1. Find the missing number in the given series.
6, 8, 13, 23, ?, 56
A. 32  B. 40
C. 44  D. 46
E. None of these

2. Find the missing number in the given series.
7, 8, 18, 57, 232, ?
A. 1165  B. 1100
C. 1160  D. 1210
E. None of these

3. Find the missing number in the given series.
8, 5, 6, 10, 21, ?
A. 50.5  B. 52.25
C. 55  D. 53.5
E. None of these

4. Find the missing number in the given series.
4, 18, 46, 102, ?, 438
A. 212  B. 222
C. 214  D. 232
E. 218

5. Find the missing number in the given series.
109, 110, 102, 129, 65, ?
A. 170  B. 190
C. 180  D. 160
E. None of these

Directions (6-10): Study the following Table and answer the questions given below.

Number of watches sold in different shops on different days. (in thousands)

<table>
<thead>
<tr>
<th>Days</th>
<th>P</th>
<th>Q</th>
<th>R</th>
<th>S</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>9.20</td>
<td>8.75</td>
<td>12.55</td>
<td>4.2</td>
<td>9.3</td>
</tr>
<tr>
<td>Tuesday</td>
<td>10.50</td>
<td>12.6</td>
<td>13.95</td>
<td>13.3</td>
<td>5.5</td>
</tr>
<tr>
<td>Wednesday</td>
<td>18.3</td>
<td>6.3</td>
<td>7.5</td>
<td>2.3</td>
<td>7.5</td>
</tr>
<tr>
<td>Thursday</td>
<td>25.5</td>
<td>14.4</td>
<td>5.6</td>
<td>6.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Friday</td>
<td>10.25</td>
<td>7.40</td>
<td>16.3</td>
<td>9.2</td>
<td>13.7</td>
</tr>
<tr>
<td>Saturday</td>
<td>17.35</td>
<td>18.7</td>
<td>19.5</td>
<td>12.8</td>
<td>4.8</td>
</tr>
</tbody>
</table>

6. What was the respective ratio between the Watches sold in Shop P to Shop S on Saturday?
A. 243:250  B. 343:250
C. 204:211  D. 104:115
E. None of these

7. What was total number of Watches sold in shop R on all the days together?
A. 84200  B. 42400
C. 71900  D. 72800
E. None of these

8. Which Shops sold maximum number of Watches on all the days together?
A. P  B. Q
C. R  D. T
E. None of these

9. What was the difference between the numbers of watches (in thousands) sold in shop T on Tuesday and Shop S on Thursday?
A. 0.6  B. 0.9
C. 0.4  D. 0.45
E. None of these

10. What was the total number of watches sold in Shop Q in Thursday, Friday and Saturday?
A. 36.5  B. 38.5
C. 37.5  D. 39
E. None of these

11. Direction: What approximate value should come in place of the question mark (?) in the following equation (Note: You are not expected to calculate the exact value)?
\( (15)^2 + (19.99)^2 + (24.001)^2 = ? \)
A. 1250  B. 1200
C. 1300  D. 1120
E. 1160

12. Directions: Find out the approximate value which should replace the question mark (?) in the following question. (You are not expected to find out the exact value.)
\( 12.25 \times ? \times 21.65 = 3545.64 + 23.36 \)
A. 20  B. 15
C. 13  D. 18
E. 24

13. Directions: What approximate value should come in place of question mark (?) in the following questions? (You are not expected to calculate the exact value)
\( (4438 - 2874 - 559) \div (269 - 106 - 83) = ? \)
A. 55  B. 13
C. 47  D. 29
E. 31

14. What approximate value should come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value).
\( 125\% \text{ of } 605 + \frac{4}{5} \text{ of } 218 = ? \)
A. 840  B. 931
C. 618  D. 1024
E. 726

15. Direction: What approximate value should come in place of the question mark (?) in the following equation (Note: You are not expected to calculate the exact value)?
\( \sqrt{580} \times \sqrt[3]{510} + 49.999 \times 3.999 = ? \)
A. 384  B. 392
C. 410  D. 372
E. 402

16. Directions: What approximate value should come in place of question mark (?) in the following questions? (Note: You are not expected to calculate the exact value).
\( 4005.33 \div 19.89 \times 1.9 = ? \)
A. 470  B. 300
C. 400  D. 370
E. 500

17. Direction: What approximate value should come in place of the question mark (?) in the following equation (Note: You are not expected to calculate the exact value).
\( 15.28 \times 12.36 + 41.17 \times 21.34 = ? \)
A. 1125  B. 1098
C. 1132  D. 1032
E. 1041

