

Ssc Cgl Tier I Previous Year Question Paper Overview

Here, you can solve all the questions asked in Ssc Cgl Tier I Previous Year Question Paper on 2022-04-19 in the Afternoon exam. The detailed solutions are also provided for every previous year question and some of these questions can be asked again in your Ssc Cgl Tier I exam. There are 100 questions in the exam and 60 minutes are provided for the Ssc Cgl Tier I exam. The Cutoff of the exam was 140 marks hence you should try to score at least 150 marks.

Ssc Cgl Tier I Previous Year Question Paper : Questions and Solutions

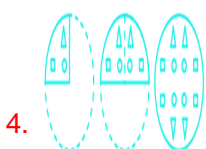
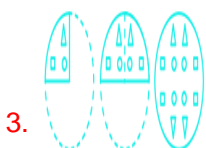
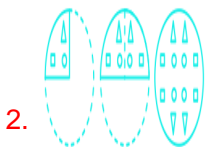
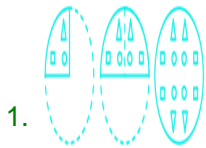
Question 1 :

Select the figure from among the given option that can replace the question mark (?) in the following serise.

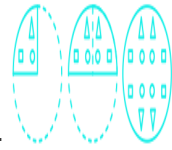
Difficulty : Moderate

Average Time : 43 Seconds

Options :



Solution :



The correct answer is **option 1** i.e.



Question 2 :

In the following Venn diagram, the pentagon stands for clerks, the triangle stands for 'coffee lovers' the square stands for 'car owners' and the circle stands for 'social workers.' The given letters represent the persons in that particular category. Which of the following categories of persons is represented by the letter 'D'?

Difficulty : Moderate

Average Time : 75 Seconds

Options :

1. Coffee-lovers who are either car-owners or social workers
2. Coffee-lovers who are car-owners and social workers
3. Car-owners who are coffee-lovers but not social workers
4. Coffee-lovers who are car-owner, social workers and clerks also

Solution :

The correct answer is **option 2** i.e. **Coffee-lovers who are car owners and social workers.**

The letter D is common to the circle, triangle, and squares and is represented by coffee lovers who are car owners and social workers.

Question 3 :

Select the correct combination of mathematical signs that can sequentially replace the * signs to balance the following equation. $22 * 66 * 33 * 11 * 44 * 0$

Difficulty : Moderate

Average Time : 50 Seconds

Options :

1. +, ÷, ×, , =
2. ×, ÷, +, , =
3. +, ÷, , ×, =



$\div, +, \times, , =$

Solution :

The correct answer is **option 1** i.e. $+, \div, \times, , =$.

Given equation: $22 * 66 * 33 * 11 * 44 * 0$

Let us check all the options:

Option 1: $+, \div, \times, , =$

The expression becomes:

$$= 22 + 66 \div 33 \times 11 - 44 = 0$$

$= 0$ is not equal to 0.

As we have found our answer, so, there is no need of checking other options.

Hence, **option 1** is the correct answer.

Question 4 :

As per the Economic Survey 2021, in which of the following states did the proportion of households that had health insurance decrease by 12% from 2015-16 to 2019-20?

Difficulty : Moderate

Average Time : 56 Seconds

Options :

1. West Bengal
2. Assam
3. Bihar
4. Sikkim

Solution :

The correct answer is **option 1** i.e. **West Bengal**

Question 5 :

Capsaicinoids, carotenoids, phenolics, and vitamins are dominant chemicals in which of the following foods?

Difficulty : Moderate

Average Time : 32 Seconds

Options :



Carrot

2. Garlic

3. Radish

4. Chilli

Solution :

The correct answer is **option 4** i.e. **Chilli**.

1. Capsaicinoids, carotenoids, phenolics, and vitamins are dominant chemicals in Chilli.
2. Capsaicinoids are the constituents in pepper that are responsible for pungency.
3. Carotenoids are tetraterpene pigments, which exhibit yellow, orange, red and purple colours.

Question 6 :

What is the atomic number of nitrogen?

Difficulty : Moderate

Average Time : 41 Seconds

Options :

1. 6

2. 8

3. 7

4. 5

Solution :

The correct answer is **option 3** i.e. **7**

Other Information-

- **7 is the atomic number of nitrogen.**
- **Nitrogen** is a chemical element with the symbol N.
- It is a gas at normal temperature and pressure and about 78% of the Earth's atmosphere is nitrogen.
- It was discovered in 1773 by the **Scottish scientist Daniel Rutherford**.
- Its two stable isotopes, mass numbers 14, 15 are known and three temporary isotopes have also been made.

Question 7 :

The Hundru Fall lies along the course of which of the following rivers?



Difficulty : Moderate

Average Time : 51 Seconds

Options :

1. Damodar
2. Sone
3. Mahanadi
4. Subarnarekha

Solution :

The correct answer is **option 4** i.e. **Subarnarekha**

Other Information-

- **Hundru fall** is situated on the banks of Subarnarekha rivers.
- Hundru Falls is a waterfall located in the Ranchi district of Jharkhand state, India.
- This 98 m (322 ft) waterfall is located on the Subarnarekha River, 21 km from Ranchi.
- This is the 34th highest waterfall in India.

Question 8 :

Who among the following was nominated for the Saraswati Samman, 2020?

Difficulty : Moderate

Average Time : 47 Seconds

Options :

1. Manoj Das
2. Sharankumar Limbale
3. Pratibha Ray
4. Manishankar Mukherjee

Solution :

The correct answer is **option 2** i.e. **Sharankumar Limbale**

Other Information-

- **Sharankumar Limbale** was nominated for the **Saraswati Samman, 2020**.
- Dr. Sharan Kumar Limbale's Marathi novel 'Sanatan' has been selected for the 30th Saraswati Samman for the year 2020.
- The award carries Rs 15 lakh, a citation and a plaque.



Saraswati Samman, instituted in 1991 by the KK Birla Foundation, is recognized as the most prestigious and highest literary award in the country.

Question 9 :

After the death of Shri Guru Gobind Singh, the Sikhs revolted against the _____ under the leadership of Banda Bahadur.

Difficulty : Moderate**Average Time : 55 Seconds****Options :**

1. Gurkhas
2. Mughals
3. British
4. Marathas

Solution :

The correct answer is **option 2** i.e. **Mughals**

Other Information-

- After the death of **Sri Guru Gobind Singh**, the Sikhs revolted against the Mughals under the leadership of **Banda Bahadur**.
- **Guru Gobind Singh** was the tenth Guru of the Sikhs.
- In the beginning of 1715 AD, **Banda Bahadur** faced the royal army of Emperor Farrukhsiyar.
- A war memorial has been built with the aim of remembering the valor and heroism of the Sikh soldiers. It is built at the same place where the battle of Chhappar Chiri took place.

Question 10 :

Who among the following is the author of the book 'The Coalition Years'?

Difficulty : Moderate**Average Time : 58 Seconds****Options :**

1. Giani Zail Singh
2. APJ Abdul Kalam
3. Pranab Mukherjee
4. KR Narayanan

Solution :



The correct answer is **option 3** i.e. **Pranab Mukherjee**

Other Information-

- **Pranab Mukherjee** is the author of the book '**The Coalition Years**'.
- **Pranab Kumar Mukherjee** has been the thirteenth President of India.
- **Pranab Mukherjee** was awarded the Bharat Ratna in January 2019.

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 11 :

If '@' means 'addition', '%' means 'multiplication', '\$' means 'division' and '#' means subtraction', then find the value of the following expression. $126 \$ 7 \% 3 @ 19 \# 21$

Difficulty : Moderate**Average Time : 71 Seconds****Options :**

1. 52
2. 18
3. 23
4. 4

Solution :

The correct answer is **option 1** i.e. **52**.

Given equation: $126 \$ 7 \% 3 @ 19 \# 21$ **Given conditions:** @ +; % x; \$ ÷; # -

Let us check all the options:

Option 1:

The expression becomes:

$$= 126 \div 7 \times 3 + 19 - 21$$

$$= 52$$

Hence, **option 1** is the correct answer.

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 12 :

Select the mirror image of the given combination when the mirror is placed at 'PQ' as shown.

Difficulty : Moderate

Average Time : 69 Seconds

Options :

- 1.
- 2.
- 3.
- 4.

Solution :

The correct answer is **option 1**

The mirror image of the question figure is shown below:



Since the mirror is placed right to the question figure, the right-hand side of the original image will be now the left-hand side of the mirror image.

Hence, **option 1** is the correct answer.

Question 13 :

Six letters, A, P, K, U, W, and N, are written on different faces of a dice. Two positions of this dice are shown. Select the letter that will be on the face opposite to the one having N.

Difficulty : Moderate

Average Time : 85 Seconds



Options :

1. W
2. P
3. U
4. A

Solution :

The correct answer is **option 3** i.e. **U**.

In both dice, K is common. So, start rotating either in the clockwise or anticlockwise direction.

Clockwise direction:

Dice 1: K N A

Dice 2: K U W

So, N is opposite to U.

Anticlockwise direction:

Dice 1: K A N

Dice 2: K W U

So, N is opposite to U.

Hence, **option 3** is the correct answer.

Question 14 :

Select the option in which the two numbers are related in the same way as the two numbers of the following number pair.
25: 343

Difficulty : Moderate

Average Time : 55 Seconds

Options :

1. 24: 216
2. 29: 121
3. 34: 510



30: 729

Solution :

The correct answer is **option 1** i.e. **24: 216**.

The logic used here is:

25: 343

$$(2 + 5)^3 = 7^3 = 343$$

Similarly,

24: 216

$$(2 + 4)^3 = 6^3 = 216$$

Hence, **option 1** is the correct answer.

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 15 :

Select the number from among the given options that can replace the question mark (?) in the following series. 361, 323, 285, 247, ?

Difficulty : Moderate

Average Time : 64 Seconds

Options :

1. 215
2. 232
3. 227
4. 209

Solution :

The correct answer is **option 4** i.e. **209**.

Given series: 361, 323, 285, 247, ?

