

100 Reasoning Questions With Solutions for SSC CGL Tier 2 Exam

Q1. Select the set in which the numbers are related in the same way as are the numbers of the following set.

- (3, 24, 4)
 (a) (6, 35, 11)
 (b) (2, 30, 8)
 (c) (12, 84, 4)
 (d) (4, 72, 9)

Q2. Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

- (a) CFIL
 (b) GHJ
 (c) MOQS
 (d) PSUX

Q3. Three of the following four numbers are alike in a certain way and one is different. Pick the number that is different from the rest.

- (a) 126
 (b) 189
 (c) 254
 (d) 217

Q4. 'Lawyer' is related to 'Justice' in the same way as 'Arbitrator' is related to '_____'.
 (a) Judgment
 (b) Injustice
 (c) Settlement
 (d) Communication

Q5. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

CEGI : AGEK :: DFHJ : ?

- (a) CHFI
 (b) CGIK
 (c) BHFL
 (d) BDJK

Q6. Select the number-pair in which the two numbers are related in the same way as are the two numbers of the following number pair.

36 : 84

- (a) 27 : 63
 (b) 21 : 51
 (c) 57 : 135
 (d) 45 : 95

Q7. Select the word-pair in which the two words are related in the same way as are the two words in the following word pair.

Book : Thesaurus

- (a) Tree : forest
 (b) Reptile : Python
 (c) Furniture : Wood
 (d) Tennis : Ball

Q8. Select the number-pair in which the two numbers are related in the same way as are the two numbers of the following number-pair

4 : 32

- (a) 8 : 248
 (b) 5 : 62
 (c) 10 : 160
 (d) 6 : 108

Q9. 'Action' is related to 'Reaction' in the same way as 'Stimulus' is related to '_____'.
 (a) Reception
 (b) Vision
 (c) Response
 (d) Feedback

Q10. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

BECD : YVXW :: DGEF : ?

- (a) VRTS
 (b) WTVU
 (c) WUTV
 (d) XUWV

Q11. Rs 1,875 is divided among A, B and C in such a way that A's share is half of the combined share of B and C, and B's share is one-fourth of the combined share of A and C. By what amount is C's share more than that of A ?

- (a) Rs 500
- (b) Rs 225
- (c) Rs 250
- (d) Rs 200

Q12. 10 years ago, a father's age was $3\frac{1}{2}$ times that of his son, and 10 yrs from now, the father's age will be $2\frac{1}{4}$ times that of the son. What will be the sum of the ages of the father and the son at present?

- (a) 100 yrs
- (b) 110 yrs
- (c) 115 yrs
- (d) 120 yrs

Q13. Two mixtures contain milk and juice in the ratio of 2 : 1 and 4 : 5. If equal volumes of the two mixtures are mixed together, what would be ratio of milk to juice in the resulting mixture?

- (a) 7 : 5
- (b) 1 : 1
- (c) 5 : 3
- (d) 5 : 4

Q14. Rs. 820 is divided among 6 men, 8 women and 12 boys in such a way that every woman gets an amount equal to that received by one man and one boy combined and that every man gets one and half times the amount received by a boy. What is the total amount received by 8 women?

- (a) Rs. 400
- (b) Rs. 300
- (c) Rs. 240
- (d) Rs. 380

Q15. The ratio of the present age of Mitali to that of Shabnam is 4 : 7. If the differences between the present ages of Shabnam and Mitali after 5 years will be 18 years, then what is the sum of the present ages of Mithali and Shabnam?

- (a) 74 years
- (b) 60 years
- (c) 66 years
- (d) 64 years

Q16. A cycle was sold for Rs. 4,140 with a profit of 15%. At what price could it have been sold to earn a profit of 25%?

- (a) Rs. 4,500
- (b) Rs. 4,350
- (c) Rs. 4,200
- (d) Rs. 4,850

Q17. The average of 9 numbers is 40. If the average of the first five numbers is 38 and that of the last five is 50, then what is the fifth number?

- (a) 90
- (b) 84
- (c) 78
- (d) 80

Q18. Nisha and Deepak are a married couple and have a daughter named Tanya. Currently, Deepak is 5 years older than Nisha and Nisha is thrice the age of Tanya. If Tanya is 10 years old, what was her father's age at the time of his daughter's birth?

- (a) 35 years
- (b) 25 years
- (c) 30 years
- (d) 20 years

Q19. A father was twelve times as old as his son twenty years ago. Now he is twice as old as his son. What are the present ages of the son and father?

- (a) 22 and 44 years
- (b) 33 and 66 years
- (c) 27 and 54 years
- (d) 15 and 30 years



Q20. At a party, the number of girls is half the number of boys. After an hour, five boys leave the party and three girls join the party and the number of boys and girls are now equal. How many people were present at the party an hour before?

- (a) 16
- (b) 8
- (c) 24
- (d) 22

Q21. If DIG is coded as 25 and CUT is coded as 49, then how will KICK be coded as ?

