

## SSC CGL Previous Year Question Paper 2017

### Reasoning Ability (Questions and Solutions)

**Direction:** In a certain code language, '+' represents 'x', '-' represents '+', 'x' represents '÷' and '÷' represents '-'.

**Q. (1)** What is the answer to the following question?

$$42 \times 7 \div 7 + 9 - 62 = ?$$

1. 5
2. 87
3. 22
4. 2

**Answer:** 1

**Solution:**  $42 \times 7 \div 7 + 9 - 62 = ?$

$$\Rightarrow (?) = 42 \div 7 - 7 \times 9 + 62$$

$$\Rightarrow (?) = 6 - 63 + 62 = 5$$

**Q. (2)** If  $17 @ 1 = 8$ ;  $9 @ 1 = 4$ ;  $6 @ 4 = 1$ ; then what is the value of  $8 @ 2 = ?$

1. 3
2. 26
3. 23
4. 47

**Answer:** 1

**Solution:** The pattern followed is that for  $a @ b = (a - b)/2$

$$\text{Therefore, } 17 @ 1 = (17 - 1)/2 = 8$$

$$9 @ 1 = (9 - 1)/2 = 4$$

$$6 @ 4 = (6 - 4)/2 = 1$$

$$\text{Hence, } 8 @ 2 = (8 - 2)/2 = 3$$

**Q. (3)** Select the missing number from the given responses.

23	114	204
45	25	36
68	89	(?)

1. 157
2. 168
3. 21
4. 15

**Answer:** 2

**Solution:** In a column, the sum of two least numbers is equal to the third number.

Eg :  $23 + 45 = 68$  and  $25 + 89 = 114$

Similarly,  $(?) + 36 = 204$

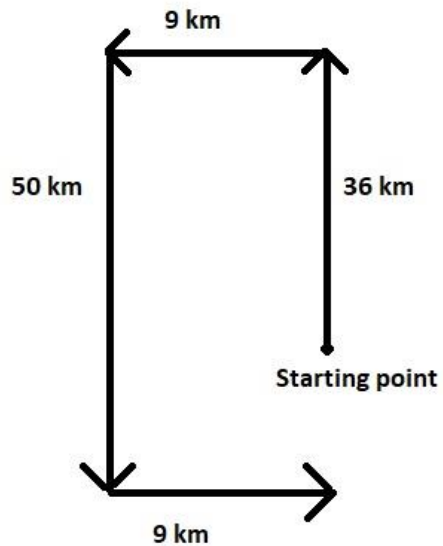
$(?) = 168$

**Q. (4)** A truck travels 36 km North, then it turns West and travels 9 km, then it turns South and travels 50 km, then it turns to its left and travels 9 km. Where is it now with reference to its starting position?

1. 14 km North
2. 86 km South
3. 86 km North
4. 14 km South

**Answer:** 4

**Solution:**



**Q. (5)** In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

**Statement 1:** Some clever are intelligent.

**Statement 2:** No intelligent is Smart.

**Conclusion I:** Some intelligent are clever.

**Conclusion II:** Some smart are clever.

1. Only conclusion I follows
2. Only conclusion II follows
3. Both I and II follow
4. Neither I nor II follows

**Answer:** 1

**Solution:**

The venn diagram for the above statements is :



Thus, only conclusion I follows.

**Q. (6)** Select the related word from the given alternatives.

**Tongue : Taste :: Nose : ?**

1. Smell
2. Face
3. Touch
4. Chin

**Answer:** 1

**Q. (7)** Select the related letters from the given alternatives.

**FDH : LJN :: RPT : ?**

1. XYZ
2. WUY
3. XVZ
4. SUV

**Answer:** 3

**Solution:** The pattern followed is:

$$F + 6 = L$$

$$D + 6 = J$$

$$H + 6 = N$$

Hence, RPT = XVZ

**Q. (8)** Select the related number from the given alternatives.

**39 : 52 :: 51 : ?**

1. 53

2. 40
3. 68
4. 38

**Answer:** 3

**Solution:**

$$39 : 52 :: 51 : ?$$

The pattern followed is  $3n : 4n$ , where  $n$  is a natural number.

