

## EXERCISE 11A

## For SSC GD &amp; MTS Exams

- Which two numbers should be interchanged to make the given equation correct? **SSC MTS 18/10/2021 (Shift-3)**  
 $14 + 32 - 56 \div 28 \times 5 = 40$   
 (a) 28 and 32 (b) 5 and 14  
 (c) 14 and 32 (d) 28 and 14
- If A denotes 'addition', B denotes 'multiplication', C denotes 'subtraction', and D denotes 'division', then what will be the value of the following expression?  
**SSC MTS 18/10/2021 (Shift-3)**  
 $14 B (18 D 3) A 5 B 7 C 12 B (24 D 4)$   
 (a) 47 (b) 77 (c) 41 (d) 53
- If  $\div$  is interchanged with  $+$ , and  $\times$  is interchanged with  $-$ , then which of the following equations is correct?  
**SSC MTS 18/10/2021 (Shift-2)**  
 (a)  $24 \times 84 + 12 \div 16 - 7 = 129$   
 (b)  $24 + 84 \div 12 - 16 \times 7 = 129$   
 (c)  $24 - 84 \div 12 + 16 \times 7 = 129$   
 (d)  $24 - 84 \div 12 + 16 + 7 = 129$
- Which two digits and signs can be interchanged so as to balance the given equation?  
**SSC MTS 18/10/2021 (Shift-2)**  
 $46 \times 6 + 32 - 12 \div 8 = -34$   
 (a) 8 and 6;  $\div$  and  $\times$  (b) 3 and 2;  $\times$  and  $-$   
 (c) 6 and 2;  $+$  and  $\times$  (d) 4 and 6;  $\div$  and  $+$
- In a certain language, if 4 and 6 are interchanged and 6 and 9 are interchanged, then which of the following numbers will be the highest? **SSC MTS 18/10/2021 (Shift-1)**  
 (a) 7486 (b) 4555  
 (c) 9383 (d) 7458
- In a certain language, if '+' means 'division', 'x' means 'subtraction', ' $\div$ ' means 'addition', and '-' means 'multiplication', then find the value of the following expression (apply BODMAS). **SSC MTS 18/10/2021 (Shift-1)**  
 $24 \div 6 - 2 + 4 \times 2$   
 (a) 25 (b) 13 (c) 12 (d) 10
- Which two numbers and signs can be interchanged so as to balance the given equation?  
**SSC MTS 14/10/2021 (Shift-3)**  
 $18 \times 7 \div 36 + 78 - 14 = 86$   
 (a) 4 and 4;  $-$  and  $+$  (b) 1 and 4;  $\times$  and  $\div$   
 (c) 3 and 4;  $\times$  and  $+$  (d) 4 and 3;  $\div$  and  $-$
- Select the correct sequence of mathematical signs to replace the \* signs so as to balance the given equation.  
**SSC MTS 14/10/2021 (Shift-3)**  
 $78 * 26 * 4 * 13 * 28 = 58$   
 (a)  $+$   $\div$   $\times$   $+$  (b)  $\div$   $+$   $\times$   $-$   
 (c)  $-$   $\div$   $+$   $\times$  (d)  $+$   $\times$   $\div$   $-$
- In a certain language, if '+' means 'multiplication', 'x' means 'division', ' $\div$ ' means 'subtraction', and '-' means 'addition', then find the value of the following expression. (Apply BODMAS) **SSC MTS 14/10/2021 (Shift-2)**  
 $18 \div 6 \times 3 - 4 + 5$   
 (a) 36 (b) 1 (c) 28 (d) 40
- In a certain language, if the digits 7 and 2 are interchanged and 3 and 4 are interchanged, then what is the value of the following expression?  
**SSC MTS 14/10/2021 (Shift-2)**  
 $52 \div 4 - 7 \times 5 + 3$   
 (a) 33 (b) 17 (c) 15 (d) 13
- $72 * 4 * 15 * 3 * 12 = 51$  **SSC MTS 14/10/2021 (Shift-1)**  
 (a)  $\div$ ,  $+$ ,  $\times$ ,  $-$  (b)  $-$ ,  $+$ ,  $\div$ ,  $\times$   
 (c)  $\div$ ,  $+$ ,  $-$ ,  $\times$  (d)  $+$ ,  $\div$ ,  $\times$ ,  $-$
- Which two signs should be interchanged to make the given equation correct? **SSC MTS 14/10/2021 (Shift-1)**  
 $36 - 6 \div 6 \times 6 + 30 = 0$   
 (a)  $-$  and  $+$  (b)  $+$  and  $\times$   
 (c)  $\div$  and  $\times$  (d)  $-$  and  $\div$
- Select the correct sequence of mathematical signs to sequentially replace the letters A, B, C, D and E so as to balance the given equation. **SSC MTS 12/10/2021 (Shift-1)**  
 $(38 A 17) B 9 C 117 D 13 E 94 = 104$   
 (a)  $\times$ ,  $\div$ ,  $+$ ,  $-$ ,  $-$  (b)  $+$ ,  $\div$ ,  $\times$ ,  $+$ ,  $-$   
 (c)  $-$ ,  $\times$ ,  $+$ ,  $\div$ ,  $-$  (d)  $\times$ ,  $-$ ,  $\div$ ,  $+$ ,  $-$
- Which two digits can be interchanged so as to balance the given equation? **SSC MTS 12/10/2021 (Shift-1)**  
 $186 \div 17 + 104 - 12 \times 3 = 16$   
 (a) 2 and 7 (b) 8 and 3  
 (c) 6 and 4 (d) 4 and 7
- Which two signs should be interchanged to make the given equation correct? **SSC MTS 11/10/2021 (Shift-3)**  
 $3 \div 6 - 2 + 8 \times 4 = 18$   
 (a)  $\div$  and  $-$  (b)  $+$  and  $\div$   
 (c)  $\div$  and  $\times$  (d)  $+$  and  $-$
- $7 * 2 * 5 * 4 * 2 * 15$  **SSC MTS 11/10/2021 (Shift-3)**  
 (a)  $\div$ ,  $-$ ,  $+$ ,  $\times$ ,  $=$  (b)  $-$ ,  $\div$ ,  $+$ ,  $\times$ ,  $=$   
 (c)  $+$ ,  $\times$ ,  $-$ ,  $\div$ ,  $=$  (d)  $\times$ ,  $-$ ,  $+$ ,  $\div$ ,  $=$
- Which two signs should be interchanged to make the given equation correct? **SSC MTS 11/10/2021 (Shift-2)**  
 $8 \times 4 - 7 + 8 \div 2 = 35$   
 (a)  $+$  and  $-$  (b)  $\div$  and  $-$   
 (c)  $-$  and  $\times$  (d)  $\times$  and  $\div$
- $17 * 3 * 6 * 2 * 7 * 55$  **SSC MTS 11/10/2021 (Shift-2)**  
 (a)  $\times$ ,  $-$ ,  $\div$ ,  $+$ ,  $=$  (b)  $-$ ,  $\div$ ,  $+$ ,  $\times$ ,  $=$   
 (c)  $\div$ ,  $+$ ,  $-$ ,  $\times$ ,  $=$  (d)  $-$ ,  $+$ ,  $\div$ ,  $\times$ ,  $=$

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19. If A is coded as '+', B is coded as 'x', C is coded as '÷' and D is coded as '-', then **SSC MTS 22/08/2019 (Shift-1)**  
 $18 A 6 B 2 C 16 B 4 D 21 = ?$   
 (a) 2 (b) -1 (c) 0 (d) 1
20. In order to make the given equation correct, which two will have to be interchanged? **SSC MTS 21/08/2019 (Shift-3)**  
 $64 \times 2 + 24 \div 3 - 8 = 96$   
 (a) -, x (b) +, ÷  
 (c) x, ÷ (d) -, +
21. Which two numbers are interchanged to make the given equation correct? **SSC MTS 21/08/2019 (Shift-3)**  
 $15 - 5 + 75 \div 30 \times 2 = 35$   
 (a) 5, 15 (b) 30, 15  
 (c) 2, 5 (d) 5, 30
22. Which two numbers need to be interchanged to make the given equation correct? **SSC MTS 21/08/2019 (Shift-2)**  
 $16 \times 1792 \div 7 + 9 - 15 = 778$   
 (a) 16, 7 (b) 16, 9  
 (c) 15, 9 (d) 16, 15
23. Which two signs need to be interchanged to make the given equation correct? **SSC MTS 21/08/2019 (Shift-2)**  
 $27 - 3 \times 2 \div 13 + 9 = 14$   
 (a) x, ÷ (b) -, ÷  
 (c) -, x (d) ÷, +
24. Which two numbers should be interchanged to make the below equation mathematically correct? **SSC MTS 21/08/2019 (Shift-1)**  
 $144 + 108 \div 12 - 16 \times 6 = 24$   
 (a) 12, 6 (b) 108, 144  
 (c) 108, 6 (d) 12, 16
25. Which two signs could be interchanged to make the below equation mathematically correct? **SSC MTS 21/08/2019 (Shift-1)**  
 $60 - 4 \times 12 \div 3 + 8 = 88$   
 (a) +, x (b) x, ÷  
 (c) -, + (d) +, ÷
26. Find out the two signs to be interchanged for making following equation correct? **SSC MTS 20/08/2019 (Shift-3)**  
 $96 - 16 \div 4 \times 2 + 8 = 6$   
 (a) x and ÷ (b) + and x  
 (c) + and ÷ (d) - and ÷
27. If '+' means '÷', '-' means 'x', 'x' means '+' and '÷' means '-'; then what will be the value of: **SSC MTS 20/08/2019 (Shift-2)**  
 $7 - 2 \times 14 \div 96 + 12 = ?$

