



# 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 2022-12-05 in the Noon 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

### 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. Women won their present status through (1)\_\_\_\_\_ and sacrifices rather than through men's kindness. Women and their supporters have fought, and in some places continue to fight for the same rights as (2)\_\_\_\_\_. Laws were made to replace local customs which denigrated and suppressed women's rights. Women have (3)\_\_\_\_\_ higher positions in the world at all levels;political, economic and social. But in reality, women still suffer from (4)\_\_\_\_\_ at various levels.For example, women work more and earn less than men. In addition to that, the majority of the world's poor and illiterate are women. The road to real (5)\_\_\_\_\_ is still long.

### Question 1 :

Select the most appropriate option to fill in blank number 4.

Difficulty : Moderate

Average Time : 75 Seconds

### Options :

1. issues
2. tolerance
3. equality
4. discrimination

### Solution :

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

The meaning of the given words is:



- **Discrimination:** The act of treating people unfairly based on certain characteristics such as race, gender, religion, or age.
- **Tolerance:** The ability to accept and respect differences in beliefs, opinions, and behavior, even if they differ from one's own.
- **Issues:** Topics or problems that cause controversy, debate, or disagreement among people or groups.
- **Equality:** The state or condition of having the same rights, opportunities, and treatment as others, regardless of their differences.
- Thus, the most appropriate filler for the given blank is **discrimination**.

Therefore, the correct sentence is:

*But in reality, women still suffer from **discrimination** at various levels. For example, women work more and earn less than men.*

**Question 2 :**

Select the most appropriate collocation to fill in the blank. Arun and his wife were \_\_\_\_\_ a baby boy after 18 years of their marriage.

Difficulty : Moderate

Average Time : 74 Seconds

**Options :**

1. delighted with
2. prepared with
3. provided with
4. blessed with

**Solution :**

The correct answer is **Option 4** i.e. **blessed with**.

- "Delighted with" means experiencing great joy or satisfaction with something, but it does not convey the same meaning as having a baby boy.
- "Prepared with" means being ready or equipped with something, but it does not convey the idea of having a baby boy.
- "Provided with" means being given or supplied with something, but it does not convey the idea of having a baby boy in the same way as "blessed with" does.
- The verb "blessed" is used in this context to convey the idea that Arun and his wife were fortunate or favored to



have a baby boy.

- The preposition "with" is used to indicate the possession or attainment of something, in this case, a baby boy.

**Thus, the completed sentence is:**

*Arun and his wife were **blessed with** a baby boy after 18 years of their marriage.*

### Question 3 :

Select the most appropriate option to fill in the blank. This drama is extremely informative \_\_\_\_\_ life in Roman times.

Difficulty : Moderate

Average Time : 80 Seconds

### Options :

1. on
2. of
3. about
4. for

### Solution :

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

- The preposition "**about**" is used to indicate the subject or topic of the information provided by the drama.
- "**On**" is used to indicate the topic of discussion or focus, but it does not convey the same meaning as "about" in this context.
- "**Of**" is used to indicate possession, origin, or belonging, but it does not convey the same meaning as "about" in this context.
- "**For**" is used to indicate purpose, benefit, or intended recipient, but it does not convey the same meaning as "about" in this context.
- Thus, the most appropriate filler would be **about**.

**Therefore, the completed sentence is:**

*This drama is extremely informative **about** life in Roman times.*

### Question 4 :

Select a suitable figure from the answer figures which would replace the question mark (?).

Difficulty : Moderate

Average Time : 73 Seconds

### Options :

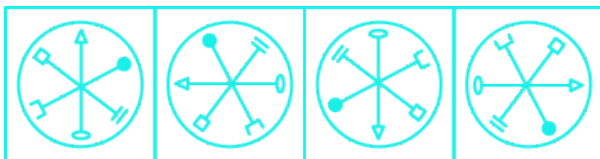
- 
- 2.
- 3.
- 4.



**Solution :**



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



The whole figure is rotating 90 degrees in an anticlockwise direction in each figure.

**Question 5 :**

Select the set in which the numbers are related in the same way as the numbers of the following set. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g., 13 – Operations on 13 such as adding /subtracting /multiplying, etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed). (5: 25: 30) (16: 256: 272)

Difficulty : Moderate

Average Time : 76 Seconds

Options :

1. (15: 225: 230)

2. (9: 81: 109)

3. (19: 361: 381)

4. (13: 169: 182)

Solution :

The correct answer is **Option 4** i.e. (13: 169: 182).

The logic used here is:

(5: 25: 30)

$$5^2 = 25$$

$$25 + 5 = 30$$

(16: 256: 272)

$$16^2 = 256$$

$$256 + 16 = 272$$

Similarly,

(13: 169: 182)

$$13^2 = 169$$

$$169 + 13 = 182$$

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

Question 6 :

A paper is folded and cut as shown below. How will it appear when unfolded?

Difficulty : Moderate

Average Time : 43 Seconds

Options :

1.

- 2.
- 3.
- 4.



**Solution :**



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

After unfolding, the paper will appear as follows:



**Question 7 :**

By interchanging the given two numbers which of the following equation will be correct? 7 and 4

**Difficulty :** Moderate

**Average Time :** 62 Seconds

**Options :**



$$4 - 7 + 6 \div 2 \times 3 = 12$$

$$2. 4 \times 3 + 7 - 9 \div 3 = 20$$

$$3. 7 + 4 \times 2 - 6 \div 2 = 17$$

$$4. 7 + 5 \times 2 - 4 \div 1 = 9$$

**Solution :**

The correct answer is **Option 1** i.e.  $4 - 7 + 6 \div 2 \times 3 = 12$ .

**Given conditions:** 7 and 4

**Option 1:**  $4 - 7 + 6 \div 2 \times 3 = 12$

After interchanging the expression becomes:

$$= 7 - 4 + 6 \div 2 \times 3 = 12$$

$$= 7 - 4 + 3 \times 3$$

$$= 7 - 4 + 9$$

$$= 7 + 5$$

$$= 12 \text{ is equal to } 12.$$

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

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

**Question 8 :**

Which of the followings HYV seeds is/are associated with the Green Revolution in India? (A) Rice (B) Wheat

**Difficulty :** Moderate

**Average Time :** 55 Seconds

**Options :**

1. Both A and B
2. Only A
3. Neither A nor B
4. Only B

**Solution :**

The correct answer is **Option 1** i.e. **Both A and B**.



The Green Revolution was an endeavour initiated by Norman Borlaug in the 1960s. He is known as the 'Father of Green Revolution' in world.

- The Green Revolution resulted in a great increase in production of food grains (especially wheat and rice) due to the introduction into developing countries of new, high-yielding variety seeds, beginning in the mid-20<sup>th</sup> century.
- In India, the Green Revolution was mainly led by M.S. Swaminathan.

**Question 9 :**

Which number will replace the question mark (?) in the following series? 729, 243, ?, 27, 9, 3

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

1. 54
2. 78
3. 81
4. 36

**Solution :**

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

**Given series:** 729, 243, ?, 27, 9, 3

The series follows this pattern:

$$3 \times 3 = 9$$

$$9 \times 3 = 27$$

$$27 \times 3 = 81$$

$$81 \times 3 = 243$$

$$243 \times 3 = 729$$

So, the missing term in the series is **81**.

**Question 10 :**

In a certain code language, 'OXYGEN' is written as 'QZAIGP', and 'MIND' is written as 'OKPF'. how will 'DOCTOR' be written in that language?

**Difficulty : Moderate****Average Time : 46 Seconds****Options :**





FQEUPS

2. EQDUPS

3. FQEVQT

4. EQEVQT

### Solution :

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

The logic used here is:

'OXYGEN' is written as 'QZAIGP'

$O + 2 = Q$

$X + 2 = Z$

$Y + 2 = A$

$G + 2 = I$

$E + 2 = G$

$N + 2 = P$

'MIND' is written as 'OKPF'

$M + 2 = O$

$I + 2 = K$

$N + 2 = P$

$D + 2 = F$

Similarly;

Code for the word DOCTOR:

$D + 2 = F$

$O + 2 = Q$

$C + 2 = E$

$T + 2 = V$

$O + 2 = Q$



$$R + 2 = T$$

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

**Question 11 :**

A certain sum of money becomes triple of itself in 26 years at simple interest. In how many years it will become five times of itself?

**Difficulty : Moderate**

**Average Time : 64 Seconds**

**Options :**

1. 64 years
2. 52 years
3. 56 years
4. 60 years

**Solution :**

The correct answer is **Option 2** i.e. **52 years**.

**Given:**

Time taken to triple the money = 26 years

**Concept Used:**

$$\text{SI} = \left\{ \frac{P \times R \times T}{100} \right\} \dots(i)$$

**Explanation:**

Let the principle be  $P$  and the rate of interest be  $R\%$  per annum.

The money triples in 26 years, amount =  $3P$

Therefore, Interest =  $3P - P = 2P$

Now, using equation (i), we get

$$2P = \left\{ \frac{P \times R \times 26}{100} \right\}$$

$$R = \frac{200}{26} = \frac{100}{13}$$

Now, for the money to become 5 times, amount =  $5P$

$$\text{Interest} = 5P - P = 4P$$



So, using equation (i), we get

$$4P = \left(P \times \frac{100}{13}\right) \times \frac{T}{100}$$

$$400 = \left(\frac{100}{13}\right) T$$

$$T = 52$$

Hence the time required for the money to be its 5 times is 52 years.

### 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. Women won their present status through (1)\_\_\_\_\_ and sacrifices rather than through men's kindness. Women and their supporters have fought, and in some places continue to fight for the same rights as (2)\_\_\_\_\_. Laws were made to replace local customs which denigrated and suppressed women's rights. Women have (3)\_\_\_\_\_ higher positions in the world at all levels; political, economic and social. But in reality, women still suffer from (4)\_\_\_\_\_ at various levels. For example, women work more and earn less than men. In addition to that, the majority of the world's poor and illiterate are women. The road to real (5)\_\_\_\_\_ is still long.

### Question 12 :

Select the most appropriate option to fill in blank number 3.

Difficulty : Moderate

Average Time : 108 Seconds

### Options :

1. snatched
2. gripped
3. plucked
4. gained

### Solution :

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

### The meaning of the given words is:

- **Gained:** Obtained something through effort or achievement.
- **Snatched:** Took something away quickly or forcefully, often without permission.
- **Gripped:** Held something firmly and tightly.
- **Plucked:** Removed something quickly and often abruptly, such as picking a flower from a plant or removing a hair from one's skin.
- Thus, the most appropriate filler for the given blank is **gained**.

Therefore, the correct sentence is:

Women have **gained** higher positions in the world at all levels;political, economic and social.

**Question 13 :**

Select the option that represents the correct order of the given words as they would appear in an English dictionary. 1- Accusable 2- Acerbity 3- Accursed 4- Acetify 5- Accuser

Difficulty : Moderate

Average Time : 67 Seconds

**Options :**

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

**Solution :**

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

In this question, you need to arrange the words as they would appear in the English dictionary.

- 1- Accursed
- 2- Accusable
- 3- Accuser
- 4- Acerbity
- 5- Acetify

**Question 14 :**

A & B means 'A is the wife of B' A # B means 'A is the father of B' A @ B means 'A is the son B' A % B means 'A is the husband of B' A + B means 'A is the mother of B' If A & B # C & D @ E % F + G, then how is D related to G?