- (a) 43
- (b) 39
- (c) 41
- (d) 34

Q22. In the code language, VICTORY is written as CIVSYRO. How will TRAITOR be written as in that language?

- (a) RATHORT
- (b) RTAJORT
- (c) ARTJOTR
- (d) ARTHROT

Q23. If BACK is coded as 11312 and CAKE is coded as 51113, then how will MADE be coded as?

- (a) 51413
- (b) 54113
- (c) 31145
- (d) 13145

Q24. In a code language, TEMPLE is written as DKOLDS. How will WORSHIP be written as in that language?

- (a) OHGRQNV
- (b) VNQGHOR
- (c) QJITSPX
- (d) OGHQRVN

Q25. In a code language if FRIDGE is written as GTLHLK, then in the same language how will you write the word KETTLE?

- (a) WQLGXX
- (b) LGWXQK
- (c) GLXWQK
- (d) XKWQLG

Q26. In a code language, SUNDAY is written as DNUAYS. How will MOTHER be written as in that language?

- (a) HTEOMR
- (b) HTOERM
- (c) HOTERM
- (d) THEORM

Q27. If CAB is coded as 6 and BED is coded as 40, then how will HAD be coded as?

- (a) 16
- (b) 52
- (c) 32
- (d) 46

Q28. In a code language, COMPUTER is written as OCREPMTU. How will DAUGHTER be written in the same language?

- (a) READTHGU
- (b) ADTHREGU
- (c) ADREGUTH
- (d) ADERUGTH

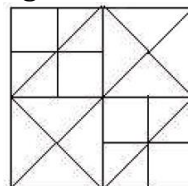
Q29. If POSTER is coded as 592314 and DARK is coded as 8647, then how will STROKE be coded as?

- (a) 234917
- (b) 234971
- (c) 493287
- (d) 329417

Q30. In a code language, TEACHING is written as SDBDGHOH. How will BOOKWORM be written as in that language?

- (a) ANPLXNNS
- (b) ANPLXPSL
- (c) CPNJXPSL
- (d) ANPLVNSN

Q31. How many squares are there in the following figure?



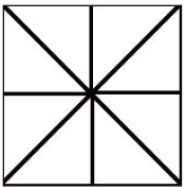
- (a) 12
- (b) 16
- (c) 13
- (d) 14

Q32. How many triangles are there in the following figure?



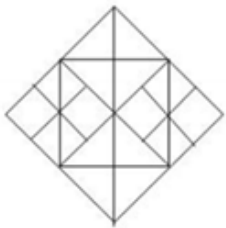
- (a) 14
- (b) 18
- (c) 20
- (d) 16

Q33. How many triangles are there in the following figure?



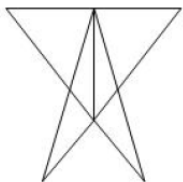
- (a) 18
- (b) 12
- (c) 14
- (d) 16

Q34. How many squares are there in the following figure?



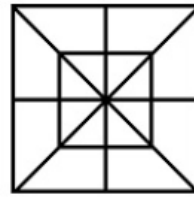
- (a) 12
- (b) 18
- (c) 16
- (d) 14

Q35. How many triangles are there in the following figure?



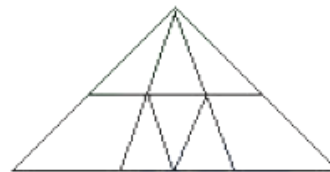
- (a) 12
- (b) 13
- (c) 11
- (d) 15

Q36. How many triangles are there in the following figure?



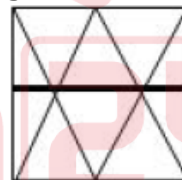
- (a) 32
- (b) 24
- (c) 28
- (d) 36

Q37. How many triangles are there in the following figure?



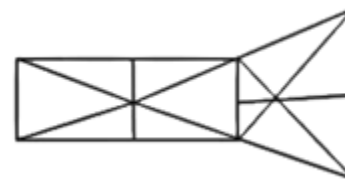
- (a) 14
- (b) 13
- (c) 17
- (d) 15

Q38. How many triangles are there in the following figure?



- (a) 18
- (b) 20
- (c) 16
- (d) 14

Q39. How many triangles are there in the following figure?



- (a) 27
- (b) 29
- (c) 31
- (d) 25

Q40. How many triangles are there in the following figure?



- (a) 14
- (b) 24
- (c) 22
- (d) 18

Q41. Two different positions of the same dice are shown. Which number will be at the top if 6 is at the bottom ?



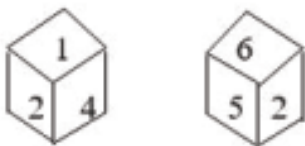
- (a) 4
- (b) 3
- (c) 5
- (d) 2

Q42. Two different positions of the same dice are shown. Which number will be at the top if 6 is at the bottom?



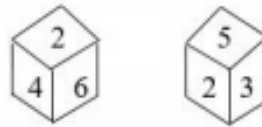
- (a) 1
- (b) 3
- (c) 2
- (d) 4

Q43. Two rotated positions of a dice are given below. Which number will be at the top if '3' is at the bottom?