The series follows this pattern:



$361 - 38 = 323$

$323 - 38 = 285$

$285 - 38 = 247$

$247 - 38 = 209$

So, the next term in the series is **209**.

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 16 :

Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series. P Q _ Q P P Q R _ P P Q R Q _ P Q R Q _

Difficulty : Moderate**Average Time : 68 Seconds****Options :**

1. Q R P P
2. R Q P P
3. P Q R P
4. P P R Q

Solution :

The correct answer is **option 2** i.e. **R Q P P**.

The sequence is – **R Q P P**

Given sequence: P Q _ Q P P Q R _ P P Q R Q _ P Q R Q _

Option 1: Q R P P

P Q _ Q P P Q R _ P P Q R Q _ P Q R Q _

Option 1 does not form a particular pattern.

Option 2: R Q P P

P Q R Q P / P Q R Q P / P Q R Q P / P Q R Q P

Option 2 forms a particular pattern.

Hence, **option 2** is the correct answer.

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 17 :

Raghav, Manpreet, Sunaina, Prakrit, Vedika, and Arwa are sitting around a circular table facing the center. Raghav is second to the left of Prakrit. Manpreet is to the immediate left of Sunaina. Arwa is second to the right of Vedika. There are an equal number of persons between Raghav and Manpreet from both ends. Who is sitting third to the left of Sunaina?

Difficulty : Moderate

Average Time : 108 Seconds

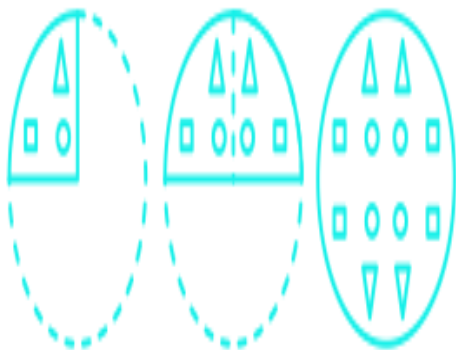
Options :

1. Raghav
2. Vedika
3. Arwa
4. Prakrit

Solution :

The correct answer is **option 3** i.e. **Arwa**.

According to the question, the arrangement is as follows:



From the above arrangement, Arwa is sitting third to the left of Sunaina.

Hence, **option 3** is the correct answer.

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 18 :

In a certain code language, 'FIXED' is written as 'XIFED', and 'MOUSE' is written as 'USOME'. How will 'GAMBIT' be written in that language?

Difficulty : Moderate

Average Time : 76 Seconds

Options :

1. TGMIBA
2. TMGIBA
3. TMIGBA
4. TIMGAB

Solution :

The correct answer is **option 3** i.e. **TMIGBA**.

The logic used here is:

'FIXED' is written as 'XIFED', and 'MOUSE' is written as 'USOME'

Letters are arranged in descending order of the English alphabetical series.

FIXED = XIFED

MOUSE = USOME

Similarly;

Code for the word GAMBIT:

GAMBIT = TMIGBA

Hence, **option 3** is the correct answer.

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate



option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 19 :

In a certain code language, 'GALLERY' is written as '1422424103650'. How will 'NOSTALGIA' be written in that language?

Difficulty : Moderate**Average Time : 76 Seconds****Options :**

1. 2830204222414184
2. 2832384222416182
3. 2830384022614362
4. 2830384022414182

Solution :

The correct answer is **option 4** i.e **2830384022414182**.

The logic used here is:

'GALLERY' is written as '1422424103650'

$$G = 7 \times 2 = 14$$

$$A = 1 \times 2 = 2$$

$$L = 12 \times 2 = 24$$

$$L = 12 \times 2 = 24$$

$$E = 5 \times 2 = 10$$

$$R = 18 \times 2 = 36$$

$$Y = 25 \times 2 = 50$$

Similarly;

Code for the word NOSTALGIA:

$$N = 14 \times 2 = 28$$

$$O = 15 \times 2 = 30$$

$$S = 19 \times 2 = 38$$

$$T = 20 \times 2 = 40$$

$$A = 1 \times 2 = 2$$

$$L = 12 \times 2 = 24$$

$$G = 7 \times 2 = 14$$

$$I = 9 \times 2 = 18$$

$$A = 1 \times 2 = 2$$

Hence, **option 4** is the correct answer.

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 20 :

If the father of Swati is the maternal grandfather of Divya, who is the daughter of Manya, then how is Manya's husband's father related to Divya?

Difficulty : Moderate

Average Time : 87 Seconds

Options :

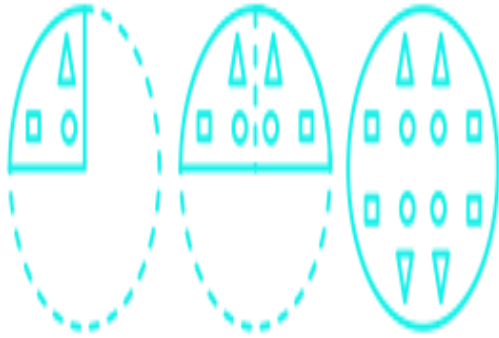
1. Maternal uncle
2. Paternal grandfather
3. Father
4. Paternal uncle

Solution :

The correct answer is **option 2** i.e. **Paternal grandfather**.

In the diagram shown;

Square shows males, the circle shows females, vertical lines show generations, a single horizontal line shows brothers or sisters, and double lines show a couple.



From the above figure, Manya's husband's father is the paternal grandfather of Divya.

Hence, **option 2** is the correct answer.

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 21 :

Shweta starts walking from her office and walks 150m towards the south, then she turns right and walks 80 m, and then she turns left and walks 60m. She finally left and walks 280 m to reach a bank. What is the shortest distance between her office and the bank?

Difficulty : Moderate

Average Time : 88 Seconds

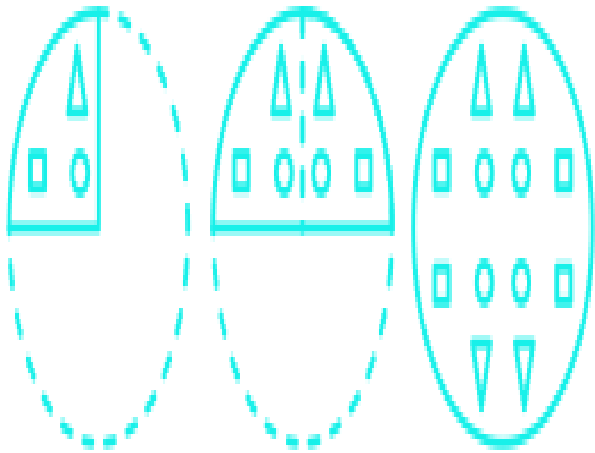
Options :

1. 280 m
2. 290 m
3. 410 m
4. 370 m

Solution :

The correct answer is **option 2** i.e. **290 m**

Using the above information we can draw the following diagram:



From the figure;

$$OE^2 = OD^2 + DE^2$$

$$OE^2 = (OA + AD)^2 + (CE - CD)^2$$

$$OE^2 = (150 + 60)^2 + (280 - 80)^2$$

$$OE^2 = (210)^2 + (200)^2$$

$$OE^2 = 44100 + 40000$$

$$OE^2 = 84100$$

$$OE = 290$$

Hence, **option 2** is the correct answer.

Question 22 :

The circumcentre of an equilateral triangle is at a distance of 3.2 cm from the base of the triangle. What is the length (in cm) of each of its altitudes?

Difficulty : Moderate

Average Time : 70 Seconds

Options :

1. 9.6

2. 7.2

3. 6.4

12.8**Solution :**The correct answer is **option 1** i.e. **9.6**

From the equilateral triangle property, O is the circumcenter as well as the centroid.

$$OD = AD/3$$

$$AD = 3 \times OD$$

$$AD = 3 \times 3.2 = 9.6 \text{ cm}$$

Question 23 :

In an $\triangle ABC$, $\angle A = 66^\circ$, $BD \perp AC$, and $CE \perp AB$. BD and EC intersect at P . The bisector PBC and PCB meet at Q . What is the measure of $\angle BQC$?

Difficulty : Moderate**Average Time : 45 Seconds****Options :**

1. 127°
2. 132°
3. 143°
4. 147°

Solution :The correct answer is **option 4** i.e. **147°**

$$\angle A = 66^\circ$$

The angle formed by the internal bisectors of the angles of the triangle is equal to 90 degrees plus half the third angle.In $\triangle ABC$ -

$$\angle BQC = 90^\circ + \frac{\angle A}{2}$$

In the quadrilateral $AEPD$ -

$$\angle EAP + \angle PEA + \angle EPD + \angle PDA = 360^\circ$$

$$\angle EPD = 360^\circ - (\angle A + 90^\circ + 90^\circ)$$

$$\angle EPD = 114^\circ$$



From figure -

$$BQC = 90^\circ + BPC/2$$

$$BQC = 90^\circ + 114^\circ/2 = 147^\circ \text{ (since EPD and BPC are vertically opposite angle).}$$

Question 24 :

A circle is inscribed in $\triangle ABC$, touching AB, BC, and AC at the points P, Q, and R, respectively. IF $AB - BC = 4\text{cm}$, $AB - AC = 2\text{cm}$ and the perimeter of $\triangle ABC = 32\text{ cm}$, then $BC/2$ (in cm)=?

Difficulty : Moderate

Average Time : 70 Seconds

Options :

1. 20/3
2. 13/3
3. 11/3
4. 10/3

Solution :

The correct answer is **option 2** i.e. **13/3**

$$AB - BC = 4 \text{(1)}$$

$$AB - AC = 2 \text{(2)}$$

$$\text{Perimeter of } ABC = 32$$

$$AB + BC + AC = 32 \text{(3)}$$

Adding equations (1), (2), and (3 -

$$3AB = 32 + 4 + 2$$

$$3AB = 38$$

$$AB = 38/3$$

$$AB - BC = 4$$

$$38/3 - BC = 4$$

$$BC = (38 - 12)/3$$

$$BC = 26/3$$

$$BC/2 = 26/6 = 13/3$$

Question 25 :

A is 120% of B and B is 65% of C. If the sum of A, B and C is 121.5, then the value of $C - 2B + A$ is:

Difficulty : Moderate**Average Time : 48 Seconds****Options :**

1. 14

2. 35

3. 24

4. 39

Solution :

The correct answer is **option 3** i.e. **24**

A is 120% of B

B is 65% of C

The sum of A, B, and C = 121.5

According to the question -

Let C be $100x$.