Difficulty : Moderate

Average Time : 55 Seconds

**Options :**

1. Brother
2. Father
3. Son

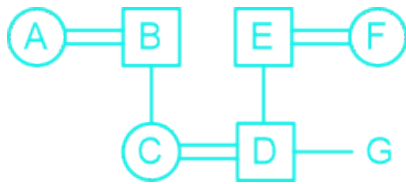
**Son-in-law**

**Solution :**

The correct answer is **Option 1** i.e. **Brother**.

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 tree, D is the brother of G.

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

**Question 15 :**

Select the correct mirror image of the given combination when the mirror is placed at line MN as shown.

**Difficulty : Moderate**

**Average Time : 53 Seconds**

**Options :**

1. w 7 f 2 t 1
2. m 7 f 5 t 1
3. w 7 f 2 t 1
4. w 7 f 2 t r

**Solution :**

The correct answer is **Option 1** i.e. **w 7 f 2 t 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 16 :**

In the following question, four number pairs are given. In each pair, the number on the left side of (–) is related to the number on the right side of (–) with some Logic/Rule/Relation. Three pairs are similar on the basis of the same Logic/Rule/Relation. Select the odd one out from the given alternatives. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g.13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

Difficulty : Moderate

Average Time : 96 Seconds

**Options :**

1. 12 – 50
2. 8 – 36
3. 10 – 44
4. 18 – 76

**Solution :**

The correct answer is **Option 1** i.e. **12 – 50**.

The logic used here is:

$$1\text{st number} \times 4 = 2\text{nd number}$$

$$2\text{nd number} + 4 = 3\text{rd number}$$

**Option 1: 12 – 50**

$$12 \times 4 = 48$$

$$48 + 4 = 52$$

This does not follow the logic.

Hence, **option 1** is the odd one out.

**Question 17 :**

Select the option that is related to the fourth term in the same way as the first term is associated with the second term and the fifth term is related to the sixth term. 729: 90::? : 56:: 512: 72

Difficulty : Moderate

Average Time : 51 Seconds

**Options :**

1. 323
2. 343
3. 352
4. 335

**Solution :**

The correct answer is **Option 2** i.e. **343**.

The logic used here is:

$$729: 90$$

$$9^3 = 729$$

$$9 \times 10 = 90$$

$$512: 72$$

$$8^3 = 512$$

$$8 \times 9 = 72$$

Similarly,

$$? : 56$$

$$7^3 = 343$$

$$7 \times 8 = 56$$

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

**Question 18 :**

In a certain code language, 'STAR' is coded as '92678', and 'FLAG' is coded as '20261521'. How will 'LOGO' be coded in that language?

Difficulty : Moderate

Average Time : 47 Seconds

**Options :**

1. 12201215
2. 12221214



15122012

4. 12201325

**Solution :**

The correct answer is **Option 1** i.e. **12201215**.

The logic used here is:

'STAR' is coded as '92678'

First, reverse the code.

STAR = 87269

Opposite of S = H = 8

Opposite of T = G = 7

Opposite of A = Z = 26

Opposite of R = I = 9

'FLAG' is coded as '20261521'

FLAG = 21152620

Opposite of F = U = 21

Opposite of L = O = 15

Opposite of A = Z = 26

Opposite of G = T = 20

Similarly;

Code for the word LOGO:

Opposite of L = O = 15

Opposite of O = L = 12

Opposite of G = T = 20

Opposite of O = L = 12

LOGO = 12201215

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





**Question 19 :**

Which two numbers, from among the given options, should be interchanged to make the given equation correct?  $72 + (7 \times 8) - (126 \div 14) - (4)^2 = 150$

**Difficulty : Moderate****Average Time : 69 Seconds****Options :**

1. 72 and 126
2. 7 and 4
3. 8 and 4
4. 14 and 7

**Solution :**

The correct answer is **Option 4** i.e. **14 and 7**.

**Given equation:**  $72 + (7 \times 8) - (126 \div 14) - (4)^2 = 150$

**Option 1: 72 and 126**

After interchanging the expression becomes:

$$= 126 + (7 \times 8) - (72 \div 14) - (4)^2 = 150$$

= 160.85 is not equal to 150.

**Option 2: 7 and 4**

After interchanging the expression becomes:

$$= 72 + (4 \times 8) - (126 \div 14) - (7)^2 = 150$$

$$= 72 + 32 - 9 - 49$$

$$= 104 - 9 - 49$$

= 46 is not equal to 150.

**Option 3: 8 and 4**

After interchanging the expression becomes:

$$= 72 + (7 \times 4) - (126 \div 14) - (8)^2 = 150$$

$$= 72 + 28 - 9 - 64$$



$$= 100 - 9 - 64$$

= 27 is not equal to 150.

**Option 4: 14 and 7**

After interchanging the expression becomes:

$$= 72 + (14 \times 8) - (126 \div 7) - (4)^2 = 150$$

$$= 72 + 112 - 18 - 16$$

$$= 184 - 18 - 16$$

$$= 150 \text{ is equal to } 150.$$

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

**Question 20 :**

Select the option that is related to the fifth letter cluster in the same way as the second letter cluster is associated with the first letter cluster and the fourth letter cluster is related to the third letter cluster. AREA: BRFA:: BABY: CACY:: GOLD:?

Difficulty : Moderate

Average Time : 87 Seconds

**Options :**

1. IOMD
2. HOME
3. HOMD
4. HOND

**Solution :**

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

The logic used here is:

AREA: BRFA

A + 1 = B

R = R

E + 1 = F

A = A



BABY: CACY

$B + 1 = C$

$A = A$

$B + 1 = C$

$Y = Y$

Similarly,

GOLD:?

$G + 1 = H$

$O = O$

$L + 1 = M$

$D = D$

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

### Question 21 :

In the following question below are given some statements followed by some conclusions based on those statements.

Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements. Statements: I. All colour are small. II. No small are big. Conclusion: I. All small are colour. II. Some small are colour. III. All big are colour.

**Difficulty : Moderate**

**Average Time : 70 Seconds**

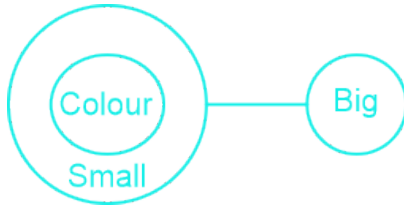
### Options :

1. Neither conclusion follows
2. Only conclusion III follows
3. Only conclusion II follows
4. Both conclusions I and II follows

### 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 small are colour **False** (It is possible, but no definite conclusion can be drawn.)
- II. Some small are colour **True** (As all colour are small, so, some small are colour is also true.)
- III. All big are colour **False** (It is possible, but no definite conclusion can be drawn.)

Hence, **Only conclusion II follows.**

### Question 22 :

Based on the position in the English alphabetical order, three of the following letter clusters are alike in some manner and one is different. Select the odd letter cluster.

Difficulty : Moderate

Average Time : 71 Seconds

### Options :

- 1. ZWSQ
- 2. TRNL
- 3. PNJH
- 4. JHDB

### Solution :

The correct answer is **Option 1** i.e. **ZWSQ**.

The logic used here is:

The logic used here is:

1st letter - 2 = 2nd letter

2nd letter - 4 = 3rd letter

3rd letter - 2 = 4th letter

### Option 1: ZWSQ

Z - 2 = X



$$X - 4 = T$$

$$T - 2 = R$$

This does not follow the logic.

Hence, **option 1** is the odd one out.

**Question 23 :**

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.  
TMT, ZOB, FQJ, LSR, ?

**Difficulty : Moderate**

**Average Time : 55 Seconds**

**Options :**

1. RYO
2. RZO
3. RUZ
4. RZQ

**Solution :**

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

**Given series:** TMT, ZOB, FQJ, LSR, ?

The series follows this pattern:

TMT, ZOB

$$T + 6 = Z$$

$$M + 2 = O$$

$$T + 8 = B$$

Similarly;

LSR, ?

$$L + 6 = R$$

$$S + 2 = U$$

$$R + 8 = Z$$



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

**Question 24 :**

Which of the following letter clusters will replace the question mark (?) in the given series? WNM, ULO, SJQ, QHS, ?

**Difficulty : Moderate**

**Average Time : 50 Seconds**

**Options :**

1. OFU
2. PFS
3. OGU
4. PGT

**Solution :**

The correct answer is **Option 1** i.e. **OFU**.

**Given series:** WNM, ULO, SJQ, QHS, ?

The series follows this pattern:

WNM, ULO

W - 2 = U

N - 2 = L

M + 2 = O

Similarly;

QHS, ?

Q - 2 = O

H - 2 = F

S + 2 = U

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

**Question 25 :**

Three statements are given followed by three conclusions numbered I, II, and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements. Statements: All books are pencils. Some pencils are pens. All pens are erasers. Conclusions: I. Some

erasers are pencils. II. All pens are books. III. Some erasers are pens.

Difficulty : Moderate

Average Time : 64 Seconds

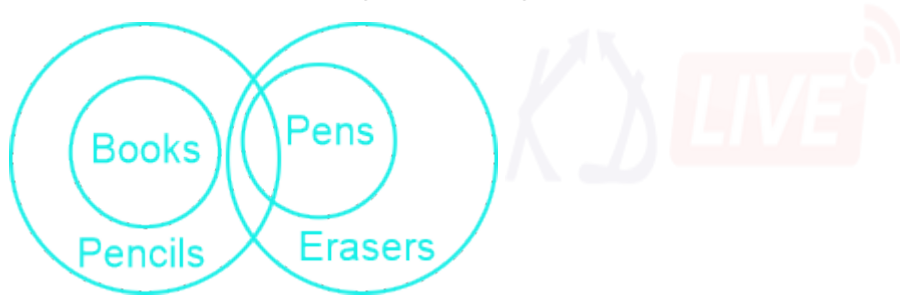
Options :

1. Only conclusions I and II follow
2. Only conclusions II and III follow.
3. Only conclusions I and III follow.
4. All conclusions follow.

Solution :

The correct answer is **Option 3** i.e. **Only conclusions I and III follow.**

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



Conclusions:

- I. Some erasers are pencils **True** (As some pencils are pens, and all pens are erasers, so, some erasers are pencils is also true.)
- II. All pens are books **False** (It is possible, but no definite conclusion can be drawn.)
- III. Some erasers are pens **True** (As all pens are erasers, so, some erasers are pens is also true.)

Hence, **Only conclusions I and III follow.**

Question 26 :

If  $A \div B$  means that A is the mother of B,  $A - B$  means that A is the father of B,  $A + B$  means that A is the sister of B. Then which of the following expression shows that P is the mother of R?

Difficulty : Moderate

Average Time : 81 Seconds

Options :

$P + Q - R$

$2. P \div Q + R$

$3. P - R + Q$

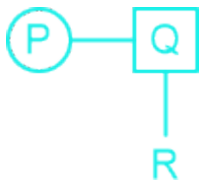
$4. Q + P - R$

**Solution :**

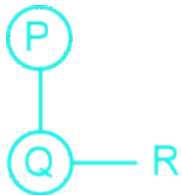
The correct answer is **Option 2** i.e.  $P \div Q + R$ .

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.

**Option1:  $P + Q - R$** 

From the above tree, P is the paternal aunt of R.

**Option 2:  $P \div Q + R$** 

From the above tree, P is the mother of R.

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

**Question 27 :**

Select the figure that will come next in the following figure series.

Difficulty : Moderate

Average Time : 69 Seconds

Options :

1.