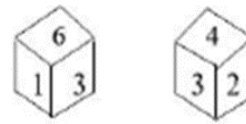
- (a) 4
- (b) 1
- (c) 2
- (d) 6

Q44. Two different positions of the same dice are shown. Which numbers will be at the top if 4 is at the bottom?



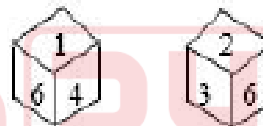
- (a) 3
- (b) 6
- (c) 5
- (d) 1

Q45. Two different positions of the same dice are shown. Which number will be at the top if 1 is at the bottom?



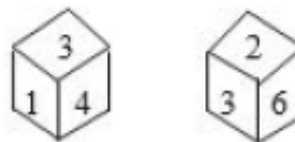
- (a) 4
- (b) 2
- (c) 6
- (d) 5

Q46. Two rotated positions of a dice are given below. Which number will be at the top if the number 1 is on the bottom of the dice?



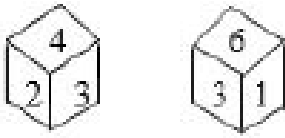
- (a) 2
- (b) 6
- (c) 3
- (d) 5

Q47. Two rotated positions of a dice are given below. Which number will be at the top if the number 4 is on the bottom of the dice?



- (a) 6
- (b) 2
- (c) 1
- (d) 4

Q48. Two different positions of the same dice are shown. Which number will be at the top if 6 is at the bottom?



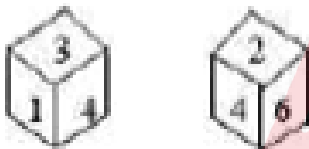
- (a) 5
- (b) 3
- (c) 4
- (d) 2

Q49. Two different positions of the same dice are shown. Which number will be at the top if 3 is at the bottom?



- (a) 1
- (b) 2
- (c) 5
- (d) 4

Q50. Two different positions of the same dice are shown. Which number will be at the top if 5 is at the bottom?



- (a) 6
- (b) 4
- (c) 2
- (d) 3



Q51. Select the option in which the given figure is embedded.



(a)



(b)



(c)



(d)



Q52. Select the option in which the given figure is embedded.



(a)



(b)



(c)



(d)



Q53. Select the option in which the given figure is embedded (Rotation not allowed).



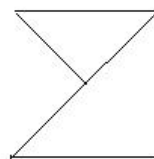
- (a)
- (b)
- (c)
- (d)

Q54. Select the option in which the given figure is embedded.



- (a)
- (b)
- (c)
- (d)

Q55. Select the option in which the given figure is embedded.



- (a)
- (b)
- (c)
- (d)

Q56. Select the figure in which the given figure is embedded.



- (a)
- (b)
- (c)
- (d)

Q57. Select the figure in which the given figure is embedded.



(a)



(b)



(c)



(d)



Q58. Select the figure in which the given figure is embedded.



(a)



(b)



(c)



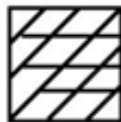
(d)



Q59. Select the figure in which the given figure is embedded.



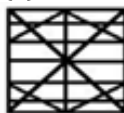
(a)



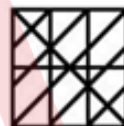
(b)



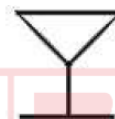
(c)



(d)



Q60. Select the figure in which the given figure is embedded.



(a)



(b)



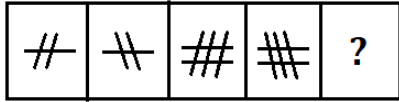
(c)



(d)



Q61. Select the figure that will come next in the following figure series.



(a)



(b)



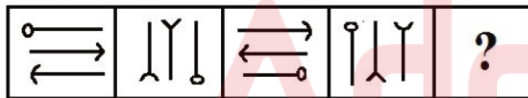
(c)



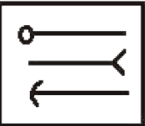
(d)



Q62. Select the figure that will come next in the following figure series.



(a)



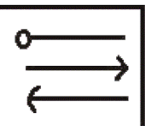
(b)



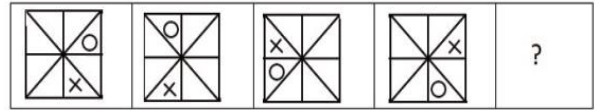
(c)



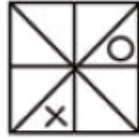
(d)



Q63. Select the figure that will come next in the following figure series.



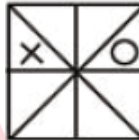
(a)



(b)



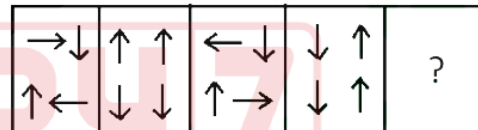
(c)



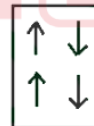
(d)



Q64. Select the figure that will come text in the following figure series.