- (a) -8 (b) 8  
 (c) 36 (d) 20
28. If 'F' means '+', 'P' means 'x', 'T' means '÷' and 'K' means '-' then  $40 T 8 F 16 P 4 K 13 = ?$  **SSC MTS 20/08/2019 (Shift-2)**  
 (a) 56 (b) 78  
 (c) 75 (d) 69
29. Which two signs should be interchanged to make the below equation mathematically correct? **SSC MTS 20/08/2019 (Shift-1)**  
 $75 \div 5 \times 15 - 3 + 10 = 60$   
 (a) -, + (b) -, x  
 (c) -, ÷ (d) x, ÷
30. Which two numbers should be interchanged to make the below equation mathematically correct? **SSC MTS 20/08/2019 (Shift-1)**  
 $3 \times 6 + 72 \div 8 - 24 = 12$   
 (a) 6, 8 (b) 24, 3  
 (c) 72, 24 (d) 3, 8
31. Which two signs need to be interchanged to make the given equation correct? **SSC MTS 19/08/2019 (Shift-3)**  
 $104 \div 8 + 6 - 9 \times 3 = 34$   
 (a) +, - (b) ÷, +  
 (c) -, x (d) +, x
32. Which two numbers need to be interchanged to make the given equation correct? **SSC MTS 19/08/2019 (Shift-3)**  
 $96 \times 6 - 8 + 2 + 3 = 768$   
 (a) 6, 8 (b) 6, 3  
 (c) 2, 3 (d) 96, 8
33.  $8 * 5 * 9 * 31$  **SSC MTS 19/08/2019 (Shift-2)**  
 (a) -, x, = (b) -, =, x  
 (c) =, x, - (d) x, -, =
34. In the following question, which of the two signs will be interchanged to get the correct equation? **SSC MTS 19/08/2019 (Shift-2)**  
 $119 - 21 \div 7 + 117 \times 3 = 11$   
 (a) - and x (b) ÷ and +  
 (c) ÷ and x (d) - and +
35. If P denotes '÷', Q denotes '+', R denotes 'x' and S denotes '-', then what is the value of the following equation? **SSC MTS 19/08/2019 (Shift-2)**  
 $100 S 12 P 72 R 6 Q 5 = ?$   
 (a) 140 (b) 105  
 (c) 104 (d) 134
36. If '#' means '+', '@' means 'x', '&' means '/' and '\$' means '-' then  $200 \& 5 @ 3 \$ 20 \# 5 = ?$  **SSC MTS 19/08/2019 (Shift-2)**  
 (a) 105 (b) 100  
 (c) 85 (d) 120

SOLUTIONS

1. (d) In given equation,  
 $14 + 32 - 56 \div 28 \times 5 = 40$   
 We interchange the values 14 and 28,  
 $28 + 32 - 56 \div 14 \times 5 = 40$   
 LHS = RHS
2. (a) in given equation,  
 14B (18 D3) A5 B7C 12B (24D4)  
 Put the mathematical operations,

- $\Rightarrow 14 \times (18 \div 3) + 5 * 7 - 12 * (24 \div 4)$   
 $\Rightarrow 14 \times 6 + 35 - 72$   
 $\Rightarrow 119 - 72 = 47$
3. (a) in given equation,  
 Interchange the signs  
 $24 \times 84 + 12 \div 16 - 7 = 129$   
 $\Rightarrow 24 - 84 \div 12 + 16 \times 7 = 129$   
 LHS = RHS

4. (a) in given equation,  
Interchange 8 and 6 and \* and  $\div$   
We know that,  

$$\Rightarrow 48 \div 8 + 32 - 12 \times 6$$

$$\Rightarrow 6 + 32 - 72$$

$$= -34$$
 LHS = RHS
5. (d) Interchange the value in given options.  
Option (a) By interchange (4 and 6) and (5 and 9)  

$$\begin{array}{r} 7 \ 4 \ 5 \ 8 \end{array}$$
 (b) By interchange (4 & 6), (5 & 9)  

$$\begin{array}{r} 6 \ 9 \ 9 \ 9 \end{array}$$
 (c) By interchange (4 & 6), (5 & 9)  

$$\begin{array}{r} 5 \ 3 \ 8 \ 3 \end{array}$$
 (d) By interchange (4 & 6), (5 & 9)  

$$\begin{array}{r} 7 \ 6 \ 9 \ 8 \end{array}$$
 Hence, option 'd' is correct.
6. (a) In given equation,  

$$24 \div 6 - 2 + 4 \times 2$$
 We can interchange the sign  

$$\Rightarrow 24 + 6 \times 2 \div 4 - 2$$

$$\Rightarrow 24 + 3 - 2$$

$$\Rightarrow 27 - 2 = 25$$
7. (d) In given equation  

$$18 \times 7 \div 36 + 78 - 14 = 86$$
 We can interchange 4 and 3,  $\div$  and  $-$  sign  

$$18 \times 7 - 46 + 78 \div 13$$

$$\Rightarrow 126 - 40$$

$$\Rightarrow 86$$

$$\Rightarrow \text{LHS} = \text{RHS}$$
8. (d) in given equation,  

$$78 * 26 * 4 * 13 * 28 = 58$$
 Put the mathematical sign (+,  $\times$ ,  $\div$ , -)  

$$\Rightarrow 78 + 26 \times 4 \div 13 - 28$$

$$\Rightarrow 70 + 8 - 28$$

$$= 58$$
 LHS = RHS
9. (a) In given equation,  

$$18 \div 6 \times 3 - 4 + 5$$
 We can Change the sign  

$$\Rightarrow 18 - 6 \div 3 + 4 \times 5$$

$$\Rightarrow 18 - 2 + 20$$

$$\Rightarrow = 36$$
10. (d) In given equation,  

$$52 \div 4 - 7 \times 5 + 3$$
 We can interchange the digit and sign  

$$\Rightarrow 57 \div 3 - 2 \times 5 + 4$$

$$\Rightarrow 19 - 10 + 4$$

$$\Rightarrow 23 - 10 = 13$$
11. (a) In given equation,  

$$72 * 4 * 15 * 3 * 12 = 51$$
 We can put the sign ( $\div$ , +,  $\times$ , -)  

$$\Rightarrow 72 \div 4 + 15 \times 3 - 12$$

$$\Rightarrow 18 + 45 - 12$$

$$\Rightarrow 63 - 12 = 51$$
 LHS = RHS
12. (d) in given equation,  

$$36 - 6 \div 6 \times 6 + 30 = 0$$
 We can change the sign  $-$  and  $\div$   

$$\Rightarrow 36 \div 6 - 6 \times 6 + 30$$

$$\Rightarrow 6 - 36 + 30$$

$$\Rightarrow 36 - 36 = 0$$
 LHS = RHS
13. (c) in given equation,  
 (38 A 17) B 9 C 117 D 13 E94 = 104  
 Put the sign ( $-$ ,  $\times$ , +,  $\div$ , -)  

$$\Rightarrow (38 - 17) \times 9 + 117 \div 13 - 94$$

$$\Rightarrow 21 \times 9 + 9 - 94$$

$$\Rightarrow 189 + 9 - 94 = 104$$
14. (b) In given equation,  

$$186 \div 17 + 104 - 12 \times 3 = 16$$
 We can interchange the digit 8 and 3  

$$\Rightarrow 136 \div 17 + 104 - 12 \times 8$$

$$\Rightarrow 8 + 104 - 96$$

$$\Rightarrow 112 - 96 = 16$$
 LHS = RHS
15. (c) in given equation,  

$$3 \div 6 - 2 + 8 \times 4 = 18$$
 We can interchange sign  $\div$  and  $\times$   

$$\Rightarrow 3 \times 6 - 2 + 8 \div 4$$

$$\Rightarrow 18 - 2 + 2 = 18$$
 LHS = RHS
16. (c) in given equation,  

$$7 * 2 * 5 * 4 * 2 * 15$$
 Put the sign (+,  $\times$ , -,  $\div$ , =)  

$$7 + 2 \times 5 - 4 \div 2 = 15$$

$$17 - 2 = 15$$
 LHS = RHS
17. (a) in given equation,  

$$8 \times 4 - 7 + 8 \div 2 = 35$$
 We can interchange the sign + and -  

$$\Rightarrow 8 \times 4 + 7 - 8 \div 2$$

$$\Rightarrow 32 + 7 - 4$$

$$\Rightarrow 39 - 4 = 35$$
 LHS = RHS
18. (a) in given equation,  

$$17 * 3 * 6 * 2 * 7 * 55$$
 Put the sign ( $\times$ , -,  $\div$ , +, =)  

$$\Rightarrow 17 \times 3 - 6 \div 2 + 7 = 55$$

$$\Rightarrow 51 - 3 + 7$$

$$\Rightarrow 58 - 3 = 55$$
 LHS = RHS
19. (c) in giver equation,  
 18A 6B 2C 16B 4D 21 = ?  
 Put the sign  

$$\Rightarrow 18 + 6 \times 2 \div 16 \times 4 - 21$$

$$\Rightarrow 18 + 3 - 21$$

$$\Rightarrow 21 - 21 = 0$$
20. (c) in the given equation,  

$$64 \times 2 + 24 \div 3 - 8 = 96$$
 We can interchange sign  $\times$  and  $\div$   