B is 65% of C = $(65\% \text{ of } 100x) = (65/100 \times 100x) = 65x$

A is 120% of B = $(120\% \text{ of } 65x) = (120/100 \times 65x) = 78x$

The sum of A, B and C = $121.5 = (78x + 65x + 100x)$

$$243/2 = 243x$$

$$x = 1/2$$

The value of A = $(78 \times 1/2) = 39$

The value of B = $(65 \times 1/2) = 65/2$

The value of C = $(100 \times 1/2) = 50$

$$C - 2B + A = 50 - 2(65/2) + 39 = 89 - 65 = 24$$

**Question 26 :**

An article is sold at a profit of $131\frac{1}{4}\%$. Had it been sold for RS 76.70 more, the profit would have been $161\frac{1}{5}\%$. 50% of the cost price of the article (in RS) is:

Difficulty : Moderate**Average Time : 62 Seconds****Options :**

- 1,250
- 2,500
- 1,300
- 1,500

Solution :

The correct answer is **option 3** i.e. **1,300**

Let the Cost price be x .

Original Selling Price = $113.25x/100$

S.P to earn more = $113.25x/100 + 76.70$

$113.25x/100 + 76.70 = 116.2x/100$

$113.25x + 7670 = 116.2x$

$2.95x = 7670$

$x = 2600$

50% of cost price = $2600(50/100) = 1300$

Question 27 :

The given pie charts show the number of start-ups in various industries since 2010 and the number of successful start-ups in those industries. Study the charts and answer the question that follows. Start-ups in various industries started since 2010 What should be the increase in the number (to the nearest integer) of successful start-ups in the industry of Health & Sports, so that its success percentage is the same as that of education?

Difficulty : Moderate**Average Time : 56 Seconds****Options :**

- 220

155

3. 187

4. 127

Solution :

The correct answer is **Option 4** i.e. **127**

Total startups in Education = 1280

Successful startup in Education = 520

Total startups in Health and sports = 1050

Successful startup in Health and sports = 300

Successful startup % in education = $520/1280 \times 100 = 40.625\%$

Requisite successful startups in Health and sports = $40.625/100 \times 1050 = 427$ (approximately)

The total increase in the successful startups required for health and sports = $427 - 300 = 127$

Question 28 :

If 8A5146B is divisible by 88, then what is the value of AB?

Difficulty : Moderate

Average Time : 46 Seconds

Options :

1. 27

2. 64

3. 81

4. 12

Solution :

The correct answer is **Option 3** i.e. **81**

8A5146B is divisible by 88.

So, 8A5146B is divisible by 8 and 11

46B should be divisible by 8

Put B = 4, 464 is divisible by 8



Hence, $B = 4$

Now, $8A51464$ should be divisible by 11

$(8 + 5 + 4 + 4) - (A + 1 + 6)$ should be divisible by 11

$21 - (A + 7)$ should be divisible by 11

$14 - A$ should be divisible by 11

Put $A = 3$

$14 - 3 = 11$ which is divisible by 11

Thus, $A = 3$

$$A^B = 3^4 = 81$$

Question 29 :

Study the given histogram and answer the question that follows. The histogram represents the percentage of marks obtained by a number of students of a school in the class X Board Examination in 2018. The total number of students = 250. The number of students who have obtained less than 50% marks is approximate what percent less than the number of students who have obtained 90% marks and above?

Difficulty : Moderate

Average Time : 67 Seconds

Options :

1. 75%
2. 60%
3. 80%
4. 40%

Solution :

The correct answer is **Option 2** i.e. **60%**

Students who obtained less than 50% marks approximately = 10

Students who obtained more than 90% marks and above = 25

Difference = $25 - 10 = 15$

Difference % = $(15/25) \times 100 = 60\%$

Question 30 :



X, Y, and Z can work complete a piece of work in 46 days, 92 days, and 23 days, respectively. X started the work. Y joined him after 7 days. If Z joined them after 8 days from the beginning, then for how many days did Y work?

Difficulty : Moderate

Average Time : 45 Seconds

Options :

1. $12\frac{5}{7}$

2. $11\frac{5}{7}$

3. $10\frac{5}{7}$

4. $9\frac{5}{7}$

Solution :

The correct answer is **Option 2** i.e. $11\frac{5}{7}$

Days in which X can complete the work = 46 days

Days in which Y can complete the work = 92 days

Days in which Z can complete the work = 23 days

Days after which Y joined = 7 days

Days after which Z joined = 8 days

Efficiency = Total work/Time taken to complete work individually

Total work = LCM of 23, 46, 92 = 92 units

Efficiency of X = $92/46 = 2$ units/day

The efficiency of Y = $92/92 = 1$ unit/day

The efficiency of Z = $92/23 = 4$ units/day

Work done in 7 days by X working alone = $2 \text{ units} \times 7 = 14$ units

Work done by X and Y on 8th day = $(2 + 1) \times 1 = 3$ units

Total work done until 8th day = $14 + 3 = 17$ units

Remaining work = $92 - 17 = 75$ units

Work done by X, Y and Z in one day = $2 + 1 + 4 = 7$ units

Total time taken = 75/7 days

Total days worked by Y = (75/7) + 1 = 82/7 = 11 ⁵/₇ days

Question 31 :

What is the simplified value of the following?

Difficulty : Moderate

Average Time : 97 Seconds

Options :

1. $\frac{40}{7}$
2. $\frac{5}{56}$
3. $\frac{7}{40}$
4. $\frac{51}{56}$

Solution :

The correct answer is **Option 2** i.e. $\frac{5}{56}$

Explanation:

From the given question,

$$\frac{9 \div \frac{3}{7} \text{ of } (9 + 6 \times \bar{4} - \bar{2}) + \left[\frac{1}{\bar{5}} \div \frac{7}{\bar{25}} - \left\{ \frac{5}{\bar{8}} + \frac{6}{\bar{16}} \right\} \right]}{24 \div \bar{16} - \bar{10} + 36 \div (5 + 20 \div 4 - 1)}$$

$$\frac{[9 \hat{A} \hat{A} \cdot \{3 \text{ over } 7\} \text{ of } (9 + 12) + [\{5 \text{ over } 7\} - 1]] \text{ over } \{24 \hat{A} \hat{A} \cdot 6 + 36 \hat{A} \hat{A} \cdot 9\}}$$

$$\frac{[9 \hat{A} \hat{A} \cdot \{3 \text{ over } 7\} \text{ of } 21 \hat{A} \hat{A} + [\{5 \text{ over } 7\} - 1]] \text{ over } \{4 \hat{A} \hat{A} + 4\}}$$

$$\frac{[1 + \{5 \text{ over } 7\} - 1] \text{ over } 8)}$$

$$\frac{\{5 \text{ over } 7\} \text{ over } 8)}$$

$$\frac{\{5 \text{ over } 56\}}$$

$$\frac{9 \div \frac{3}{7} \text{ of } (9 + 6 \times \bar{4} - \bar{2}) + \left[\frac{1}{\bar{5}} \div \frac{7}{\bar{25}} - \left\{ \frac{5}{\bar{8}} + \frac{6}{\bar{16}} \right\} \right]}{24 \div \bar{16} - \bar{10} + 36 \div (5 + 20 \div 4 - 1)}$$

Hence the value of $\frac{9 \div \frac{3}{7} \text{ of } (9 + 6 \times \bar{4} - \bar{2}) + \left[\frac{1}{\bar{5}} \div \frac{7}{\bar{25}} - \left\{ \frac{5}{\bar{8}} + \frac{6}{\bar{16}} \right\} \right]}{24 \div \bar{16} - \bar{10} + 36 \div (5 + 20 \div 4 - 1)}$ is $\frac{5}{56}$

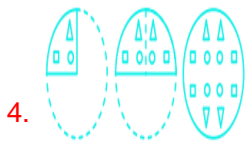
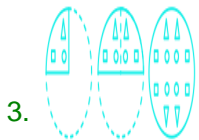
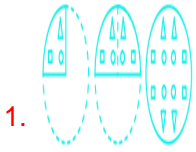
Question 32 :

Select the option in which the given figure is embedded (rotation is NOT allowed).

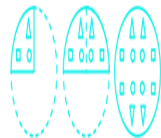
Difficulty : Moderate

Average Time : 68 Seconds

Options :

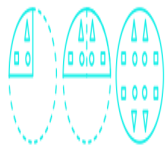


Solution :



The correct answer is **option 3** i.e. .

The given figure is embedded in option 3, as shown below:



Question 33 :

The compound interest on a certain sum of money at 21% p.a. for 2 years is Rs 11,138.40(interest compounded yearly). The total amount received (in Rs) after 2 years is:

Difficulty : Moderate

Average Time : 71 Seconds

**Options :**

1. 31,538.40
2. 24,000.50
3. 35,138.40
4. 28,315.40

Solution :

The correct answer is **option 3** i.e. **35,138.40**

Rate = 21% p.a

Time = 2 years

Compound Interest = Rs 11,138.40

The effective rate for two years = $r_1 + r_2 + \frac{r_1 r_2}{100}$ (Where r_1 and r_2 are successive rates offered in the two-year period)

Effective rates for 2 years = $21 + 21 + \frac{21(21)}{100} = 46.41\%$

Amount = Principal + Compound interest

Principal = $\frac{11138.40(100)}{46.41} = \text{Rs. } 24000$

Amount = $24000 + 11138.40 = \text{Rs. } 35138.40$

Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. The camel and the fox were very good friends and very good thieves. One day, the two friends (1) _____ to cross the river so that they could travel to a (2) _____ farm to steal food. The small fox (3) _____ swim, so the camel said to his friend, 'Climb (4) _____ onto my back and I will swim across the (5) _____.'