Directions (11-17): What approximate value should come in place of the question mark (?) in the following equation (Note: You are not expected to calculate the exact value)?
\( (15)^2 + (19.99)^2 + (24.001)^2 = ? \)
A. 1250  B. 1200
C. 1300  D. 1120
E. 1160
18. Direction: What approximate value should come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value.)

\[ 23 \times 17.5 + 63.774 - 321.3 \div 52.6 = ? \]

A. 460  B. 520  C. 600  D. 400  E. 370

19. Directions: What should come in place of question mark (?) in the following question?

\[ \frac{7}{8} \text{ of } 616 \times 12 \div 16 + ? = 17 \times 19 + \frac{4}{3} \times ? \]

A. \( \frac{3}{5} \)  B. \( \frac{2}{5} \)  C. \( \frac{4}{3} \)  D. \( \frac{3}{4} \)  E. \( \frac{4}{3} \)

20. Directions: What approximate value should come in place of question mark (?) in the following questions? (Note You are not expected to calculate the exact value.)

\[ 16.007 \times 14.995 \times 6.080 = ? \]

A. 1510  B. 1440  C. 1200  D. 1350  E. 1250

21. Direction: What will come in place of question mark (?) in the following question?

\[ ? \% \text{ of } 780 - 335 = 250 \]

A. 65  B. 50  C. 75  D. 60  E. None of these

22. Directions: What will come in place of the question mark (?) in the given questions?

\[ \sqrt{21} = \sqrt{1521} + \sqrt{576} \]

A. 7056  B. 862  C. 7225  D. \( \sqrt{7056} \)  E. None of these

23. What will come in place of question mark (?) in the following questions?

\[ (2\sqrt{392} - 21) + (\sqrt{8} + 7)^2 = (?)^2 \]

A. 4  B. -4  C. 12  D. 2  E. 6

24. Direction: What value should come in place of the question mark (?) in the following question?

\[ \frac{8.5 \times 4.4}{0.25 \times 0.2} = \% \text{ of } 80 \]

A. 60  B. 64  C. 70  D. 75  E. 80

25. Directions: What will come in place of question mark (?) in the following questions?

\[ 1456 \div 16 \times 14 + 22 = (?)^2 \]

A. 24  B. 36  C. 48  D. 52  E. None of these

26. If downstream speed of a boat is 16 kmph and its upstream speed is 11 kmph, what is the speed of the stream?

A. 1.5 kmph  B. 2 kmph  C. 3 kmph  D. 2.5 kmph  E. None of these

7. The Simple Interest accrued on a sum of certain principal is 1200 in 4 yr at the rate of 8 p.c.p.a. What would be the Simple Interest accrued on thrice of that principal at the rate of 6 p.c.p.a. in 3 yr?

A. 2025  B. 3025  C. 2250  D. Rs 1846.84  E. None of these

29. The cost of 14 kgs of rice is 672, the cost of 12 kgs of wheat is 432 and the cost of 18 kgs of sugar is 504. What is the total cost of 20 kgs of rice, 15 kgs of wheat and 16 kgs of sugar?

A. 1,898  B. 1,948  C. 2,020  D. 1,964  E. None of these

30. A started a business with an investment of Rs 16000. After 2 months B also became his partner and invested 5/8th of the amount invested by A. Again after 2 more months C entered into the partnership with Rs 8000. After 10 months they had a profit of Rs 6336. Find the share of B in the profit.

A. Rs 1760  B. Rs 1670  C. Rs 1780  D. Rs 1680  E. None of these

31. Samir spends 52% of his monthly salary on education expenditure and 23% on miscellaneous expenditure. If he is left with Rs. 4500, what is the monthly salary?

A. Rs. 16000  B. Rs. 17500  C. Rs. 17000  D. Rs. 18500  E. None of these

32. The ages of Nishi and Vinnee are in the ratio of 6: 5 respectively. After 9 yr the ratio of their ages will be 9: 8. What is the difference in their ages?

A. 9yr  B. 7yr  C. 5yr  D. 3yr  E. None of the above

33. Rohit sold an item for Rs. 7200 and incurred a loss of 25%. At what price should he have sold the item to have gained a profit of 25%?

A. Rs. 12500  B. Rs. 12000  C. Rs. 12800  D. Rs. 13000  E. None of these

34. A car covers a distance of 540 km in 9 h. Speed of a train is double the speed of the car. Two-third the speed of the train is equal to the speed of a bike. How much distance will the bike cover in 5 h?

