

## SSC CGL Tier-II Paper-I 2022-23 Memory Based (Reasoning) (Based on 02 Mar 2023 Exam)

**Q1.** Which of the following numbers will replace the question mark (?) in the given series?

68, 189, 333, 502, ?

- (a) 625
- (b) 698
- (c) 729
- (d) 564

**Q2.** Study the given pattern carefully and select the number that can replace the question mark (?) in it.

First row - 54, 64, 10

Second row - 4, 13, 9

Third row - 23, 88, ?

- (a) 43
- (b) 63
- (c) 51
- (d) 65

**Q3.** Eight students A,B,C,D,E,F,G and H are sitting around a circular table facing inwards with equal distance between them but not necessarily in the same order. H sits second to the right of C. Three people sit between F and G. B and A are immediate neighbours. G is neither adjacent to H nor C. B sits opposite D who is not an immediate neighbour of C. who sits opposite A?

- (a) G
- (b) H
- (c) F
- (d) D

**Q4.** In a school there are five students J,K,L, M and N, who each go to school only once in a week. The school open for 5 days a week. L goes on Monday. J and K go on consecutive days. J goes the next day to that of L. There is a gap of two days between the days on which J and K go to work. On which of the given days N would be going to the school?

- (a) Tuesday
- (b) Thursday
- (c) Friday
- (d) Monday

**Q5.** 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:**

Some chairs are Bus.

All Road are Car.

All Bus are Road.

**Conclusion:**

I. Some chairs are Road.

II. All Road are Bus.

III. All Car are chairs.

- (a) Only conclusion I follows
- (b) Only conclusions I and II follow
- (c) Only conclusions I and III follow
- (d) Only conclusion II follows

**Q6.** Two teams, of 3 players each are taking part in quiz. Players of one team are sitting facing the 3 players of the second team. A and B are sitting facing each other. C and D are in different teams. E is sitting facing C. F is at one of the corners. C is sitting to the immediate right of A. Which of the following are members of the same team?

- (a) D,E and F
- (b) B,C and E
- (c) A, C and E
- (d) A, C and F



**Q7.** In the following question, one statement is given and these statements are followed by three conclusions numbered (I) to (III). You have to take the given statement to be true. Read the conclusions and then decide which of the given conclusions logically follows.

**Statements:**

$$Z \leq Y = X < P = S$$

**Conclusions:**

(I)  $Y \leq S$

(II)  $X < S$

(III)  $Z = P$

Only (I) conclusion follows

Only (II) conclusion follows

Only (III) conclusion follows

Both (II) and (III) follow

**Q8.** 6 people are sitting in a row. Abhinav is sitting towards the immediate left of Bhushan and the immediate right of Chinu. Chinu is sitting to the immediate right of Komal. Dhiraj is the immediate right of Ram who is to the left of Komal, then which two people are sitting in the center?

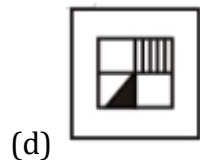
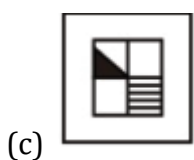
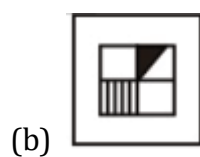
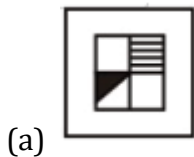
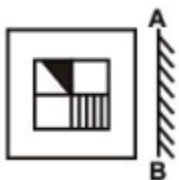
(a) Ram and Chinu

(b) Komal and Chinu

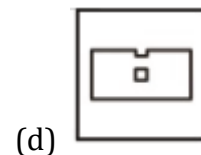
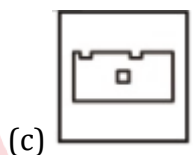
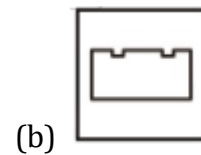
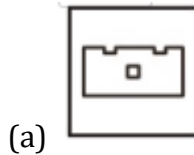
(c) Abhinav and Bhushan

(d) Komal and Dhiraj

**Q9.** Select the mirror image of the figure when the mirror is placed right side of the figure.



**Q10.** The sequence of folding a piece of square paper and the manner in which the folded paper has been cut is shown in the figures x, y and z. How would this paper look when unfolded?