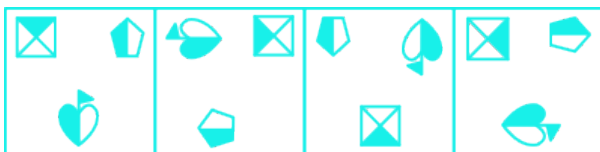
- 1.
- 2.
- 3.
- 4.



**Solution :**



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



Here, all the shapes are moving in the clockwise direction, while each shape is rotating in its new place following different patterns:

- Square rotates 90 degrees anticlockwise
- Pentagon rotates 90 degrees anticlockwise
- Heart-shaped leaf rotate 90 degrees clockwise

**Question 28 :**



Select the word pair that best represents a similar relationship to the one expressed in the pair of words given below. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/numbers of consonants/vowels in the word) Race: Track

Difficulty : Moderate

Average Time : 81 Seconds

Options :

1. Athletics: Stadium
2. Cart: Wheel
3. Wrestling: Court
4. Exercise: Course

Solution :

The correct answer is **Option 1** i.e. **Athletics: Stadium**.

The logic used here is:

Race: Track

Racing is done on the tracks.

Similarly,

Athletics: Stadium

Athletics is played in a stadium.

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

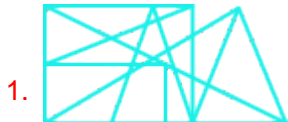
Question 29 :

Select the option figure in which the given figure (X) is embedded as its part (rotation is NOT allowed).

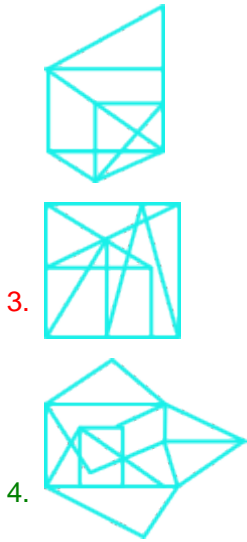
Difficulty : Moderate

Average Time : 46 Seconds

Options :



2.



**Solution :**



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

The given figure is embedded in option 4, as shown below:



**Question 30 :**

By interchanging the given two signs and numbers which of the following equation will be not correct?  $\div$  and  $\times$ , 1 and 3

**Difficulty : Moderate**

**Average Time : 64 Seconds**

**Options :**

1.  $6 \div 3 - 1 + 4 \times 2 = 5$
2.  $4 \times 3 - 1 + 8 \div 2 = 9$
3.  $5 - 8 \times 3 + 9 \div 1 = 24$
4.  $6 + 4 - 9 \times 3 \div 1 = -17$

**Solution :**

The correct answer is **Option 2** i.e.  $4 \times 3 - 1 + 8 \div 2 = 9$ .

**Given conditions:**  $\div$  and  $\times$ , 1 and 3

**Option 1:**  $6 \div 3 - 1 + 4 \times 2 = 5$

After interchanging the expression becomes:

$$= 6 \times 1 - 3 + 4 \div 2 = 5$$

$$= 6 \times 1 - 3 + 2$$

$$= 6 - 3 + 2$$

= 5 is equal to 5.

**Option 2:**  $4 \times 3 - 1 + 8 \div 2 = 9$

After interchanging the expression becomes:

$$= 4 \div 1 - 3 + 8 \times 2 = 9$$

$$= 4 - 3 + 8 \times 2$$

$$= 4 - 3 + 16$$

= 17 is not equal to 9.

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

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

**Question 31 :**

A group of ribosomes attached to mRNA is known as:

**Difficulty :** Moderate

**Average Time :** 64 Seconds

**Options :**

1. polypeptide
2. polysomes
3. polymer
4. monomer

**Solution :**



The correct answer is **Option 2** i.e. **polysomes**.

- The group of ribosomes bound to an mRNA molecule is called a polyribosome, or polysome.
- Ribosomes are found 'free' in the cytoplasm or bound to the endoplasmic reticulum (ER) to form rough ER.

**Question 32 :**

Kelucharan Mohapatra, awarded with the Padma Vibhushan in the year 2000, was a dancer of which of the following classical dance forms?

Difficulty : Moderate

Average Time : 44 Seconds

**Options :**

1. Odissi
2. Kathakali
3. Kathak
4. Manipuri

**Solution :**

The correct answer is **Option 1** i.e. **Odissi**.

- Guru Kelucharan Mohapatra was an Indian classical dancer, guru and proponent of Odissi dance.
- In 1989, he became the proud winner of the Padma Bhushan Award.
- He was honoured with the Sangeet Academy Fellowship in 1991.
- He became a member of the dance troupe that was guided by Guru Goswami and went place to place for performing various dance performances there.
- During 1946 to 1952 Kelucharan stayed with a theatre group named Annapurna from Cuttack. He came into the limelight after his solo dance drama performance on Devi Bhasmasura and was highly appreciated after that.

**Question 33 :**

The Right to Freedom of Religion is contained within which Articles of the Constitution of India?

Difficulty : Moderate

Average Time : 60 Seconds

**Options :**

1. Article 19 to Article 22
2. Article 29 to Article 30
3. Article 25 to Article 28
4. Article 14 to Article 18

**Solution :**

The correct answer is **Option 3** i.e. **Article 25 to Article 28**.

- Right to freedom of religion is well described in the Articles 25, 26, 27 and 28 of Indian constitution before the State and no religion shall be given preference over the other.
- Citizens are free to preach, practice and propagate any religion of their choice.

**Question 34 :**

Which of the following is NOT an indirect tax?

Difficulty : Moderate

Average Time : 46 Seconds

**Options :**

1. Excise tax
2. Goods and Services tax
3. Customs duty
4. Wealth tax

**Solution :**

The correct answer is **Option 4** i.e. **Wealth tax**.

- Wealth tax is to be paid at 1% on the net wealth in excess of Rs. 30,00,000.
- No cess or surcharge is levied on Wealth tax. Wealth-tax and residential status. A person may own assets in India as well as abroad.

**Question 35 :**

Under which scheme, Lieutenant Governor Manoj Sinha inaugurated "UMEED Market Place" in Jammu and Kashmir?

Difficulty : Moderate

Average Time : 46 Seconds

**Options :**

1. Stand Up India Scheme
2. Ujjwala scheme
3. AVSAR Scheme of Airport Authority of India
4. KUSUM scheme

**Solution :**

The correct answer is **Option 3** i.e. **AVSAR Scheme of Airport Authority of India**.



AVSAR Scheme has been in force since May 1st, 2022.

- It aims to boost bilateral trade between these countries by creating new opportunities for businesses on both sides.

**Question 36 :**

The bird like pheasant and monals are found in which type of forest?

Difficulty : Moderate

Average Time : 45 Seconds

**Options :**

1. Temperate deciduous forest
2. Tropical evergreen forest
3. Temperate evergreen forest
4. Mediterranean forests

**Solution :**

The correct answer is **Option 1** i.e. **Temperate deciduous forest**.

- Temperate deciduous forests are located in the mid-latitude areas which means that they are found between the polar regions and the tropics.
- The deciduous forest regions are exposed to warm and cold air masses, which cause this area to have four seasons.
- There are also several different kinds of plants like mountain laurel, azaleas and mosses that live on the shady forest floor where only small amounts of sunlight get through.

**Question 37 :**

In which of the following years was the first train run in India?

Difficulty : Moderate

Average Time : 54 Seconds

**Options :**

1. 1853
2. 1854
3. 1852
4. 1855

**Solution :**

The correct answer is **Option 1** i.e. **1853**.



The formal inauguration ceremony was performed on 16th April 1853, when 14 railway carriages carrying about 400 guests left Bori Bunder at 3.30 pm "amidst the loud applause of a vast multitude and to the salute of 21 guns."

- The first passenger train steamed out of Howrah station destined for Hooghly, a distance of 24 miles, on 15th August, 1854.
- Thus the first section of the East Indian Railway was opened to public traffic, inaugurating the beginning of railway transport on the Eastern side of the sub-continent.

**Question 38 :**

Which of the following dance forms is mentioned in the ancient text of Vyavaharmala?

Difficulty : Moderate

Average Time : 54 Seconds

**Options :**

1. Sattriya
2. Mohiniyattam
3. Manipuri
4. Odissi

**Solution :**

The correct answer is **Option 2** i.e. **Mohiniyattam**.

- Mohiniyattam or dance of Mohini (an incarnation of Lord Vishnu) is the classical solo dance form of Kerala.
- Mohiniattam derives its name from the word 'Mohini', a female avatar of Lord Vishnu.
- Conventionally a solo dance performed by female artists, it emotes a play through dancing and singing where the song is customarily in Manipravala which is a mix of Sanskrit and Malayalam language and the recitation may be either performed by the dancer herself or by a vocalist with the music style being Carnatic.

**Question 39 :**

The SI unit of electric charge is a \_\_\_\_\_.

Difficulty : Moderate

Average Time : 55 Seconds

**Options :**

1. coulomb
2. watt
3. newton
4. joule



**Solution :**

The correct answer is **Option 1** i.e. **coulomb**.

- The unit of charge is coulomb.
- The coulomb is the SI unit of electric charge amount, and it is equal to roughly  $6.2421018 \text{ e}$ .

**Question 40 :**

In September 2022, the Supreme Court allowed all women, irrespective of their marital status, to safely and legally abort their child till \_\_\_\_\_ of pregnancy under the Medical Termination of Pregnancy (MTP) Act.

**Difficulty : Moderate****Average Time : 44 Seconds****Options :**

1. 30 weeks
2. 15 weeks
3. 24 weeks
4. 18  
18 weeks

**Solution :**

The correct answer is **Option 3** i.e. **24 weeks**.

- The Supreme Court said all women are entitled to choose abortion while pronouncing the judgement in the medical termination of pregnancy (MTP) case.
- A bench headed by Justice DY Chandrachud held that unmarried or single women cannot be excluded from seeking safe abortion of pregnancies up to 24 weeks under the Medical Termination act and the rules.

**Question 41 :**

Which Article of the Constitution of India mentions that business in Parliament shall be transacted in Hindi or English?

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

1. Article 120
2. Article 121
3. Article 122

**Article 119****Solution :**

The correct answer is **Option 1** i.e. **Article 120**.

- Draft Article 99 (Article 120) was debated on 17 September 1949.
- It prescribed Hindi and English as the languages to be used in the Parliament, with exceptions for members who could not express themselves adequately in either language.
- Provision under Article 120 states that the language for communication could be Hindi, English, and mother tongue in some cases.

**Question 42 :**

In 1526, the battle of Panipat was fought between \_\_\_\_\_.

**Difficulty : Moderate**

**Average Time : 46 Seconds**

**Options :**

1. Babur and Rana Sanga
2. Akbar and Hemu
3. Humayun and Sher Khan
4. Babur and Ibrahim Lodi

**Solution :**

The correct answer is **Option 4** i.e. **Babur and Ibrahim Lodi**.

- The First Battle of Panipat took place on 21 April 1526 in North India.
- It was fought between the invading forces of Babur and the Lodi Empire.
- It marked the beginning of the Mughal Empire. This was one of the earliest battles involving gunpowder firearms and field artillery.

**Question 43 :**

Highest sex ratio according to census 2011 is of which state?

