Directions (1-5): Study the following arrangement carefully and answer the following questions given below:

Six persons A, B, C, D, E and F are going on a holiday to different places in different months of the same year. The places are Guwahati, Delhi, Chennai, Bhopal, Shimla and Mumbai in the months are February, March, April, June, October, December, but not necessarily in the same order.

E is going to Guwahati. C is going in October. Only two persons are going between B and F, who is going to Shimla. B goes just before E. A is going before D. D or B is not going to Mumbai or Chennai. C is not going to Mumbai or Bhopal. A is not going to Chennai. The one who is going to Bhopal does not go just before E. The one who is going to Mumbai does not going in February.

Q1. Who among the following is going in March Month?
(a) A
(b) B
(c) C
(d) D
(e) E

Q2. Who among the following is going to Bhopal?
(a) A
(b) B
(c) C
(d) D
(e) None of these

Q3. A is going to which place?
(a) Delhi
(b) Mumbai
(c) Chennai
(d) Bhopal
(e) None of these

Q4. Which among the following combination is correct?
(a) March-F
(b) June-D
(c) April-A
(d) February-E
(e) None of these
Q5. How many person(s) going in between E and the one who is going to Mumbai?
(a) One  
(b) Two  
(c) Three  
(d) Four  
(e) None

Directions (6-10): In each of the questions below. Some statements are given followed by conclusions/group of conclusions numbered I and II. You have to assume all the statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given two conclusions logically follows from the information given in the statements.

Q6. Statements:
Some date are clock.
Some clock are time.
No hour is date

Conclusions:
I. Some Clock are hour
II. No hour is time
(a) If only conclusion I follows
(b) If only conclusion II follows
(c) If either I or II follows
(d) If neither I nor II follows
(e) If both I and II follow

Q7. Statements:
All yellow are blue.
Some blue are red.
All blue are green.

Conclusions:
I. Some green can be red
II. All yellow are green
(a) If only conclusion I follows
(b) If only conclusion II follows
(c) If either I or II follows
(d) If neither I nor II follows
(e) If both I and II follow

Q8. Statements:
Some book are bell.
All box are belt.
Some bell are box.
Conclusions:
I. Some books are belt
II. Some books are not belt.
(a) If only conclusion I follows
(b) If only conclusion II follows
(c) If either I or II follows
(d) If neither I nor II follows
(e) If both I and II follow

Q9. Statements:
Some roads are sea.
No road is track.
No runway is track.
Conclusions:
I. Some sea are not track
II. Some road are not runway
(a) If only conclusion I follows
(b) If only conclusion II follows
(c) If either I or II follows
(d) If neither I nor II follows
(e) If both I and II follow

Q10. Statements:
All hands are leg.
No hand is mouth.
All body is mouth.
Conclusions:
I. Some leg are body
II. Some leg are not body.
(a) If only conclusion I follows
(b) If only conclusion II follows
(c) If either I or II follows
(d) If neither I nor II follows
(e) If both I and II follow

Directions (11-15): Study the following arrangement carefully and answer the following questions given below:
8 # ^ G 7 ^ L U $ W T 4 B % R ? F H * I 2 D 1 M P 5 @ Q 8 E 9 O 6

Q11. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
(a) DP5
(b) #7^  
(c) FI2
(d) PQ8
(e) QE9
Q12. How many such alphabets are there in the above arrangement each of which is immediately preceded by a symbol and immediately followed by a number?
(a) None
(b) One
(c) Two
(d) Three
(e) More than three

Q13. Which of the following element is the seventh to the left of the sixth from the right end of the above arrangement?
(a) ^
(b) R
(c) D
(d) *
(e) 2

Q14. Which of the following is exactly between the element which is ninth from the right end and the one which is eleventh from the left end of the above arrangement?
(a) *
(b) H
(c) I
(d) 2
(e) #

Q15. If all the symbols are dropped from the above arrangement, which among the following will be the ninth to the left of P?
(a) U
(b) W
(c) 4
(d) T
(e) B

Directions (16-20): Study the following arrangement carefully and answer the following questions given below:
There are Eight persons A, B, C, D, E, F, G and H going for a vacation on 19th or 28th of the following month i.e. March, June, August, November but not necessarily in the same order. Only one person is going on each date. A goes on 28th of the month which is having 31 days. D goes immediately before H. Two people go in between A and H. F goes on the day immediate before G. B goes on 19th of the month which is having 31 days and three people are going in between B and G. No one goes after C.