A. 450 km  B. 360km  C. 400km  D. 500km  E. None of these
35. 8 men can complete a piece of work in 20 days. 8 women can complete the same work in 32 days. In how many days will 5 men and 8 women together complete the same work?
   A. 16 days  B. 12 days  C. 14 days  D. 10 days  E. None of these

36. The perimeter of a square is twice the perimeter of a rectangle. If the perimeter of the square is 72 cms and the length of the rectangle is 12 cms, what is the difference between the breadth of the rectangle and the side of the square?
   A. 9 cms  B. 12 cms  C. 18 cms  D. 3 cms  E. None of these

37. There are 4 white, 6 black and 2 red balls in a bucket, 3 balls are taken out randomly. What is the probability that all three balls are of different colors?
   A. 12/55  B. 15/55  C. 12/65  D. 22/55  E. None of these

38. In how many different ways can the letters of the word 'ARMOUR' be arranged?
   A. 720  B. 300  C. 640  D. 350  E. None of these

39. Manoj sold an article for ₹15000. Had he offered a discount of 10% on the selling price, he would have earned a profit of 8%. What is the cost price?
   A. 12500  B. 13500  C. 12250  D. 13250  E. None of these

40. The average age of father and son at present is 27 years. Also, the difference between their ages is 30 years. What is the respective ratio between the present age of father and the present age of son?
   A. 8 : 3  B. 7 : 2  C. 2 : 7  D. 3 : 8  E. None of these

Direction (41-45): Study the following information carefully and answer the questions given below:
GHB LAS MKT BGO SRV

41. If the third alphabet in each of the word is changed to the next alphabet in English alphabetical order, how many words thus formed have more than two different consonants?
   A. None  B. One  C. Two  D. Three  E. Four

42. If in each of the words, all the alphabets are arranged in reverse English alphabetical order within the word, how many words will end with a vowel?
   A. None  B. One  C. Two  D. Three  E. Four

43. How many letters are there in the English alphabetical series between the second letter of the last word from the left and third letter of the fourth word from the right?
   A. None  B. One  C. Two  D. Three  E. Four

44. If the given words are arranged in the order as they would appear in the English dictionary from right to left, which of the following will be third from the right?
   A. GHB  B. LAS  C. MKT  D. BGO  E. SRV

45. If in each of the given words, each of the consonants is changed to the next letter and each vowel is left unchanged, in how many words thus formed will there be no vowel?
   A. None  B. One  C. Two  D. Three  E. Four

46. If in the arrangement 238096417534, the first number is interchanged with the third number, the fourth number is interchanged with the sixth similarly seventh number is interchanged with ninth and so on. Which number will be third from the left end after the rearrangement?
   A. 4  B. 0  C. 1  D. 2  E. None of these

47. How many such pairs of letters are there in the word "RECOVERED" each of which has as many letters between them in the word as in the English alphabet?
   A. 1  B. 3  C. 2  D. 4  E. None of these

Direction (48-52): In each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/ are definitely true.

48. Statement: K > P > Q > T, K = Y, K < Z
   Conclusions:
   I. Y > T  II. T > Z
   A. If only conclusion I is true.  B. If only conclusion II Is true.  C. If either conclusion I or II is true.  D. Neither conclusion I nor II is true.  E. Both conclusion I and II are true.

49. Statement: A>Q, B<T, A = B,
   Conclusions:
   I. B = Q  II. A > Q
   A. If only conclusion I is true.  B. If only conclusion II Is true.  C. If either conclusion I or II is true.  D. Neither conclusion I nor II is true.  E. Both conclusion I and II are true.

40. The average age of father and son at present is 27 years. Also, the difference between their ages is 30 years. What is the respective ratio between the present age of father and the present age of son?
   A. 8 : 3  B. 7 : 2  C. 2 : 7  D. 3 : 8  E. None of these

Direction (41-45): Study the following information carefully and answer the questions given below:
GHB LAS MKT BGO SRV

41. If the third alphabet in each of the word is changed to the next alphabet in English alphabetical order, how many words thus formed have more than two different consonants?
   A. None  B. One  C. Two  D. Three  E. Four

42. If in each of the words, all the alphabets are arranged in reverse English alphabetical order within the word, how many words will end with a vowel?
   A. None  B. One  C. Two  D. Three  E. Four

43. How many letters are there in the English alphabetical series between the second letter of the last word from the left and third letter of the fourth word from the right?
   A. None  B. One  C. Two  D. Three  E. Four

44. If the given words are arranged in the order as they would appear in the English dictionary from right to left, which of the following will be third from the right?
   A. GHB  B. LAS  C. MKT  D. BGO  E. SRV

45. If in each of the given words, each of the consonants is changed to the next letter and each vowel is left unchanged, in how many words thus formed will there be no vowel?
   A. None  B. One  C. Two  D. Three  E. Four

46. If in the arrangement 238096417534, the first number is interchanged with the third number, the fourth number is interchanged with the sixth similarly seventh number is interchanged with ninth and so on. Which number will be third from the left end after the rearrangement?
   A. 4  B. 0  C. 1  D. 2  E. None of these

47. How many such pairs of letters are there in the word "RECOVERED" each of which has as many letters between them in the word as in the English alphabet?
   A. 1  B. 3  C. 2  D. 4  E. None of these

Direction (48-52): In each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/ are definitely true.

