Hack saw
- 2. ✓ Pliers
- 3. \* Mini drill
- 4. Side cutters

Question Number: 33 Question Id: 2752288721 Question Type: MCQ Option Shuffling: Yes Is

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

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

An MCB is used in home electric panels for protection from overload. What is the full form of MCB?

- 1. Miniature Central Breaker
- 2. ✓ Miniature Circuit Breaker
- 3. Miniature Chief Breaker
- 4. Minuscule Circuit Breaker

Question Number: 34 Question Id: 2752288722 Question Type: MCQ Option Shuffling: Yes Is

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

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

Identify the equipment (used by an electrician) that is shown in the given image.



## **Options:**

- 1. ✓ Soldering equipment
- 2. \* Drilling equipment
- 3. \* Punching equipment
- 4. \* Cutting equipment

Question Number : 35 Question Id : 2752288723 Question Type : MCQ Option Shuffling : Yes Is

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

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

The meter shown in the given figure is used for the measurement of which of the following electrical quantities?



## **Options:**

- 1. \* Resistance
- 2. ✓ Resistance, current and voltage
- 3. **\*** Voltage
- 4. Current

Question Number: 36 Question Id: 2752288724 Question Type: MCQ Option Shuffling: Yes Is

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

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

An energy source provides 100 mJ of energy for every micro-coulomb of charge. What is its voltage?

#### **Options:**

- 1. **1**00 kV
- 2. \* 10 kV
- 3. **\*** 100 V
- 4. **\*** 1000 V

Question Number : 37 Question Id : 2752288725 Question Type : MCQ Option Shuffling : Yes Is

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

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

1 Coulomb per second corresponds to \_\_\_\_\_ ampere/s.

#### **Options:**

- 1. 🗸 1
- 2. \* 100
- 3. \* 10
- 4. \* 0.1

Question Number: 38 Question Id: 2752288726 Question Type: MCQ Option Shuffling: Yes Is

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

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

Three resistors are connected in parallel across a 100-V DC supply. What are the values of the three resistors if the currents flowing through the resistors are 10 A, 20 A and 5A, respectively?

## **Options:**

1.  $\checkmark$  10 Ω, 5 Ω and 20 Ω

2.  $\approx$  10 Ω, 20 Ω and 5 Ω

3.  $\approx$  20  $\Omega$ , 5  $\Omega$  and 10  $\Omega$ 

4.  $\stackrel{\text{\tiny 4}}{\sim}$  5 Ω, 10 Ω and 20 Ω

Question Number: 39 Question Id: 2752288727 Question Type: MCQ Option Shuffling: Yes Is

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

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

Two resistors  $R_1$  and  $R_2$  connected in series have resistance of 20  $\Omega$  when connected in a series and resistance of 5  $\Omega$  when connected in parallel. Find the values of  $R_1$  and  $R_2$ 

## **Options:**

1. 🗸 10 Ω, 10 Ω

 $2. \approx 15 \Omega, 5 \Omega$ 

3. \* 5 Ω, 15 Ω

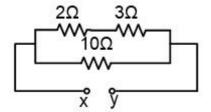
4.  $\approx$  20 Ω, 0 Ω

Question Number : 40 Question Id : 2752288728 Question Type : MCQ Option Shuffling : Yes Is

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

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

In the following circuit, the heat produced in one second in the 3- $\Omega$  resistor is 12 J. How much heat is produced in one second in the 10- $\Omega$  resistor?



## **Options:**

1. **%** 6 J

2. **\*** 24 J

3. **1**0 J

4. \* 12 J

Question Number: 41 Question Id: 2752288729 Question Type: MCQ Option Shuffling: Yes Is

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

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

The charge on an electron is  $1.6 \times 10^{-19}$  C. If the current in the circuit is 3.2 A, what is the number of electrons flowing through the circuit in 2 seconds?