**Q11.** X stands for +, Z stands for  $\div$ , Y stands for -, and P stands for  $\times$ , then what is the value of  $12 P 5 X 20 Y 49 Z 7 = ?$

(a) 65

(b) 73

(c) 83

(d) 89

**Q12.** 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 decided which of the conclusions logically follow from the statement.

**Statements:**

Some Books are Gloves.

Some Gloves are T-shirt.

Some T-shirt are Shirt.

**Conclusions:**

I. Some Books are T-shirts

II. Some Shirt are Books

III. Some Books are Shirt.

(a) All follows

(b) Only I and II follows

(c) Only I and III follow

(d) None of the above

**Q13.** Select the set of numbers that is similar to the following set of numbers.

(27, 36, 45)

- (a) (43, 52, 60)
- (b) (45, 55, 70)
- (c) (34, 40, 30)
- (d) (21, 16, 30)

**Q14.** If 'P 3 Q' means 'P is daughter of Q', 'P 5 Q' means 'P is father of Q', 'P 7 Q' means 'P is mother of Q' and 'P 9 Q' means 'P is sister of Q', then how is J related to K in J 3 L 9 N 3 O 5 K?

- (a) Mother
- (b) Wife
- (c) Niece
- (d) Daughter

**Q15.** A + B means A is the brother of B

T - S means T is the father of S

P / Q means P is the sister of Q,

U \* V means V is the mother of U.

Which of the following means that F is the mother of E?

- (a) L + M / F \* E
- (b) L - M \* F / E
- (c) M + L / E \* F
- (d) F / M \* L / E

**Q16.** Find out the alternative which will replace the question mark.

9:738 :: 12:?

- (a) 1840
- (b) 1740
- (c) 1728
- (d) 1746

**Q17.** Which of the following number will replace the question mark (?) in the given series?

8, 17, 5, ?, 2, 11

- (a) 15
- (b) 14
- (c) 18
- (d) 21

**Q18.** Study the given pattern carefully and select the number that can replace the question mark (?) in it.

First row - 67, 25, 151

Second row - 55, 17, 131

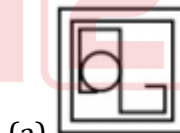
Third row - 44, 19, ?

- (a) 94
- (b) 87
- (c) 99
- (d) 101

**Q19.** Position of R in a row is 11<sup>th</sup> from front and position of P is 14<sup>th</sup> from bottom. If they interchange their places then position of R would be 17<sup>th</sup> from front. How many persons is in the row?

- (a) 28
- (b) 27
- (c) 30
- (d) 26

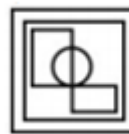
**Q20.** From the given answer figures, select the one in which the question figure is hidden/embedded.



(a)



(b)



(c)



(d)

**Q21.** Stimulus is related to Response in the same way as Action is related to:

- (a) Reception
- (b) Vision
- (c) Reaction
- (d) Feedback

**Q22.** A, B, C, D and E are the five persons in the group. How many persons are taller than E?

I. A is taller than B, who was only shorter than A and E.

II. C is shorter than A, who was shorter than E

- (a) Only statement I is sufficient to answer.
- (b) Only statement II is sufficient to answer.
- (c) Neither statement I nor statement II is sufficient to answer.
- (d) Both statements I and II sufficient to answer

**Q23.** In a certain language, code ACCIDENT is coded as BADGECOR. How will OPERATION will be coded as:

- (a) PNFNBSJMM
- (b) PNFPBRJMO
- (c) PMENBSJMN
- (d) PNFQCJMO

**Q24.** Select the set in which the numbers are related in the same way as are the numbers of the following set.

- (8, 30, 9)
- (a) (8, 24, 16)
- (b) (27, 60, 16)
- (c) (16, 40, 25)
- (d) (27, 50, 25)

**Q25.** Three of the following four numbers are alike in certain ways and one is different. Pick the number that is different from the rest.

- (a) 162
- (b) 198
- (c) 452
- (d) 252

**Q26.** If IT = 92, J = 1, and M = 31, then how will you code EGG?

- (a) 91
- (b) 95
- (c) 19
- (d) 99

**Q27.** Four words have been given, out of which three are alike in some manner and one is different. Select the odd one.

- (a) Momentum
- (b) Force
- (c) Tissue
- (d) Speed

**Q28.** A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

3, 10, 29, 66, 127, ?