48. Statement: K > P > Q ≥ T, K = Y, K ≤ Z
   Conclusions:
   I. Y > T  II. T > Z
   A. If only conclusion I is true.  B. If only conclusion II Is true.  C. If either conclusion I or II is true.  D. Neither conclusion I nor II is true.  E. Both conclusion I and II are true.

49. Statement: A>Q, B≤T, A = B,
   Conclusions:
   I. B = Q  II. A > Q
   A. If only conclusion I is true.  B. If only conclusion II Is true.  C. If either conclusion I or II is true.  D. Neither conclusion I nor II is true.  E. Both conclusion I and II are true.
Conclusions:
I. R < Z
II. Z < W
A. If only conclusion I is true.
B. If only conclusion II is true.
C. If either conclusion I or II is true.
D. Neither conclusion I nor II is true.
E. Both conclusion I and II are true.

51. Statement: A = Y < C > W
Conclusions:
I. C = A
II. C > A
A. If only conclusion I is true.
B. If only conclusion II is true.
C. If either conclusion I or II is true.
D. Neither conclusion I nor II is true.
E. Both conclusion I and II are true.

52. Statement: K < M, Y = X < Z, K < Y
Conclusions:
I. Y > M
II. M > Z
A. If only conclusion I is true.
B. If only conclusion II is true.
C. If either conclusion I or II is true.
D. Neither conclusion I nor II is true.
E. Both conclusion I and II are true.

Direction (53-57): Study the following information carefully and answer the questions given below:

Seven friends I, J, K, L, M, N and O lives in a seven-floor building. The ground floor is no.1, the floor above it is no.2 and so on.
M does not live on an even numbered floor. O does not live on the topmost floor. Only one person lives between M and O. I does not live on an even numbered floor and does not live below N. L does not live immediately above or immediately below O. Two persons lives between L and M. Both K and J do not live on an odd-numbered floor. There are two floors between the floors on which O and K live. N lives on floor number 5.

53. I lives on which floor?
A. First  B. Fifth  C. Third  D. Seventh  E. None of these
54. How many persons live between L and N?
A. None  B. One  C. Two  D. Three  E. None of these
55. Who among the following lives on floor number 2?
A. O  B. J  C. K  D. L  E. None of these
56. How many persons live between I and O?
A. Two  B. Three  C. Five  D. Four  E. None of these

57. If K interchanges his floor with the one who lives on floor number two, then who among the following lives exactly between L and J?
A. N  B. I  C. O  D. M  E. None of these

Direction (58-62): Study the following arrangement carefully and answer the question given below:

1 5 8 4 2 1 5 2 3 4 5 6 7 8 9 5 1 4 1 5 6 8 7 4

58. Which of the following is ninth to the left of twenty first from the left end of the above arrangement?
A. 7  B. 5  C. 6  D. 8  E. None of these
59. How many such 5's are there in the above arrangement, each of which is immediately preceded by an odd digit and immediately followed by an even digit?
A. None  B. One  C. Two  D. Three  E. More than three
60. How many such 1's are there in the above arrangement, each of which is immediately followed by a perfect square?
A. None  B. One  C. Two  D. Three  E. More than three
61. How many such 4's are there in the above arrangement, each of which is immediately preceded by whose numeric value is greater than 4?
A. None  B. One  C. Two  D. Three  E. More than three
62. If all the even digit are deleted from the above arrangement which of the following will be tenth from the right end of the arrangement?
A. 5  B. 3  C. 1  D. 7  E. 9
63. In a row of 54 persons, A is 15th from the left side of the row and B is 20th from the right side of the row. Find the no. of persons sitting between A and B?
A. 18  B. 19  C. 15  D. 20  E. 17
64. Prakash walked 30 metres towards West, took a left turn and walked 20 metres. He again took a left turn and walked 30 metres. He then took a right turn and stopped. Towards which direction was he facing when he stopped?
A. South  B. North  C. East  D. Data inadequate  E. None of these
65. Among six friends L, M, N, P, Q and S each having a different height, N is taller than Q and P but shorter than M. P is taller only Q while S is shorter than only L. Which of the following pair represents the tallest and the shortest among the five friends?
A. M, P
B. L, Q
C. P, Q
D. Cannot be determined
E. None of these

**Direction (66-70):** Study the following information carefully and answer the given questions.

Seven person - P, Q, R, S, T, V and W are sitting in a straight line facing North but not necessarily in the same order.
(a) Q sits third to the right of T. W sits second to the right of Q.
(b) V and R are immediate neighbours of each other. V is not an immediate neighbour of T.
(c) Only one person sits between S and P.
(d) S is not an immediate neighbour of Q.