## **Options:**

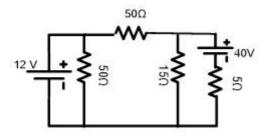
2. 
$$\checkmark$$
 4 × 10<sup>19</sup>

 $Question\ Number: 42\ Question\ Id: 2752288730\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Is$ 

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

Correct Marks: 1 Wrong Marks: 0.33

The respective numbers of branches and nodes in the given circuit are:



- 1. **4** and 2
- 2. **4** 5 and 3
- 3. **3** 5 and 4
- 4. **¾** 4 and 5

Question Number: 43 Question Id: 2752288731 Question Type: MCQ Option Shuffling: Yes Is

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

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

The ampere-hour efficiency of a lead-acid battery is around:

## **Options:**

- 1. **\*** 80 percent
- 2. **✓** 90 percent
- 3. **%** 60 percent
- 4. **3** 50 percent

Question Number: 44 Question Id: 2752288732 Question Type: MCQ Option Shuffling: Yes Is

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

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

Which type of supply is necessary for the process of electrolysis?

## **Options:**

- 1. **✓** DC supply
- 2. \* AC supply of normal frequency
- 3. **AC** supply at high frequency
- 4. Supply with varying voltage

Question Number: 45 Question Id: 2752288733 Question Type: MCQ Option Shuffling: Yes Is

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

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

A battery cell having EMF of 4 V and internal resistance of 0.1  $\Omega$  is connected to an external resistance of 1  $\Omega$ . What is the current supplied by the battery?

- 1. **3.9** A
- 2. **3.64** A
- 3. **\*** 4 A

Question Number: 46 Question Id: 2752288734 Question Type: MCQ Option Shuffling: Yes Is

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

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

Four batteries of 2 V each are connected in parallel with correct polarity. If a  $10-\Omega$  resistive load is connected across these, then what is the load current supplied by the batteries?

## **Options:**

- 1. **4** 0.2 A
- 2. **%** 0.8 A
- 3. **\*** 0.4 A
- 4. **3** 0.6 A

Question Number : 47 Question Id : 2752288735 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 an example of a primary cell?

#### **Options:**

- 1. Lead-acid cell
- 2. **Section** Edison cell
- 3. **✓** Daniel cell
- 4. \* Nickel-cadmium cell

Question Number: 48 Question Id: 2752288736 Question Type: MCQ Option Shuffling: Yes Is

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

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

The capacity of a storage battery is expressed in terms of:

- 1. \* time duration of its use
- 2. \* the number of cells in it

3. ✓ ampere hours it can deliver

4. \* the number of recharges it can take

Question Number: 49 Question Id: 2752288737 Question Type: MCQ Option Shuffling: Yes Is

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

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

In the context of drilling operations, what does the 'boring' process involve?

**Options:** 

1. \* Removing metal in the form of minute chips

2. Making dimensionally accurate holes

3. ✓ Enlarging a previously drilled hole

4. Reducing the diameter of the work piece

Question Number: 50 Question Id: 2752288738 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 mathematical expression of Ampere's Circuital Law?

**Options:** 

$$\int H_r d_r = NI$$

$$\oint H_r d_r = N^2 I^2$$

$$\oint H_r d_r = N^2 I$$

3. 
$$\oint H_r d_r = N^2 I$$

$$\oint H_r d_r = NI^2$$

Question Number: 51 Question Id: 2752288739 Question Type: MCQ Option Shuffling: Yes Is

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

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

What is the force (in N/m) between two long parallel conductors placed 1 m apart in vacuum if the current flowing through them is 1A?

## **Options:**

- 1.  $\checkmark$  2 × 10<sup>-7</sup>
- 2.  $4 \times 10^{-7}$
- 3. × 2×10<sup>-5</sup>
- 4.  $\times$  4 × 10<sup>-5</sup>

Question Number : 52 Question Id : 2752288740 Question Type : MCQ Option Shuffling : Yes Is

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

Correct Marks : 1 Wrong Marks : 0.33

Two resistors of 3  $\Omega$  and 6  $\Omega$  are connected in parallel. What is the equivalent conductance of the parallel circuit?

