Directions (1-5): In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.

Q1.
Statements:

\[ P > T \leq O \leq R = S > V > L \]

Conclusions:

I. \( L < R \)

II. \( T > V \)

(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Q2.
Statements:

\[ A \leq B \leq C = D \leq E \geq F > G \]

Conclusions:

I. \( E > A \)

II. \( A = E \)

(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Q3.
Statements:

\[ H \geq I = T > B \geq C > E < O \]

Conclusions:

I. \( O > I \)

II. \( H > E \)
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Q4.
Statements:

M = O ≥ P ≤ E ≤ D = R < S

Conclusions:

I. E ≤ M
II. R ≤ O
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Q5.
Statements:

W < Y > X ≥ Z ≥ V = U ≥ T

Conclusions:

I. U < Y
II. T ≤ X
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

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

S A $ 4 6 & W R 9 % E Z 8 2 1 Q U @ # 3 5 I M B & 7 @ E 2 K

Q6. Which of the following element is 11th to the left of the one which is 22nd from the left end of the given arrangement?
(a) 3
(b) E
(c) %
(d) Z
(e) None of these
Q7. If all the digits are dropped from the series, which element will be fifth to the left of the one which is fourteenth from the left end of the new arrangement?
(a) @
(b) E
(c) Q
(d) Z
(e) None of these

Q8. How many such symbols are there in the given series which are immediately preceded by a number and immediately followed by a vowel?
(a) None
(b) One
(c) Two
(d) Three
(e) Four

Q9. How many such alphabets are there in the given series which are immediately preceded by consonant but not immediately followed by consonant?
(a) One
(b) Two
(c) Three
(d) More than three
(e) None of these

Q10. What should come in place of question mark (?) in the following series based on the above arrangement?
A4S &R6 %Z9 2Q8 ?
(a) U#Q
(b) @5U
(c) #5@
(d) @U3
(e) @3U

Directions (11-15): Study the following information carefully and answer the question given below-

Eight people viz. L, M, N, O, P, Q, R and S live in a building of nine different floors. One floor is vacant. The ground floor is numbered as 1, the floor just above it is numbered as 2 and so on till top floor which is numbered as 9 (but not necessarily in the same order).
Two floors are there between the floors on which M and L live. M lives on floor number 5. O lives immediately above P. N lives on floor number 3. There are three floors between P and Q. R lives in one of the floor above S. O lives on one of the floor below vacant floor.
Q11. Who among the following lives on top floor?
(a) O  
(b) R  
(c) S  
(d) P  
(e) No one

Q12. Who among the following lives on ground floor?
(a) S  
(b) R  
(c) Q  
(d) L  
(e) None of these

Q13. How many persons live between R and S?
(a) One  
(b) Two  
(c) Three  
(d) Four  
(e) None of these

Q14. Four of the following five are alike in a certain way and hence form a group. Who among the following does not belong to that group?
(a) Q  
(b) R  
(c) P  
(d) S  
(e) L

Q15. Who among the following lives immediately below the vacant floor?
(a) P  
(b) M  
(c) L  
(d) O  
(e) None of these

Directions (16-20): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer

Q16. Statements:
All mobile are pagers
Some pagers are tubes
No tubes are cycle
Conclusions:
I. Some tubes are mobile
II. Some pagers are not cycle
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Q17. Statements:
All milk is bread
All bread is butter
No butter is yogurt
Conclusions:
I. Some milk is yogurt
II. Some yogurt is not bread
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Q18. Statements:
Some paper are books
All books are notes
Some notes are pages
Conclusions:
I. Some pages are paper
II. Some paper are not pages
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Q19. Statements:
Some wine is vodka
Some vodka is rum
No rum is scotch
Conclusions:
I. Some wine being scotch is a possibility
II. Some rum being vodka is a possibility
Q20. Statements:
No pizza is burger
Some burger are fries
No fries is wraps

Conclusions:
I. Some burger are wraps
II. No pizza is wraps

(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Directions (21-25): Study the following information carefully and answer the given questions.

Twelve persons are sitting in two parallel rows at equal distance facing each other. A, B, C, D, E and F are sitting in Row 1 facing south. P, Q, R, S, T and U are sitting in Row 2 facing north (but not necessarily in the same order).
U sits third to the right of P and one of them sits at the end of the row. A sits at the right end of the row. Three persons sit between A and D. T sits to the immediate left of U. Two persons sit between T and Q. Q who faces B sits to the immediate right of S. C faces R. E sits to the immediate left of C.