66. Four of the following five are alike in a certain way based on their seating positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
A. QW
B. TV
C. RQ
D. VW
E. PS

67. How many persons sit between R and P?
A. None
B. One
C. Two
D. Three
E. Four

68. Which of the following pairs sits at the extreme corners of the line?
A. R, W
B. S, T
C. W, Q
D. T, R
E. S, W

69. What is the position of T with respect to V?
A. Second to the left
B. Third to the right
C. Immediate right
D. Fourth to the left
E. Immediate left

70. If all the persons are made to sit in alphabetical order from right to left, the positions of how many will remain unchanged as compared to the original seating positions?
A. None
B. One
C. Two
D. Three
E. Four

**Direction (71-75):** Study the conditions given below and answer the questions that follow. Given below are the codes for the digits/symbols.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>?</td>
<td>P</td>
</tr>
<tr>
<td>#</td>
<td>B</td>
</tr>
<tr>
<td>$</td>
<td>T</td>
</tr>
<tr>
<td>8</td>
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<td>D</td>
</tr>
<tr>
<td>@</td>
<td>K</td>
</tr>
<tr>
<td>*</td>
<td>A</td>
</tr>
</tbody>
</table>

**Conditions:**
1) If the third and fourth elements are multiples of 2, then the third and fourth elements will be coded as the code of @.
2) If the third and fifth elements are symbols, then both symbols will be coded as X.
3) If the first and last element is divisible by 3, then the code of first and last elements are to be interchanged.

71. 3%85#6
A. TKUNVF
B. TKDUVF
C. TKUDVF
D. FKUDVF

72. #8@7$9
A. VUXKXS
B. VUXPQS
C. VUXPXS
D. VUGPQS
E. SUXPXV

73. 7%96*5
A. FKSPBD
B. PKSFBD
C. FKVPBD
D. FSKPBD
E. None of these

74. 4&86%7
A. ANGGKB
B. ANGGKP
C. ANUFKB
D. ANGGPK
E. NAGGBK

75. 9%8$*6
A. FZQZPS
B. SZQATF
C. FSKUQB
D. FKUQSB
E. None of these

76. Directions: In each question below are two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

**Statements:**
Some trees are bushes.
All flowers are bushes.

**Conclusions:**
I. At least some bushes are trees.
II. At least some flowers are trees.
A. Only conclusion I follows
B. Only conclusion II follows
C. Either conclusion I or II follows
D. Neither conclusion I nor II follows
E. Both conclusions I and II follow

77. Directions: In each question below are two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

**Statements:**
All colors are paints.
No paint is a brush.

**Conclusions:**
I. At least some brushes are colors.
II. No brush is a color.
A. Only conclusion I follows
B. Only conclusion II follows
C. Either conclusion I or II follows
D. Neither conclusion I nor II follows
E. Both conclusions I and II follow
78. **Directions:** In each question below are two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusion logically follows from the given statements disregarding commonly known facts.

**Statements:** Some chemicals are organics. All organics are fertilizers.

**Conclusions:**
I. Atleast some fertilizers are chemicals
II. All fertilizers are organics
A. Only conclusion I follows
B. Only conclusion II follows
C. Either conclusion I or II follows
D. Neither conclusion I nor II follows
E. Both conclusions I and II follow

79. **Directions:** In each question below are two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusion logically follows from the given statements disregarding commonly known facts.

**Statements:**
No air is solid.
Some solids are liquids.

**Conclusions:**
I. No liquid is air.
II. Some airs are definitely not liquids.
A. Only conclusion I follows
B. Only conclusion II follows
C. Either conclusion I or II follows
D. Neither conclusion I nor II follows
E. Both conclusions I and II follow

80. **Directions:** In each question below are two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusion logically follows from the given statements disregarding commonly known facts.

**Statements:**
All gems are diamonds.
All diamonds are rocks.

**Conclusions:**
I. At least some rocks are gems.
II. All gems are rocks.
A. Only conclusion I follows
B. Only conclusion II follows
C. Either conclusion I or II follows
D. Neither conclusion I nor II follows
E. Both conclusions I and II follow