**Difficulty : Moderate**

**Average Time : 49 Seconds**

**Options :**

1. Chhattisgarh
2. Andhra Pradesh



Tamil Nadu

4. Kerala

**Solution :**

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

- Kerala has the highest sex ratio of 1084 in the all Indian states.
- In the Population Census of 2011 it was revealed that the population ratio in India 2011 is 943 females per 1000 males.
- Haryana has the lowest sex ratio (877) in Indian states while in union territory Daman Diu has lowest sex ratio of 618.

**Question 44 :**

The age range for the Youth Boxer category is:

**Difficulty : Moderate**

**Average Time : 45 Seconds**

**Options :**

1. 15 – 16 years
2. 19 – 20 years
3. 17 – 18 years
4. 13 – 18 years

**Solution :**

The correct answer is **Option 3** i.e. **17 – 18 years**.

- Men and Women Boxers between the ages of 19 - 34 are categorized as Elite Boxers.
- Boys and Girls Boxers between the ages of 17 to 18 are categorized as Youth Boxers.
- Youth Boxers are permitted to participate in Elite Boxers' competitions as per Rules applicable to Elite Boxers.
- Boys and Girls Boxers between the ages of 15 to 16 are categorized as Junior Boxers.
- The age of a Boxer is determined using his/her year of birth.

**Question 45 :**

Hot, dry winds blowing in the Northern plain in India are known as \_\_\_\_\_.

**Difficulty : Moderate**

**Average Time : 56 Seconds**

**Options :**

1. North easterly winds



Westerlies

3. Loo

4. Nor westers

**Solution :**

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

- Loo is a hot and dry wind.
- It blows in the summer season in the northern plains of India.
- Because of its high temperature and low humidity, the loo causes severe effects on the vegetation of the areas where it blows.

**Question 46 :**

In which of the following Indian states is Lokrang festival observed?

Difficulty : Moderate

Average Time : 44 Seconds

**Options :**

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

**Solution :**

The correct answer is **Option 4** i.e. **Madhya Pradesh**.

- The Lokrang Festival is celebrated on 26th January every year in Madhya Pradesh.
- Organized by Adivasi Lok Kala Academy in Bhopal city, it is a festival that celebrates the vivid folk music and dance of the central Indian state.

**Question 47 :**

In which among the following period Catal Huyuk was one of the most famous sites?

Difficulty : Moderate

Average Time : 44 Seconds

**Options :**

1. Neolithic
2. Mesolithic



Palaeolithic

4. Chalcolithic

### Solution :

The correct answer is **Option 1** i.e. **Neolithic**.

- Catal Huyuk (pronounced cha-tel hoo-yek, or Çatalhöyük in Turkish) is an archaeological site in what is now south-central Turkey.
- Along with Jericho, it's considered one of the oldest cities in the world, dating from almost 7500 BC.

### Question 48 :

In 1600, the East India company acquired a charter from which ruler?

Difficulty : Moderate

Average Time : 43 Seconds

### Options :

1. King George-I
2. Queen Elizabeth-I
3. Queen victoria
4. King James-I

### Solution :

The correct answer is **Option 2** i.e. **Queen Elizabeth-I**.

- The East India Company acquired a charter granting it the sole right to trade with the East in 1600 by Queen Elizabeth I.
- The company acquired a Royal Charter from Queen Elizabeth I on 31 December 1600, coming relatively late to trade in the Indies because before them, the Portuguese Estado da Índia had traded there for much of the 16th century.

### Question 49 :

Whose autobiography is 'Apoorna'?

Difficulty : Moderate

Average Time : 49 Seconds

### Options :

1. Rahul Dravid
2. Ravi Shastri



Milkha Singh

4. Sanjay Manjrekar

**Solution :**

The correct answer is **Option 4** i.e. **Sanjay Manjrekar**.

- The triumph of Sanjay Manjrekar's autobiography 'Imperfect' is in the way it humanizes the world of professional cricket.
- In Imperfect, Sanjay Manjrekar uses his famous analytical powers to look back on his own career as a cricketer.
- His photographic memory takes the reader along on his journey from the dusty maidans of Mumbai to the world stage as the combative batsman faces up to the fearsome West Indian and Pakistani pace attacks.

**Question 50 :**

In Tennis which of the following scores is a complete set?

**Difficulty : Moderate**

**Average Time : 53 Seconds**

**Options :**

1. 5-3
2. 6-4
3. 6-6
4. 6-5

**Solution :**

The correct answer is **Option 2** i.e. **6-4**.

- A player wins a set when they have won six games and are at least two games clear of their opponent.
- If a set reaches 6-6, it is usually decided by a tiebreak (see tiebreak in the scoring section below).

**Question 51 :**

Identify a protein-digesting enzyme.

**Difficulty : Moderate**

**Average Time : 40 Seconds**

**Options :**

1. lipase
2. Amylase
3. Collagen



## Pepsin

### Solution :

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

- Pepsin is a stomach enzyme that serves to digest proteins found in ingested food.
- Gastric chief cells secrete pepsin as an inactive zymogen called pepsinogen.
- Parietal cells within the stomach lining secrete hydrochloric acid that lowers the pH of the stomach. A low pH (1.5 to 2) activates pepsin

### Question 52 :

Which of the following became India's first State Assembly to implement the National e-Vidhan Application (NeVA) programme to become paperless?

Difficulty : Moderate

Average Time : 48 Seconds

### Options :

1. Haryana
2. Tripura
3. Nagaland
4. Assam

### Solution :

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

- Nagaland Legislative Assembly (NLA) has become the first in the country to have operationalised the National e-Vidhan Application (NeVA) programme.
- This was stated by NLA Speaker, Sharingan Longkumer during the first day of the the13th NLA Budget session which commenced today.
- Longkumer said, E-Book installed in the NLA is the medium through which the member will be using NeVA application in the Assembly in pursuit of the paperless Assembly

### Question 53 :

Who among the following ruler ruled before Prithviraj Chauhan over Delhi?

Difficulty : Moderate

Average Time : 51 Seconds

### Options :

1. Ghiyasuddin Balban



Ananga Pala

3. Jalaluddin Khajji

4. Qutbuddin Aybak

**Solution :**

The correct answer is **Option 2** i.e. **Ananga Pala**.

- Anangpal Tomar II was succeeded by his grandson Prithviraj Chauhan.
- Delhi Sultanate was established in 1192 after Prithviraj Chauhan's defeat in the Battle of Tarain (present-day Haryana) by the Ghurid forces.

**Question 54 :**

Motion of an object is \_\_\_\_\_ if its velocity is constant.

Difficulty : Moderate

Average Time : 41 Seconds

**Options :**

1. only accelerating
2. only decelerating
3. non-uniform
4. uniform

**Solution :**

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

- Objects moving in uniform circular motion have a constant (uniform) speed and a changing velocity.
- Uniform circular motion - circular motion at a constant speed - is one of many forms of circular motion.
- An object moving in uniform circular motion would cover the same linear distance in each second of time.
- When moving in a circle, an object traverses a distance around the perimeter of the circle

**Question 55 :**

$(\cos^2 235^\circ + \cos^2 55^\circ) \sin 35^\circ + \frac{1}{\cot 56^\circ} = \underline{\hspace{2cm}}$

Difficulty : Moderate

Average Time : 52 Seconds

**Options :**

1. 2
2. 3





4

4. 1

**Solution :**

The correct answer is **Option 1** i.e. **2**.

**Concept Used:**

$$\sin^2 A + \cos^2 A = 1$$

$$\cos(90 - A) = \sin A$$

$$\tan(90 - A) = \cot A$$

**Explanation:**

From the given question,

$$\cos^2 35^\circ + \cos 55^\circ \sin 35^\circ + \left( \frac{\tan 34^\circ}{\cot 56^\circ} \right)$$

$$\cos^2 35^\circ + \cos(90 - 35^\circ) \sin 35^\circ + \left( \frac{\tan(90 - 56^\circ)}{\cot 56^\circ} \right)$$

$$\cos^2 35^\circ + \sin^2 35^\circ + 1$$

$$1 + 1 = 2$$

Hence the value of  $\cos^2 35^\circ + \cos 55^\circ \sin 35^\circ + \left( \frac{\tan 34^\circ}{\cot 56^\circ} \right)$  is 2.

**Question 56 :**

The total surface area of a cube is 1536 m<sup>2</sup>. Find its volume.

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

1. 216 m<sup>3</sup>

2. 125 m<sup>3</sup>

3. 4096 m<sup>3</sup>

4. 729 m<sup>3</sup>

**Solution :**

The correct answer is **Option 3** i.e. **4096 m<sup>3</sup>**

**Given:**



Total surface area of cube =  $1536 \text{ cm}^2$

**Concept Used:**

Surface area of cube =  $6a^2$  ... (i)

Volume of cube =  $a^3$  ... (ii)

**Explanation:**

From equation (i), we get

$$6a^2 = 1536$$

$$a^2 = 256$$

$$a = 16$$

Now, using equation (ii), we get

$$\text{Volume of cube} = (16)^3$$

$$\text{Volume of cube} = 4096 \text{ cm}^3.$$

hence the volume of cube is  $4096 \text{ cm}^3$ .

**Question 57 :**

On dividing a certain number by 363, we get 17 as the remainder. What will be the remainder when the same number is divided by 11?

**Difficulty : Moderate**

**Average Time : 67 Seconds**

**Options :**

1. 7

2. 8

3. 6

4. 9

**Solution :**

The correct answer is **Option 3** i.e. **6**.

**Given:**

The number when divide by 363 leaves the remainder 17.

**Explanation:**

Let the number be  $(363 + 17) = 380$ .

Now, dividing 380 by 11, we get

$$380 = 11 \times 34 + 6$$

Hence the remainder will be 6.

**Question 58 :**

If  $a - b = 2$  and  $a^3 - b^3 = 80$ , then what will be the value of  $ab$ ?

**Difficulty : Moderate****Average Time : 42 Seconds****Options :**

1. 12
2. -24
3. 24
4. -12

**Solution :**

The correct answer is **Option 1** i.e. **12**.

**Given:**

$$a - b = 2 \text{ and}$$

$$a^3 - b^3 = 80$$

**Concept Used:**

$$a^3 - b^3 = (a - b)(a^2 + ab + b^2) \quad \dots(i)$$

$$(a - b)^2 = a^2 - 2ab + b^2 \quad \dots(ii)$$

**Explanation:**

From the given question and using equation (i), we get

$$80 = 2((a^2 + ab + b^2)$$

$$(a^2 + ab + b^2) = 40 \quad \dots(iii)$$

Also using equation (ii), we get

$$a^2 - 2ab + b^2 = (2)^2$$

$$a^2 - 2ab + b^2 = 4$$

$$a^2 + b^2 = 4 + 2ab \dots(\text{iv})$$

Using the values from equation (iv) in equation (iii), we get

$$(4 + 2ab + ab) = 40$$

$$4 + 3ab = 40$$

$$3ab = 36$$

$$ab = 36/3 = 12$$

Hence the value of ab is 12.

**Question 59 :****Difficulty : Moderate****Average Time : 81 Seconds****Options :**

1.  $(1 - a^4)^{1/4}$

2.  $a$

3.  $(a^4 - 1)^{1/4}$

4.  $(a^4 + 1)^{1/4}$

**Solution :**

The correct answer is **Option 4** i.e.  $(a^4 + 1)^{1/4}$ .