Question 34 :

Select the option that represents the correct order of the given words as they would appear in an English dictionary. 1. Speaking 2. Standardize 3. Southern 4. Stampede 5. Spacious 6. Sovereignty

Difficulty : Moderate

Average Time : 71 Seconds

Options :

1. 3, 4, 6, 5, 1, 2
2. 3, 6, 5, 1, 4, 2
3. 3, 6, 2, 4, 1, 5

3, 2, 6, 1, 4, 5

Solution :

The correct answer is **option 2** i.e. **3, 6, 5, 1, 4, 2.**

In this question, you need to arrange the words in the order in which they appear in an English dictionary.

1. Southern
2. Sovereignty
3. Spacious
4. Speaking
5. Stampede
6. Standardize

Question 35 :

A total amount of ₹12,95,000 is to be distributed between Vineet, Prateek, and Mayank in such a way that Vineet gets half of the amount that Mayank gets and Prateek gets ₹1,25,000 less than Vineet. How much amount will Vineet get?

Difficulty : Moderate

Average Time : 48 Seconds

Options :

1. ₹1,80,000
2. ₹1,55,000
3. ₹1,70,000
4. ₹1,85,000

Solution :

The correct answer is **option 1** i.e. **₹1,80,000.**

Let Mayank gets Rs. $2x$

Vineet gets Rs. x

Prateek gets = $x - 25000$

According to the question;

$$2x + x + x - 25000 = 295000$$

$$4x = 295000 + 25000$$

$$4x = 320000$$

$$x = 80000$$

Vineet gets Rs.80000.

Question 36 :

Chords AB and CD of a circle intersect externally at P. If AB = 7cm, CD = 1cm and PD = 5cm, then 50% of the length of PA(in cm) is:

Difficulty : Moderate

Average Time : 46 Seconds

Options :

1. 5

2. 10

3. 8

4. 3

Solution :

The correct answer is **option 1** i.e. **5**

Chords AB and CD of a circle intersect externally at P.

AB = 7 cm, CD = 1 cm and PD = 5 cm

If two chords of a circle intersect externally, then the product of the lengths of the segments are equal.

Let, PB = x cm

$$PB \times PA = PD \times PC$$

$$x(x + 7) = 5(5 + 1)$$

$$x^2 + 7x = 30$$

$$x^2 + 7x - 30 = 0$$

$$x^2 + 10x - 3x - 30 = 0$$

$$x(x + 10) - 3(x + 10) = 0$$



$$(x + 10)(x - 3) = 0$$

$$x + 10 = 0$$

$$x = -10 \text{ [Not possible]}$$

$$x - 3 = 0$$

$$x = 3$$

$$PA = x + 7 = 10$$

$$50\% \text{ of } PA = 10(50/100) = 5 \text{ cm}$$

Question 37 :

Select the letter cluster from among the given options that can replace the question mark (?) in the following series. PGF, QJK, RMP, SPU, ?

Difficulty : Moderate**Average Time : 64 Seconds****Options :**

1. RTZ
2. USX
3. TSZ
4. STY

Solution :

The correct answer is **option 3** i.e. **TSZ**.

Given series: PGF, QJK, RMP, SPU, ?

The series follows this pattern:

PGF, QJK

$$P + 1 = Q$$

$$G + 3 = J$$

$$F + 5 = K$$

Similarly;

SPU, ?

$$S + 1 = T$$

$$P + 3 = S$$

$$U + 5 = Z$$

So, the next term in the series is **TSZ**.

Question 38 :

Select the number from among the given options that can replace the question mark (?) in the following series. 12, 38, 116, 350, ?

Difficulty : Moderate

Average Time : 49 Seconds

Options :

1. 1052
2. 986
3. 916
4. 1012

Solution :

The correct answer is **option 1** i.e. **1052**

Question 39 :

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: Some schools are colleges. All colleges are universities. Conclusions: I. All universities are schools. II. Some universities are colleges.

Difficulty : Moderate

Average Time : 43 Seconds

Options :

1. Either conclusion I or II follows.
2. Only conclusion I follows.
3. Only conclusion II follows.
4. Both the conclusions follow.

Solution :

The correct answer is **option 3** i.e. **Only conclusion II follows**.

The least possible Venn Diagram for the given statements is drawn below:



Conclusions:

- I. All universities are schools **False** (It is possible but no definite conclusion can be drawn.)
- II. Some universities are colleges **True** (As all colleges are universities, so some universities are colleges.)

Hence, **Only conclusion II follows.**

Question 40 :

Four letter clusters have been given, of which three are alike and one is different. Select the one that is different.

Difficulty : Moderate

Average Time : 64 Seconds

Options :

- 1. LQJ
- 2. HLP
- 3. SXC
- 4. FKP

Solution :

The correct answer is **option 2** i.e. **HLP**.

The logic used here is:

1st letter + 5 = 2nd letter

Opposite of 2nd letter = 3rd letter

Option 1: LQJ

L + 5 = Q

Opposite of Q = J

This follows the logic.

Option 2:HLP

$$H + 5 = M$$

Opposite of $M = N$

This does not follow the logic.

Hence, **option 2** is the odd one out.

Question 41 :

In a certain code, 'jig fig vic' means 'I love India' and 're dig fig lic vic' means 'I like culture of India'. Which of the following is the code for 'love'?

Difficulty : Moderate

Average Time : 61 Seconds

Options :

1. vic
2. lic
3. fig
4. jig

Solution :

The correct **answer is 4** i.e. **jig**

The logic used here is:

'jig fig vic' means 'I love India' and 're dig fig lic vic' means 'I like culture of India'

Code for vic = I/India

Code for fig = I/India

So, code for the word love = Jig

Hence, **option 4** is the correct answer.

Question 42 :

Study the given pattern carefully and select the number from among the given options that can replace the question mark (?) in it. 8 55 56 91 28 2 68 20 11 27 ? 7 13 17 9

Difficulty : Moderate

Average Time : 52 Seconds

Options :

1. 20
2. 24
3. 30
4. 18

Solution :

The correct answer is **option 2** i.e. **24**

Question 43 :

Select the option that is related to the third term in the same way as the second term is related to the first term. QUICKER: TGMEKWS:: REPORTS:?

Difficulty : Moderate

Average Time : 33 Seconds

Options :

1. UVTQRGT
2. VUTQRGS
3. USVQRGT
4. UVTRRHT

Solution :

The correct answer is **option 1** i.e. **UVTQRGT**.

The logic used here is:

QUICKER: TGMEKWS

First, reverse the given word.

QUICKER = REKCIUQ

R + 2 = T

E + 2 = G

K + 2 = M

C + 2 = E

I + 2 = K

$$U + 2 = W$$

$$Q + 2 = S$$

Similarly,

REPORTS:?

REPORTS = STROPER

$$S + 2 = U$$

$$T + 2 = V$$

$$R + 2 = T$$

$$O + 2 = Q$$

$$P + 2 = R$$

$$E + 2 = G$$

$$R + 2 = T$$

Hence, **option 1** is the correct answer.

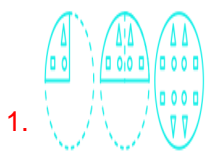
Question 44 :

The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figure. How would this paper look when unfolded?

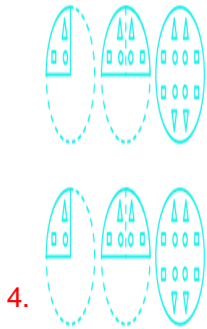
Difficulty : Moderate

Average Time : 62 Seconds

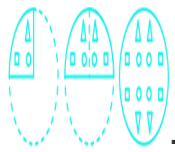
Options :



3.



Solution :



The correct answer is **option 3** i.e.

After unfolding, the paper will appear as follows:



Question 45 :

Which of the following is a mountain between India and Nepal?

Difficulty : Moderate

Average Time : 67 Seconds

Options :

1. Makalu
2. Manaslu
3. Dhaulagiri
4. Kanchenjunga

Solution :

The correct answer is **option 4** i.e. **Kanchenjunga**.

- Kanchenjunga is the third-highest mountain in the world, situated at an altitude of 8586 m above sea level on the Indo-Nepal border in the Himalayas.



The name means 'The five treasures of the high snow'.

- It consists of 5 long pinnacles, each containing gold, silver, gems, grains, and the divine treasure of the holy book.
- Five peaks make up Kanchenjunga, with three main peaks bordering the central and southern Indian states of North Sikkim and Nepal's Taplejung District.

Question 46 :

Who among the following Indian musicians was a part of a band named 'Planet Drum' along with Mickey Hart, Sikiru Adepoju, and Giovanni Hidalgo, whose first album received the 1992 Grammy Award for Best World Music Album, which was the first Grammy in this category?

Difficulty : Moderate

Average Time : 66 Seconds

Options :

1. Bhimsen Joshi
2. Zakir Hussain
3. Ravi Shankar
4. Hariprasad Chaurasia

Solution :

The correct answer is **option 2** i.e. **Zakir Hussain**.

- Hussain was part of a rhythm band named Planet Drum along with Mickey Hart, Sikiru Adepoju, and Giovanni Hidalgo.
- Hussain has accompanied some of the greatest Indian musicians and collaborated with such diverse performers as the London String Quartet and Van Morrison.
- His 1992 album with Grateful Dead drummer Mickey Hart, Planet Drum, earned a Grammy Award and the Downbeat Critics Poll for best world beat album.

Question 47 :

According to the Union Budget 2020-2021, the bank credit growth as of January 1, 2021, stood at _____%

Difficulty : Moderate

Average Time : 53 Seconds

Options :

1. 5.9
2. 6.7

5.2

4. 7.1

Solution :

The correct answer is **option 2** i.e. **6.7**.

- The credit growth was 5.3 per cent at beginning of April 2021 and started to increase since then, but was still modest and stood at 7.3 per cent as on 17 Dec 2021.
- In 2021-22, the risk capital (i.e. money raised from capital market) has so far been more important than the banks in providing finance to the rival.
- The rise in demand for loans is called credit growth. This is an important indicator of economic activity.