$$\Rightarrow 64 \div 2 + 24 \times 3 - 8$$

$$\Rightarrow 32 + 72 - 8$$

$$\Rightarrow 104 - 8 = 96$$
 LHS = RHS
21. (b) in given equation,  

$$15 - 5 + 75 \div 30 \times 2 = 35$$
 We can interchange 15 and 30  

$$\Rightarrow 30 - 5 + 75 \div 15 \times 2$$

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- $\Rightarrow 25 + 10 = 35$   
LHS = RHS
22. (a) in given equation,  
 $16 \times 1792 \div 7 + 9 - 15 = 778$   
We can interchange the number 16 and 7  
 $\Rightarrow 7 \times 1792 \div 16 + 9 - 15$   
 $\Rightarrow 7 \times 112 + 9 - 15$   
 $\Rightarrow 793 - 15 = 778$
23. (b) in given equation,  
 $27 - 3 \times 2 \div 13 + 9 = 14$   
We can interchange the sign - and  $\div$   
 $\Rightarrow 27 \div 3 \times 2 - 13 + 9$   
 $\Rightarrow 18 - 13 + 9$   
 $\Rightarrow 27 - 13 = 14$   
LHS = RHS
24. (b) in given equation,  
 $144 + 108 \div 12 - 16 \times 6 = 24$   
We can interchange the number 108 and 144  
 $\Rightarrow 108 + 144 \div 12 - 16 \times 6$   
 $\Rightarrow 108 + 12 - 96$   
 $\Rightarrow 120 - 96 = 24$   
LHS = RHS
25. (a) in given equation,  
 $60 - 4 \times 12 \div 3 + 8 = 88$   
We can interchange the sign + and  $\times$   
 $\Rightarrow 60 - 4 + 12 \div 3 \times 8$   
 $\Rightarrow 60 - 4 + 4 \times 8$   
 $\Rightarrow 92 - 4 = 88$   
LHS = RHS
26. (d) in given equation,  
 $96 - 16 \div 4 \times 2 + 8 = 6$   
We can interchange the sign - and  $\div$   
 $\Rightarrow 96 \div 16 - 4 \times 2 + 8$   
 $\Rightarrow 6 - 8 + 8 = 6$   
LHS = RHS
27. (d) in given equation,  
 $7 - 2 \times 14 \div 96 + 12$   
We can interchange the sign  
 $\Rightarrow 7 \times 2 + 14 - 96 \div 12$   
 $\Rightarrow 14 + 14 - 8$   
 $\Rightarrow 28 - 8 = 20$
28. (a) in given equation,  
40T 8F 16P 4R 13 = ?  
Put the sign  
 $\Rightarrow 40 \div 8 + 16 \times 4 - 13$   
 $\Rightarrow 5 + 64 - 13 = 56$
29. (c) in the given equation,  
 $75 \div 5 \times 15 - 3 + 10 = 60$   
We can interchange the sign - and  $\div$   
 $\Rightarrow 75 - 5 \times 15 \div 3 + 10$   
 $\Rightarrow 75 - 25 + 10 = 60$   
LHS = RHS
30. (a) in given equation,  
 $3 \times 6 + 72 \div 8 - 24 = 12$   
We can interchange the number 6 and 8  
 $\Rightarrow 3 \times 8 + 72 \div 6 - 24$   
 $\Rightarrow 24 + 12 - 24 = 12$   
LHS = RHS
31. (a) in given equation,  
 $104 \div 8 + 6 - 9 \times 3 = 34$   
We can interchange the sign + and -  
 $\Rightarrow 104 \div 8 - 6 + 9 \times 3$   
 $\Rightarrow 13 - 6 + 27$   
 $\Rightarrow 40 - 6 = 34$   
LHS = RHS
32. (a) in given equation,  
 $96 \times 6 - 8 \div 2 + 3 = 768$   
We can interchange the number 6 and 8  
 $\Rightarrow 96 \times 8 - 6 \div 2 + 3$   
 $\Rightarrow 768 - 3 + 3 = 768$
33. (d) in given equation,  
 $8*5*9*31$   
Put the sign ( $\times, -, =$ )  
 $\Rightarrow 8 \times 5 - 9 = 31$   
 $\Rightarrow 40 - 9 = 31$   
LHS = RHS
34. (c) in given equation,  
 $119 - 21 \div 7 + 117 \times 3 = 11$   
We can interchange the sign  $\div$  and  $\times$   
 $\Rightarrow 119 - 21 \times 7 + 117 \div 3$   
 $\Rightarrow 119 - 147 + 39$   
 $\Rightarrow 158 - 147 = 11$   
LHS = RHS
35. (c) in given equation,  
100S 12P 72R 6Q 5 = ?  
Put the sign  
 $\Rightarrow 100 - 12 \div 72 \times 6 + 5$   
 $\Rightarrow 100 - 1 + 5 = 104$
36. (a) in given equation,  
200 & 5 @ 3 \$ 20 # 5 = ?  
Put the mathematical sign  
 $\Rightarrow 200 \div 5 \times 3 - 20 + 5$   
 $\Rightarrow 120 - 20 + 5 = 105$

### EXERCISE 11B

#### For SSC CHSL Exam

1.  $25*5*10*2*4*21$  **SSC CHSL 10/06/2022 (Shift-3)**  
(a)  $-, +, \div, \times, =$  (b)  $\div, \times, +, -, =$   
(c)  $\times, \div, -, +, =$  (d)  $\div, +, \times, -, =$
2. Which two numbers, from amongst the given options, should be interchanged to make the given equation correct? **SSC CHSL 10/06/2022 (Shift-3)**  
 $(17 \times 4) - (7)^2 + (63 \div 9) \times 6 + 83 - 41 = 83$   
(a) 7 and 9 (b) 7 and 6  
(c) 4 and 6 (d) 4 and 7
3. If I denotes ' $\div$ ', J denotes ' $\times$ ', K denotes ' $-$ ' and L denotes '+', then what will come in place of '?' in the following equation? **SSC CHSL 10/06/2022 (Shift-3)**  
 $(18 \text{ I } 9) \text{ J } 12 \text{ L } 22 \text{ K } 4 \text{ I } \text{ L } (36 \text{ J } 2) \text{ K } 2 \text{ J } 8 = ?$   
(a) 80 (b) 61  
(c) 60 (d) 71
4.  $46*16*4*21*72*4*57$  **SSC CHSL 10/06/2022 (Shift-2)**  
(a)  $\div, =, -, \times, -, +$  (b)  $-, +, \times, =, -, +$   
(c)  $=, \times, +, +, \div, -$  (d)  $+, =, -, \times, -, +$

5.  $3 \times 4 \times 2 \times 10 \times 17 \times 2$  **SSC CHSL 10/06/2022 (Shift-2)**  
 (a) +, +, +, =, - (b)  $\times$ ,  $\times$ , +, =,  $\times$   
 (c)  $\times$ , +, =, -, - (d) +, +, =,  $\times$ , -
6. If M denotes '-', N denotes '+', O denotes ' $\times$ ' and P denotes '+', then what will come in place of '?' in the following equation?  
**SSC CHSL 10/06/2022 (Shift-2)**  
 $(72 \text{ N } 9) \text{ O } 4 \text{ M } 26 \text{ P } 97 \text{ M } (36 \text{ N } 2) = ?$   
 (a) 90 (b) 85 (c) 75 (d) 80
7.  $40 \times 2 \times 15 \times 30 \times 5$  **SSC CHSL 10/06/2022 (Shift-1)**  
 (a)  $\times$ , -, =, + (b)  $\times$ , =, -, -  
 (c)  $\div$ , =, +, - (d)  $\div$ , +, =, +
8.  $42 \times 19 \times 4 \times 69 \times 81 \times 9 \times 58$  **SSC CHSL 10/06/2022 (Shift-1)**  
 (a) +,  $\times$ , -, +,  $\div$ , = (b)  $\div$ , -,  $\times$ , =,  $\times$ , +  
 (c) -, -, =,  $\times$ ,  $\div$ , - (d)  $\times$ , -, =, +,  $\times$ , -
9. If I denotes ' $\div$ ', J denotes ' $\times$ ', K denotes '-' and L denotes '+', then what will come in place of '?' in the following equation?  
**SSC CHSL 09/06/2022 (Shift-3)**  
 $19 \text{ L } (22 \text{ J } 4) \text{ K } (66 \text{ I } 11) \text{ L } (16 \text{ J } 2) = ?$   
 (a) 141 (b) 130  
 (c) 133 (d) 138
10.  $78 \times 3 \times 12 \times 5 \times 59 \times 17 \times 44$  **SSC CHSL 09/06/2022 (Shift-3)**  
 (a) -, +,  $\times$ , -,  $\times$  (b)  $\div$ , +,  $\times$ , -, +, =  
 (c) +, =, -, +,  $\times$ ,  $\div$  (d) =, -, +,  $\times$ , -, +
11.  $79 \times 2 \times 58 \times 2 \times 14 \times 143$  **SSC CHSL 09/06/2022 (Shift-2)**  
 (a) -, +,  $\div$ ,  $\times$ , = (b)  $\div$ ,  $\times$ , -, +, =  
 (c)  $\times$ , -,  $\div$ , +, = (d)  $\div$ ,  $\times$ , +, -, =
12.  $26 \times 56 \times 4 \times 17 \times 49 \times 7 \times 30$  **SSC CHSL 09/06/2022 (Shift-1)**  
 (a) +,  $\div$ , -, +,  $\div$ , = (b) -, +,  $\times$ , +, =, -  
 (c) +, -, =,  $\times$ ,  $\div$ , - (d) -,  $\div$ , +, -,  $\times$ , =
13. Which two numbers need to be interchanged to make the following equation correct?  
**SSC CHSL 26/10/2020 (Shift-3)**  
 $8 \times \frac{3}{4} + 5 - 9 = 10$   
 (a) 4 and 8 (b) 3 and 9  
 (c) 5 and 9 (d) 3 and 4
14. If '+' means 'divided by', '-' means 'add', ' $\times$ ' means 'minus' and ' $\div$ ' means 'multiplied by', what will be the approximate value of the following expressions?  
**SSC CHSL 26/10/2020 (Shift-2)**  
 $\left[ \left\{ (11 \times 2) - (2 \div 3) \right\} + (3 - 2) \right] \div 2$   
 (a) 4 (b) 5  
 (c) 6 (d) 3
15. Which two signs should be interchanged to balance the given equation?  
**SSC CHSL 26/10/2020 (Shift-1)**  
 $4 \times 3 + 10 - 2 \div 7 = 10$   
 (a)  $\times$  and + (b)  $\div$  and  $\times$   
 (c)  $\div$  and - (d) + and -
16. Which of the following options of changing the mathematical operations will make the given equation correct?  
**SSC CHSL 21/10/2020 (Shift-3)**  
 $2 \div 3 - 5 \times 3 + 3 = 16$   
 (a)  $\div \rightarrow \times$ ,  $- \rightarrow \div$ ,  $\times \rightarrow +$ ,  $+ \rightarrow -$  (b)  $\div \rightarrow \times$ ,  $- \rightarrow +$ ,  $\times \rightarrow \div$ ,  $+ \rightarrow -$   
 (c)  $\div \rightarrow -$ ,  $- \rightarrow +$ ,  $\times \rightarrow +$ ,  $+ \rightarrow \div$  (d)  $\div \rightarrow +$ ,  $- \rightarrow \times$ ,  $\times \rightarrow -$ ,  $+ \rightarrow \div$
17. If '+' means ' $\times$ ', '-' means '+', ' $\times$ ' means ' $\div$ ' and ' $\div$ ' means '-', then what is the value of the following equation?  
**SSC CHSL 21/10/2020 (Shift-3)**  
 $24 \times 4 + 12 - 14 \div 10$