**Given:**

$$\sqrt{\frac{1}{x^2 + a^2}} = (x^2 - a^2)$$

**Concept Used:**

$$(a + b)(a - b) = a^2 - b^2$$

**Explanation:**

$$\sqrt{\frac{1}{x^2 + a^2}} = (x^2 - a^2)$$

$$(x^2 + a^2)(x^2 - a^2) = 1$$



$$x^4 - a^4 = 1$$

$$x^4 = 1 + a^4$$

$$x = \sqrt[4]{(1 + a^4)}$$

Hence the value of x is  $\sqrt[4]{(1 + a^4)}$ .

**Question 60 :**

The following table shows the shares traded on Mumbai, Rajasthan, Uttar Pradesh and Uttarakhand stock exchanges: The average of the high rates of the shares in all the four stock exchanges for Kolgate is:

**Difficulty : Moderate**

**Average Time : 75 Seconds**

**Options :**

1. Rs.34.75
2. Rs.51.07
3. Rs.52.04
4. Rs.63.21

**Solution :**

The correct answer is **Option 1** i.e. **Rs.34.75**.

**Explanation:**

The total of the high rates of the shares in all the four stock exchanges for Kolgate =  $(34 + 60 + 25 + 20) = 139$

The average of the high rates of the shares in all the four stock exchanges for Kolgate =  $139/4 = 34.75$ .

Hence the average of the high rates of the shares in all the four stock exchanges for Kolgate is Rs. 34.75.

**Question 61 :**

The speed of a boat in still water is km/h. It is found that the boat takes thrice as much time to row up than it does to row down the same distance in the river stream. Find the speed of the river stream.

**Difficulty : Moderate**

**Average Time : 57 Seconds**

**Options :**

1.  $23/27$  m/sec
2.  $22/27$  m/sec
3.  $20/27$  m/sec

19/27 m/sec

**Solution :**

The correct answer is **Option 3** i.e. **20/27 m/sec.**

**Given:**

Speed of boat in still water,  $x = \frac{16}{3}$  km/hr

**Concept Used:**

Time = Distance/speed

Downstream speed = speed of boat in still water + speed of stream

Upstream speed = speed of boat in still water - speed of stream

**Explanation:**

Let the speed of stream be  $y$  km/hr and distance travelled be  $D$  km.

So, Downstream speed =  $x + y = \frac{16}{3} + y$

And Upstream speed =  $x - y = \frac{16}{3} - y$

Now, according to the given question,

$$\frac{D}{x - y} = 3\left(\frac{D}{x + y}\right)$$

$$\frac{16}{3} + y = 3\left(\frac{16}{3} - y\right)$$

$$\frac{16}{3} + y = 16 - 3y$$

$$4y = 16 - \frac{16}{3}$$

$$4y = \frac{32}{3}$$

$$y = \frac{8}{3}$$

Now, speed of stream in m/sec =  $\frac{8}{3} \times \frac{5}{18} = \frac{20}{27}$

Hence the speed of the stream is  $\frac{20}{27}$  m/sec.

**Question 62 :**

The largest five-digit number which when divided by 7, 9 and 11, leaves the same remainder as 3 in each case, is:

Difficulty : Moderate

Average Time : 98 Seconds

**Options :**



95840

2. 98685

3. 96720

4. 99795

**Solution :**

The correct answer is **Option 4** i.e. **99795**.

**Given :**

Numbers = 7, 9, 11

Remainder in each case = 3

**Concept Used:**

The largest number which when divided by 7, 9 and 11, leaves the same remainder as 3 in each case is obtained by subtracting the (LCM - 3) from the largest number.

**Explanation:**

The largest five digit number = 99999

Now, LCM of(7, 9, 11) = 693

When divided by 693, 99999 will leave the remainder as 207

The largest 5-digit number which is divisible by 693 =  $99999 - 207 = 99792$

Now, as it leaves remainder 3 in each case, the required number =  $99792 + 3 = 99795$

Hence the number which when divided by 7, 9 and 11, leaves the same remainder as 3 in each case, is 99795.

**Question 63 :**

If the ratio of area of two similar triangles is 3 : 2, then what is the ratio of the corresponding sides of the two triangles?

**Difficulty : Moderate**

**Average Time : 66 Seconds**

**Options :**

1. 9 : 4

2. 3 : 2

3.  $\sqrt{3} : \sqrt{2}$



$$\hat{a}^{\circ 3} : \hat{a}^{\circ 2}$$

**Solution :**

The correct answer is **Option 4** i.e.  $\hat{a}^{\circ 3} : \hat{a}^{\circ 2}$ .

**Given:**

Ratio of areas of two similar triangles =  $(\sqrt{3} : \sqrt{2})$

**Concept Used:**

If two triangles are similar, the ratio of their sides are equal and ratio of their areas are equal to the square of the sides of the triangle.

**Explanation:**

Using the property of similar triangles, we have

$$(\text{Ratio of areas of triangles}) = (\text{Ratio of sides of the triangles})^2$$

$$(\text{Ratio of sides of the triangles}) = (\text{Ratio of areas of triangles})^{1/2}$$

$$(\text{Ratio of sides of the triangles}) = (\sqrt{3} : \sqrt{2})^{1/2}$$

$$(\text{Ratio of sides of the triangles}) = \hat{a}^{\circ 3} : \hat{a}^{\circ 2}$$

Hence the ratio of the corresponding sides of the two triangles is  $\hat{a}^{\circ 3} : \hat{a}^{\circ 2}$ .

**Question 64 :**

The pie chart given below shows the sales of 7 different companies. The total sales of all these 7 companies is 2160. The sale of a particular company is shown in terms of degree with respect to the total sales of all these 7 companies. The total sales of P, R and S are how much percent less than the total sales of Q, T and U?

**Difficulty :** Moderate

**Average Time :** 85 Seconds

**Options :**

1. 56.42 percent
2. 24.42 percent
3. 46.53 percent
4. 32.32 percent

**Solution :**

The correct answer is **Option 3** i.e. **46.53 percent**.



**Given:**

Total sales of 7 companies = 2160

**Explanation:**

The total sales of P, R and S =  $\left(\frac{26^\circ + 12^\circ + 70^\circ}{360^\circ}\right) \times 2160$

The total sales of P, R and S =  $\left(\frac{108^\circ}{360^\circ}\right) \times 2160 = 648$

The total sales of Q, T and U =  $\left(\frac{150^\circ + 37^\circ + 15^\circ}{360^\circ}\right) \times 2160$

The total sales of Q, T and U =  $\left(\frac{202^\circ}{360^\circ}\right) \times 2160 = 1212$

The required difference =  $1212 - 648 = 564$

Hence the total sales of P, R and S is  $\left(\frac{564}{1212} \times 100\right) = 46.53\%$  less than the total sales of Q, T and U.

**Question 65 :**

Find the value of  $\left(\sqrt{\frac{1+\cos\theta}{1-\cos\theta}} + \sqrt{\frac{1-\cos\theta}{1+\cos\theta}}\right)$

**Difficulty : Moderate****Average Time : 65 Seconds****Options :**

1.  $2 \sin$
2.  $2 \cos$
3.  $2 \operatorname{cosec}$
4.  $2 \sec$

**Solution :**

The correct answer is **Option 3** i.e. **2 cosec** .

**Concept Used:**

$$\sin^2 A = 1 - \cos^2 A$$

$$1/\sin A = \operatorname{cosec} A$$

**Explanation:**

From the given question, rationalising both the terms, we get

$$\left(\sqrt{\frac{(1+\cos\theta)(1+\cos\theta)}{(1-\cos\theta)(1+\cos\theta)}} + \sqrt{\frac{(1-\cos\theta)(1-\cos\theta)}{(1+\cos\theta)(1-\cos\theta)}}\right)$$

$$\sqrt{\frac{1+\cos\theta}{1-\cos^2\theta}} + \sqrt{\frac{1-\cos\theta}{1-\cos^2\theta}}$$

$$\left\{ \frac{1+\cos\theta}{\sin\theta} + \frac{1-\cos\theta}{\sin\theta} \right\}$$

$$\text{cosec}\theta + \cot\theta + \text{cosec}\theta - \cot\theta$$

$$2 \text{ cosec}$$

Hence the value of  $\sqrt{\frac{1+\cos\theta}{1-\cos\theta}} + \sqrt{\frac{1-\cos\theta}{1+\cos\theta}}$  is  $2 \text{ cosec}$ .

**Question 66 :**

The table given below shows the marks obtained by two students in 6 subjects. What is the difference between the total marks obtained by A and B in all the 6 subjects.

**Difficulty : Moderate****Average Time : 118 Seconds****Options :**

1. 40

2. 30

3. 20

4. 50

**Solution :**

The correct answer is **Option 2** i.e. **30**.

**Explanation:**

The total marks obtained by A in all subjects =  $(180 + 240 + 360 + 300 + 60 + 330) = 1470$

The total marks obtained by B in all subjects =  $(90 + 420 + 390 + 210 + 270 + 120) = 1500$

Now the required difference =  $1500 - 1470 = 30$ .

Hence the difference between the total marks obtained by A and B in all the 6 subjects is 30 marks.

**Question 67 :**

ABC and DEF are congruent triangles respectively. If  $AB = 6 = DE$ ,  $BC = 8 = EF$  and  $m \angle B = 30^\circ$ , then  $m \angle D + m \angle C =$  \_\_\_\_\_.

**Difficulty : Moderate****Average Time : 48 Seconds****Options :**1.  $160^\circ$

120°

3. 130°

4. 150°

**Solution :**

The correct answer is **Option 4** i.e. **150°**.

As the triangles are congruent and as per the given sides,

$$m A = m D$$

$$m B = m E \text{ and hence}$$

$$m C = m F$$

$$\text{Now, } m A + m B + m C = 180^\circ$$

$$m A + m C + 30^\circ = 180^\circ$$

$$m A + m C = 150^\circ \dots\dots(1)$$

$$\text{Similarly, } m D + m F = 150^\circ \dots\dots(2)$$

$$\text{Now adding (1) and (2), } m A + m C + m D + m F = 300^\circ$$

$$\text{Now as } m A = m D \text{ and } m C = m F$$

$$2m D + 2m C = 300^\circ$$

$$m D + m C = 150^\circ$$

**Question 68 :**

The following table gives the percentages of marks obtained by six students in six difference subjects in an examination. The number of students who obtained 60% marks and above in all subjects is:

Difficulty : Moderate

Average Time : 90 Seconds

**Options :**

1. 3

2. 1

3. 2

4. 4

**Solution :**

The correct answer is **Option 3** i.e. 2.

**Explanation:**

As we can see in the given table that D and F are the two students who got 60% and above marks in all the subjects.

Hence the number of students who obtained 60% marks and above in all subjects is 2.

**Question 69 :**

If an angle of a right-angled triangle is  $35^\circ$ , then find the other angles.

**Difficulty : Moderate****Average Time : 42 Seconds****Options :**

1.  $90^\circ$  and  $75^\circ$
2.  $90^\circ$  and  $35^\circ$
3.  $90^\circ$  and  $55^\circ$
4.  $90^\circ$  and  $45^\circ$

**Solution :**

The correct answer is **Option 3** i.e.  $90^\circ$  and  $55^\circ$ .

**Given:**

One angle in a right-angled triangle =  $35^\circ$

**Concept Used:**

One angle in a right-angled triangle is  $90^\circ$

**And** the sum of all angles of a triangle =  $180^\circ$

**Explanation:**

Let the third angle of a right-angled triangle be  $x^\circ$ .