## Options:

- 1. **3** 0.2 S
- 2. 🗸 0.5 S
- 3. **\*** 2 S
- 4. **\*** 5 S

Question Number: 53 Question Id: 2752288741 Question Type: MCQ Option Shuffling: Yes Is

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

Correct Marks: 1 Wrong Marks: 0.33

Three equal resistances of 30  $\Omega$  are connected in parallel in a circuit. What is the total power dissipated if the current in each resistor is 5 A?

- 1. 🗸 2250 W
- 2. **\*** 750 W
- 3. \* 1250 W
- 4. \* 4500 W

Question Number: 54 Question Id: 2752288742 Question Type: MCQ Option Shuffling: Yes Is

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

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

Two resistors of 10  $\Omega$  each are connected in parallel and the combination is connected in series with a 5- $\Omega$  resistor across a DC source. If the power loss in the 5- $\Omega$  resistor is 500 W, what is the source voltage?

## **Options:**

- 1. **3** 500 V
- 2. \* 50 V
- 3. 🗸 100 V
- 4. \* 10 V

Question Number: 55 Question Id: 2752288743 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 is generally used in most ceiling fans?

#### **Options:**

- 1. ✓ Single-phase induction motor
- 2. \* Three-phase induction motor
- 3. \* Synchronous motor
- 4. \* Stepper motor

Question Number: 56 Question Id: 2752288744 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 is used in power tools demanding high speed and high starting torque?

## **Options:**

- 1. ✓ Universal motor
- 2. \* DC shunt motor
- 3. \* Reluctance motor
- 4. \* Hysteresis motor

Question Number: 57 Question Id: 2752288745 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 takes line current of 20 A. What is the value of the back EMF induced if armature resistance is 1  $\Omega$ ?

## **Options:**

- 1. **3** 270 V
- 2. **3** 210 V
- 3. 🗸 230 V
- 4. \* 250 V

Question Number : 58 Question Id : 2752288746 Question Type : MCQ Option Shuffling : Yes Is

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

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

At what value of the induced EMF is the mechanical power developed by a DC motor the maximum?

1. 
$$\checkmark$$
  $E = V/2$ 

2. 
$$E = V/4$$

3. \* 
$$E = V/3$$

4. E = 2V/3

Question Number: 59 Question Id: 2752288747 Question Type: MCQ Option Shuffling: Yes Is

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

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

Speed of a DC shunt motor on no load is 1100 rpm. Its full-load speed is 1000 rpm. What is its percentage speed regulation?

## **Options:**

1. **✓** 10 percent

2. \* 9 percent

3. \* 5 percent

4. **4.** 4.5 percent

Question Number : 60 Question Id : 2752288748 Question Type : MCQ Option Shuffling : Yes Is

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

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

The maximum efficiency of a DC motor is 80% when its output power is 1000 W. What is its constant loss?

## **Options:**

1. **3** 250 W

2. 🗸 125 W

3. **3** 200 W

4. **\*** 100 W

Question Number: 61 Question Id: 2752288749 Question Type: MCQ Option Shuffling: Yes Is

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

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

The MCB provides protection to wiring installation from:

1) over-current

- 2) short circuit
- 3) open circuit and
- 4) theft

Which of the given options are correct?

## **Options:**

- 1. **✓** 1 and 2 only
- 2. \* 1, 2 and 3 only
- 3. **\*** 2 and 3 only
- 4. \* 1, 2, 3 and 4

Question Number: 62 Question Id: 2752288750 Question Type: MCQ Option Shuffling: Yes Is

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

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

With regard to equipment grounding, what is the desirable value of earth resistance?

## **Options:**

- 1.  $^{**}$  More than 1 M $\Omega$
- 2. ✓ Approximately 0
- 3. \* Infinity
- 4.  $\approx$  Less than 1 MΩ

Question Number : 63 Question Id : 2752288751 Question Type : MCQ Option Shuffling : Yes Is

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

Correct Marks: 1 Wrong Marks: 0.33

As per the earthing policy of the Government of India, in any earthing system, what should be the limiting value of the cross section of the main copper earth lead?