Q21. Which of the following pair sits at the extreme ends of the Row 2?
(a) P & S
(b) U & S
(c) P & Q
(d) U & Q
(e) None of these

Q22. Who sits second to the left of the person facing F?
(a) P
(b) R
(c) T
(d) Q
(e) U
Q23. What is the position of E with respect to B?
(a) Third to the left
(b) Second to the left
(c) Second to the right
(d) Third to the right
(e) None of these

Q24. Who is facing T?
(a) D
(b) E
(c) A
(d) C
(e) None of these

Q25. If the positions of all persons sitting in Row 2 are arranged as per the English alphabetical order from left to right, then who among the following faces R?
(a) A
(b) B
(c) C
(d) D
(e) None of these

Q26. Find the odd one out?
(a) YZW
(b) UVS
(c) QRO
(d) MNK
(e) IJF

Q27. Prerna points towards a picture and she says ,"He is the husband of the daughter of my paternal grandfather". How is Prerna related to that person?
(a) Daughter
(b) Niece
(c) Cousin
(d) Sister
(e) None of the above

Q28. In a row of 27 students, Piyush is 16th from the left end and Brijesh is 13th from the right end. All of them are facing North. How many students sit between them?
(a) One
(b) Two
(c) Three
(d) None
(e) Cannot be determined
Q29. If K means ‘−’, M means ‘×’, L means ‘÷ ’ and N means ‘+’ then
10 M 3 N 16 L 4 K 2= ?
(a) 38  
(b) 23  
(c) 95  
(d) 32  
(e) 68

Q30. How many pairs of letters are there in the word” CAPSULE” which have as many letters between them in the word as in alphabetical series?
(a) None  
(b) One  
(c) Two  
(d) Three  
(e) Four

Directions (31-32): Study the following sequence and answer the given questions.

Rohan starts walking from a point A in the west direction. After 6m he turns right. Then he walks for 7m and turns to his right again. He walks for 4m and then turns left and walks for 2m. He then turns to his right and after walking 2m finally stops at point D.

Q31. How far is Rohan from point A?
(a) 7m  
(b) 9m  
(c) 6m  
(d) 19m  
(e) Cannot be determined

Q32. In which direction is point A with respect to the point D?
(a) North  
(b) North-East  
(c) South  
(d) South-West  
(e) Cannot be determined

Directions (33-35): Study the following information and answer the given questions.

In a family of eight members there are three married couples. P is the daughter of M. M is married to N. R is the son of S. S has two children and both are married. V is married to R. F is grandfather of P. V is mother of H. N is son-in-law of S.
Q33. How is S related to F?
(a) Mother
(b) Daughter
(c) Wife
(d) Grandmother
(e) None of these

Q34. How is H related to M?
(a) Nephew
(b) Niece
(c) Son
(d) Daughter
(e) Cannot be determined

Q35. How is V related to N?
(a) Sister
(b) Mother
(c) Sister-in-law
(d) Cousin
(e) None of these

Directions (36-40): Study the information and answer the following questions:

Eight persons P, Q, R, S, T, U, V and W are sitting around a circle facing outside the centre (not necessarily in the same order). V sits opposite to W. P is an immediate neighbor of V. Q is an immediate neighbor of W. S sits third to the right of Q. U sits opposite to T. S is not an immediate neighbor of T.

Q36. Who among the following sit third to the left of V?
(a) T
(b) U
(c) Q
(d) R
(e) None of these

Q37. How many persons sit between P and Q?
(a) One
(b) Two
(c) Three
(d) Four
(e) Cannot be determined
Q38. Who sits opposite to S?
(a) R
(b) Q
(c) P
(d) T
(e) None of these

Q39. Who among the following sits second to the left of the one who is fifth to the right of U?
(a) T
(b) R
(c) W
(d) P
(e) None of these

Q40. Who sits to the immediate right of R?
(a) T
(b) W
(c) V
(d) Q
(e) None of these

Q41. Simple interest on a certain sum at the rate of \(16\frac{2}{3}\%\) per annum for three years is Rs. 1250. Find the sum.
(a) Rs. 3,000
(b) Rs. 2,500
(c) Rs. 2,400
(d) Rs. 4,000
(e) Rs. 5,000

Q42. A fraction becomes \(\frac{5}{3}\) when 20% of numerator is added to its numerator and 30% of denominator is subtracted from its denominator. Find the fraction.
(a) \(\frac{35}{36}\)
(b) \(\frac{36}{25}\)
(c) \(\frac{33}{35}\)
(d) \(\frac{27}{35}\)
(e) \(\frac{35}{33}\)