- (a) 90 (b) 82 (c) 76 (d) 84
18. Which two signs need to be interchanged to make the following equation correct?  
**SSC CHSL 21/10/2020 (Shift-1)**  
 $5 \times 4 + 12 - 3 \div 6 = 18$   
 (a) + and - (b)  $\div$  and -  
 (c)  $\div$  and  $\times$  (d)  $\times$  and +
19. If '+' means 'multiplication', ' $\times$ ' means 'division', ' $\div$ ' means 'subtraction', and '-' means 'addition', find the value of the following expression.  
**SSC CHSL 20/10/2020 (Shift-3)**  
 $48 \div 12 \times 3 - 6 + 3$   
 (a) 150 (b) 30 (c) 9 (d) 62
20. Select the correct equation when the sign '+' and ' $\times$ ' and the numbers '4' and '8' are interchanged.  
**SSC CHSL 20/10/2020 (Shift-1)**  
 (a)  $2 \times 4 + 8 = 34$  (b)  $4 + 8 \times 2 = 32$   
 (c)  $6 + 8 \times 4 = 38$  (d)  $12 \times 4 + 8 = 34$
21. Which two numbers should be interchanged in the following equation to make it correct?  
**SSC CHSL 19/10/2020 (Shift-3)**  
 $12 \times 2 + 8 - 48 \div 6 = 20$   
 (a) 12 and 48 (b) 2 and 6  
 (c) 8 and 12 (d) 6 and 8
22. Which two signs should be interchanged to make the given equation correct?  
**SSC CHSL 11/08/2021 (Shift-2)**  
 $45 - 49 + 26 \times 70 \div 35 = 42$   
 (a)  $\div$  and  $\times$  (b)  $\times$  and -  
 (c) + and  $\times$  (d) + and -
23. Which two digits and signs need to be interchanged so as to balance the given equation?  
**SSC CHSL 11/08/2021 (Shift-1)**  
 $26 \div 6 - 54 + 24 \times 8 = 174$   
 (a) 8 and 6;  $\times$  and  $\div$  (b) 4 and 2; + and  $\div$   
 (c) 6 and 4; - and  $\times$  (d) 5 and 8;  $\times$  and +
24. Which two digits and two signs need to be interchanged so as to balance the given equation?  
**SSC CHSL 10/08/2021 (Shift-3)**  
 $98 \div 4 - 126 + 96 \times 5 = 266$   
 (a) 8 and 2; - and + (b) 5 and 8;  $\times$  and  $\div$   
 (c) 5 and 9; + and  $\div$  (d) 6 and 4;  $\times$  and  $\div$
25. Which two numbers need to be interchanged to make the following equation correct?  
**SSC CHSL 19/10/2020 (Shift-3)**  
 $8 \times \left( \frac{4}{3} \right) + 9 - 5 = 10$   
 (a) 9, 3 (b) 8, 4 (c) 4, 3 (d) 5, 3
26. Which two numbers should be interchanged in the following equation to make it correct?  
**SSC CHSL 19/10/2020 (Shift-2)**  
 $36 \div 6 - 15 \times 2 + 48 = 14$   
 (a) 6 and 14 (b) 48 and 15  
 (c) 2 and 6 (d) 36 and 48
27. If '-' means multiplication, ' $\times$ ' means addition, ' $\div$ ' means subtraction, and '+' means division, then which of the following equations is correct?  
**SSC CHSL 19/10/2020 (Shift-1)**  
 (a)  $8 + 3 \div 16 \times 36 - 6 = 14$   
 (b)  $8 - 3 \div 16 \times 36 + 6 = 14$   
 (c)  $8 \div 3 - 16 + 36 \times 6 = 14$   
 (d)  $8 \times 3 \div 16 + 36 - 6 = 14$

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28. Which two numbers should be interchanged in the following equation to make it correct?

SSC CHSL 16/10/2020 (Shift-3)

$$6 + 28 \div 4 - 2 \times 17 = 12$$

- (a) 28 and 2                      (b) 6 and 4  
(c) 17 and 6                      (d) 17 and 4

29. Which two signs or numbers should be interchanged to make the given equation correct?

SSC CHSL 16/10/2020 (Shift-2)

$$(56 \div 7) + 5 \times 8 - 12 = 60$$

- (a) 7 and 5                      (b)  $\times$  and +  
(c) + and  $\div$                       (d) 8 and 12

30. Which two signs should be interchanged to make the given equation correct? SSC CHSL 16/10/2020 (Shift-1)

$$(560 \div 80) + 90 \times 8 - 38 = 600$$

- (a) + and  $\div$                       (b)  $\times$  and +  
(c)  $\div$  and -                      (d) + and -

## SOLUTIONS

1. (d) In given equation,  
 $25 * 5 * 10 * 2 * 4 * 21$   
 Put the Mathematical sign ( $\div$ , +,  $\times$ , -, =)  
 $\Rightarrow 25 \div 5 + 10 \times 2 - 4$   
 $\Rightarrow 5 + 20 - 4 = 21$   
 $\Rightarrow \text{LHS} = \text{RHS}$   
 Option (d) is right
2. (a) In given equation,  
 $(17 \times 4) - (7)^2 + (63 \div 9) \times 6 + 83 - 41 = 83$   
 Interchange the number 7 and 9  
 $\Rightarrow 17 \times 4 - (9)^2 + (63 \div 7) \times 6 + 83 - 41$   
 $\Rightarrow 68 - 81 + 54 + 83 - 41$   
 $\Rightarrow 122 - 122 + 83 = 83$   
 Option (a) is correct
3. (b) In given equation,  
 $(18 \mid 9) \text{ J } 12\text{L } 22\text{K } 41\text{L } (36\text{J}2) \text{ K}2\text{J}8 = ?$   
 Put the Mathematical sign  
 $\Rightarrow (18 \div 9) \times 12 + 22 - 41 + (36 \times 2) - 2 \times 8$   
 $\Rightarrow 24 + 22 - 41 + 72 - 16$   
 $\Rightarrow 118 - 57 = 61$
4. (c) In given equation,  
 $46 * 16 * 4 * 21 * 72 * 4 * 57$   
 Put the Mathematical sign (=,  $\times$ , +,  $\div$ , -, -)  
 $\Rightarrow 46 = 16 \times 4 + 21 + 72 \div 4 - 57$   
 $\Rightarrow 46 = 64 + 21 + 18 - 57$   
 $\Rightarrow 46 = 103 - 57$   
 $\Rightarrow 46 = 46$   
 Option (c) is right
5. (b) In given equation,  
 $3 * 4 * 2 * 10 * 17 * 2$   
 Put the Mathematical sign ( $\times$ ,  $\times$ , +, =,  $\times$ )  
 $\Rightarrow 3 \times 4 \times 2 + 10 = 17 \times 2$   
 $\Rightarrow 24 \times 10 = 34$   
 $\Rightarrow 34 = 34$   
 Option (b) is right
6. (b) In the given equation,  
 $(72 \text{ N } 9) \text{ O}4 \text{ m } 26 \text{ P } 97 \text{ m } (36 \text{ N } 2) = ?$   
 Put the mathematical sign  
 $(72 \div 9) \times 4 - 26 + 97 - (36 \div 2)$   
 $\Rightarrow 8 \times 4 - 26 + 97 - 18$   
 $\Rightarrow 32 - 26 + 97 - 18 = 85$
7. (d) In given equation,  
 $40 * 2 * 15 * 30 * 5$   
 Put the mathematical sign in option (d)  
 $\Rightarrow 40 \div 2 + 15 = 30 + 5$