- 1. 100 mm<sup>2</sup>
- 2. **3**0 mm<sup>2</sup>

3. × 1000 mm<sup>2</sup>

4. × 10 mm<sup>2</sup>

Question Number: 64 Question Id: 2752288752 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:

 $i = 100\sqrt{2} \sin 2\pi \times 50t \text{ A}.$ 

What is its amplitude (in A) and frequency (in Hz), respectively?

## **Options:**

1.  $\approx 100\sqrt{2}, 2\pi \times 50t$ 

2. 100√2, 50

3, \$ 100, 50

4.  $\approx 100, 2\pi \times 50t$ 

Question Number: 65 Question Id: 2752288753 Question Type: MCQ Option Shuffling: Yes Is

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

Correct Marks: 1 Wrong Marks: 0.33

An AC voltage of  $V=100\sqrt{2}\,\text{sin}2\pi\times50t\,$  is applied to a resistive network of resistance 100  $\Omega$ . What is the power dissipated in the resistor?

## **Options:**

1. **×** 100√2 W

2. \$ 200 W

3. 🗸 100 W

4. **≈** 200√2 W

Question Number: 66 Question Id: 2752288754 Question Type: MCQ Option Shuffling: Yes Is

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

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

What is the unit of apparent power?

## **Options:**

- 1. \* W
- 2. \* VAr
- 3. **⋖** VA
- 4. \* Wh

Question Number: 67 Question Id: 2752288755 Question Type: MCQ Option Shuffling: Yes Is

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

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

A transformer having turns ratio of 5 takes input power of 500 W when its secondary is under open-circuit condition. What is its iron loss approximately?

#### **Options:**

- 1. **1** 500 W
- 2. **3** 250 W
- 3. \* 0 W
- 4. **\*** 100 W

Question Number: 68 Question Id: 2752288756 Question Type: MCQ Option Shuffling: Yes Is

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

Correct Marks: 1 Wrong Marks: 0.33

What is the unit of rating of transformer?

- 1. **✓** kVA
- 2. \* kW
- 3. \* kVAr
- 4. \* MW

Question Number: 69 Question Id: 2752288757 Question Type: MCQ Option Shuffling: Yes Is

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

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

The stator of a synchronous machine is identical to that of a \_\_\_\_\_.

## **Options:**

- 1. \* DC machine
- 2. \* single-phase induction machine
- 3. ✓ three-phase induction machine
- 4. \* stepping machine

Question Number: 70 Question Id: 2752288758 Question Type: MCQ Option Shuffling: Yes Is

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

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

What is the frequency of EMF generated in an 8-pole synchronous generator driven at 900 rpm?

#### **Options:**

- 1. **3** 50 Hz
- 2. **4** 60 Hz
- 3. **3** 25 Hz
- 4. \* 75 Hz

Question Number: 71 Question Id: 2752288759 Question Type: MCQ Option Shuffling: Yes Is

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

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

In order to control a lamp from three different points in a very long corridor, how many switches are required?

## **Options:**

- 1. \* two two-way switches and two intermediate switches
- 2. ✓ two two-way switches and one intermediate switch
- 3. \* three two-way switches and one intermediate switch
- 4. \* three two-way switches and two intermediate switches

Question Number: 72 Question Id: 2752288760 Question Type: MCQ Option Shuffling: Yes Is

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

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

How many light points and fan points can one light and fan sub-circuit have?

#### **Options:**

- 1. 🗸 10
- 2. \* 15
- 3. \* 5
- 4. \* 3

Question Number: 73 Question Id: 2752288761 Question Type: MCQ Option Shuffling: Yes Is

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

Correct Marks: 1 Wrong Marks: 0.33

In home inverters, which type of battery is most commonly used?