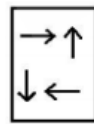
(a)



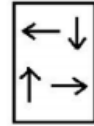
(b)



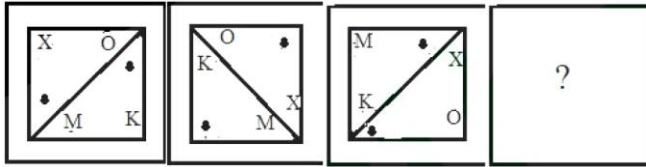
(c)



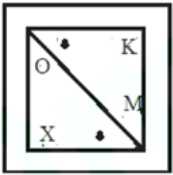
(d)



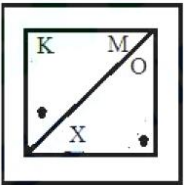
Q65. Select the figure that will come next in the following figure series.



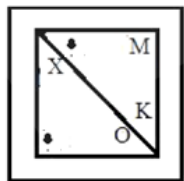
(a)



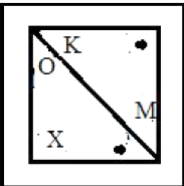
(b)



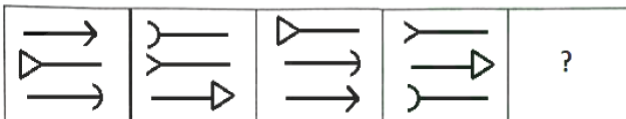
(c)



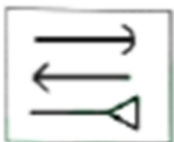
(d)



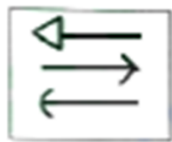
Q66. Select the figure that will come next in the following figure series.



(a)



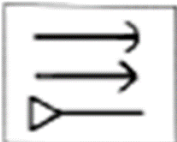
(b)



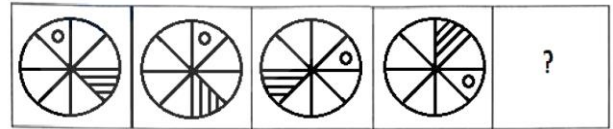
(c)



(d)



Q67. Select the figure that will come next in the following figure series.



(a)



(b)



(c)



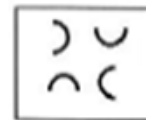
(d)



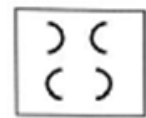
Q68. Select the figure that will come next in the following figure series.



(a)



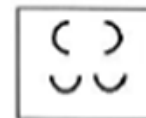
(b)



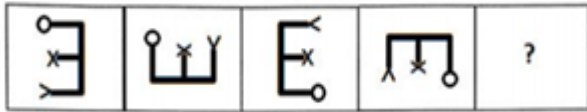
(c)



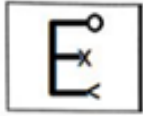
(d)



Q69. Select the figure that will come next in the following figure series.



(a)



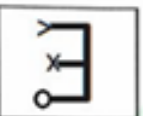
(b)



(c)



(d)



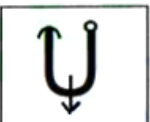
Q70. Select the figure that will come next in the following figure series.



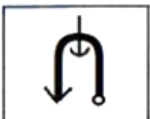
(a)



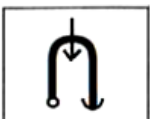
(b)



(c)



(d)



Q71. Which two signs should be interchanged in the following equation to make it correct?

$$12 - 8 + 12 \times 9 \div 3 = 9$$

(a) + and \div

(b) + and \times

(c) - and \div

(d) + and -

Q72. Which two signs should be interchanged in the following equation to make it correct?

$$18 + 6 - 6 \div 3 \times 3 = 6$$

(a) + and -

(b) + and \div

(c) - and \div

(d) + and \times

Q73. What will be the value of the following equation if ' \div ' means 'addition', '+' means 'subtraction', '-' means 'multiplication' and ' \times ' means 'division'?

$$54 \times 6 - 7 \div 8 + 2 = ?$$

(a) 63

(b) 57

(c) 69

(d) 61

Q74. Which two signs should be interchanged in the following equation to make it correct?

$$15 - 9 \div 6 \times 10 + 5 = 25$$

(a) \times and -

(b) + and -

(c) + and \div

(d) \times and \div

Q75. Which two sign should be interchanged in the following equation to make it correct?

$$10 + 5 \div 10 \times 8 - 10 = 16$$

(a) + and \times

(b) - and +

(c) \div and \times

(d) - and \div

Q76. Which two sign should be interchanged in the following equation to make it correct?

$$12 - 6 \div 12 \times 6 + 6 = 9$$

(a) \div and \times

(b) + and \div

(c) - and +

(d) \times and +

Q77. What will be the value of following equation if '÷' means 'addition', '+' means 'subtraction', '-' mean 'multiplication' and 'x' means 'division'?