Q43. Rajjo borrows Rs. 6300 from PNB on compound interest at the rate of \(33\frac{1}{3}\%\) p.a. for two years. Find the total interest given by Rajjo to the bank after 2 years
(a) Rs.4,100
(b) Rs.3,900
(c) Rs.4,900
(d) Rs.4,600
(e) Rs. 4,500
Q44. Raheem spends 36% of his monthly income on daily spendings, 40% on house rent and children fee together and rest amount he saves for future needs. If his total savings be Rs. 14,400. Find his total monthly income.
(a) Rs. 45,000
(b) Rs. 40,000
(c) Rs. 48,000
(d) Rs. 60,000
(e) Rs. 55,000

Q45. The population a city after three years will be 21,600. If rate of increase of population per year be 20% then find the present population of the city.
(a) 12,500
(b) 16,500
(c) 14,500
(d) 10,500
(e) 11,600

Directions (46-50): Solve the following questions and find the value of (?)

\[ \frac{3}{4} \text{ of } 424 + \frac{5}{6} \text{ of } 540 = \frac{6}{7} \text{ of } 343 + ? \]
Q46. (a) 744
(b) 474
(c) 374
(d) 574
(e) 478

Q47. 33% of 600 + 44% of 225 = ? % of 500
(a) 56.4
(b) 5.94
(c) 59.4
(d) 49.4
(e) 69.4

Q48. \[ \frac{3453}{30} + \frac{5555}{500} = ? - \frac{777}{70} \]
(a) 13.371
(b) 133.71
(c) 13.731
(d) 137.31
(e) 131.73
Q49. \( 101 \times 6 + 450 \div 15 = ? \) % of 200
(a) 813
(b) 318
(c) 418
(d) 518
(e) 218

Q50. \( 13^2 + 17^2 + 23^2 - 24^2 = ? + 6^3 \)
(a) 269
(b) 159
(c) 195
(d) 185
(e) 175

Directions (51-55): Study the following line graph carefully and answer the following questions.

The line graph shows the no. of questions asked from different topics of quantitative aptitude in two shifts of SBI clerk prelims exam.

Q51. No. of questions asked in shift 1 from SI & CI is what percent of no. of questions asked from time and work in the same shift?
(a) 60%
(b) 50%
(c) 55%
(d) 64%
(e) 75%
Q52. Find the average no. of questions asked from all the given sections in shift 2.
(a) 46
(b) 64
(c) 48
(d) 68
(e) 74

Q53. What is the ratio of no. of questions asked from profit & loss and percentage together in shift 1 to the questions asked from profit & loss and time & work together in shift-2?
(a) 6 : 5
(b) 5 : 7
(c) 7 : 5
(d) 5 : 6
(e) 8 : 7

Q54. What is the difference between total no. of questions asked in both shifts from all the given sections together?
(a) 45
(b) 40
(c) 35
(d) 30
(e) 60

Q55. Total no. of questions asked from DI in shift 2 are what percent less than that of DI in shift 1?
(a) $\frac{52}{3}$%
(b) $\frac{62}{3}$%
(c) $\frac{42}{3}$%
(d) 8%
(e) $\frac{32}{3}$%

Directions (56-60): What will come in place of (?) in the following number series?

Q56. 4.7, 12.7, 28.7, 60.7, ?, 252.7
(a) 124.7
(b) 188.7
(c) 92.7
(d) 122.7
(e) 118.4
Q57. 1, 4, 14, 45, 139, ?
(a) 281  
(b) 422  
(c) 421  
(d) 140  
(e) 424

Q58. 5, 16, 32, 55, 87, ?
(a) 126  
(b) 128  
(c) 132  
(d) 130  
(e) 135

Q59. 440, 624, 840, 1088, 1368, ?
(a) 1520  
(b) 1848  
(c) 1680  
(d) 2024  
(e) 2400

Q60. 981, 961, 936, 906, 871, ?
(a) 824  
(b) 813  
(c) 826  
(d) 831  
(e) 821

Q61. Ratio between length of trains A and B is 3 : 5. Speed of train A is 72 km/h and that of train B is 54 km/h & they are running opposite to each other. If train A crosses train B in 16 seconds then find length of train B.
(a) 350 m  
(b) 250 m  
(c) 450 m  
(d) 150 m  
(e) 320 m