#### **Options:**

- 1. \* Leclanché cell battery
- 2. \* Daniel cell battery
- 3. ✓ Lead-acid battery
- 4. \* Voltaic battery

Question Number: 74 Question Id: 2752288762 Question Type: MCQ Option Shuffling: Yes Is

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

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

In home inverters, how is the battery connected?

## **Options:**

- 1. ✓ Across the input terminals of the inverter
- 2. \* Across the output terminals of the inverter
- 3. \* Across the load terminals
- 4. \* Across the input terminals of the rectifier feeding the inverter

Question Number: 75 Question Id: 2752288763 Question Type: MCQ Option Shuffling: Yes Is

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

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

What is the output if an electric signal X = 00110011 is applied to a NOT gate?

#### **Options:**

- 1. \* 01100101
- 2. \* 00001100
- 3. 11001100
- 4. \* 11000011

# **Computer Proficiency (MS-Office)**

**Section Id**: 275228514

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** 

Yes Clear Response:

Sub-Section Number: 1

**Sub-Section Id:** 275228605

**Question Shuffling Allowed:** Yes

Question Number: 76 Question Id: 2752288764 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 a text subscript in Microsoft Word 2019?

## **Options:**

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

Question Number: 77 Question Id: 2752288765 Question Type: MCQ Option Shuffling: Yes Is

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

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

In Microsoft Word 2019, the keyboard shortcut Ctrl+K helps the user to \_\_\_\_\_.

## **Options:**

- 1. \* select the contents of a page
- 2. \* reverse certain commands
- 3. **✓** insert a link
- 4. \* print an inactive document

Question Number: 78 Question Id: 2752288766 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:

Microsoft Word was first released in 1983 under the name 'Multi-Tool Word for Xenix systems'.

Statement 2:

In Microsoft Word 2019, the default alignment of a paragraph is left.

#### **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: 79 Question Id: 2752288767 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 by which you can add captions in Microsoft Word 2016?

#### **Options:**

- 1. \* Insert > Captions
- 2. \* View > Captions
- 3. \* Layout > Captions
- 4. ✓ Reference > Captions

Question Number: 80 Question Id: 2752288768 Question Type: MCQ Option Shuffling: Yes Is

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

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

In Microsoft Excel 2016, by default, a number is aligned to the of a cell.

#### **Options:**

- 1. \* top right
- 2. \* bottom left
- 3. **✓** bottom right
- 4. \* top left

Question Number: 81 Question Id: 2752288769 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 open the Insert Function window in Microsoft Excel 2016?

#### **Options:**

- 1. **Ctrl+F3**
- 2. \* Shift+F5
- 3. **Ctrl+F5**
- 4. **✓** Shift+F3

Question Number: 82 Question Id: 2752288770 Question Type: MCQ Option Shuffling: Yes Is

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

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

Which of the following file formats represents a comma-delimited file in Microsoft Excel 2019?

#### **Options:**

- 1. **✓** .csv
- 2. \* .dif
- 3. \* .wav
- 4. \* .xml

Question Number: 83 Question Id: 2752288771 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 closes a currently open file in Microsoft PowerPoint 2016?

- 1. **\*** Ctrl+F
- 2. \* Ctrl+T
- 3. VCtrl+W
- 4. **Ctrl+A**

Question Number: 84 Question Id: 2752288772 Question Type: MCQ Option Shuffling: Yes Is

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

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

Which of the following tabs in Microsoft PowerPoint 2019 contains Page Setup and Slide

# Orientation?

- Options:
- 2. **%** Insert

1. **\*** Home

- 3. **✓** Design
- 4. \* Animations

Question Number: 85 Question Id: 2752288773 Question Type: MCQ Option Shuffling: Yes Is

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

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

A/an \_\_\_\_\_\_ effect is a special effect added to a text or an object on a slide in Microsoft PowerPoint 2019.

- 1. **✓** animation
- 2. \* background fill
- 3. \* transition
- 4. \* sound