Q16. Who among the following goes on 19th of August?
(a) B
(b) F
(c) H
(d) G
(e) E
Q17. E goes on which date?
(a) 19 March  
(b) 28 June  
(c) 19 November  
(d) 28 August  
(e) None of these

Q18. How many persons go on holiday between E and H?
(a) three  
(b) two  
(c) one  
(d) four  
(e) Five

Q19. Who among the following goes on 28th June?
(a) B  
(b) A  
(c) D  
(d) E  
(e) F

Q20. Who among the following go to holiday in between G and H?
(a) A  
(b) F  
(c) B  
(d) None of these  
(e) E

Directions (21-25): 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.

Q21.
**Statements:**
J > X ≤ O ≤ R = M > V > L
**Conclusions:**
I. M < J  
II. X > 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.
Q22.
**Statements:**
A ≤ N ≤ C = 0 ≤ W ≥ 1 = E
**Conclusions:**
I. W < A
II. W = 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.

Q23.
**Statements:**
U ≥ I = V > B ≥ R > E < O
**Conclusions:**
I. U > R
II. V > 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.

Q24.
**Statements:**
L = 0 ≥ P ≤ A ≤ D = R ≥ B
**Conclusions:**
I. P ≤ R
II. B ≤ L
(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.

Q25.
**Statements:**
J < Y > O ≥ Z ≥ E = U ≥ T
**Conclusions:**
I. U < Y
II. T ≤ J
(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.
Q26. In a class, there are 45 students, Rahul is at 23rd rank from bottom and there are eleven students between Saurabh and Rahul. Saurabh is above Rahul. Now, what is the rank of Saurabh from top?
(a) 10  
(b) 11  
(c) 13  
(d) 12  
(e) 15

Directions (27-28): Study the following arrangement carefully and answer the following questions given below:
In a family of seven members X is brother of Z who is paternal grandmother of G. E is sister of G and daughter of J who is mother-in-law of K. J has two children and only one daughter. K is daughter-in-law of L.

Q27. How is E related to L?
(a) Sister  
(b) Daughter  
(c) Daughter-in-law  
(d) Niece  
(e) None of these

Q28. What is the relation of L with X?
(a) Nephew  
(b) Brother  
(c) Cousin  
(d) Father  
(e) None of these

Q29. In a certain code ‘ROAM’ is written as ‘5913’ and ‘DONE’ is written as ‘4962’. How is ‘RANDOM’ written in that code?
(a) 514639  
(b) 564193  
(c) 516493  
(d) 546193  
(e) 516913

Q30. A man walks 10 m straight turns right and walks 5 m again walks 20 m after turning right and stops there facing South. What is his direction when he starts walking?
(a) South  
(b) West  
(c) North  
(d) East  
(e) Cannot be determined
Directions (31-35): Study the given information carefully to answer the given questions.

Eight persons A1, A2, A3, A4, A5, A6, A7 and A8 sitting around a circular table facing center, but not necessarily in the same order.
Two persons sit between A3 and A6. A4 sits to the immediate right of A6. A1, who is an immediate neighbor of A3, sits third to the left of A2. A3 does not sit opposite to A2.
A7 is neither an immediate neighbor of A2 nor A1. A8 sits to the immediate right of A7.

Q31. Who among the following sits third to the left of one who sits second to the right of A4?
(a) A3  
(b) A6  
(c) A1  
(d) A5  
(e) A7

Q32. Which statement among the following is true about A2?
(a) A7 sits opposite to A2  
(b) A6 sits immediate left of A2  
(c) A3 sits second to the left of A2  
(d) Only two persons sit between A2 and A4  
(e) None is true

Q33. Who sits opposite to A8?
(a) A1  
(b) A3  
(c) A5  
(d) A2  
(e) None of these

Q34. Who among the following sits exactly between A1 and A5 when counted from the right of A1?
(a) A6  
(b) A2  
(c) A3  
(d) A4  
(e) A7

Q35. Who among the following sits second to the right of A1?
(a) A8  
(b) A2  
(c) A3  
(d) A4  
(e) A5
Directions (36-40): Study the given information carefully to answer the given questions.

In a certain code language,
‘teachers to check exams’ is written as ‘es fr jd pt’,
‘check done in night’ is written as ‘ch dh mo fr’,
‘done to allot persons’ is written as ‘jd dv ch gi’ and
‘allot chairman in check’ is written as ‘mo gi fr ox’.