Q62. Ramesh and Ramu enter into a partnership with their initial sum Rs. 36000 and Rs. 48000 respectively. After 6 months, a third person Keshav also joins them with his initial sum Rs. 24000. After a year if total profit is Rs. 6400 then find the profit share of Ramu.
(a) Rs. 3000  
(b) Rs. 2300  
(c) Rs. 3200  
(d) Rs. 2800  
(e) Rs. 3600
Q63. The sum of present age of P and Q is 54 years. After 4 years, ratio of their ages will be 2 : 3. Find the present age of P.
(a) 25.2 years
(b) 24.6 years
(c) 21.8 years
(d) 20.8 years
(e) 22.6 years

Q64. In how many different ways the letters of the word ‘GAGUAR’ can be arranged?
(a) 220
(b) 180
(c) 60
(d) 120
(e) 160

Q65. A dice is thrown up find the probability of getting an odd no. on the upper face.
(a) 3/4
(b) 2/3
(c) 1/2
(d) 5/6
(e) 1/3

Directions (66-70): In the following questions there are two equations given. You have to solve both the equations and give answer:

Q66.
I. \( x^2 + 9x - 22 = 0 \)
II. \( 2y^2 - 7y + 6 = 0 \)
(a) if \( x > y \)
(b) if \( x < y \)
(c) if \( x \geq y \)
(d) if \( x \leq y \)
(e) if \( x = y \) or relation between \( x \) and \( y \) cannot be established

Q67.
I. \( 2y^2 - 13y - 34 = 0 \)
II. \( 3x^2 - 11x - 20 = 0 \)
(a) if \( x > y \)
(b) if \( x < y \)
(c) if \( x \geq y \)
(d) if \( x \leq y \)
(e) if \( x = y \) or relation between \( x \) and \( y \) cannot be established
Q68.
I. $x^4 = 256$
II. $y^2 - 16y + 64 = 0$
(a) if $x > y$
(b) if $x < y$
(c) if $x \geq y$
(d) if $x \leq y$
(e) if $x = y$ or relation between $x$ and $y$ cannot be established

Q69.
I. $x^2 - 46x + 528 = 0$
II. $y^2 - 48y + 572 = 0$
(a) if $x > y$
(b) if $x < y$
(c) if $x \geq y$
(d) if $x \leq y$
(e) if $x = y$ or relation between $x$ and $y$ cannot be established

Q70.
I. $2x + 3y = 4$
II. $4x + 5y = 6$
(a) if $x > y$
(b) if $x < y$
(c) if $x \geq y$
(d) if $x \leq y$
(e) if $x = y$ or relation between $x$ and $y$ cannot be established

Directions (71-80): Simplify the following problems.

Q71. $(841 + 29) + (34 \times 5) - (23 \times 5) = ?$
(a) 88
(b) 81
(c) 84
(d) 78
(e) 72

Q72. $?^2 = 40\%$ of 420 + $44\%$ of 200
(a) 24
(b) 12
(c) 8
(d) 16
(e) 416
Q73. \(343 + 243 + 512 = 20\% \text{ of } ?\)
(a) 4590
(b) 5490
(c) 6490
(d) 6140
(e) 5290

Q74. \((0.3)^3 \times (0.09) \times (0.027) = (0.0081)^2 + 2\)
(a) 0
(b) 1
(c) 2
(d) 3
(e) 4

Q75. \(\sqrt[3]{1728} + \sqrt{784} + \sqrt{1296} = ? + \sqrt[4]{512}\)
(a) 86
(b) 68
(c) 74
(d) 72
(e) 64

Q76. 13\% \text{ of } 400 + 17\% \text{ of } 500 = ? + 44\% \text{ of } 625
(a) -138
(b) 138
(c) -136
(d) 136
(e) -134

Q77. 24\% \text{ of } 125 + 48\% \text{ of } 150 = ?
(a) 106
(b) 108
(c) 104
(d) 112
(e) 102

Q78. \(\frac{2}{3} \text{ of } 4 \frac{2}{7} \text{ of } 3 \frac{1}{3} \text{ of } 81 = ?\)
(a) 2900
(b) 2500
(c) 2700
(d) 2300
(e) 2400
Q79. \( 90 \times 70 \div 14 + 13 - 28 = ? - 30\% \text{ of } 250 \)
(a) 410
(b) 510
(c) 610
(d) 710
(e) 530

Q80. \( 3 \frac{1}{2} + 4 \frac{3}{4} - 4 \frac{3}{5} = ? - 5 \frac{1}{2} \)
(a) \( \frac{9}{20} \)
(b) \( \frac{6}{5} \)
(c) \( \frac{11}{20} \)
(d) \( \frac{12}{20} \)
(e) \( \frac{9}{10} \)