So,  $90^\circ + 35^\circ + x = 180^\circ$

$x = 180 - 125$

$x = 55$

Hence the other two angles of a right-angled triangle are  $90^\circ$  and  $55^\circ$ .

**Question 70 :**



A dishonest dealer sells a product at 11% loss on cost price, but uses 22% less weight. What is his percentage profit or loss?

**Difficulty : Moderate**

**Average Time : 66 Seconds**

**Options :**

1. 14.1% loss
2. 14.1% gain
3. 11.4% gain
4. 11.4 % loss

**Solution :**

The correct answer is **Option 2** i.e. **14.1% gain**.

**Given:**

Loss %,  $a = 11\%$

Less weight,  $b = 22\%$

**Concept Used:**

Profit/Loss % =  $\{(b \pm a)/(100 - b)\} \times 100$

**Explanation:**

Putting the given values in the formula, we get

Profit/Loss % =  $\{(22 - 11)/78\} \times 100$

Profit/Loss % =  $(11/78) \times 100$

Profit/Loss % =  $14.1 > 0$

Hence his percentage profit is 14.1%

**Question 71 :**

A shopkeeper earns 10% on an investment but loses 20% on another investment. If the ratio of the two investments is 2 : 3, then the combined loss percentage is:

**Difficulty : Moderate**

**Average Time : 55 Seconds**

**Options :**



5.5%

2. 7%

3. 6%

4. 8%

**Solution :**

The correct answer is **Option 4** i.e. **8%**.

**Given:**

Ratio of investments = 2 : 3

Gain on one investment = 10%

Loss on other investment = 20%

**Explanation:**

Let the first and second investments be 200 and 300 respectively.

Then, total amount of investment = 500

Now, gain on first investment = 10%

So, amount after gain =  $(200 \times \frac{110}{100}) = 220$

Also, loss on second investment = 20%

So, amount after loss =  $(300 \times \frac{80}{100}) = 240$

Now the total amount after both profit and loss =  $220 + 240 = 460$

Now overall loss =  $500 - 460 = 40$

Therefore, loss % =  $(\frac{40}{500} \times 100) = 8$ .

Hence the combined loss percentage is 8%.

**Question 72 :**

Which of the following statement is correct? I. The value of  $1002 - 992 + 982 - 972 + 962 - 952 + 942 - 932 + \dots + 222 - 212$  is 4840. II. The value of  $((k^2 + \frac{1}{k^2})(k - \frac{1}{k})(k^4 + \frac{1}{k^4})(k + \frac{1}{k})(k^4 - \frac{1}{k^4}))$  is  $(k^{16} - \frac{1}{k^{16}})$

Difficulty : Moderate

Average Time : 71 Seconds

**Options :**

Neither I nor II

2. Only II

3. Only I

4. Both I and II

**Solution :**

The correct answer is **Option 3** i.e. **Only I**.

**For statement I:**

$$(100^2 - 99^2) + (98^2 - 97^2) + (96^2 - 95^2) + (94^2 - 93^2) + \dots + (22^2 - 21^2)$$

$$(100 + 99)(100 - 99) + (98 + 97)(98 - 97) + \dots + (22 + 21)(22 - 21)$$

$$100 + 99 + 98 + 97 + \dots + 22 + 21$$

Now, sum of first n terms =  $n(n+1)/2$

So, sum of  $1 + 2 + 3 + 4 + \dots + 20 = 20 \times 21/2 = 210$

Also, sum of  $1 + 2 + 3 + 4 + \dots + 97 + 98 + 99 + 100 = 100 \times 101/2 = 5050$

Now the required sum =  $5050 - 210 = 4840$ .

So, statement I is correct.

**for statement II:**

$$\left( \frac{k^2+1}{k^2} \right) \left( k - \frac{1}{k} \right) \left( \frac{k^4+1}{k^4} \right) \left( k + \frac{1}{k} \right) \left( \frac{k^4-1}{k^4} \right)$$

$$\left( \frac{k^2+1}{k^2} \right) \left( k^2 - \frac{1}{k^2} \right) \left( \frac{k^8-1}{k^8} \right)$$

$$\left( \frac{k^4-1}{k^4} \right) \left( \frac{k^8-1}{k^8} \right) \text{ which is not equal to } \left( \frac{k^{16}-1}{k^{16}} \right)$$

So statement II is incorrect.  
Hence statement I is correct.

**Question 73 :**

A contractor decided to complete a work in 80 days and employed 60 men at the beginning and 20 men additionally after 20 days and got the work completed as per schedule. If he had not employed the additional men, how many extra days would he have needed to complete the work (round off to the nearest integer)?

Difficulty : Moderate

Average Time : 94 Seconds

**Options :**





32 days

2. 20 days

3. 30 days

4. 26 days

**Solution :**

The correct answer is **Option 2** i.e. **20 days**.

**Given:**

Time taken to complete the work = 80 days

Number of men worked for 20 days = 60

Number of men worked after 20 days = 80

**Concept Used:**

$$\{(Men_1 \times efficiency_1 \times \{day_1 \over wok_1\}) = (Men_2 \times efficiency_2 \times \{day_2 \over wok_2\})\}$$

**Explanation:**

After 20 days, the remaining work is don by 80 men in 65 days.

Now, 60 men will complete this work in  $48.75 = 49$  days

The extra days needed to complete the work =  $80 - (40 + 20) = 20$ days.

**Question 74 :**

The length of the side of a cube is 4.2 cm. What is the volume of the largest sphere that can be taken out of the cube?

Difficulty : Moderate

Average Time : 61 Seconds

**Options :**

1.  $26.40 \text{ cm}^3$

2.  $20.50 \text{ cm}^3$

3.  $38.80 \text{ cm}^3$

4.  $48.60 \text{ cm}^3$

**Solution :**





The correct answer is **Option 3** i.e. **38.80 cm<sup>3</sup>**

**Given:**

Length of cube = 4.2 cm

**Concept Used:**

If a sphere is taken out of a cube, side of cube = diameter of sphere

Volume of sphere =  $\frac{4}{3} \pi r^3$

**Explanation:**

Let the radius of sphere be r.

Now diameter of sphere = side of cube

diameter of sphere = 4.2 r = diameter/2 = 2.1 cm

Now, volume of sphere =  $\frac{4}{3} \times \frac{22}{7} \times (2.1)^3 = 38.80$

Hence the volume of the sphere is 38.80 cm<sup>3</sup>.

**Question 75 :**

A tradesman marks his goods 20% above his cost price. If he allows his customer 20% discount on the marked price, how much profit or loss does he make, if any:

**Difficulty : Moderate**

**Average Time : 67 Seconds**

**Options :**

1. 2% loss
2. 4% loss
3. 1% profit
4. 3% profit

**Solution :**

The correct answer is **Option 2** i.e. **4% loss**.

**Given:**

discount = 20%

M.P. = 20% above C.P.

**Concept Used:**

$$\text{S.P.} = \text{M.P.} \times \left\{ \frac{100 - D}{100} \right\}$$

$$\text{Profit/Loss\%} = \left\{ \frac{\text{S.P.} - \text{C.P.}}{\text{C.P.}} \right\} \times 100$$

**Explanation:**

Let the C.P. of the goods be 100.

$$\text{So, M.P.} = 100 + (20\% \text{ of } 100) = 120$$

$$\text{Now, S.P.} = \left\{ 120 \times \left\{ \frac{100 - 20}{100} \right\} \right\}$$

$$\text{S.P.} = 120 \times 0.8 = 96$$

$$\text{So, Profit/Loss\%} = \left\{ \frac{96 - 100}{100} \right\} \times 100 = -4$$

Hence the tradesman made a 4% loss.

**Question 76 :**

What will be the value of  $\cos x \operatorname{cosec} x - \sin x \sec x$ ?

**Difficulty :** Moderate

**Average Time :** 63 Seconds

**Options :**

1.  $\cot 2x/2$
2.  $\tan 2x$
3.  $\cot 2x$
4.  $2\cot 2x$

**Solution :**

The correct answer is **Option 4** i.e.  $2\cot 2x$ .

**Concept Used:**

$$\operatorname{cosec} x = 1/\sin x$$

$$\sec x = 1/\cos x$$

$$\tan x = 1/\cot x$$

$$\sin x/\cos x = \tan x$$

$$\cos x/\sin x = \cot x$$



$$\cot 2x = \frac{\cot^2 x - 1}{2 \cot x}$$

**Explanation:**

From the given question, we have

$$\cos x \operatorname{cosec} x - \sin x \sec x = \frac{\cos x}{\sin x} - \frac{\sin x}{\cos x}$$

$$\cot x - \tan x$$

$$\cot x - \frac{1}{\cot x}$$

$$\frac{\cot^2 x - 1}{\cot x}$$

Now, multiplying numerator and denominator by 2, we get

$$\frac{2(\cot^2 x - 1)}{2 \cot x} = 2 \cot x.$$

Hence the value of  $\cos x \operatorname{cosec} x - \sin x \sec x$  is  $2 \cot x$ .

**Question 77 :**

A varies directly as the positive square root of B, and inversely as the cube of C. If  $A = 15$ , when  $B = 27$  and  $C = 2$ , then find B when  $A = 9$  and  $C = 2$ .

**Difficulty : Moderate****Average Time : 73 Seconds****Options :**

1.  $281/42$
2.  $243/25$
3.  $264/37$
4.  $275/51$

**Solution :**

The correct answer is **Option 2** i.e.  $243/25$ .

**Given:**

$$A = 15 \text{ when } B = 27 \text{ and } C = 2$$

$$\text{Also } A = k_1 \sqrt{B} \text{ and } A = \frac{k_2}{C^3}$$

Where  $k_1$  and  $k_2$  are proportionality constants.

**Explanation:**



From the given question,

$$15 = \sqrt{k_1 \sqrt{27}}$$

$$k_1 = \sqrt{(15 \over 3 \sqrt{3})}$$

$$k_1 = \sqrt{5 \over \sqrt{3}}$$

Now, when  $A = 9$

$$\text{Then } 9 = \sqrt{5 \over \sqrt{3}} \times \sqrt{\sqrt{B}}$$

$$\sqrt{\sqrt{B}} = \sqrt{9 \sqrt{3} \over 5}$$

Squaring both sides we get

$$B = 243/25$$

Hence the value of  $B = 243/25$ .

**Question 78 :**

The average weight of 5 men decreases by 3 kg when one of them weighing 150 kg is replaced by another person. Find the weight of the new person.

**Difficulty : Moderate**

**Average Time : 75 Seconds**

**Options :**

1. 125 kg
2. 100 kg
3. 120 kg
4. 135 kg

**Solution :**

The correct answer is **Option 4** i.e. **135 kg**.

**Given:**

Average of 5 men decreases by 3 kg.

**Concept Used:**

Total weight = Average weight  $\times$  number of men

**Explanation:**



Let the average weight of 5 men be  $x$  kg and weight of new man be  $N$  kg

Now, total weight of 5 men =  $x \times 5 = 5x$

According to the given question,

$$5x - 150 + N = 5(x - 3)$$

$$5x - 150 + N = 5x - 15$$

$$N = 150 - 15$$

$$N = 135$$

Hence the weight of the new man is 135 kg.

**Question 79 :**

Select the correct passive form of the given sentence. My parents have booked a mini-getaway for me.

Difficulty : Moderate

Average Time : 61 Seconds

**Options :**

1. A mini-getaway was being booked for me by my parents.
2. A mini-getaway had been booked for me by my parents.
3. A mini-getaway was been booked for me by my parents.
4. A mini-getaway has been booked for me by my parents.