- $\Rightarrow 20 + 15 = 35$   
 $\Rightarrow 35 = 35$   
 Option (d) is right.
8. (a) In the given equation,  
 $42 * 19 * 4 * 69 * 81 * 9 * 58$   
 Put the mathematical sign (+,  $\times$ , -, +,  $\div$ , =)  
 $42 + 19 \times 4 - 69 + 81 \div 9 = 58$   
 $42 + 76 - 69 + 9$   
 $58 = 58$   
 LHS = RHS
9. (c) ATQ,  
 19 L (22J4) K (66III) L (16J2)  
 Put the mathematical sign in place of alphabets  
 $\Rightarrow 19 + (22 \times 4) - (66 \div 11) + (16 \times 2)$   
 $\Rightarrow 19 + 88 - 6 + 32$   
 $\Rightarrow 139 - 6 = 133$
10. (b) In given equation,  
 $78 * 3 * 12 * 5 * 59 * 17 * 44$   
 Put the mathematical sign in given option (b)  
 $\Rightarrow 78 \div 3 + 12 \times 5 - 59 + 17 = 44$   
 $\Rightarrow 26 + 60 - 59 + 17 = 44$   
 $\Rightarrow 103 - 59 = 44$   
 $\Rightarrow 44 = 44$   
 Hence, option 'b' is correct
11. (c) In given equation,  
 $79 * 2 * 58 * 2 * 14 * 143$   
 Put the mathematical signs given in option (c)  
 $\Rightarrow 79 \times 2 - 58 \div 2 + 14 = 143$   
 $\Rightarrow 158 - 29 + 14 = 143$   
 $\Rightarrow 172 - 29 = 143$   
 $\Rightarrow 143 = 143$   
 Hence, option 'c' is correct
12. (a) In given equation,  
 $26 * 56 * 4 * 17 * 49 * 7 * 30$   
 Put the mathematical sign given in option (a)  
 $\Rightarrow 26 + 56 \div 4 - 17 + 49 \div 7 = 30$   
 $\Rightarrow 26 + 14 - 17 + 7 = 30$   
 $\Rightarrow 47 - 17 = 30$   
 $\Rightarrow 30 = 30$   
 Option (a) is correct.
13. (c) In the given equation,  
 $8 \times \frac{3}{4} + 5 - 9 = 10$   
 Interchange the number 5 and 9  
 $\Rightarrow 8 \times \frac{3}{4} + 9 - 5$   
 $\Rightarrow 6 + 9 - 5$

- $\Rightarrow 15 - 5 = 10$   
 LHS = RHS  
 Hence, 'c' is correct option,
14. (c) In given equation,  
 $[(11 \times 2) - (2 \div 3)] + (3 - 2) \div 2$   
 Interchange the sign  
 $\Rightarrow [(11 - 2) + (2 \times 3)] \div (3 + 2) \times 2$   
 $\Rightarrow [(9 + 6) \div 5] \times 2$   
 $\Rightarrow 3 \times 2 = 6$   
 Hence, option 'c' is correct
15. (c) In given equation,  
 $4 \times 3 + 10 - 2 \div 7 = 10$   
 Interchange the sign ( $\div$ ,  $-$ )  
 $\Rightarrow 4 \times 3 + 10 \div 2 - 7$   
 $\Rightarrow 12 + 5 - 7$   
 $\Rightarrow 17 - 7 = 10$   
 LHS = RHS  
 Hence, option (c) is correct.
16. (d) In given equation,  
 $2 \div 3 - 5 \times 3 + 3 = 16$   
 Change the sign given in option (d)  
 $\Rightarrow 2 + 3 \times 5 - 3 \div 3$   
 $\Rightarrow 2 + 15 - 1$   
 $= 16$   
 Hence, option (d) is correct
17. (c) In the given equation,  
 $24 \times 4 + 12 - 14 \div 10$   
 Change the sign  
 $\Rightarrow 24 \div 4 \times 12 + 14 - 10$   
 $\Rightarrow 6 \times 12 + 14 - 10$   
 $\Rightarrow 72 + 14 - 10 = 76$   
 Hence, option 'c' is correct
18. (b) In given equation,  
 $5 \times 4 + 12 - 3 \div 6 = 18$   
 interchange the sign  $\div$  and  $-$   
 $\Rightarrow 5 \times 4 + 12 \div 3 - 6$   
 $\Rightarrow 20 + 4 - 6$   
 $\Rightarrow 24 - 6 = 18$   
 LHS = RHS  
 Hence, option (b) is correct
19. (d) In given equation,  
 $48 \div 12 \times 3 - 6 + 3$   
 Change the sign  
 $\Rightarrow 48 - 12 \div 3 + 6 \times 3$   
 $\Rightarrow 48 - 4 + 18$   
 $\Rightarrow 66 - 4 = 62$   
 Option 'd' is correct
20. (a) In given sign and numbers.  
 Put the sign and number in option (a)  
 $\Rightarrow 2 + 4 \times 8 = 34$   
 $\Rightarrow 2 + 32 = 34$   
 LHS = RHS  
 Option 'a' is correct
21. (c) In given equation  
 $12 \times 2 + 8 - 48 \div 6$   
 Interchange the number 8 and 12  
 $\Rightarrow 8 \times 2 + 12 - 48 \div 6$   
 $\Rightarrow 16 + 2 - 8$   
 $\Rightarrow 28 - 8 = 20$   
 LHS = RHS
- Option 'c' is correct
22. (d) In given equation,  
 $45 - 49 + 26 \times 70 \div 35 = 42$   
 Interchange the sign  $+$  and  $-$   
 $\Rightarrow 45 + 49 - 26 \times 70 \div 35$   
 $\Rightarrow 94 - 52 = 42$   
 Option 'd' is correct
23. (a) In the given equation,  
 $26 \div 6 - 54 + 24 \times 8 = 174$   
 Interchange number (6 and 8) and sign ( $\times$ ,  $\div$ )  
 $\Rightarrow 28 \times 8 - 54 + 24 \div 6$   
 $\Rightarrow 224 - 54 + 4$   
 $\Rightarrow 228 - 54 = 174$   
 LHS = RHS  
 Hence, option 'a' is correct
24. (b) in given equation,  
 $98 \div 4 - 126 + 96 \times 5 = 266$   
 Interchange sign ( $\times$  and  $\div$ ) and number (5 and 8)  
 $\Rightarrow 95 \times 4 - 126 + 96 \div 8$   
 $\Rightarrow 380 - 126 + 12$   
 $\Rightarrow 392 - 126 = 266$   
 Option 'b' is correct
25. (c) In given equation.  
 $8 \times \left(\frac{4}{3}\right) + 9 - 5 = 10$   
 Interchange the number 4 and 3  
 $\Rightarrow 8 \times \frac{4}{3} + 9 - 5$   
 $\Rightarrow 6 + 9 - 5$   
 $\Rightarrow 15 - 5 = 10$   
 Option 'c' is correct
26. (d) In given equation,  
 $36 \div 6 - 15 \times 2 + 48 = 14$   
 Interchange the number 36 and 48  
 $\Rightarrow 48 \div 6 - 15 \times 2 + 36$   
 $\Rightarrow 8 - 30 + 36$   
 $\Rightarrow 44 - 30 = 14$   
 LHS = RHS  
 Option 'd' is correct
27. (b) Interchange the sign in option 'b'  
 $8 \times 3 - 16 + 36 \div 6$   
 $24 - 16 + 6$   
 $30 - 16 = 14$   
 LHS = RHS  
 Hence option 'b' is correct
28. (c) In given equation  
 $6 + 28 \div 4 - 2 \times 17 = 12$   
 interchange the sign 17 and 16  
 $17 + 28 \div 4 - 2 \times 6$   
 $17 + 7 - 12$   
 $24 - 12 = 12$   
 Option 'c' is correct
29. (d) in given equation,  
 $(56 \div 7) + 5 \times 8 - 12 = 60$   
 interchange the number 8 and 12  
 $\Rightarrow (56 \div 7) + 5 \times 12 - 8$   
 $\Rightarrow 8 + 60 - 8$   
 $\Rightarrow 60$   
 Option 'd' is correct
30. (b) In given equation,  
 $(560 \div 80) + 90 \times 8 - 30 = 600$

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Interchange the sign  $\times$  and  $+$   
 $\Rightarrow (560 \div 80) \times 90 + 8 - 38$   
 $\Rightarrow 7 \times 90 + 8 - 38$   
 $\Rightarrow 630 + 8 - 38$