$$72 \times 9 - 3 \div 8 + 2 = ?$$

- (a) 25
- (b) 30
- (c) 40
- (d) 35

Q78. Which of the two signs should be interchanged in the following equation to make the given value correct?

$$15 + 5 - 10 \times 6 \div 12 = 6$$

- (a) + and ÷
- (b) - and ÷
- (c) + and ×
- (d) + and -

Q79. Which two signs should be interchanged in the following equation to make it correct?

$$9 - 3 + 12 \times 8 \div 4 = 11$$

- (a) + and -
- (b) + and ×
- (c) - and ÷
- (d) + and ÷

Q80. If + denotes -, - denotes *, * denotes /, / denotes +, then what will be the numeric value of

$$60 * 10 / 40 + 6 - 5 =$$

- (a) 3
- (b) 144
- (c) 16
- (d) 200

Q81. Select the correct mirror image of the given figure when the mirror is placed to the right of the figure.



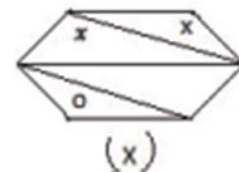
- (a)
- (b)
- (c)
- (d)

Q82. Select the correct mirror image of the given figure when the mirror is placed to the right of the figure.



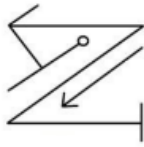
- (a)
- (b)
- (c)
- (d)

Q83. Select the correct mirror image of the given figure when the mirror is placed to the right of the figure.



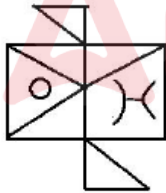
- (a)
- (b)
- (c)
- (d)

Q84. Select the correct mirror image of the given figure when the mirror is placed to the right of the figure.



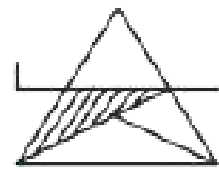
- (a)
- (b)
- (c)
- (d)

Q85. Select the correct mirror image of the given figure when the mirror is placed to the right of the figure.



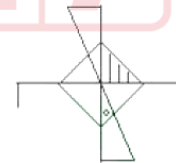
- (a)
- (b)
- (c)
- (d)

Q86. Identify the mirror image of the following figure when the mirror is placed to the right of the figure.



- (a)
- (b)
- (c)
- (d)

Q87. Identify the mirror image of the following figure of the mirror is placed to the right of the figure.



- (a)
- (b)
- (c)
- (d)

Q88. Select the mirror image of the given when the mirror is placed to the right of the figure.



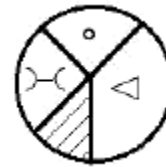
- (a)
- (b)
- (c)
- (d)

Q89. Select the mirror image of the given figure when the mirror is placed to the right of the figure.



- (a)
- (b)
- (c)
- (d)

Q90. Select the mirror image of the given figure when the mirror is placed to the right of the figure.



- (a)
- (b)
- (c)
- (d)

Q91. Select the combination of letters that when sequentially placed in the gaps of the given letter series will complete the series.

b_bab_bc_abbb_ba_b

- (a) cbbac
- (b) cbabc
- (c) cbbcb
- (d) bcbab

Q92. Which number will replace the question mark (?) in the following series ?

3, 7, 16, 35, ?, 153

- (a) 84
- (b) 74
- (c) 78
- (d) 63

Q93. Which number will replace the question mark (?) in the following series?

2, 5, 11, 23, 44, ?

- (a) 77
- (b) 51
- (c) 63
- (d) 66

Q94. Select the combination of letters that when sequentially placed in the gaps of the given letter series will complete the series.

ac_d_b_cbdd_a_bddb

- (a) bdabc
- (b) bdbca
- (c) bdcab
- (d) cbdbc

Q95. Select the combination of letters that when sequentially placed in the gaps of the given letter series will complete the series.

cb_db_cba_bc_bad_c

- (a) acdcb
- (b) cabdc
- (c) acbcd
- (d) dcacb

Q96. Which number will replace the question mark (?) in the following series?

98, 95, 86, 82, 66, ?, 36

- (a) 58
- (b) 60
- (c) 61
- (d) 63

Q97. Which number will replace the question mark (?) in the following series?

2, 3, 6, 10, 17, 28, ?

- (a) 45
- (b) 39
- (c) 43
- (d) 46

Q98. Select the term that will come in the place of '?'

7, 11, 19, 31, ?, 67

- (a) 45
- (b) 51
- (c) 43
- (d) 47

Q99. Find the next number in the given series.

3, 13, 31, ?, 91

- (a) 48
- (b) 13
- (c) 69
- (d) 57

Q100. Select the term that will come next in the following series.

3, 5, 10, 20, 37, ?