- (a) 216
- (b) 218
- (c) 225
- (d) 149

**Q29.** At what angle, the hands of a clock are inclined at 20 minutes past 11?

- (a) 175°
- (b) 220°
- (c) 190°
- (d) 150°

**Q30.** Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

- (a) BEHK
- (b) WYAC
- (c) IJKL
- (d) PRTU



# Solutions

**S1. Ans.(b)**

**Sol.** The pattern is

$$\begin{array}{cccccc}
 68 & 189 & 333 & 502 & 698 \\
 +121 & +144 & +169 & +196 & \\
 (11)^2 & +(12)^2 & +(13)^2 & +(14)^2 & 
 \end{array}$$

**S2. Ans.(d)**

**Sol.** The logic here is  
First + Third = Second

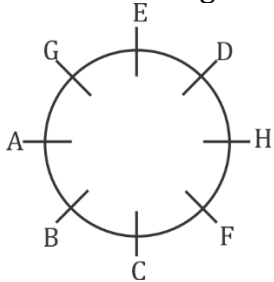
$$54 + 10 = 64$$

Similarly,

$$23 + 65 = 88$$

**S3. Ans.(b)**

**Sol.** The arrangement is



Hence, H sits opposite A.

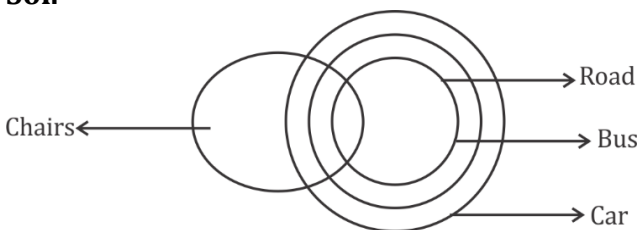
**S4. Ans.(b)**

**Sol.**

Days	Students
Monday	L
Tuesday	J
Wednesday	K
Thursday	N
Friday	M

**S5. Ans.(a)**

**Sol.**



Only Conclusion I follow

**S6. Ans.(d)**

**Sol.**

Team 1	B	E	D
Team 2	A	C	F

**S7. Ans.(b)**

**Sol.**  $Z = Y, Y = X, P = S$

$X < P$  and  $P = S$

Hence  $X < S$

**S8. Ans.(c)**

**Sol.**



Hence, Komal and Chinu is answer.

**S9. Ans.(b)**

**Sol.**

**S10. Ans.(a)**

**Sol.**

**S11. Ans.(b)**

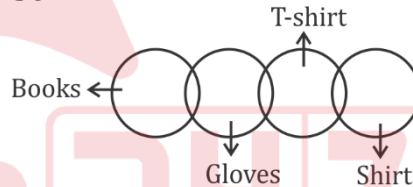
**Sol.**  $12 P 5 X 20 Y 49 Z 7$

$$= 12 \times 5 + 20 - 49 \div 7$$

$$= -60 + 20 - 7 = 73$$

**S12. Ans.(d)**

**Sol.**



**S13. Ans.(c)**

**Sol.** The pattern is

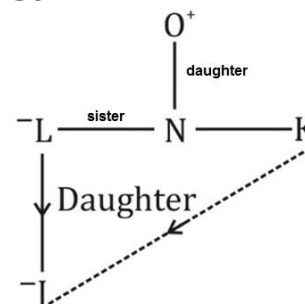
$$(27, 36, 45) = 36 - 27 = 9 \times 5 = 45$$

Similarly,

$$(40, 34, 30) = (40 - 34) = 6 \times 5 = 30$$

**S14. Ans.(c)**

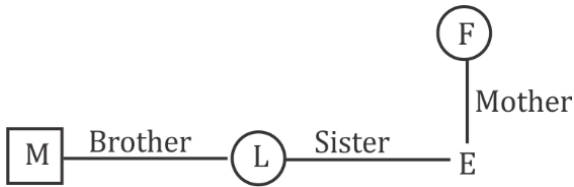
**Sol.**



J is the niece of K

S15. Ans.(c)

Sol.