Q36. What is the code for ‘night’ in the given code language?
(a) mo  
(b) ox
(c) ch
(d) Other than those given as options
(e) dh

Q37. In the given code language, what does the code ‘pt’ stand for?
(a) allot
(b) Either ‘exams’ or ‘teachers’
(c) night
(d) check
(e) Either ‘for’ or ‘persons’

Q38. What may be the code for ‘check call’ in the given code language?
(a) dv iq  
(b) iq gi
(c) iq fr
(d) gi es
(e) fr dv

Q39. What is the code for ‘to’ in the given code language?
(a) mo  
(b) fr
(c) gi
(d) dv
(e) jd

Q40. If ‘allot new persons’ is coded as ‘dv wzgi’ in the given code language, then what is the code for ‘new chairman done’?
(a) wz ch es  
(b) ch wz ox
(c) ox mo wz
(d) fr es wz
(e) ch ox fr
Q41. The average weight of boys in a class of total strength 50 is 40 kg while average weight of girls is 35 kg. Find number of girls in class if average weight of class is 38 kg.
(a) 10
(b) 30
(c) 20
(d) 40
(e) 15

Q42. Veer buy an article for Rs. 480. He sold it at 12% loss and get some money and from that money he again buys an article and this he sold at 25% profit. What was profit percentage he got from this transaction?
(a) 16%
(b) 12%
(c) 10%
(d) 14%
(e) 20%

Q43. A man invested a certain amount at the rate of 8 % per annum for 5 year and obtained a total SI of Rs. 5000. Had he invested the same amount at the same rate for 2 years, how much amount would he have obtained as CI at the end of 2 year?
(a) 2050 Rs.
(b) 2010 Rs.
(c) 2040 Rs.
(d) 2080 Rs.
(e) 2060 Rs.

Q44. Two trains of lengths 60 m and 80 m are running in the same direction with speed of 80 kmph and 64 kmph respectively. The time taken by them to cross each other is?
(a) 36.5 sec
(b) 31.5 sec
(c) 30.5 sec
(d) 28.5 sec
(e) 26.5 sec

Q45. Walking at three-fourth of his usual speed, Ram cover certain distance in 2 hours more than the time he take to cover the distance at his usual speed. The time taken by him to cover the distance with his usual speed is?
(a) 4.5 hr
(b) 5.5 hr
(c) 6 hr
(d) 5 hr
(e) 4 hr
Q46. A boat can row at the rate of 3.5 km/hr in still water. If the time taken by boat to cover a certain distance upstream is 2 1/2 times as much as to cover the same distance downstream, find the speed of the current?
(a) 2.5 km/hr 
(b) 1.5 km/hr 
(c) 3 km/hr 
(d) 1.25 km/hr 
(e) 1.75 km/hr

Q47. Three years ago, the average age of five employees of a company was 54 yrs. The present average age is 52 yr after the inclusion of a new employee entered. Find the age of the new employee?
(a) 18 yr 
(b) 25 yr 
(c) 20 yr 
(d) 22 yr 
(e) 27 yr

Q48. P and Q invested the same capital in business, at the end of the year they get the profit of 7500 Rs. and 5000 Rs. respectively. If P has invested his capital for the whole year, for how many months Q has invested her capital?
(a) 8 months 
(b) 7 months 
(c) 5 months 
(d) 9 months 
(e) 10 months

Q49. Veer spends 50% of his monthly income on household items and out of the remaining he spends 50% on transport, 25% on entertainment, 10% on sport and remaining amount of Rs. 1800 is saved. What is Veer’s monthly income?
(a) 26000 Rs. 
(b) 24000 Rs. 
(c) 29000 Rs. 
(d) 25000 Rs. 
(e) 10000 Rs.