Question 48 :

Which of the following is a characteristic of amorphous solids?

Difficulty : Moderate**Average Time : 51 Seconds****Options :**

1. A definite and characteristic enthalpy of fusion
2. Melting at a sharp and characteristic temperature
3. A definite characteristic geometrical shape
4. Gradual softening over a range of temperatures

Solution :

The correct answer is **option 4** i.e. **Gradual softening over a range of temperatures**.

- Amorphous solids have two characteristic properties. When cleaved or broken, they produce fragments with irregular, often curved surfaces; and they have poorly defined patterns when exposed to x-rays because their components are not arranged in a regular array.
- An amorphous, translucent solid is called a glass.
- Almost any substance can solidify in amorphous form if the liquid phase is cooled rapidly enough

Question 49 :

Which of the following techniques can be used for reducing the total dissolved solids (TDS) in water? (1) Ion Exchange (2) Distillation (3) Carding

Difficulty : Moderate**Average Time : 59 Seconds****Options :**

- Only 1
2. Only 3
3. Both 1 and 2
4. Both 2 and 3

Solution :

The correct answer is **option 3** i.e. **Both 1 and 2**.

- The ion exchange process percolates water through bead-like spherical resin materials (ion-exchange resins).
- Distillation is method of separating mixtures based on differences in their volatilities in a boiling liquid mixture.
- The main contaminant present in water is total dissolved solids (TDS) left in the water after the normal filtration process.
- Contaminants that are larger than 2 microns are termed total dissolved solids.

Question 50 :

The Constituent Assembly was recognised by Section _____ of the Indian Independence Act, 1947.

Difficulty : Moderate

Average Time : 53 Seconds

Options :

1. 6(2)
2. 10(1)
3. 12(2)
4. 8(1)

Solution :

The correct answer is **option 4** i.e. **8(1)**.

- The Constituent Assembly was recognised by Section 8(1) of the Indian Independence Act, 1947.
- The Constituent Assembly of India was a sovereign body, which was formed on the recommendations of the Cabinet Mission.
- The Constitution making body was elected by the Provincial Legislative Assembly constituting of 389 members who included 93 from Princely States and 296 from British India.

Question 51 :

In India, the Protection of Children from Sexual Offences (POCSO) Act, _____ is a comprehensive law to provide for the protection of children from the offences of sexual assault, sexual harassment and pornography, while safeguarding the interests of the child.

Difficulty : Moderate

Average Time : 53 Seconds

Options :

1. 2012
2. 2006
3. 2010
4. 2008

Solution :

The correct answer is **option 1** i.e. **2012**.

- POCSO Act, 2012 was enacted when the cases of sexual abuse against children were rising.
- The POCSO Act 2012, by defining a child as a person below 18 years of age, fixes the age of consent at 18 years.
- Under POCSO, the consent of a "child" is immaterial and consensual sexual intercourse with or among adolescents is treated on a par with rape.

Question 52 :

Lalita is a form of folk music from _____.

Difficulty : Moderate

Average Time : 47 Seconds

Options :

1. Madhya Pradesh
2. Rajasthan
3. Maharashtra
4. Gujarat

Solution :

The correct answer is **option 3** i.e. **Maharashtra**.

- Lavani and Povada are the most popular folk songs that entertain the village folks in Maharashtra.
- Bhajan, Bharud, Gondhal, Kirtan, Lalita, Abhangas and Tumbadi singing are the other forms of community entertainment based on folk songs found in Maharashtra.
- Gondhal, Lalita, Lavani, Povadas and Tamasha are the other forms of entertainment that involve folk music in Maharashtra.

Question 53 :

The 74th Amendment Act of 1992 added a new Part _____ to the Constitution of India.



Difficulty : Moderate

Average Time : 49 Seconds

Options :

1. X
2. IX-A
3. IX
4. VIII

Solution :

The correct answer is **option 2** i.e. **IX-A**

Other Information-

- The **74th Amendment Act** of 1992 added a new Part **IX-A** to the Constitution of India.
- This **Part-IX** includes the provisions made (from Articles 243 to 243-O) for '**Panchayats**'.
- Added **Part IX-A** to the Constitution containing provisions from **Articles 243-P to 243-ZG**.
- It deals with municipalities in articles **243P to 243ZG**.
- This amendment, also known as the Municipalities Act, came into force on 1 June 1993.

Question 54 :

With which of the following organisations was Lala Har Dayal associated?

Difficulty : Moderate

Average Time : 56 Seconds

Options :

1. Ghadar Party
2. Indian Independence League
3. Indian Home Rule Society
4. Swaraj Party

Solution :

the correct answer is **option 1** i.e. **Ghadar Party**

Other Information-

- The organization of **Ghadar Party** was associated with **Lala Hardayal**.
- The **Ghadar Party** was born in Astoria, San Francisco, USA in 1913 with the aim of uprooting the British Empire.
- The founder president of **Ghadar Party** was **Sardar Sohan Singh Bhakna**.



Lala Hardayal was one of the leading revolutionaries of the Indian freedom struggle who inspired and encouraged the Indians living abroad to contribute to the freedom struggle of the country.

- For this, he went to America and established the **Ghadar Party**.

Question 55 :

In which Indian state is the 'Fatorpa Zatra' celebrated?

Difficulty : Moderate

Average Time : 62 Seconds

Options :

1. Madhya Pradesh
2. Goa
3. Kerala
4. Himachal Pradesh

Solution :

The correct answer is **option 2** i.e. **Goa**.

Other Information-

- '**Fatorpa Yatra**' is celebrated in the Indian state of Goa.
- Fatorpa Zatra is one of the most famous zatras of Goa and is celebrated at the temple of Shantadurga Kuncol.
- Goa or Goa is the smallest state of India by area and the fourth smallest by population.
- **Goa** was earlier a colony of Portugal.
- The Portuguese ruled Goa for about 450 years and it was handed over to the Indian administration on 19 December 1961.

Question 56 :

Who among the following won the All England Open Badminton Championship 2020 in the Men's Singles category?

Difficulty : Moderate

Average Time : 58 Seconds

Options :

1. Viktor Axelsen
2. Kento Momota
3. Anders Antonsen
4. Chou Tien-chen

Solution :



The correct answer is **option 1** i.e. **Viktor Axelsen**

Other Information-

- **Viktor Axelsen** won the All England Open Badminton Championship 2020 in the men's singles category.
- **Prakash Padukone** won the men's singles title in the year 1980 and became the first Indian to do so.
- It is a competition where heritage and excellence meet. The first edition was held in Guilford in 1898.

Question 57 :

In which of the following years was the Mont-Ford Reforms report presented by the British colonial government in India?

Difficulty : Moderate

Average Time : 52 Seconds

Options :

1. 1907
2. 1918
3. 1934
4. 1942

Solution :

The correct answer is **option 2** i.e. **1918**

Other Information-

- The **Mont-Ford Reforms Report** was presented by the British colonial government in India in **1918**.
- This became the basis of the Government of India Act 1919.
- **Montagu-Chelmsford Reforms** or more briefly known as **Mont-Ford Reforms**.
- Through this act, the responsibility of powers was clearly divided among the provinces.

Question 58 :

Which of the following is the shallowest part of the ocean showing an average gradient of 1° or even less?

Difficulty : Moderate

Average Time : 50 Seconds

Options :

1. Oceanic deeps
2. Continental shelf
3. Continental slope
4. Deep sea plain

**Solution :**

The correct answer is **option 2** i.e. **Continental shelf**.

Other Information-

- The **Continental shelf** is the shallowest part of the ocean showing an average slope of 1° or less.
- The **Continental shelf** is the extended margin of all the continents in the ocean.
- It is the shallowest part of the ocean.
- The shallowness of the continental shelf enables sunlight to penetrate the water, which encourages plankton growth.
- These areas also get nutrients from the land. These are also the richest fishing grounds in the world.

Question 59 :

Who among the following created a national record in the javelin throw event at the third Indian Grand Prix meet in March 2021?

Difficulty : Moderate

Average Time : 60 Seconds

Options :

1. Vipin Kasana
2. Devendra Jhajharia
3. Shivpal Singh
4. Neeraj Chopra

Solution :

The correct answer is **option 4** i.e. **Neeraj Chopra**

Question 60 :

Which of the following is a foreign bank operating in India as of 31st May 2021?

Difficulty : Moderate

Average Time : 33 Seconds

Options :

1. Axis Bank Ltd
2. HDFC Bank Ltd
3. BNP Paribas
4. ICICI Bank Ltd

Solution :



The correct answer is **option 3** i.e. **BNP Paribas**

Other Information-

- **BNP Paribas** is a foreign bank operating in India as on 31 May 2021.
- The full form of BNP is Banque Nationale de Paris.
- BNP Paribas has its headquarters in Paris and London.
- It was born in 2000 from the BNP and Paribas and is the world's fourth largest bank by assets.
- It is the largest bank in the Eurozone.

Question 61 :

Which day has been declared by the World Health Organization as Hand Hygiene Day?

Difficulty : Moderate

Average Time : 54 Seconds

Options :

1. 5th May
2. 18th August
3. 21st July
4. 14th June

Solution :

The correct answer is **option 1** i.e. **5th May**

Other Information-

- May 5 is celebrated by the World Health Organization as Hand Hygiene Day or World Hand Hygiene Day.
- The day aims to spread awareness about hand hygiene in healthcare, as well as bring people together in support of improving hand hygiene around the world.
- The **World Health Organization (WHO)** has reviewed new research and evidence on the role of climate or culture in improving hand hygiene and the quality and safety of health care.

Question 62 :

Which of the following is a disease caused by drinking contaminated water?

Difficulty : Moderate

Average Time : 56 Seconds

Options :

1. Scurvy
2. Cholera



Rickets

4. Anaemia

Solution :

The correct answer is **option 2** i.e. **Cholera**.