- (a) 58
- (b) 61
- (c) 69
- (d) 63



Solutions

S1. Ans.(d)

Sol.

$$(3, 24, 4) \rightarrow 3 \times 4 \times 2 = 24$$

similarly, option (d)

$$(4, 72, 9) \rightarrow 4 \times 9 \times 2 = 72$$

S2. Ans.(d)

Sol.

$$C \xrightarrow{+3} F \xrightarrow{+3} I \xrightarrow{+3} L$$

$$G \xrightarrow{+1} H \xrightarrow{+1} I \xrightarrow{+1} J$$

$$M \xrightarrow{+2} O \xrightarrow{+2} Q \xrightarrow{+2} S$$

S3. Ans(c)

Sol. Except 254, all are multiple of 7.

S4. Ans.(c)

Sol.

Lawyer → Justice

same as

Arbitrator → settlement

S5. Ans.(c)

Sol.

$$\begin{array}{cccc} C & E & G & I \\ -2 & +2 & -2 & +2 \\ A & G & E & K \end{array} \quad \begin{array}{cccc} D & F & H & J \\ -2 & +2 & -2 & +2 \\ B & H & F & L \end{array}$$

S6. Ans.(a)

Sol.

$$\begin{array}{cc} 36 & : & 84 \\ \downarrow & & \downarrow \\ 12 \times 3 & & 12 \times 7 \end{array}$$

Similarly,

$$\begin{array}{cc} 27 & : & 63 \\ \downarrow & & \downarrow \\ 9 \times 3 & & 9 \times 7 \end{array}$$

S7. Ans.(b)

Sol.

Thesaurus is a sub group of book

same as python is subgroup of reptile

S8. Ans.(d)

Sol. $4 = 4^3 \div 2 = 64 \div 2 = 32$

$6 = 6^3 \div 2 = 216 \div 2 = 108$

S9. Ans.(c)

Sol. Action leads to Reaction, Stimulus leads to response

S10. Ans.(b)

Sol. Pair of opposite letters

S11. Ans.(c)

Sol.

ATQ,

$$B + C = 2A \quad \dots(i)$$

$$A + C = 4B \quad \dots(ii)$$

solving (i) & (ii) we get

$$A : B : C = 5 : 3 : 7$$

$$\therefore \text{Required amount} = \frac{1875}{15} \times 2 = 250$$

S12. Ans.(b)

Sol.

$$\frac{F-10}{S-10} = \frac{7}{2}$$

$$\Rightarrow 2F - 20 = 7S - 70$$

$$\Rightarrow 2F - 7S = -50 \quad \dots(i)$$

Also,

$$\frac{F+10}{S+10} = \frac{9}{4}$$

$$\Rightarrow 4F + 40 = 9S + 90$$

$$\Rightarrow 4F - 9S = 50 \quad \dots(ii)$$

on solving (i) and (ii)

$$F = 80, S = 30$$

$$F + S = 110$$

S13. Ans.(d)

Sol.

	Milk	Juice
A	$\rightarrow 2 \times 3 = 6$	$1 \times 3 = 3 \Rightarrow 3 \times 3$
B	$\rightarrow 4$	$5 \Rightarrow 9$
10	8	
Required ratio = 5 : 4		

S14. Ans.(a)

Sol. Let money received by

$$b = 2x$$

$$m = 3x$$

$$w = m + b$$

$$w = 5x$$

$$= 6m + 8w + 12b$$

$$= 6 \times 3x + 8 \times 5x + 12 \times 2x$$

$$= 18x + 40x + 24x$$

$$= 82x$$

$$82x \rightarrow 820$$

$$x = 10$$

total amount received by women = $40x = \text{Rs. } 400$.

S15. Ans.(c)

Sol. Let age of Mitali and Shabnam be $4x$ and $7x$ respectively

ATQ,

$$(7x + 5) - (4x + 5) = 18$$

$$3x = 18$$

$$x = 6$$

$$\text{sum of ages} = 4x + 7x = 11x = 66 \text{ years.}$$

S16. Ans.(a)

Sol. 115 ---- Rs. 4140

$$125 = \frac{4140}{115} \times 125 = \text{Rs. 4500}$$

S17. Ans.(d)

Sol. Total sum of all 9 numbers = $40 \times 9 = 360$

New,

$$\text{Sum of first five numbers} = 38 \times 5 = 190$$

and

$$\text{Sum of last five numbers} = 50 \times 5 = 250$$

\therefore Fifth number

$$= (250 + 190) - 360$$

$$= 440 - 360 = 80$$

S18. Ans.(b)

Sol. $D - N = 5$, $N = 3T$

$$T = 10 \Rightarrow N = 30$$

$$\Rightarrow D = 35$$

At the time of daughter's birth, Deepak's age = $35 - 10 = 25$ years

S19. Ans.(a)

Sol.

Son Father

Present age x $2x$

$$\text{A.T.Q.} \Rightarrow 2x - 20 = 12 (x - 20)$$

$$x = 22$$

$$\therefore \text{son} = 22 \text{ yrs.}$$

$$\text{Father} = 44 \text{ yrs.}$$

S20. Ans.(c)

Sol.