S16. Ans.(b)

Sol. The pattern is

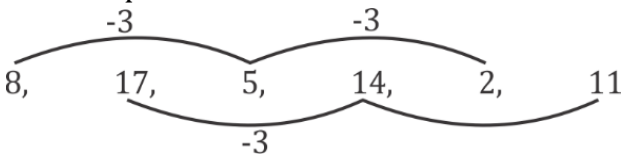
$$(9 : 738) - 9^3 + 9 = 738$$

Similarly,

$$(12, 1740) - (12)^3 + 12 = 1740$$

S17. Ans.(b)

Sol. The pattern is



S18. Ans.(a)

Sol. The pattern is

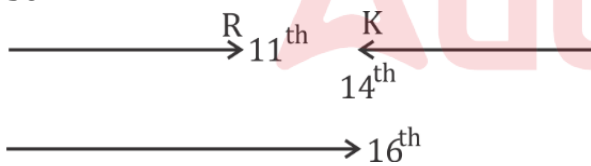
In Rows

$$(Ist) \times 3 - (IInd) \times 2 = IIIrd$$

$$44 \times 3 - 19 \times 2 = 94$$

S19. Ans.(b)

Sol.



$$\text{Total Person} = 16 + 11 = 27$$

S20. Ans.(c)

Sol.

S21. Ans.(c)

Sol

Sol.22 Ans (d)

Sol. According to question

$$E > A > B > C > D$$

Both statement sufficient to answer.

S23. Ans(b)

Sol.

Given

ACCIDENT  $\rightarrow$  BADGECOR

Pattern follows is

$$A + 1 = B$$

$$C - 2 = A$$

$$C + 1 = D$$

$$I - 2 = G$$

$$D + 1 = E$$

$$E - 2 = C$$

$$N + 1 = O$$

$$T - 2 = R$$

Similarly

OPERATION  $\rightarrow$

$$O + 1 = P, P - 2 = N, E + 1 = F, R - 2 = P, A + 1 = B,$$

$$T - 2 = R, I + 1 = J, O - 2 = M, N + 1 = O$$

The answer is PNFPRJMO

S24. Ans.(b)

Sol.

$$2^3 \quad 3^2$$

$$2 \times 3 \times 5 \rightarrow 30$$

Similarly,

$$3^3 \quad 4^2$$

$$3 \times 4 \times 5 = 60$$

S25. Ans.(c)

Sol. Digit sum of all is multiple of 9 except (c)

S26. Ans.(a)

Sol. As,  $IT = 9 + 20 = 29$

So, logic is interchanging of digits place, i.e 29 changes to 92

$$J = 10$$

So, 10 changes to 01 = 1

$$EGG = 5 + 7 + 7 = 19$$

So, 19 changes to 91.

S27. Ans.(c)

Sol.

As, momentum, force and speed are the terms related to subject physics but tissue is related to biology.

S28. Ans.(b)

Sol.

Pattern is:

$$1^3 + 2 = 1 + 2 = 3$$

$$2^3 + 2 = 8 + 2 = 10$$

$$3^3 + 2 = 27 + 2 = 29$$

$$4^3 + 2 = 64 + 2 = 66$$

$$5^3 + 2 = 125 + 2 = 127$$

$$6^3 + 2 = 216 + 2 = 218$$

S29. Ans. (b)

Sol.

$$\theta = \left| \frac{11M - 60H}{2} \right|$$
$$\theta = \left| \frac{11 \times 20 - 60 \times 11}{2} \right| = \left| \frac{220 - 660}{2} \right| = 220^\circ$$

S30. Ans.(d)

Sol.

$$\begin{array}{cccc} \text{B} & \text{E} & \text{H} & \text{K} \\ \underbrace{\hspace{1em}}_{+3} & \underbrace{\hspace{1em}}_{+3} & \underbrace{\hspace{1em}}_{+3} & \\ \text{W} & \text{Y} & \text{A} & \text{C} \\ \underbrace{\hspace{1em}}_{+2} & \underbrace{\hspace{1em}}_{+2} & \underbrace{\hspace{1em}}_{+2} & \\ \text{I} & \text{J} & \text{K} & \text{L} \\ \underbrace{\hspace{1em}}_{+1} & \underbrace{\hspace{1em}}_{+1} & \underbrace{\hspace{1em}}_{+1} & \\ \text{P} & \text{R} & \text{T} & \text{U} \\ \underbrace{\hspace{1em}}_{+2} & \underbrace{\hspace{1em}}_{+2} & \underbrace{\hspace{1em}}_{+1} & \end{array}$$