- **Cholera** is a disease caused by drinking contaminated water.
- **Cholera** is an infectious disease.
- Cholera is caused by the bacterium *Vibrio cholerae*, which is spread through contaminated food and water.
- It spreads from person to person through dirty hands and nails.

Question 63 :

The following sentence has been divided into parts. One of them may contain a grammatical 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. This park is / the largest bird sanctuary / in the State.

Difficulty : Moderate

Average Time : 56 Seconds

Options :

1. the largest bird sanctuary
2. This park is
3. No error
4. in the State

Solution :

The correct answer is **option 3** i.e. **No error**

- In the above sentence subject is '**the park**' and '**is**' is the verb of the sentence.
- Largest used in the sentence is correct as we need to use definitivr article with the superlative degree of adjective.
- Hence, the above sentence is correct.

Hence, the correct answer is-

No error

Question 64 :

Select the most appropriate synonym of the given word. Monotonous

Difficulty : Moderate

Average Time : 50 Seconds

Options :



Boring

2. Compulsory
3. Eventful
4. Momentous

Solution :

The correct answer is **option 1** i.e. **Boring**

- The meaning of **Monotonous** is 'dull, tedious'.
- The meaning of the options are as follows

1. **Boring**- dull.
2. **Compulsory**- that must be done.
3. **Eventful**- full of important, dangerous, or exciting things happening.
4. **Momentous**- very important

Hence, as per the meaning of the options the correct synonym is-

Boring

Question 65 :

A and B had a joint business in which A invested Rs 60,000 in the business for one year. After 3 months B invested Rs 80,000. At the beginning of the second year, A invested Rs 30,000 more and B withdrew Rs 5,000. At the end of two years, profit earned by A is Rs 35,880. What is the profit (in Rs) earned by B, if they distributed half of the total profit equally and rest in the capital ratio?

Difficulty : Moderate

Average Time : 70 Seconds

Options :

1. 69,920
2. 38,060
3. 34,040
4. 58,940

Solution :

The correct answer is **option 3** i.e. **34,040**

Explanation:



Total capital invested by A = $60000 \times 12 + 90000 \times 12 = 720000 + 1080000 = \text{Rs. } 1800000$

Total capital invested by B = $80000 \times 9 + 75000 \times 12 = 720000 + 900000 = \text{Rs. } 1620000$

Ratio = $1800000 : 1620000 = 10 : 9$

Let the total profit earned is $4x$.

Out of $4x$ profit, $2x$ is equally divided between A and B.

A's profit = $x + \frac{10}{19} \times 2x = 35880$

$39x = 35880 \times 19$

$x = \text{Rs. } 17480$

Profit earned by B = $x + \frac{9}{19} \times 2x = \frac{37x}{19} = \frac{37 \times 17480}{19} = \text{Rs. } 34040$

Question 66 :

Select the most appropriate meaning of the given idiom. To hold water

Difficulty : Moderate

Average Time : 58 Seconds

Options :

1. To be valid and reasonable
2. To be unsteady and unsure
3. To be large and deep
4. To be sad and depressed

Solution :

The correct answer is **option 1** i.e. **To be valid and reasonable**

- The meaning of the above idiom is '**Reasonable and valid**'

Hence, the correct answer is-

To be valid and reasonable

Question 67 :

The following sentence has been split into four segments. Identify the segment that contains a grammatical error. I asked my friend / where had he / learnt to dance / so well.

Difficulty : Moderate

Average Time : 49 Seconds

Options :



where had he

2. learnt to dance
3. I asked my friend
4. so well

Solution :

The correct answer is **option 1** i.e. **where had he**

- In grammar whenever we need to use an interrogative sentence we use **modal verb before the subject**.
- In the above sentence instead of "**where had he**" we need to use '**where he had**'.

Hence, the correct answer is-

where had he

Question 68 :

Select the correct passive voice form of the given sentence. The Chief Minister inaugurated the new hospital.

Difficulty : Moderate

Average Time : 50 Seconds

Options :

1. The new hospital will be inaugurated by the chief minister
2. The new hospital was inaugurated by the chief minister
3. The new hospital is being inaugurated by the chief minister
4. The new hospital had been inaugurated by the chief minister

Solution :

the correct answer is **option 2** i.e. **The new hospital was inaugurated by the chief minister.**

- In active and passive the tense will remain the same.
- The subject will become the object and vice versa.
- The above sentence is in past tense hence **was/were** will be used.

Hence, the correct sentence is

The new hospital was inaugurated by the chief minister.

Question 69 :

Select the option that can be used as a one-word substitute for the given group of words. A style of cooking food, characteristic of a particular country or region



Difficulty : Moderate

Average Time : 63 Seconds

Options :

1. Creche
2. Antique
3. Menu
4. Cuisine

Solution :

The correct answer is **option 4** i.e. **Cuisine**

- The meaning of the options are as follows.

1. **Creche**- a place where young children are cared for during the day while their parents do something else.
2. **Antique**- very old and therefore unusual and valuable
3. **Menu**- a list of the food that you can choose at a restaurant
4. **Cuisine**- the style of cooking of a particular country, restaurant, etc.

Hence, as per the meanings the correct answer is-

Cuisine

Question 70 :

Select the most appropriate meaning of the given idiom. Play with fire

Difficulty : Moderate

Average Time : 58 Seconds

Options :

1. To be courageous
2. To spread knowledge
3. To do something dangerous
4. To fight an opponent

Solution :

The correct answer is **option 3** i.e. **To do something dangerous**

- The meaning of the above idiom is '**doing something risky**'.

Hence, the correct answer is-



To do something dangerous

Question 71 :

Select the most appropriate synonym of the given word. Abandon

Difficulty : Moderate

Average Time : 42 Seconds

Options :

1. Possess
2. Retain
3. Rescue
4. Quit

Solution :

The correct answer is **option 4** i.e. **Quit**

- The meaning **Abandon** is '**having been left or deserted**'
- The meaning of the options are as follows.
 1. **Possess**- to have or own something.
 2. **Retain**- to keep or continue to have something.
 3. **Rescue**- to save somebody/something from a situation that is dangerous or unpleasant.
 4. **Quit**- to leave

Hence, as per the meanings the correct answer is-

Quit

Question 72 :

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. Shamim have not / attended school / for four days now.

Difficulty : Moderate

Average Time : 66 Seconds

Options :

1. attended school
2. for four days now
3. Shamim have not



No error

Solution :

The correct answer is **option 3** i.e **Shamim have not**

- '**Shamim has not**' should be used instead of '**have not**'.
- Shamim is a singular noun hence, singular verb should be used.

Hence, the correct sentence is-

Shamim **has not** attended school for four days now.

Question 73 :

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'. The dress may pleasantly be delivered to us at the earliest.

Difficulty : Moderate

Average Time : 54 Seconds

Options :

1. No substitution required
2. may kindly
3. might kindly
4. must pleasantly

Solution :

The correct answer is **option 2** i.e. **may kindly**

- In the above sentence the word **pleasantly** used is more casual hence, '**Kindly**' should be used
- Therefore, **may kindly** will be used instead of **may pleasantly**.

Hence, the correct sentence is-

The dress **may kindly** be delivered to us at the earliest.

Question 74 :

Select the option that can be used as a one-word substitute for the given group of words. Unable to express feelings clearly

Difficulty : Moderate

Average Time : 51 Seconds

Options :



Inarticulate

2. Affluent
3. Eloquent
4. Verbose

Solution :

The correct answer is **option 1** i.e. **Inarticulate**

- The meaning of the options are as follows.
1. **Inarticulate**- not able to express ideas and feelings clearly
 2. **Affluent**- having a lot of money
 3. **Eloquent**- able to use language and express your opinions well
 4. **Verbose**- using or containing more words than are needed

Hence, as per the meanings the correct answer is-

Inarticulate

Question 75 :

Select the most appropriate ANTONYM of the given word. Constrict

Difficulty : Moderate

Average Time : 52 Seconds

Options :

1. Smite
2. Choke
3. Stretch
4. Cramp

Solution :

The correct answer is **option 3** i.e. **Stretch**

The meaning of **Constrict** is '**to become or make something tighter, narrower or less**'.

The meaning of the options are as follows:

1. **Smite**- strike with a firm blow.
2. **Choke**- to be or to make somebody unable to breathe because something is stopping air getting into the lungs
3. **Stretch**- to pull something so that it becomes longer or wider; to become longer or wider in this way



Cramp- a sudden pain that you get in a muscle.

Hence, as per the meanings the correct answer is- **Stretch**

Question 76 :

Select the option that will improve the underlined part of the given sentence. In case no improvement is needed, select 'No improvement required'. Since setting up, the charity has raised a million dollars.

Difficulty : Moderate

Average Time : 68 Seconds

Options :

1. Since being set up
2. From setting up
3. Since setting
4. No improvement required

Solution :

The correct answer is **option 1** i.e. **Since being set up**

- The initial part of the sentence is incorrect as it requires **gerund i.e being**.
- Instead of '**since setting up**' '**since being set up**' should be used.

Hence the correct sentence is

Since being set up, the charity has raised a million dollars.

Question 77 :

Given below are four jumbled sentences. Select the option that gives their correct order. A. For example, the sound of footsteps followed by the slam of a door are like phrases which convey some information. B. In films, sound effects play the part of words. C. We then know who is performing an action and why, and a clear picture is formed in our mind's eye. D. Once the sounds are prefaced or followed by a dialogue, the sentence is complete.

Difficulty : Moderate

Average Time : 68 Seconds

Options :

1. DCBA
2. CBDA
3. BCDA
4. BADC

**Solution :**

The correct answer is **option 4** i.e. **BADC**

- The first sentence of a paragraph is usually a **general and independent sentence**. Hence, in this case it will be **B**.
- **B** will be followed by **A** as it states the sound of footsteps followed by the slam of door.
- The next sentence will be **D** as it states that the sounds are followed by a dialogue.
- The concluding part will be sentence **C** as it states who is performing the action and why.

Hence, the correct paragraph is-

In films, sound effects play the part of words. For example, the sound of footsteps followed by the slam of a door are like phrases which convey some information. Once the sounds are prefaced or followed by a dialogue, the sentence is complete. We then know who is performing an action and why, and a clear picture is formed in our mind's eye.