B : G

2 : 1

$$2G = B$$

$$(G + 3) = (B - 5)$$

$$G + 3 = 2G - 5$$

$$8 = G$$

$$B = 16$$

Before 1 hour, number of persons

$$\text{in party} = G + B$$

$$= 8 + 16$$

$$= 24$$

S21. Ans.(b)

Sol.

DIG

$$4 + 9 + 7 = 20 + 5 = 25$$

CUT

$$3 + 21 + 20 = 44 + 5 = 49$$

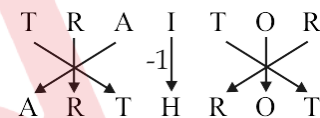
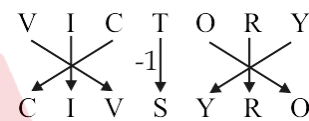
Similarly,

KICK

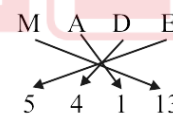
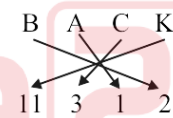
$$11 + 9 + 3 + 11 = 34 + 5 = 39$$

S22. Ans.(d)

Sol.

**S23. Ans.(b)**

Sol.

**S24. Ans.(a)**

Sol. -1 pattern in reverse order.

S25. Ans.(b)

Sol. +1, +2, +3, +4, +5, +6 pattern.

S26. Ans.(b)

Sol.

S U N D A Y \longrightarrow D N U A Y S
1 2 3 4 5 6 4 3 2 5 6 1

Similarly,

M O T H E R \longrightarrow H T O E R M
1 2 3 4 5 6 4 3 2 5 6 1

S27. Ans.(c)

Sol.

C A B

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

B E D

$$2 \times 5 \times 4 = 40$$

H A D

$$8 \times 1 \times 4 = 32$$

S28. Ans.(c)

Sol.

Same as

C	O	M	P	U	T	E	R
1	2	3	4	5	6	7	8
O	C	R	E	P	M	T	U
2	1	8	7	4	3	6	5

D	A	U	G	H	T	E	R
1	2	3	4	5	6	7	8

A	D	R	E	G	U	T	H
2	1	8	7	4	3	6	5

S29. Ans.(b)

Sol. Direct individual code

S30. Ans.(d)

Sol.

T	E	A	C	H	I	N	G
-1	-1	+1	+1	-1	-1	+1	+1
S	D	B	D	G	H	O	H

B	O	O	K	W	O	R	M
-1	-1	+1	+1	-1	-1	+1	+1
A	N	P	L	V	N	S	N

S31. Ans.(d)

S32. Ans.(b)

Sol. There are 18 triangles

S33. Ans.(d)

S34. Ans.(d)

S35. Ans.(d)

S36. Ans.(a)

S37. Ans.(d)

S38. Ans.(a)

S39. Ans.(b)

Sol. 29 triangles.

S40. Ans.(c)

S41. Ans.(d)

Sol.

Opposite side

$$1 \rightarrow 5 \rightarrow 6$$

$$1 \rightarrow 3 \rightarrow 2$$

S42. Ans.(b)

Sol.

Opposite faces are

$$3 \rightarrow 6$$

$$5 \rightarrow 2$$

$$1 \rightarrow 4$$

S43. Ans.(c)

Sol. Opposite faces are

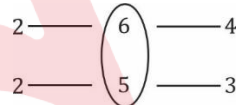
$$2 \longleftrightarrow 3$$

$$1 \longleftrightarrow 5$$

$$4 \longleftrightarrow 6$$

S44. Ans.(a)

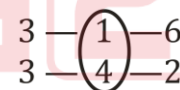
Sol.



3 at the top

S45. Ans.(a)

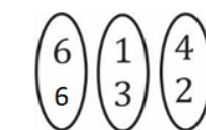
Sol.



4 is opposite to 1

S46. Ans.(c)

Sol.



3 is opposite to 1.

S47. Ans.(b)

Sol. Opposite faces are -

$$3 \leftrightarrow 5$$

$$4 \leftrightarrow 2$$

$$1 \leftrightarrow 6$$

S48. Ans.(d)

Sol. Opposite letters are:

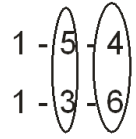
3 \longleftrightarrow 5

2 \longleftrightarrow 6

4 \longleftrightarrow 1

S49. Ans.(c)

Sol.



5 is at top if 3 is at bottom.

S50. Ans.(b)

Sol. $4 \rightarrow 1 \rightarrow 3$

$4 \rightarrow 2 \rightarrow 6$

4 is opposite of 5

S51. Ans.(d)

S52. Ans.(a)

S53. Ans.(a)

S54. Ans.(d)

S55. Ans.(c)

S56. Ans.(d)

S57. Ans.(c)

S58. Ans.(d)

S59. Ans.(c)

S60. Ans.(a)

S61. Ans.(d)

S62. Ans.(d)

S63. Ans.(d)

Sol. Circle is rotated 2 blocks anti-clockwise in each step. Cross is rotated clockwise by 1, 2, 3 and 4 blocks in each step.