$\Rightarrow 638 - 38 = 600$   
 LHS = RHS  
 Hence, option b' is correct

## EXERCISE 11C

### For SSC CGL CPO Exams

1. If '@' means 'addition', '%' means 'multiplication', '\$' means 'division' and '#' means 'subtraction', then find the value of the following expression.  
**SSC CGL 19/04/2022 (Shift-2)**  
 $126 \$ 7\% 3 @ 19 \# 21$   
 (a) 52 (b) 18  
 (c) 23 (d) 4
2. Which two numbers need to be interchanged to make the following equation correct?  
**SSC CGL 19/04/2022 (Shift-1)**  
 $119 + 11 \times 5 - 153 \div 17 = 201$   
 (a) 119 and 153 (b) 17 and 5  
 (c) 11 and 17 (d) 119 and 17
3. Which two digits should be interchanged to make the given equation correct?  
**SSC CGL 19/04/2022 (Shift-1)**  
 $37 + 1152 \times 8 \div 768 - 47 = 22$   
 (a) 3 and 4 (b) 2 and 3  
 (c) 4 and 5 (d) 5 and 6
4. If 'A' denotes 'addition', 'B' denotes 'multiplication', 'C' denotes 'subtraction', and 'D' denotes 'division', then what will be the value of the following expression.  
**SSC CGL 18/04/2022 (Shift-3)**  
 $441 D 7 A 21 B 6 C (189 D 7) A (46 C 12)$   
 (a) 158 (b) 169  
 (c) 196 (d) 185
5.  $63 * 90 * 42 * 230 * 46 * 3$   
**SSC CGL 18/04/2022 (Shift-3)**  
 (a)  $=, \times, +, \div, -$  (b)  $+, \div, -, =, \times$   
 (c)  $=, -, +, \div, \times$  (d)  $\times, +, \div, -, +$
6. Which two numbers (Not Digits) need to be interchanged to make the following equation correct?  
**SSC CGL 18/04/2022 (Shift-2)**  
 $15 + 90 \div 9 \times 5 - 11 = 28$   
 (a) 11 and 9 (b) 15 and 9  
 (c) 15 and 5 (d) 9 and 5
7.  $15 * 1411 * 83 * 137 * 218 * 100$   
**SSC CGL 18/04/2022 (Shift-2)**  
 (a)  $\times, \div, =, +, -$  (b)  $\times, =, -, \div, +$   
 (c)  $+, -, \times, =, \div$  (d)  $\times, +, \div, -, =$
8. If '@' means 'addition', '%' means 'multiplication', '\$' means 'division', and '#' means 'subtraction', then find the value of the following expression.  
**SSC CGL 18/04/2022 (Shift-1)**  
 $23 @ 105 \$ 15 \% 6 \# 29$   
 (a) 23 (b) 28  
 (c) 36 (d) 40
9. If A denotes 'addition', B denotes 'multiplication', C denotes 'subtraction', and D denotes 'division', then what will be the value of the following expression?  
**SSC CGL 18/04/2022 (Shift-1)**  
 $66 A (132 D 12) C (4 A 3) B (15 D 5) A 16 B (-3)$   
 (a) 8 (b) 10  
 (c) 6 (d) 56
10.  $34 * 17 * 54 * 18 * 6 * 56$   
 (a)  $+, \div, \times, -, =$  (b)  $\div, -, +, \times, =$   
 (c)  $\times, +, \div, -, =$  (d)  $\div, -, \times, +, =$
11.  $135 * 15 * 3 * 2 * 13 * 16$   
 (a)  $+, \div, -, =, \times$  (b)  $=, \times, +, \div, -$   
 (c)  $\div, \times, +, -, =$  (d)  $\times, +, =, \div, -$
12. Which two signs should be interchanged to make the given equation correct?  
**SSC CGL 24/08/2021 (Shift-1)**  
 $156 - 13 + 9 \times 18 \div 5 = 169$   
 (a)  $\times$  and  $\div$  (b)  $\times$  and  $-$   
 (c)  $\div$  and  $+$  (d)  $\div$  and  $+$
13.  $14 * 7 * 39 * 133 * 19 * 130$   
**SSC CGL 23/08/2021 (Shift-3)**  
 (a)  $\div, -, +, \times, =$  (b)  $\times, -, +, \div, =$   
 (c)  $\div, +, -, \times, =$  (d)  $\times, +, -, \div, =$
14.  $252 * 14 * 8 * 100 * 16 * 60$   
**SSC CGL 23/08/2021 (Shift-2)**  
 (a)  $\div, -, \times, +, =$  (b)  $\div, \times, -, +, =$   
 (c)  $\div, \times, +, =, -$  (d)  $\div, \times, +, -, =$
15.  $25 * 7 * 40 * 20 * 4 * 210$   
**SSC CGL 23/08/2021 (Shift-1)**  
 (a)  $\times, +, -, \div, =$  (b)  $\times, -, +, \div, =$   
 (c)  $-, +, =, \div, \times$  (d)  $+, -, =, \div, \times$
16.  $5 * 468 * 18 * 70 * 180 * 4 * 5$   
**SSC CGL 20/08/2021 (Shift-3)**  
 (a)  $\times, \div, -, +, =, \times$  (b)  $\times, \div, +, -, =, \times$   
 (c)  $\times, \div, +, =, -, \times$  (d)  $\div, \times, +, -, =, \times$
17.  $221 * 17 * 12 * 130 * 24 * 50$   
**SSC CGL 20/08/2021 (Shift-2)**  
 (a)  $\div, -, \times, =, +$  (b)  $\times, \div, -, +, =$   
 (c)  $\div, \times, -, +, =$  (d)  $\div, \times, -, +, =$
18.  $45 * 24 * 72 * 20 * 12 * 7$   
**SSC CGL 20/08/2021 (Shift-1)**  
 (a)  $=, \times, +, \div, -$  (b)  $\div, \times, +, -, =$   
 (c)  $+, \div, -, =, \times$  (d)  $\times, \div, =, -, +$
19.  $483 * 23 * 93 * 16 * 4 * 50$   
**SSC CGL 18/08/2021 (Shift-3)**  
 (a)  $\div, -, +, \times, =$  (b)  $+, \div, -, \times, =$   
 (c)  $\div, +, -, =, \times$  (d)  $\div, +, -, \times, =$
20. Which two numbers should be interchanged to make the given equation correct?  
**SSC CGL 18/08/2021 (Shift-2)**  
 $78 \div 48 \times 8 + (26 \times 7) - 39 + (45 + 15) = 210$   
 (a) 26 and 15 (b) 78 and 45  
 (c) 48 and 39 (d) 45 and 48
21. If 'A' stands for 'subtraction', 'B' stands for 'multiplication', 'C' stands for 'addition', and 'D' stands for 'Division', then what is the value of the following expression?  
**SSC CGL 09/03/2020 (Shift-3)**  
 $43 C 29 B 3 A 14 B (5 C 4) C 11 C (14 A 3) A 64 D 8 B 2$   
 (a) 83 (b) 27  
 (c) 110 (d) 10
22. Which two signs should be interchanged to make the given equation correct?  
**SSC CGL 09/03/2020 (Shift-2)**  
 $14 \times 3 \div 27 + 54 - 9 = 21$   
 (a)  $\times$  and  $-$  (b)  $+$  and  $-$   
 (c)  $\div$  and  $-$  (d)  $\times$  and  $\div$