Question 78 :

The following sentence has been split into four segments. Identify the segment that contains a grammatical error. I was angry / on myself / for making / such a silly mistake.

Difficulty : Moderate

Average Time : 82 Seconds

Options :

1. such a silly mistake
2. for making
3. on myself
4. I was angry

Solution :

The correct answer is **option 3** i.e. **on myself**

- '**Angry with someone**' will be the grammatically correct phrase.
- In the above sentence instead of '**on myself**' **with myself**' should be used.

Hence, the correct sentence is

I was angry **with** myself for making such a silly mistake.

Question 79 :

Select the most appropriate option to fill in the blank. _____ or not you allow me, I am going to the fair.



Difficulty : Moderate

Average Time : 51 Seconds

Options :

1. Whether
2. Unless
3. If
4. Until

Solution :

The correct answer is **option 1** i.e. **Whether**

- **Whether or not** is used to give an opposite alternative.
- Hence, as per the sentence **whether** is the correct option.

Hence, the correct sentence is

Whether or not you allow me, I am going to the fair.

Question 80 :

Select the option that expresses the given sentence in passive voice. Can you carry my bag upstairs?

Difficulty : Moderate

Average Time : 47 Seconds

Options :

1. Was my bag carried upstairs by you?
2. Could your bag be carried upstairs by me?
3. Can my bag be carried upstairs by you?
4. Can your bag be carried upstairs by me?

Solution :

The correct answer is **option 3** i.e. **Can my bag be carried upstairs by you?**

- The **subject** will be **object** in passive voice.
- The **object** will be the **subject**.
- '**Can carry**' will be changed to '**Can be carried**'.

Hence, the correct sentence is

Can my bag be carried upstairs by you?

**Question 81 :**

Select the most appropriate ANTONYM of the given word. Taut

Difficulty : Moderate

Average Time : 56 Seconds

Options :

1. Tight
2. Solid
3. Strong
4. Slack

Solution :

The correct answer is **option 4** i.e. **Slack**

- The meaning of 'taut' is 'very tight'.
 - The meaning of the options are as follows.
1. **Tight**- fixed firmly in position and difficult to move or remove
 2. **Solid**- hard and firm
 3. **Strong**- physically powerful
 4. **Slack**- loose

Hence as per the meanings the correct answer is

Slack

Question 82 :

Select the option that expresses the given sentence in direct speech. She asked me what my favourite cuisine was.

Difficulty : Moderate

Average Time : 55 Seconds

Options :

1. She said to me, "What is your favourite cuisine?"
2. She said to me, "What my favourite cuisine is?"
3. She said to me, "What is my favourite cuisine?"
4. She said to me, "What your favourite cuisine was?"

Solution :

The correct answer is **option 1** i.e. **She said to me, "What is your favourite cuisine?"**

The above sentence is an interrogative sentence. Hence **asked** will not be changed.

- **Commas and inverted commas** will be added.
- **'my'** will be changed to **'your'**.
- **'Was'** will be changed to **'is'**.

Hence, the correct sentence is

She said to me, "What is your favourite cuisine?"

Question 83 :

Select the INCORRECTLY spelt word.

Difficulty : Moderate

Average Time : 62 Seconds

Options :

1. Disturbence
2. Genius
3. Opportunity
4. Conscious

Solution :

The correct answer is **option 1** i.e. **Disturbence**

- The correct spelling **Disturbence is Disturbance**
- All the other options are correctly spelt.

Hence, the correct answer is

Disturbence**Comprehension :**

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank. Pollution is destroying nature. The smoke that is (1) _____ from the chimneys of the factories, and from vehicles is the mixture of poisonous gases. Due to environmental pollution, there is (2) _____ in nature, so, many birds, animals, and plants are on the verge of (3) _____ day by day. The only way to (4) _____ environmental pollution is to plant many trees. By planting trees, we can get rid of many harmful poisonous gases. It is the responsibility of everyone to (5) _____ and protect our environment. SubQuestion No : 21

Question 84 :

Select the most appropriate option for blank 1.

**Difficulty : Moderate****Average Time : 66 Seconds****Options :**

1. generated
2. absorbed
3. created
4. emitted

Solution :

The correct answer is **option 4** i.e. **emitted**

- The above passage is on **pollution**.
- The correct option for the blank is **emitted** which means **to send out something like smell, sound etc.**

Hence, the correct answer is

emitted**Comprehension :**

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank. Pollution is destroying nature. The smoke that is (1) _____ from the chimneys of the factories, and from vehicles is the mixture of poisonous gases. Due to environmental pollution, there is (2) _____ in nature, so, many birds, animals, and plants are on the verge of (3) _____ day by day. The only way to (4) _____ environmental pollution is to plant many trees. By planting trees, we can get rid of many harmful poisonous gases. It is the responsibility of everyone to (5) _____ and protect our environment. SubQuestion No : 21

Question 85 :

Select the most appropriate option for blank 2.

Difficulty : Moderate**Average Time : 70 Seconds****Options :**

1. an imbalance
2. a difference
3. an inequality
4. a balance

Solution :

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The correct answer is **option 1** i.e. **an imbalance**

- The sentence talks about how things have **changed for animals and birds due to the pollution.**
- The pollution has caused a **disproportion..**

Hence, the correct option is

Imbalance

Comprehension :

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank. Pollution is destroying nature. The smoke that is (1) _____ from the chimneys of the factories, and from vehicles is the mixture of poisonous gases. Due to environmental pollution, there is (2) _____ in nature, so, many birds, animals, and plants are on the verge of (3) _____ day by day. The only way to (4) _____ environmental pollution is to plant many trees. By planting trees, we can get rid of many harmful poisonous gases. It is the responsibility of everyone to (5) _____ and protect our environment. SubQuestion No : 21

Question 86 :

Select the most appropriate option for blank 3.

Difficulty : Moderate

Average Time : 71 Seconds

Options :

1. survival
2. distinction
3. appearance
4. extinction

Solution :

The correct answer is **option 4** i.e. **extinction**

- The above sentence talks about the effect of this imbalance caused in the environment.
- The correct option is **Extinction which means on the verge of no longer existing.**

Hence, the correct answer is

extinction

Comprehension :

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank. Pollution is destroying nature. The smoke that is (1) _____ from the chimneys of the factories, and from vehicles is the mixture of poisonous gases. Due to environmental pollution, there is (2) _____ in nature, so, many birds, animals, and plants are on



the verge of (3) _____ day by day. The only way to (4) _____ environmental pollution is to plant many trees. By planting trees, we can get rid of many harmful poisonous gases. It is the responsibility of everyone to (5) _____ and protect our environment. SubQuestion No : 21

Question 87 :

Select the most appropriate option for blank 4.

Difficulty : Moderate

Average Time : 70 Seconds

Options :

1. eradicate
2. sustain
3. radiate
4. introduce

Solution :

The correct answer is **option 1** i.e. **eradicate**

- The above sentence talks about the only to stop pollution.
- Hence, the correct option is **eradicate** which means '**get rid of something completely**'.

Hence, the correct answer is

eradicate

Comprehension :

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank. Pollution is destroying nature. The smoke that is (1) _____ from the chimneys of the factories, and from vehicles is the mixture of poisonous gases. Due to environmental pollution, there is (2) _____ in nature, so, many birds, animals, and plants are on the verge of (3) _____ day by day. The only way to (4) _____ environmental pollution is to plant many trees. By planting trees, we can get rid of many harmful poisonous gases. It is the responsibility of everyone to (5) _____ and protect our environment. SubQuestion No : 21

Question 88 :

Select the most appropriate option for blank 5.

Difficulty : Moderate

Average Time : 69 Seconds

Options :

1. ruin



preserve

3. destroy

4. neglect

Solution :

The correct answer is **option 2** i.e. **preserve**

- The above sentence talks about the everyone's duty to help protect the environment.
- Hence, the correct option is **preserve** which means '**to keep something safe or in good condition**'.

Hence, the correct answer is

preserve

Question 89 :

If $a^2 + b^2 + 49c^2 + 18 = 2(b + 28c - a)$, then the value of $(2a - b + 7c)$ is:

Difficulty : Moderate

Average Time : 46 Seconds

Options :

1. 5

2. -3

3. -4

4. 1

Solution :

The correct answer is **option 4** i.e. **1**

$$a^2 + b^2 + 49c^2 + 18 = 2(b + 28c - a)$$

$$a^2 + b^2 + 49c^2 + 18 = 2b + 56c - 2a$$

$$a^2 + b^2 + 49c^2 + 18 = 2b + 56c - 2a$$

$$(a^2 + 2a + 1) + (b^2 - 2b + 1) + (49c^2 - 56c + 16) = 0$$

$$(a + 1)^2 + (b - 1)^2 + (7c - 4)^2 = 0$$

$$a + 1 = 0, b - 1 = 0, 7c - 4 = 0$$

$$a = -1, b = 1, c = 4/7$$



$$(2a - b + 7c) = [2(-1) - 1 + 7(4/7)] = -2 - 1 + 4 = 1$$

Question 90 :

If $x^2 - 5x - 1 = 0$, what is the value of?

Difficulty : Moderate**Average Time : 59 Seconds****Options :**

1. 145
2. 140
3. 130
4. 135

Solution :

The correct answer is **option 4** i.e. **135**

$$x^2 - 5x - 1 = 0$$

Dividing both sides by x .

$$x - 5 - 1/x = 0$$

$$(x - 1/x) = p = 5 \dots(1)$$

$$(x^6 - x^4 + x^2 - 1)/x^3$$

$$x^3 - x + 1/x - 1/x^3$$

$$x^3 - 1/x^3 - (x - 1/x)$$

$$(x - 1/x)^3 + 3(x - 1/x) - (x - 1/x)$$

$$p^3 + 3p - p = 125 + 15 - 5 = 135$$

Question 91 :

Find a single discount percentage equivalent to successive discounts of 10%, 20% and 25%.