**Solution :**

The correct answer is **Option 4** i.e. **A mini-getaway has been booked for me by my parents.**

**To convert the given active form of the sentence into its passive form, follow these steps:**

- Identify the subject and the object in the active sentence. In this case, the subject is "my parents" and the object is "a mini-getaway."
- Move the object (a mini-getaway) to the beginning of the sentence and place it as the new subject.
- Add the auxiliary verb "be" in the appropriate form (based on the tense of the active sentence) before the past participle of the main verb. In this case, the verb is "booked," which is the past participle of "book."
- Use the appropriate form of the auxiliary verb "be" based on the tense of the active sentence. In this case, since the active sentence is in the present perfect tense ("have booked"), we use "has been" for the singular subject "a mini-



getaway."

- Place the original subject ("my parents") after the auxiliary verb "be" to indicate who performed the action. Use the preposition "by" to introduce the agent of the action (optional).

**Thus, the passive form of the given sentence is:**

*A mini-getaway has been booked for me by my parents.*

**Question 80 :**

The following sentence has been split into four segments. Identify the segment that contains a grammatical error. There are some monkeys / on the roof of the / carriage but Madhav / did not see them.

**Difficulty : Moderate**

**Average Time : 113 Seconds**

**Options :**

1. on the roof of the
2. There are some monkeys
3. carriage but Madhav
4. did not see them

**Solution :**

The correct answer is **Option 2** i.e. **There are some monkeys.**

- The first part of the given sentence is erroneous in nature as it contains the error of tense.
- '**Are**' is used when the sentence is in its present form, but the sentence is in the past tense.
- Thus, 'are' should be replaced with '**were**' to bring the tense of the whole sentence in alignment.

**Thus, the corrected sentence is:**

*There **were** some monkeys on the roof of the carriage but Madhav did not see them.*

**Question 81 :**

Select the most appropriate synonym of the word Amend.

**Difficulty : Moderate**

**Average Time : 59 Seconds**

**Options :**

1. Rectify



Harm

3. Impair

4. Worsen

### Solution :

The correct answer is **Option 1** i.e. **Rectify**.

### The meaning of the given words is:

- **Amend:** To make corrections or modifications to something, typically a document, law, or agreement, in order to improve or update it.
- **Rectify:** To correct, fix, or resolve a problem or error. It refers to taking action to make something right or restore it to a desired state.
- **Harm:** To cause damage, injury, or negative consequences to someone or something.
- **Impair:** To weaken, diminish, or negatively affect the quality, functionality, or condition of something or someone.
- **Worsen:** To make something or someone worse, more severe, or of poorer quality. It implies a deterioration or decline in a particular situation, condition, or state.

Thus, the most appropriate synonym for the given word is **Rectify**.

### Question 82 :

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'. Rita will never have changed her job if she would have been promoted.

Difficulty : Moderate

Average Time : 78 Seconds

### Options :

1. No substitution
2. should never have
3. would never have
4. shall never have

### Solution :

The correct answer is **Option 3** i.e. **would never have**.

- Since, the given sentence is in the past tense. Use of 'will' in the given sentence is erroneous.
- **Will** indicates a future perfect tense, which goes in contradiction with the tense of rest of the sentence.
- So, we need to replace 'will' with its past form i.e., **would**.



Therefore, the corrected sentence will be:

Rita **would never have** changed her job if she would have been promoted.

**Question 83 :**

Select the INCORRECTLY spelt word in the following sentence. Sudhir's harrassment is not only perceivable and occasional but also has become a matter of humorous incident before his colleague.

Difficulty : Moderate

Average Time : 63 Seconds

**Options :**

1. colleague
2. harrassment
3. Humorous
4. perceivable

**Solution :**

The correct answer is **Option 2** i.e. **harrassment**.

**The correct spelling and meaning of the given words are:**

- **Harassment:** The act of persistently annoying, intimidating, or causing distress to someone through unwanted or offensive behavior, often with the intention to degrade, threaten, or harm them.
- **Colleague:** A person who works with others in the same profession or organization, typically at a similar level or within the same department or team.
- **Humorous:** Characterized by humor or the ability to provoke laughter or amusement.
- **Perceivable:** Capable of being perceived, observed, or recognized through the senses or mental faculties.
- Thus, the most appropriate filler for the given blank is **harrasment**.

**Thus, the correct sentence is:**

Sudhir's **harrasment** is not only perceivable and occasional but also has become a matter of humorous incident before his colleague.

**Question 84 :**



Select the most appropriate option to fill in the blank. The trainee wanted to know the \_\_\_\_\_ of the course to get a better understanding of the job prospects

Difficulty : Moderate

Average Time : 81 Seconds

Options :

1. ins and outs
2. bird's eye view
3. crying need
4. tall talk

Solution :

The correct answer is **Option 1** i.e. **ins and outs**.

- The phrase "**ins and outs**" is an idiomatic expression that means the detailed or comprehensive knowledge or understanding of a subject, process, or situation.
- "**Bird's eye view**" refers to a general or overall perspective, but it does not convey the same meaning as "ins and outs" in terms of a detailed understanding.
- "**Crying need**" refers to an urgent or pressing necessity, but it does not convey the same meaning as "ins and outs" in terms of understanding a course.
- "**Talk talk**" does not have a specific meaning or relevance in this context and does not convey the same meaning as "ins and outs."
- Thus, the most appropriate filler for the given blank is "**ins and outs**".

Therefore, the completed sentence is:

The trainee wanted to know the **ins and outs** of the course to get a better understanding of the job prospects.

Question 85 :

Select the most appropriate synonym of the given word. Impede

Difficulty : Moderate

Average Time : 83 Seconds

Options :

1. Intend
2. Prompt
3. Respite



Hinder

**Solution :**

The correct answer is **Option 4** i.e., **Hinder**.

The meaning of the given words is:

- **Impede:** To obstruct, hinder, or delay the progress, movement, or development of something or someone.
- **Hinder:** To create difficulties or obstacles that restrict or slow down the progress, growth, or effectiveness of something or someone.
- **Intend:** To have a specific purpose, goal, or plan in mind. It refers to having a deliberate intention or aim to accomplish or achieve something.
- **Prompt:** To inspire, motivate, or stimulate someone to take action or respond quickly.
- **Respite:** A temporary period of relief, rest, or break from something challenging, demanding, or difficult.

Thus, the most appropriate synonym for the given word is **Hinder**.

**Question 86 :**

Select the INCORRECTLY spelt word.

Difficulty : Moderate

Average Time : 68 Seconds

**Options :**

1. Warden
2. Poliseman
3. Engineer
4. Doctor

**Solution :**

The correct answer is **Option 2** i.e. **Poliseman**.

The correct spelling and meaning of the given words are:

- **Policeman:** A law enforcement officer who is responsible for maintaining public order, preventing and detecting crimes, and enforcing laws within a specific jurisdiction.



**Engineer:** A professional who applies scientific and mathematical principles to design, develop, and maintain structures, machines, systems, or processes, often with a focus on practical applications.

- **Warden:** An official who supervises and manages a specific area or institution, such as a prison, wildlife reserve, or educational facility.
- **Doctor:** A licensed medical professional who diagnoses, treats, and provides care to patients, aiming to prevent, alleviate, or cure illnesses, injuries, and diseases.

**Question 87 :**

Select the most appropriate synonym of the underlined word in the given sentence. The audience was mesmerised by the speech delivered by the vivacious lady.

**Difficulty : Moderate****Average Time : 69 Seconds****Options :**

1. Energetic
2. Fearless
3. Prosperous
4. Friendly

**Solution :**

The correct answer is **Option 1** i.e. **Energetic**.

**The meaning of the given words is:**

- **Vivacious:** Full of life, vibrant, and lively in character or behavior. It often conveys a sense of energy and enthusiasm.
- **Energetic:** Possessing or displaying high levels of physical or mental activity. It denotes an active and lively nature.
- **Fearless:** Showing courage and bravery in the face of danger, challenges, or adversity. It implies the absence of fear or hesitation.
- **Prosperous:** Successful and flourishing, often in terms of material wealth, economic well-being, or overall success in life.
- **Friendly:** Warm, kind, and affable in disposition or behavior. It describes someone who is amicable, approachable, and fosters positive interactions with others.

Thus, the most appropriate synonym for the given word is **Energetic**.

**Question 88 :**

Select the option that expresses the given sentence in active voice. The gate was opened by the peon.



Difficulty : Moderate

Average Time : 71 Seconds

Options :

1. The peon is opening the gate.
2. The peon opened the gate.
3. The peon was opening the gate.
4. The gate was being opened by the peon

Solution :

The correct answer is **Option 2** i.e. **The peon opened the gate.**

To convert the passive form of the given sentence into its active form, the following steps can be followed:

- Identify the subject and object of the passive sentence. In this case, the subject is "the peon" and the object is "the gate."
- Determine the tense of the passive verb. In this case, the verb "was opened" is in the past tense.
- Flip the subject and object positions. The object of the passive sentence becomes the subject of the active sentence, and the subject of the passive sentence becomes the object of the active sentence.
- Change the passive verb form to the corresponding active verb form in the same tense. In this case, "was opened" changes to the active verb "opened."
- Adjust the sentence structure and add any necessary words to make the sentence grammatically correct and coherent in the active form.

Thus, the active form would be:

*The peon opened the gate.*

Question 89 :

The question below consists of a set of labeled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph. P. They are on the market already but they are costly. Q. Their cost depends on the sort you install and the size of your home. R. These devices extract warmth from the air or the ground, or from water - a bit like a fridge operating in reverse. S. Climate advisers anticipate that most homes in future will be warmed by heatpumps.

Difficulty : Moderate

Average Time : 107 Seconds

Options :

1. RQPS

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SQRP

3. SRPQ

4. PRSQ

**Solution :**

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

- The **Sentence S** provides an opening statement by stating that climate advisers predict that most homes in the future will be warmed by heat pumps.
- The **sentence R** in continuation to the opening statement provides the necessary background information about the heat pumps and how they work.
- The **Sentence P** comes next, stating that the heat pumps are already available on the market but they are expensive.
- The **Sentence Q** follows and concludes by providing more details about the cost of heat pumps, which depends on the type of heat pump and the size of the home.

**Thus, the corrected paragraph would be:**

*Climate advisers anticipate that most homes in future will be warmed by heatpumps. These devices extract warmth from the air or the ground, or from water - a bit like a fridge operating in reverse. They are on the market already but they are costly. Their cost depends on the sort you install and the size of your home.*

**Question 90 :**

Select the most appropriate option that can substitute the underlined segment in the given sentence. The art history teacher was sacked after she were thought taking school supplies.

**Difficulty :** Moderate

**Average Time :** 85 Seconds

**Options :**

1. she was wondered
2. she was dumped
3. she was caught
4. she was enlightened

**Solution :**

The correct answer is **Option 3** i.e. **she was caught**.

- The given sentence contains a grammatical error. The subject-verb agreement is incorrect as the subject "she" is singular and the verb "were" is plural.

In this sentence, the verb "was" agrees with the singular subject "she."

- Also, instead of thought, it should be caught, as nobody is sacked just upon a thought of felony.