S64. Ans.(b)

S65. Ans.(a)

S66. Ans.(d)

S67. Ans.(c)

Sol. Small circle moves one block clockwise. And lines moves +1, +2, +3 blocks clockwise in each step.

S68. Ans.(b)

S69. Ans.(b)

S70. Ans.(d)

S71. Ans.(a)

Sol. $12 - 8 \div 12 \times 9 + 3 = 9$

$12 - \frac{8}{12} \times 9 + 3 = 9$

$12 - 6 + 3 = 9$

S72. Ans.(b)

Sol. $18 + 6 - 6 \div 3 \times 3 = 6$

on interchanging + and \div

$18 \div 6 - 6 + 3 \times 3$

$3 - 6 + 9 = 6 = \text{RHS}$

S73. Ans.(c)

Sol. $54 \div 6 \times 7 + 8 - 2$

$= 63 + 8 - 2 = 69$

S74. Ans.(b)

Sol. $15 + 9 \div 6 \times 10 - 5$

$= 15 + 15 - 5 = 25 = \text{RHS}$

S75. Ans.(b)

Sol. $10 - 5 / 10 \times 8 + 10 = 16$

$10 - \frac{1}{2} \times 8 + 10 = 16$

$20 - 4 = 16$

$16 = 16$

S76. Ans.(c)

Sol. $12 + 6 \div 12 \times 6 - 6 = 9$

$12 + 6/2 - 6 = 9$

$15 - 6 = 9$

$9 = 9$

S77. Ans.(b)

Sol. $72 \div 9 \times 3 + 8 - 2$

$\Rightarrow 24 + 8 - 2 = 30$

S78. Ans.(b)

Sol. On interchanging - and \div ,

$$15 + 5 \div 10 \times 6 - 12 \\ = 15 + 3 - 12 = 6 = \text{RHS}$$

S79. Ans.(d)

Sol. On interchanging + and \div

$$\text{LHS} = 9 - 3 \div 12 \times 8 + 4 \\ = 9 - 2 + 4 = 11 = \text{RHS}$$

S80. Ans.(c)

$$\text{Sol. } \frac{60}{10} + 40 - 6 \times 5 \\ = 6 + 40 - 30 \\ = 16$$

S81. Ans.(d)

S82. Ans.(c)

S83. Ans.(d)

S84. Ans.(c)

S85. Ans.(b)

S86. Ans.(c)

S87. Ans.(b)

S88. Ans.(b)

S89. Ans.(a)

S90. Ans.(c)

S91. Ans.(c)

sol.

b c b a b b | b c b a b b | b c b a b b

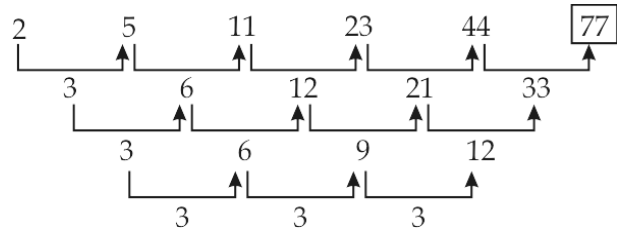
S92. ans.(b)

sol.

$$3 \times 2 + 1 = 7 \\ 7 \times 2 + 2 = 16 \\ 16 \times 2 + 3 = 35 \\ 35 \times 2 + 4 = 74 \\ 74 \times 2 + 5 = 153$$

S93. Ans.(a)

Sol.



S94. Ans.(a)

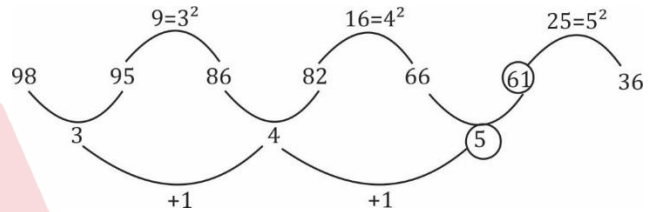
Sol. acbddb/acbddb/acbddb

S95. Ans.(a)

Sol. cbadbc/cbadbc/cbadbc

S96. Ans.(c)

Sol.



S97. Ans.(d)

Sol. $3 + 2 + 1 = 6$

$$6 + 3 + 1 = 10$$

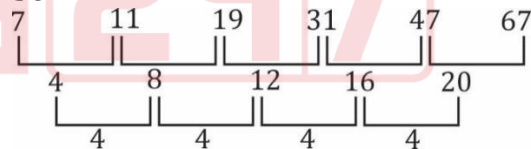
$$10 + 6 + 1 = 17$$

$$17 + 10 + 1 = 28$$

$$28 + 17 + 1 = 46$$

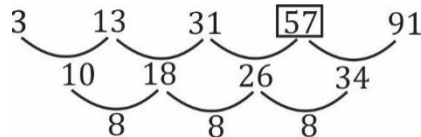
S98. Ans.(d)

Sol.



S99. Ans.(d)

Sol.



S100. Ans.(d)

Sol.