Difficulty : Moderate**Average Time : 59 Seconds****Options :**

1. 55%
2. 46%



20%

4. 18.3%

Solution :

The correct answer is **option 2** i.e. **46%**

The successive discount is 10%, 20%, and 25%.

Successive discount = $X + Y - (XY)/100$ (Where, X = First discount and Y = Second discount)

Successive discount = $X + Y - (XY)/100 = 10 + 20 - 200/100 = 28\%$

Again,

Successive discount = $X + Y - (XY)/100 = 28 + 25 - (28 \times 25)/100 = 28 + 25 - 700/100 = 46\%$

Question 92 :

What is the LCM of 3.6, 1.8 and 0.144?

Difficulty : Moderate

Average Time : 41 Seconds

Options :

1. 3.6
2. 36
3. 3600
4. 360

Solution :

The correct answer is **option 1** i.e. **3.6**

LCM of (3.6, 1.8, 0.144) = LCM of (36/10, 18/10, 144/1000)

= LCM of (3600/1000, 1800/1000, 144/1000)

= LCM of (3600, 1800, 144)/HCF of (1000, 1000, 1000)

= 3600/1000

= 3.6

Question 93 :

A car covers a distance of 90 km in 50 min. What is its speed (in m/s)?



Difficulty : Moderate

Average Time : 37 Seconds

Options :

1. 60
2. 90
3. 108
4. 30

Solution :

The correct answer is **option 4** i.e. **30**

Given:

Distance = 90 km = 90000 m

Time = 50 min = 3000 sec

Concept Used:

Speed = distance/time

Explanation:

Speed = Distance/Time = $90000/3000 = 30$ m/s

Hence the speed (in m/s) is 30 m/s.

Question 94 :

A 20 m long ladder rests against a wall so that the angle between the ladder and the wall is 30° . How far (in m) is the base of the ladder from the wall?

Difficulty : Moderate

Average Time : 48 Seconds

Options :

1. 103
2. 203
3. 20
4. 10

Solution :

The correct answer is **option 4** i.e. **10**

Length of ladder = 20 m

The angle between the ladder and the wall = 30°

In the right-angled triangle ABC -

$$\sin 30^{\circ} = BC/AB$$

$$1/2 = BC/20$$

$$BC = 20/2 = 10\text{m}$$

Question 95 :

Study the given graph and answer the question that follows. The bar graph shows the exports of cars of type A and B (in millions) from 2014 to 2018. The total exports of cars of type B from 2015 to 2018 is what percentage more than the total exports of cars of type A from 2015 to 2018 (correct to one decimal place)?

Difficulty : Moderate

Average Time : 52 Seconds

Options :

1. 17.2%
2. 15.5%
3. 14.9%
4. 16.7%

Solution :

The correct answer is **option 4** i.e. **16.7%**

Total number of years = 5

The total exports of cars of type B from 2015 to 2018 (in Rs. millions) = $250 + 200 + 275 + 325 = 1050$

The total exports of cars of type A from 2015 to 2018 (in Rs. millions) = $150 + 275 + 175 + 300 = 900$

The difference (in Rs. millions) = $1050 - 900 = 150$

The required percentage = $(150/900) \times 100 = 16.66\% \approx 16.7\%$

Question 96 :

Two similar jugs have their heights of 8 cm and 12 cm, respectively. If the smaller jug is 80 cm³, what is the capacity of the bigger jug (in cm³)?

**Difficulty : Moderate****Average Time : 48 Seconds****Options :**

1. 120
2. 192
3. 216
4. 270

Solution :

The correct answer is **option 4** i.e. **270**

Height of smaller jug = 8 cm

Height of bigger jug = 12 cm

The volume of the smaller jug = 80 cm^3

The volume of similar surfaces is equal to the cube of similar sides.

$$(\text{Height}_A^3)/(\text{Height}_B^3) = \text{Volume}_A/\text{Volume}_B$$

From the proportionality concept -

$$8^3/12^3 = 80/(\text{Volume}_B)$$

$$512/1728 = 80/(\text{Volume}_B)$$

$$(\text{Volume}_B) = 270 \text{ cm}^3$$

Question 97 :

The average of the three numbers is 15. The average of the second and third number is 12.5. What is the first number?

Difficulty : Moderate**Average Time : 57 Seconds****Options :**

1. 18
2. 21
3. 24
4. 20

Solution :

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The correct answer is **option 4** i.e. **20**

Given:

Average of three numbers = 15

The average of the second and third numbers = 12.5

Concept Used:

Sum of terms = Average \times Number of terms

Explanation:

Sum of three number = $15 \times 3 = 45$

Sum of the second number and third number = $12.5 \times 2 = 25$

First number = $45 - 25 = 20$

Hence the first number is 20.

Question 98 :

If $\cos B = 5/7$, what is the value of $\operatorname{cosec} B + \cot B$? Given that $0 < B < \pi/2$

Difficulty : Moderate

Average Time : 50 Seconds

Options :

1. $5/6$
2. $6/12$
3. $7/6$
4. 6

Solution :

The correct answer is **option 4** i.e. **6**

$\cos B = 5/7$

Using Pythagoras' theorem -

$\cos = \text{base/hypotenuse} = 5/7$

$$b^2 + p^2 = h^2$$

$$5^2 + p^2 = 7^2$$



$$p^2 = 24$$

$$p = 26$$

$$\operatorname{Cosec} B + \cot B = (7/26) + (5/26) = 12/26 = 6$$

Question 99 :

The following pie-charts shows the number of students studying in different departments of an institutes during the academic years 2019 and 2020. The total number of students was 2000 and 2400, respectively, in academic years 2019 and 2020. What is the ratio of the number of students studying science in the year 2019 to that in the year 2020?

Difficulty : Moderate**Average Time : 57 Seconds****Options :**

1. 18 : 19
2. 20 : 21
3. 15 : 19
4. 14 : 15

Solution :

The correct answer is **option 3** i.e. **15 : 19**

Total students in the year 2019 = 2000

Total students in the year 2020 = 2400

Students studying science in 2019 = $(18/100) \times 2000 = 360$

Students studying science in 2020 = $(19/100) \times 2400 = 456$

Ratio = $360 : 456 = 15 : 19$

Question 100 :

If $\cos 53^\circ = x/y$, then $\sec 53^\circ + \cot 37^\circ$ is equal to:

Difficulty : Moderate**Average Time : 38 Seconds****Options :**

1. $\frac{x + \sqrt{y^2 - x^2}}{y}$



$$\frac{x + \sqrt{y^2 - x^2}}{x}$$

3. $\frac{y + \sqrt{y^2 - x^2}}{x}$

4. $\frac{x + \sqrt{y^2 - x^2}}{y}$

Solution :

$$\frac{y + \sqrt{y^2 - x^2}}{x}$$

The correct answer is **option 3** i.e.

$$\cos 53^\circ = x/y$$

$$\sec 53^\circ = y/x$$

$$\tan(90 - 53) = \cot 37^\circ = 1/(\tan 37^\circ) = (y^2 - x^2)/x$$

Putting the value of $\sec 53^\circ$ and $\cot 37^\circ$ -

$$\sec 53^\circ + \cot 37^\circ = (y/x) + (y^2 - x^2)/x = [y + (y^2 - x^2)]/x$$

Ssc Cgl Tier I Previous Year Question Paper Analysis

The analysis of Ssc Cgl Tier I Previous Year Question Paper held on 2022-04-19 in the Afternoon exam is as follows:

1. 100 questions were moderate.
2. The safe score is 140 marks.
3. 25 questions were asked from Logical Reasoning, 25 questions were asked from General Awareness, 25 questions were asked from Quantitative Aptitude and 25 questions were asked from English Language
4. 9 questions should have been skipped if you were short of time.

Ssc Cgl Tier I Previous Year Question Paper Topic Wise Weightage

Logical Reasoning

1. Coding Decoding - 3
2. Analogy - 2
3. Classification - 1
4. Blood Relations - 1
5. Distance And Direction - 1
6. Syllogism - 1
7. Venn Diagrams - 1
8. Dictionary Based - 1
9. Figure Based - 3
10. Series - 3
11. Mathematical Reasoning - 3
12. Cubes And Dice - 1
13. Seating Arrangement And Puzzle - 4

General Awareness

1. Polity - 1
2. Art And Culture - 24

Quantitative Aptitude

1. Simplification - 1
2. Average - 1
3. Percentage - 2
4. Data Interpretation - 4
5. Time And Work - 1
6. Time Speed And Distance - 1
7. Interest - 1
8. Geometry - 3
9. Trigonometry - 3
10. Mensuration - 1
11. Algebra - 2
12. Number System - 2
13. Partnership - 1
14. Profit And Loss - 1
15. Comparison Of Quantities - 1

English Language

1. Spotting Error - 4
2. Parajumbles - 1
3. Idioms - 1
4. One Word Substitution - 2
5. Match The Following - 1
6. Voice - 2
7. Parts Of Speech - 1
8. Sentence Improvement - 2
9. Synonym - 2
10. Antonym - 1
11. Filler (Vocab) - 7
12. Incorrectly Spelt - 1
13. Incorrectly Spelt - 1

Ssc Cgl Tier I Previous Year Question Paper Tips and Tricks



1. Try to solve Ssc Cgl Tier I Previous Year Question Paper without taking any help from the solutions.
2. Ssc Cgl Tier I Previous Year Question Paper require proper usage of concept so firstly read the question thoroughly and then use the right concept.
3. In case you're not able to solve the question in less than 30 seconds in the exam then you should skip the question and move to the next question.

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Quantitative Aptitude
Logical Reasoning
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Daily Vocabulary
Daily Editorial
Latest Notifications
Exam Dates
Admit Card
Exam Results
Exam Cutoff
Exam Eligibility
Exam Pattern
Answer Key
Important Days



Further Guidance on Ssc Cgl Tier I Previous Year Question Paper

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Neetu Mam is primarily passionate for the English language and teaching from the last 20 years however for the Ssc Cgl Tier I Previous Year Question Paper. She has guided her team to provide the best explanation for the question.