Therefore, the correct sentence is:

*The art history teacher was sacked after **she was caught** taking school supplies.*

### Question 91 :

Rearrange the parts of the sentence in correct order. Lighting has P. to become a disrupter and Q. become human-centric as our R. requirements change during the day and S. lighting has to adapt to our change in needs

Difficulty : Moderate

Average Time : 66 Seconds

### Options :

1. PSQR
2. RPQS
3. QRSP
4. PQRS

### Solution :

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

- The sentence follows a compound-complex structure. If we analyse the given statements, we realise that the features of lightening are being referred to.
- It is said that light has become a disrupter and human centric. Clearly, conjunction 'and' in **statement P** shows that it will come before the **sentence Q**.
- Further **statement R** talks about the requirement change connecting it with **Sentence S** which reflects upon how lightening needs to mold itself.

Thus, the correct sentence would be:

*Lighting has to become a disrupter and become human-centric as our requirements change during the day and lighting has to adapt to our change in needs.*

### Question 92 :

Select the most appropriate synonym of the given word. Mercy

Difficulty : Moderate

Average Time : 66 Seconds

### Options :



Legacy

2. Clarity

3. Clemency

4. Plurality

### Solution :

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

### The meaning of the given words is:

- **Mercy**: Compassion, forgiveness, or leniency shown toward someone who is in one's power or who has committed a wrong.
- **Clemency**: Leniency or mercy shown toward someone who has committed a crime or offense. It often involves reducing a sentence or punishment.
- **Legacy**: Something that is handed down from a previous generation or period, often of cultural, social, or historical significance.
- **Clarity**: The quality of being clear, transparent, or easy to understand. It can refer to the clarity of communication, thought, or perception.
- **Plurality**: The state of being plural or consisting of multiple elements or parts.

Thus, the most appropriate synonym for the given word is **Clemency**.

### Question 93 :

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

Difficulty : Moderate

Average Time : 71 Seconds

### Options :

1. Ablutions
2. Solutions
3. Steaming
4. Bathing

### Solution :

The correct answer is **Option 1** i.e. **Ablutions**.

### The meaning of the given words is:

- **Ablutions**: The act of washing oneself, especially as part of a religious or ceremonial ritual.



**Solutions:** Answers or remedies to problems, challenges, or puzzles. They are typically proposed to overcome difficulties, conflicts, or obstacles.

- **Steaming:** The process of cooking or heating food by exposing it to steam or vapor. It can also refer to the emission of steam from a hot liquid or surface.
- **Bathing:** The act of washing oneself or someone else with water or a liquid, often for the purpose of cleaning, relaxation, or therapeutic benefits.

Thus, the most appropriate one word substitution for the given set of words is **Ablutions**.

**Question 94 :**

Select the correct direct form of the given sentence. Aryan told me that I knew where to find him.

Difficulty : Moderate

Average Time : 70 Seconds

**Options :**

1. Aryan said to me, "You know where to find me."
2. Aryan said to me, "You knowing where to find me."
3. Aryan said to me, "You are known where to find me."
4. Aryan says to me, "You know where to find me."

**Solution :**

The correct answer is **Option 1** i.e. **Aryan said to me, "You know where to find me."**

**Following steps should be followed to convert the given sentence into its direct form:**

- Identify the reporting verb and its tense. In this case, the reporting verb is "told" and it is in the past tense.
- Identify the subject and object of the reporting verb. In this case, the subject is "Aryan" and the object is "me."
- Identify the conjunction used to introduce the reported speech. In this case, the conjunction is "that."
- Change the tense of the reporting verb from past tense to present tense and place it before the reported speech. This step is not necessary if the reported speech is already in the present tense.
- Change the pronouns and possessive adjectives in the reported speech to reflect the subject and object of the reporting verb in the direct form.
- Remove the conjunction "that" and put the reported speech in quotation marks.
- Make any necessary changes to the tense, punctuation, and word order to make the sentence grammatically correct in the direct form.

Thus, the direct form would be:



Aryan said to me, "You know where to find me."

**Question 95 :**

Select the idiom that can correctly replace the underlined part of the given sentence. I know she really wants the promotion, but she really hit me below the hand by telling the boss about my personal problems.

Difficulty : Moderate

Average Time : 112 Seconds

**Options :**

1. hit me the bricks
2. hit me below the books
3. hit me below the bottle
4. hit me below the belt

**Solution :**

The correct answer is **Option 4** i.e. **hit me below the belt**.

- The correct idiom is '**hit me below the belt**'.
- The meaning of the idiom is **To say something that is often too personal, usually irrelevant, and always unfair.**

Thus, the most appropriate choice among the given options is '**hit me below the belt**'.

**Question 96 :**

The following sentence has been split into four segments. Identify the segment that contains a grammatical error. He will make mistakes, but he will learn / by making mistakes. So, dear parents, / once you put the money in your / children's little pockets, forget all on it.

Difficulty : Moderate

Average Time : 60 Seconds

**Options :**

1. children's little pockets, forget all on it
2. once you put the money in your
3. by making mistakes. So, dear parents,
4. He will make mistakes, but he will learn

**Solution :**

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The correct answer is **Option 1** i.e. **children's little pockets, forget all on it.**

- The last part of the given sentence is erroneous in nature.
- The phrase "forget all on it" is not grammatically correct because the verb "forget" requires the preposition "about" to indicate the thing that is being forgotten.
- The error in the segment is the preposition "on" that should be replaced by the preposition "about."

**Therefore, the corrected sentence is:**

*He will make mistakes, but he will learn by making mistakes. So, dear parents, once you put the money in your **children's little pockets, forget all about it.***

### 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. Women won their present status through (1)\_\_\_\_\_ and sacrifices rather than through men's kindness. Women and their supporters have fought, and in some places continue to fight for the same rights as (2)\_\_\_\_\_. Laws were made to replace local customs which denigrated and suppressed women's rights. Women have (3)\_\_\_\_\_ higher positions in the world at all levels; political, economic and social. But in reality, women still suffer from (4)\_\_\_\_\_ at various levels. For example, women work more and earn less than men. In addition to that, the majority of the world's poor and illiterate are women. The road to real (5)\_\_\_\_\_ is still long.

### Question 97 :

Select the most appropriate option to fill in blank number 1.

Difficulty : Moderate

Average Time : 104 Seconds

### Options :

1. struggle
2. happiness
3. dignity
4. joy

### Solution :

The correct answer is **Option 1** i.e. **struggle.**

**The meaning of the given words is:**

- **Struggle:** A challenging effort to overcome a difficult or adverse situation or to achieve a goal.
- **Happiness:** A feeling of pleasure, contentment, and satisfaction that arises from one's experiences, relationships, or

circumstances.

- **Dignity**: The quality of being worthy of respect, honor, and esteem.
- **Joy**: A feeling of great happiness, pleasure, or delight that is often expressed through laughter, smiles, or other positive emotions.
- Thus, the most appropriate filler for the given blank is **struggle**.

**Therefore, the correct sentence is:**

*Women won their present status through **struggle** and sacrifices rather than through men's kindness.*

### 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. Women won their present status through (1)\_\_\_\_\_ and sacrifices rather than through men's kindness. Women and their supporters have fought, and in some places continue to fight for the same rights as (2)\_\_\_\_\_. Laws were made to replace local customs which denigrated and suppressed women's rights. Women have (3)\_\_\_\_\_ higher positions in the world at all levels;political, economic and social. But in reality, women still suffer from (4)\_\_\_\_\_ at various levels.For example, women work more and earn less than men. In addition to that, the majority of the world's poor and illiterate are women. The road to real (5)\_\_\_\_\_ is still long.

### Question 98 :

Select the most appropriate option to fill in blank number 2.

**Difficulty : Moderate**

**Average Time : 101 Seconds**

### Options :

1. everyone
2. men
3. universal
4. politicians

### Solution :

The correct answer is **Option 2** i.e. **men**.

- The sentence is talking about the efforts made by women and their supporters to gain equal rights as someone or a group of people.
- The use of "universal" or "everyone" in the blank would not make sense in the context of the sentence, and the inclusion of "politicians" would not fit the comparison between the two groups.
- The word "men" is the most appropriate choice as it completes the comparison between women and men, who

historically and culturally have had unequal rights and opportunities in many societies.

- The correct option to fill in the blank is "men."

**The completed sentence reads:**

*Women and their supporters have fought, and in some places continue to fight for the same rights as **men**.*

### 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. Women won their present status through (1)\_\_\_\_\_ and sacrifices rather than through men's kindness. Women and their supporters have fought, and in some places continue to fight for the same rights as (2)\_\_\_\_\_. Laws were made to replace local customs which denigrated and suppressed women's rights. Women have (3)\_\_\_\_\_ higher positions in the world at all levels;political, economic and social. But in reality, women still suffer from (4)\_\_\_\_\_ at various levels.For example, women work more and earn less than men. In addition to that, the majority of the world's poor and illiterate are women. The road to real (5)\_\_\_\_\_ is still long.

### Question 99 :

Select the most appropriate option to fill in blank number 5.

Difficulty : Moderate

Average Time : 105 Seconds

### Options :

1. probability
2. maturity
3. equality
4. eligibility

### Solution :

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

### The meaning of the given words is:

- **Equality:** Fair and impartial treatment of individuals or groups, without discrimination.
- **Probability:** The likelihood or chance of an event occurring, expressed as a number between 0 and 1.
- **Maturity:** The state of being fully grown or developed, both physically and mentally.
- **Eligibility:** The state of being qualified or entitled to something based on specific requirements or criteria.
- Thus, the most appropriate filler for the given blank is **equality**.

**Therefore, the correct sentence is:**

The road to real **equality** is still long.

**Question 100 :**

Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term. 17: 4607:: 11:? :: 23: 11615

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

1. 1440
2. 1572
3. 1463
4. 1199

**Solution :**

The correct answer is **Option 4** i.e. **1199**.

The logic used here is:

17: 4607

$$17^2 \times 16 - 17 = 289 \times 16 - 17 = 4624 - 17 = 4607$$

23: 11615

$$23^2 \times 22 - 23 = 529 \times 22 - 23 = 11638 - 23 = 11615$$

Similarly,

11:?

$$11^2 \times 10 - 11 = 121 \times 10 - 11 = 1210 - 11 = 1199$$

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

## Ssc Cgl Tier I Previous Year Question Paper Analysis

The analysis of Ssc Cgl Tier I Previous Year Question Paper held on 2022-12-05 in the Noon exam is as follows:

1. 100 questions were moderate.
2. The safe score is 140 marks.



25 questions were asked from English Language, 25 questions were asked from Logical Reasoning, 25 questions were asked from General Awareness and 25 questions were asked from Quantitative Aptitude

4. 28 questions should have been skipped if you were short of time.

# Ssc Cgl Tier I Previous Year Question Paper Topic Wise Weightage

## English Language

1. Cloze Test - 4
2. Spotting Error - 2
3. Parajumbles - 1
4. Sentence Jumbles - 1
5. One Word Substitution - 1
6. Fillers - 3
7. Narration - 1
8. Voice - 2
9. Sentence Improvement - 4
10. Synonym - 3
11. Incorrectly Spelt - 2
12. Incorrectly Spelt - 2

## Logical Reasoning

1. Coding Decoding - 2
2. Analogy - 5
3. Classification - 2
4. Blood Relations - 2
5. Syllogism - 2
6. Dictionary Based - 1
7. Figure Based - 2
8. Series - 3
9. Mathematical Reasoning - 3
10. Seating Arrangement And Puzzle - 3

## General Awareness

GK Misc - 25

## Quantitative Aptitude

1. Arithmetic - 25

# 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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