23. If 'A' stands for 'Subtraction', 'B' stands for 'multiplication', 'C' stands for 'addition', and 'D' stands for 'Division', then what is the value of the following expression?  
**SSC CGL 09/03/2020 (Shift-1)**  
 32 B4 A 12 B (35 A 24) C 52 D 4  
 (a) 19 (b) 9  
 (c) 47 (d) 39
24. Which two signs should be interchanged to make the given equation correct? **SSC CGL 07/03/2020 (Shift-3)**  
 $121 \div 11 + 54 - 9 \times 3 = 128$   
 (a)  $\div$  and  $-$  (b)  $+$  and  $-$   
 (c)  $\times$  and  $\div$  (d)  $+$  and  $\times$
25. If 'A' stands for 'Subtraction', 'B' stands for 'multiplication', 'C' stands for 'addition', and 'D' stands for 'Division', then what is the value of the following expression?  
**SSC CGL 07/03/2020 (Shift-2)**  
 27 A 8 B 5 C (11 C 3) B 5 C 36 D 6  
 (a) 24 (b) 20  
 (c) 63 (d) 60
26. Which two numbers should be interchanged to make the given equation correct?  
**SSC CGL 06/03/2020 (Shift-3)**  
 $28 + 49 - 35 \div 7 \times 4 = 68$   
 (a) 28 and 35 (b) 49 and 35  
 (c) 28 and 49 (d) 4 and 28
27. The two given expression on both sides of the '=' sign will have the same value if two numbers from either side of both sides are interchanged. Select the correct numbers to be interchanged from the given options.  
**SSC CGL 06/03/2020 (Shift-2)**  
 $4 + 6 \times 7 - 27 \div 3 = 7 \times 8 - 4 + 39 \div 3$   
 (a) 6, 4 (b) 6, 8  
 (c) 8, 7 (d) 3, 4
28. Which two signs should be interchanged to make the given equation correct? **SSC CGL 06/03/2020 (Shift-1)**  
 $12 + 81 - 27 \times 9 \div 3 = 36$   
 (a)  $+$  and  $\times$  (b)  $\times$  and  $-$   
 (c)  $\div$  and  $\times$  (d)  $-$  and  $\div$
29. Select the correct equation after interchanging operations '+' and '-' and numbers '4' and '8'  
**SSC CPO 13/12/2019 (Shift-3)**  
 (a)  $2 + 8 - 4 = 9$  (b)  $4 - 8 + 11 = 1$   
 (c)  $8 + 4 - 2 = 10$  (d)  $4 - 8 + 11 = 8$
30.  $86 * (5 * 8 * 4) * 9 * 85$  **SSC CPO 13/12/2019 (Shift-3)**  
 (a)  $+, \times, \div, -, =$  (b)  $\div, -, \times, +, =$   
 (c)  $-, \times, \div, +, =$  (d)  $+, -, \times, \div, +, =$
31. Which two signs need to be changed to make the following equation correct. **SSC CPO 13/12/2019 (Shift-3)**  
 $64 - 8 \div 3 + 7 \times 5 = 40$   
 (a)  $\div$  and  $-$  (b)  $\times$  and  $+$   
 (c)  $\div$  and  $+$  (d)  $\times$  and  $\div$
32.  $(157\_13)\_36\_1\_5$  **SSC CPO 13/12/2019 (Shift-1)**  
 (a)  $+, \div, -, =$  (b)  $-, \div, +, =$   
 (c)  $+, -, \div, =$  (d)  $\div, -, +, =$
33. If '+' means '-', '-' means 'x', 'x' means ' $\div$ ' and ' $\div$ ' means '+', then what will be the value of the following expression? **SSC CPO 13/12/2019 (Shift-1)**  
 $25 - 2 + 32 \times 8 \div 4$   
 (a) 51 (b) 45  
 (c) 55 (d) 50
34. Which two signs need to be interchanged to make the following equation correct?  
**SSC CPO 13/12/2019 (Shift-1)**  
 $48 - 8 \div 4 + 5 \times 6 = 32$   
 (a)  $\times$  and  $+$  (b)  $\div$  and  $-$   
 (c)  $\times$  and  $\div$  (d)  $\div$  and  $+$
35.  $1/6 * 1/24 * 2 * 8 * 35 * 23$  **SSC CPO 12/12/2019 (Shift-3)**  
 (a)  $\times, -, \div, +, =$  (b)  $\times, +, \div, -, =$   
 (c)  $+, -, \div, \times, =$  (d)  $\div, -, \times, +, =$
36. Select the correct equation after interchanging operators '+' and ' $\div$ ', and numbers '2' and '8'.  
**SSC CPO 12/12/2019 (Shift-3)**  
 (a)  $2 + 8 \div 4 = 2$  (b)  $8 + 4 \div 2 = 8$   
 (c)  $8 + 2 \div 4 = 6$  (d)  $4 + 8 \div 2 = 4$
37. If + means -, - means  $\times$ ,  $\times$  means  $\div$ , and  $\div$  means +, then what will be the value of following expression?  
**SSC CPO 12/12/2019 (Shift-3)**  
 $50 + 10 \div 25 \times 5 - 3 = ?$   
 (a) 51 (b) 50 (c) 45 (d) 55
38.  $(18 * 9 * 14) * 37 * 4$  **SSC CPO 12/12/2019 (Shift-1)**  
 (a)  $\div, -, \times, =$  (b)  $\times, -, \div, =$   
 (c)  $-, \div, \times, =$  (d)  $\times, \div, -, =$
39. If + means -, - means  $\times$ ,  $\times$  means  $\div$ , and  $\div$  means +, then what will be the value of following expression?  
**SSC CPO 12/12/2019 (Shift-1)**  
 $27 - 2 + 24 \times 8 \div 4$   
 (a) 45 (b) 55 (c) 50 (d) 51
40. Which two signs need to be interchanged to make the following equation correct?  
**SSC CPO 12/12/2019 (Shift-1)**  
 $45 - 9 \div 3 + 5 \times 6 = 32$   
 (a)  $\times$  and  $\div$  (b)  $\div$  and  $+$   
 (c)  $\times$  and  $+$  (d)  $\div$  and  $-$

## SOLUTIONS

1. (a)  $126 \$ 7 \% 3 @ 19 \# 21$   
 Put the mathematical sign to replace of alphabets  
 $\Rightarrow 126 \div 7 \times 3 + 19 - 21 = 18 \times 3 + 19 - 21$   
 $\Rightarrow 54 + 19 - 21 = 52$
2. (a)  $119 + 11 \times 5 - 153 \div 17 = 201$   
 Interchange the no. 119 and 153  
 $\Rightarrow 153 + 11 \times 5 - 119 \div 17 = 153 + 55 - 7 = 201$
3. (a)  $37 + 1152 \times 8 \div 768 - 47 = 22$

- Interchange the two digit 3 and 4  
 $\Rightarrow 47 + 1152 \times 8 \div 768 - 37 = 47 + 12 - 37$   
 $\Rightarrow 22$
4. (c)  $441 D 7 A 21 B 6C ( 189D 7) A (46C 12)$   
 Put the mathematical sign to replace alphabets  
 $\Rightarrow 441 \div 7 + 21 \times 6 - (189 \div 7) + (46 - 12)$   
 $\Rightarrow 441 \div 7 + 21 \times 6 - 27 + 34 = 63 + 126 - 27 + 34$   
 $\Rightarrow 223 - 27 = 196$

10 ■ SSC Reasoning

5. (c)  $63 \times 90 \div 42 \times 230 \div 46 \times 3$   
Put the mathematical sign in given option (c)  
 $63 = 90 - 42 + 230 \div 46 \times 3$   
 $63 = 90 - 42 * 5 \times 3$   
 $63 = 63$   
Option (c) is correct
6. (b)  $15 + 90 \div 9 \times 5 - 11 = 28$   
Interchange the no. 15 and 9  
 $\Rightarrow 9 + 90 \div 15 \times 5 - 11 = 9 + 6 \times 5 - 11$   
 $= 28$   
option (b) is correct
7. (a)  $15 \times 1411 \div 83 \times 137 \times 218 \times 100$   
Put the mathematical sign in given option (a)  
 $\Rightarrow 15 \times 1411 \div 83 = 137 + 218 - 100$   
 $\Rightarrow 15 \times 17 = 355 - 100$   
 $\Rightarrow 255 = 255$   
So, option (a) is correct
8. (c) 23 @ 105 \$ 15 % 6 # 29  
Put the mathematical sign to replace alphabets  
 $23 + 105 \div 15 \times 6 \div 29 = 23 + 7 \times 6 - 29$   
 $\Rightarrow 65 - 29 = 36$
9. (a) 66 A (132D 12) C (4A 3) B (15D 5) A 16B (-3)  
Put the mathematical sign to replace alphabets  
 $\Rightarrow 66 + 11 - 7 \times 3 + (-48)$   
 $\Rightarrow 77 - 69 = 8$
10. (b)  $34 \times 17 \times 54 \times 18 \times 6 \times 56$   
Put the mathematical sign in given option (b)  
 $\Rightarrow 34 \div 17 - 54 + 18 \times 6 = 56$   
 $\Rightarrow 2 - 54 + 108 = 56$   
 $\Rightarrow 110 - 54 = 56$   
 $\Rightarrow 56 = 56$   
Option (b) is correct
11. (c)  $135 \times 15 \times 3 \times 2 \times 13 \times 16$   
Put the mathematical sign in given option (c)  
 $\Rightarrow 135 \div 15 \times 3 + 2 - 13 = 16$   
 $\Rightarrow 9 \times 3 + 2 - 13 = 16$   
 $\Rightarrow 29 - 13 = 16$   
 $\Rightarrow 16 = 16$   
Option (c) is correct
12. (d)  $156 - 13 + 9 \times 18 \div 5 = 169$   
Interchange the two sign ( $\div$ ) and ( $-$ )  
 $\Rightarrow 156 \div 13 + 9 \times 18 - 5 = 169$   
 $\Rightarrow 12 + 162 - 5 = 169$   
 $\Rightarrow 174 - 5 = 169$   
 $\Rightarrow 169 = 169$   
Option (d) is correct
13. (d)  $14 \times 7 \times 39 \times 133 \times 19 \times 130$   
Put the mathematical sign in given option (d).  
 $\Rightarrow 14 \times 7 + 39 - 133 \div 19 = 130$   
 $\Rightarrow 98 + 39 - 7 = 130$   
 $\Rightarrow 137 - 7 = 130$   
 $\Rightarrow 130 = 130$   
Option (d) is correct
14. (b)  $252 \times 14 \times 8 \times 100 \times 16 \times 60$   
Put the mathematical sign in given option (b).  
 $\Rightarrow 252 \div 14 \times 8 - 100 + 16 = 60$   
 $\Rightarrow 18 \times 8 - 100 + 16 = 60$   
 $\Rightarrow 160 - 100 = 60$   
 $\Rightarrow 60 = 60$   
Option (b) is correct
15. (a.)  $25 \times 7 \times 40 \times 20 \times 4 \times 210$   
Put the mathematical sign in given option (a).  
 $\Rightarrow 25 \times 7 + 40 - 20 \div 4 = 210$   
 $\Rightarrow 175 + 40 - 5 = 210$   
 $\Rightarrow 215 - 5 = 210$   
 $\Rightarrow 210 = 210$   
Option (a) is correct
16. (b)  $5 \times 468 \times 18 \times 70 \times 180 \times 4 \times 5$   
Put the mathematical sign in given option (b).  
 $\Rightarrow 5 \times 468 \div 18 + 70 - 180 = 4 \times 5$   
 $\Rightarrow 5 \times 26 + 70 - 180 = 20$   
 $\Rightarrow 200 - 180 = 20$   
 $\Rightarrow 20 = 20$   
Option (b) is correct
17. (c)  $221 \times 17 \times 12 \times 130 \times 24 \times 50$   
Put the mathematical sign in given option (c).  
 $\Rightarrow 221 \div 17 \times 12 - 130 + 24 = 50$   
 $\Rightarrow 13 \times 12 - 130 + 24 = 50$   
 $\Rightarrow 156 - 130 + 24 = 50$   
 $\Rightarrow 180 - 130 = 50$   
 $\Rightarrow 50 = 50$   
Option (c) is correct
18. (d)  $45 \times 24 \times 72 \times 20 \times 12 \times 7$   
Put the mathematical sign in given option (d)  
 $\Rightarrow 45 \times 24 \div 72 = 20 - 12 + 7$   
 $\Rightarrow 15 = 27 - 12$   
 $\Rightarrow 15 = 15$   
Option (d) is correct
19. (d)  $483 \times 23 \times 93 \times 16 \times 4 \times 50$   
Put the mathematical sign in given option (d)  
 $\Rightarrow 483 \div 23 + 93 - 16 \times 4 = 50$   
 $\Rightarrow 21 + 93 - 64 = 50$   
 $\Rightarrow 114 - 64 = 50$   
 $\Rightarrow 50 = 50$   
Option (d) is correct.
20. (c)  $78 \div 46 \times 8 + (26 \times 7) - 39 + (45 + 15) = 210$   
Interchange the no. 48 and 39  
 $\Rightarrow 78 \div 39 \times 8 + (26 \times 7) - 48 + (45 + 15) = 210$   
 $\Rightarrow 2 \times 8 + 182 - 48 + 60 = 210$   
 $\Rightarrow 16 + 242 - 48 = 210$   
 $\Rightarrow 258 - 48 = 210$   
 $\Rightarrow 210 = 210$   
Option (c) is correct
21. (d) 43 C 29 B 3 A 14 B (5 C 4) C 11 C (14 A 3) A 64 D 8  
Put the mathematical sign to replace B2 alphabets  
 $\Rightarrow 43 + 29 \times 3 - 14 \times (5 + 4) + 11 + (14 - 3) - 64$   
 $\div 8 \times 2$   
 $\Rightarrow 43 + 87 - 14 \times 9 + 11 + 11 - 8 \times 2$   
 $\Rightarrow 43 + 87 - 126 + 11 + 11 - 16$   
 $\Rightarrow 152 - 146 = 10$
22. (c)  $14 \times 3 \div 27 + 54 - 9 = 21$   
Interchange the sign ( $\div$ ) and ( $-$ )  
 $\Rightarrow 14 \times 3 - 27 + 54 \div 9 = 21$   
 $\Rightarrow 42 - 27 + 6 = 21$   
 $\Rightarrow 48 - 27 = 21$   
 $\Rightarrow 21 = 21$   
Option (c) is correct
23. (b) 32 B4 A 12B (35 A 24) C 5 2 D 4  
Put the mathematical sign to replace alphabets  
 $\Rightarrow 32 \times 4 - 12 \times (35 - 24) + 52 \div 4$