$$\text{Therefore, } 3 \times (13) : 4 \times (13) = 39 : 51$$

$$\text{Similarly, } 3n = 51$$

$$\Rightarrow n = 17$$

$$\text{Hence, } 4 \times 17 = 68$$

**Q. (9)** Select the odd word from the given alternatives.

1. Nylon
2. Wool
3. Silk
4. Cotton

**Answer:** 1

**Solution:** Wool, silk and cotton are natural fibres while nylon is a synthetic fibre, hence it is the odd one out.

**Q. (10)** Select the odd letters from the given alternatives.

1. ZXV
2. GDA
3. NKH
4. URO

**Answer:** 1

**Solution:**

1. Z (-2 letters) = X (-2 letters) = V
2. G (-3 letters) = D (-3 letters) = A
3. N (-3 letters) = K (-3 letters) = H

4. U (-3 letters) = R (-3 letters) = O

**Q. (11)** Select the odd number from the given alternatives.

1. 15
2. 20
3. 40
4. 60

**Answer:** 1

**Solution:** Except 15, all other numbers are divisible by 20.

**Q. (12)** A series is given, with one word missing. Choose the correct alternative from the given ones that will complete the series.

**Pension, Aptitude, Captain, Tropical, Autopsy, ?**

1. Parrot
2. Apply
3. Trap
4. Tetrapod

**Answer:** 4

**Solution:**

**Pension, Aptitude, Captain, Tropical, Autopsy, ?**

In each term, the position of the letter 'p' is shifted to the right.

Pension (1st place) , Aptitude (2nd place) , Captain (3rd place) , Tropical (4th place) , Autopsy (5th place)

Hence, in the next term 'p' should be at 6th position, and the only option available is **Tetrapod**

**Q. (13)** A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

**DEC, HIG, LMK, PQO, TUS, ?**

1. XYZ
2. WXY

3. XYW
4. YZA

**Answer:** 3

**Solution:** DEC, HIG, LMK, PQO, TUS, ?

The pattern followed is that in each letter of the term, the difference is of 4 letters.

1st letter: D (+ 4) H (+ 4) L (+ 4) P (+ 4) T (+ 4) X

2nd letter: E (+ 4) I (+ 4) M (+ 4) Q (+ 4) U (+ 4) Y

3rd letter: C (+ 4) G (+ 4) K (+ 4) O (+ 4) S (+ 4) W

Thus, missing term = **XYW**

**Q. (14)** A series is given, with one number missing. Choose the correct alternative from the given ones that will complete the series.

**100, -20, 4, ? , 0.16, -0.032**

1. 0.8
2. 1
3. -1
4. -0.8

**Answer:** 4

**Solution:** The pattern of the series is:

- $100 \div (-5) = -20$
- $-20 \div (-5) = 4$
- $4 \div (-5) = -0.8$
- $-0.8 \div (-5) = 0.16$
- $0.16 \div (-5) = -0.032$

**Q. (15)** The weights of 4 boxes are 20, 40, 50 and 30 kilograms. Which of the following cannot be the total weight, in kilograms, of any combination of these boxes and in a combination a box can be used only once:

1. 140
2. 130
3. 90

4. 120

**Answer:** 2

**Solution:** Weights of 4 boxes = 20, 40, 50 and 30 kilograms

- $140 = 20 + 30 + 40 + 50$
- 130 = not possible
- $90 = 20 + 30 + 40$
- $120 = 30 + 40 + 50$

**Q. (16)** From the given words, select the word which cannot be formed using the letters of the given word.

**ORDINALS**

1. DINAR
2. ADORN
3. SALON
4. IDEAL

**Answer:** 4

**Solution:** The word **ORDINALS** does not contain any 'E', and thus the word '**Ideal**' cannot be formed.

**Q. (17)** If **QUICKLY** is coded as **OSGAIJW**, then how will **HUE** be coded as?

1. ZMA
2. FSC
3. HZK
4. HNI

**Answer:** 2

**Solution:** **QUICKLY** is coded as **OSGAIJW**

The pattern followed is:

**Q - 2 = O**

**U - 2 = S**

**I - 2 = G**



**C - 2 = A**

**K - 2 = I**

**L - 2 = J**

**Y - 2 = W**

Similarly, **H - 2 = F**

**U - 2 = S**

**E - 2 = C**

**Q. (18)** Select the related word from the given alternatives.

**Office : Colleagues :: Home : ?**

1. Rest
2. Work
3. Friends
4. Family

**Answer: 4**

**Q. (19)** Select the related letters from the given alternatives.

**XVT : RPN :: LJH : ?**

1. FDB
2. ECA
3. KIG
4. QOM

**Answer: 1**

**Solution:** The pattern followed is:

X - 6 = R

V - 6 = P

T - 6 = N

Similarly, L - 6 = F

J - 6 = D

H - 6 = B

**Q. (20)** Select the related number from the given alternatives.

**0.04 : 0.2 :: 0.09 : ?**

1. 0.3
2. 0.6
3. 0.9
4. 2

**Answer:** 1

**Solution:**

Expression = **0.04 : 0.2 :: 0.09 : ?**

The pattern followed is  $n : n$

$0.04 : 0.04 = 0.04 : 0.2$

Hence,  $0.09 : 0.09 = 0.09 : 0.3$

**Q. (21)** A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

**YY, YOY, YYYY, YYOYY, YYYYYY, ?**

1. YYYOYYYY
2. YYYOYYY
3. YYYYYYY
4. YYYOYYYO

**Answer:** 2

**Solution:** YY, YOY, YYYY, YYOYY, YYYYYY, ?

The pattern followed is that in every alternate term 'O' is inserted between an even number of Y's

Thus, next term = **YYYOYYY**

**Q. (22)** A series is given, with one number missing. Choose the correct alternative from the given ones that will complete the series.

**3, 5/3, 1/3, ? , -7/3, -11/3**

1.  $-\frac{2}{3}$
2.  $-\frac{4}{3}$

3. -1
4. -2

**Answer: 3**

**Solution:** The pattern followed is:

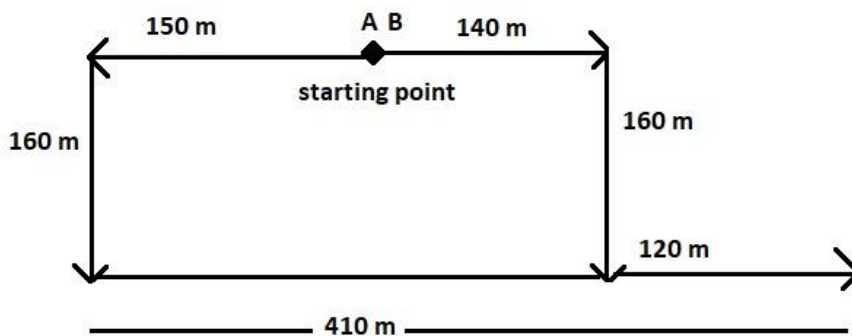
- $3 - 4/3 = 5/3$
- $5/3 - 4/3 = 1/3$
- $1/3 - 4/3 = -1$
- $-1 - 4/3 = -7/3$
- $-7/3 - 4/3 = -11/3$

**Q. (23)** Two women A and B are shopping in a mall. They start from the same point. A walks 150 m West, then turns to her left and walks 160 m. B walks 140 m East, then turns South and walks 160 m, then turns to her left and walks 120 m. Where is B with respect to A now?

1. 410 m West
2. 410 m East
3. 170 m East
4. 170 m West

**Answer: 2**

**Solution:**



**Q. (24)** In the question a statement is given, followed by two arguments, I and II. You have to consider the statement to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given arguments, if any, is a strong argument.

**Statement:** Should eating paan at public places be made punishable?

**Argument I:** Yes, people eat pan and spit and makes public places dirty.

**Argument II:** No, Indians love paan.

1. if only argument I is strong
2. if only argument II is strong
3. if both I and II are strong
4. if neither I nor II is strong

**Answer:** 1

**Q. (25)** A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

**AbC, dEfG, hIjKl, MnOpQr, ?**

1. StUvWxY
2. StUvWx
3. StUvWxYZ
4. sTuVwXy

**Answer:** 1

**Solution:**

**AbC, dEfG, hIjKl, MnOpQr, ?**

The pattern followed is that capital and small alphabets are written alternatively and the number of letters are increased in each term.

So, in the next term 7 letters will be written starting with 'S' in capital.

Missing term = **StUvWxY**