- $\Rightarrow 32 \times 4 - 12 \times 11 + 13 = 128 - 132 + 13$   
 $\Rightarrow 141 - 132 = 9$
24. (a)  $121 \div 11 + 54 - 9 \times 3 = 128$   
 Interchange the sign  $\div$  and  $-$   
 $\Rightarrow 121 - 11 + 54 \div 9 \times 3 = 128$   
 $\Rightarrow 121 - 11 + 18 = 128$   
 $\Rightarrow 139 - 11 = 128$   
 $\Rightarrow 128 = 128$   
 Option (a) is correct.
25. (c) 27 A 8 B 5 C (11 C 3) B 5 C 36 D 6  
 Put the mathematical sign to replace alphabets  
 $\Rightarrow 27 - 8 \times 5 + (11 + 3) \times 5 + 36 \div 6$   
 $\Rightarrow 27 - 40 + 14 \times 5 + 6 = 27 - 40 + 70 + 6$   
 $\Rightarrow 103 - 40 = 63$
26. (a)  $28 + 49 - 35 \div 7 \times 4 = 68$   
 Interchange the no. 28 and 35  
 $\Rightarrow 35 + 49 - 28 \div 7 \times 4 = 68$   
 $\Rightarrow 35 + 49 - 4 \times 4 = 68$   
 $\Rightarrow 84 - 16 = 68$   
 $\Rightarrow 68 = 68$   
 Option (a) is correct
27. (b)  $4 + 6 \times 7 - 27 \div 3 = 7 \times 8 - 4 + 39 \div 3$   
 Interchange the no. 6 and 8  
 $\Rightarrow 4 + 8 \times 7 - 27 \div 3 = 7 \times 6 - 4 + 39 \div 3$   
 $\Rightarrow 4 + 56 - 9 = 42 - 4 + 13$   
 $\Rightarrow 51 = 51$   
 Option (b) is correct.
28. (d)  $12 + 81 - 27 \times 9 \div 3 = 36$   
 Interchange the sign  $(-)$  and  $(\div)$   
 $\Rightarrow 12 + 81 \div 27 \times 9 - 3 = 36$   
 $\Rightarrow 12 + 3 \times 9 - 3 = 36$   
 $\Rightarrow 12 + 27 - 3 = 36$   
 $\Rightarrow 36 = 36$   
 Option (d) is correct
29. (b) A.T.Q. = Interchange the sign  $+$  and  $-$  and no. 4 and 8 in option (b)  
 $4 - 8 + 11 = 1$   
 $\Rightarrow 8 + 4 - 11 = 1$   
 $\Rightarrow 12 - 11 = 1$   
 $\Rightarrow 1 = 1$   
 Option (b) is correct
30. (c)  $86 * (5 * 8 * 4) * 9 * 85$   
 Put the mathematical sign in given option (c)  
 $\Rightarrow 86 - (5 \times 8 \div 4) + 9 = 85$   
 $\Rightarrow 86 - 10 + 9 = 85$   
 $\Rightarrow 95 - 10 = 85$   
 $\Rightarrow 85 = 85$   
 Option (c) is correct.
31. (a)  $64 - 8 \div 3 + 7 \times 5 = 40$   
 Interchange the sign  $\div$  and  $-$   
 $\Rightarrow 64 \div 8 - 3 + 7 \times 5 = 40$   
 $\Rightarrow 8 - 3 + 35 = 40$   
 $\Rightarrow 43 - 3 = 40$   
 $\Rightarrow 40 = 40$   
 Option (a) is correct.
32. (b)  $(157 - 13) - 36 - 1 - 5$   
 Put the mathematical sign in given option (b)  
 $\Rightarrow (157 - 13) \div 36 + 1 = 5$   
 $\Rightarrow 144 \div 36 + 1 = 5$   
 $\Rightarrow 4 + 1 = 5$   
 $\Rightarrow 5 = 5$   
 Option (b) is correct.
33. (d)  $25 - 2 + 32 \times 8 \div 4$   
 Put the mathematical sign to replace given sign  
 $\Rightarrow 25 \times 2 - 32 \div 8 + 4 = 50 - 4 + 4$   
 $\Rightarrow = 50$
34. (b)  $48 - 8 \div 4 + 5 \times 6 = 32$   
 Interchange the sign  $(\div)$  and  $(-)$   
 $\Rightarrow 48 \div 8 - 4 + 5 \times 6 = 32$   
 $\Rightarrow 6 - 4 + 30 = 32$   
 $\Rightarrow 32 = 32$   
 Option (b) is correct
35. (d)  $\frac{1}{6} * \frac{1}{24} * 2 * 8 * 35 * 23$   
 Put the mathematical sign in given option (d)  
 $\Rightarrow \frac{1}{6} \div \frac{1}{24} - 2 \times 8 + 35 = 23$   
 $\Rightarrow 4 - 16 + 35 = 23$   
 $\Rightarrow 39 - 16 = 23$   
 $\Rightarrow 23 = 23$   
 Option (d) is correct
36. (a) A.T.Q., interchange the sign  $+$  and  $\div$  and no. 2 and 8 in option (a.)  
 $\Rightarrow 2 + 8 \div 4 = 2$   
 $\Rightarrow 8 \div 2 + 4 = 8$   
 $\Rightarrow 4 + 4 = 8$   
 $\Rightarrow 8 = 8$   
 Option (a) is correct.
37. (c)  $50 + 10 \div 25 \times 5 - 3 = ?$   
 Put the mathematical sign to place of given sign.  
 $\Rightarrow 50 - 10 + 25 \div 5 \times 3$   
 $\Rightarrow 50 - 10 + 5 \times 3 = 50 - 10 + 15$   
 $\Rightarrow 65 - 10 = 55$
38. (b)  $(18 * 9 * 14) * 37 * 4$   
 Put the mathematical sign in given option (b).  
 $\Rightarrow (18 \times 9 - 14) \div 37 = 4$   
 $\Rightarrow (162 - 14) \div 37 = 4$   
 $\Rightarrow 148 \div 37 = 4$   
 $\Rightarrow 4 = 4$   
 Option (b) is correct.
39. (b)  $27 - 2 + 24 \times 8 \div 4$   
 Put the mathematical sign to replace given sign  
 $\Rightarrow 27 \times 2 - 24 \div 8 + 4$   
 $= 54 - 3 + 4 = 55$
40. (d)  $45 - 9 \div 3 + 5 \times 6 = 32$   
 Interchange the sign  $\div$  and  $-$   
 $\Rightarrow 45 \div 9 - 3 + 5 \times 6 = 32$   
 $\Rightarrow 5 - 3 + 30 = 32$   
 $\Rightarrow 32 = 32$   
 Option (d) is correct