Q50. A rectangular field cost Rs. 110 for leveling at 50 paise per square meter. If the ratio of length to breadth is 11 : 5. Find the breadth of field?
(a) 12 m 
(b) 10 m 
(c) 5 m 
(d) 16 m 
(e) 15 m
Directions (51-55): What will come in the place of question (?) marks:

**Q51.** 128, 1088, 1568, 1808, 1928, ?
(a) 1978  
(b) 1968  
(c) 1998  
(d) 1988  
(e) 1984

**Q52.** 24, 46, 90, 178, 354, ?
(a) 812  
(b) 712  
(c) 706  
(d) 908  
(e) 928

**Q53.** 25, 300, 3000, 24000, 144000, ?
(a) 576000  
(b) 448000  
(c) 526000  
(d) 510000  
(e) 538000

**Q54.** 38, 18, 26, 64, 223, ?
(a) 1000.5  
(b) 1004.5  
(c) 1002.5  
(d) 1008.5  
(e) 996.5

**Q55.** 108.8, 326.4, 81.6, 408, 68, ?
(a) 486  
(b) 476  
(c) 454  
(d) 490  
(e) 420
Directions (56-60): Given below pie chart shows percentage distribution of population in five villages. Read the chart carefully and answer the questions.

Total population = 7200

Q56. If ratio between male to female population in village A and B is 5 : 4 and 2 : 1 respectively. Find total female population in village A & B together is what percent of total male population in village B?

(a) $97 \frac{13}{21}$
(b) $93 \frac{13}{21}$
(c) $91 \frac{13}{21}$
(d) $99 \frac{13}{21}$
(e) $95 \frac{13}{21}$

Q57. Find the central angle of population of village D & E together?

(a) 148°
(b) 154°
(c) 166°
(d) 160°
(e) 162°

Q58. If total population of another village Q is 65 % of total population of village C and ratio between male population to female population in village Q is 4 : 9. Then find total female population in village Q?

(a) 805
(b) 810
(c) 840
(d) 880
(e) 960
Q59. If total literate population of village D is equal to 75% of total population of village B. then find percentage of illiterate population in village D?
(a) 54.25%
(b) 52.25%
(c) 58.25%
(d) 56.25%
(e) 50.25%

Q60. Find the ratio between total population of village E to total population of village B?
(a) 5:7
(b) 6:11
(c) 6:7
(d) 6:5
(e) 5:12

Directions (61-70): What will come in place of (x) in the following questions:

Q61. \( 45\% \text{ of } 80 + \sqrt{841} + x^2 = 2121 + 21 \)
(a) 2
(b) 6
(c) 5
(d) 8
(e) 9

Q62. \( \frac{36+3x}{23} + 2^8 \div 16^2 = 13 \times 4 \)
(a) 290
(b) 270
(c) 379
(d) 350
(e) 152

Q63. \( 7^3 \times 2^5 \div 4^3 + 175\% \text{ of } 350 = x^2 \)
(a) 23
(b) 21
(c) 28
(d) 26
(e) 25

Q64. \( 23 \times 24 + 23 \times 47 - 23 \times 54 = x \)
(a) 237
(b) 289
(c) 321
(d) 391
(e) 491
Q65. 120% of 650 + 320 + 255 ÷ 5 = x
(a) 1163
(b) 1363
(c) 1151
(d) 1263
(e) 1051

Q66. $\frac{11}{9} + \frac{2}{9} - \frac{12}{9} - \frac{4}{4} = x$
(a) $\frac{35}{36}$
(b) $\frac{25}{36}$
(c) $\frac{35}{36}$
(d) $\frac{31}{36}$
(e) $\frac{35}{36}$

Q67. 5220 + 1375 - 5364 + x = 10288
(a) 9263
(b) 9057
(c) 8024
(d) 7056
(e) 8824

Q68. $? \times (1350 \div 112.5) = \sqrt{5929} + \sqrt{8281}$
(a) 11
(b) 12
(c) 13
(d) 14
(e) 15

Q69. 18750 ÷ $\sqrt{?} = 36 \times 11 + 59 \times 6$
(a) 25
(b) 625
(c) 5
(d) 3125
(e) 5625

Q70. $3^2 = 729 \div 243 \times 216 \times 72 \div 576$
(a) -2
(b) 8
(c) 6
(d) 5
(e) 4
Directions (71-75): What approximate value will come in the place of question (?) marks:

Q71. \[ 21.11\% \text{ of } 1299.89 + 5 \times ? = 52.12\% \text{ of } 4399.98 \]
(a) 415
(b) 408
(c) 362
(d) 398
(e) 403

Q72. \[ 2.93 \times 4.98 + 54.88 \div 4.98 + ? = 78.12\% \text{ of } 199.11 \]
(a) 130
(b) 110
(c) 105
(d) 140
(e) 150

Q73. \[ \frac{(3.99 \times 1) + 29.88}{24.92} + 1149.92 \div 5 = 319.98 \]
(a) 555
(b) 4282
(c) 569
(d) 525
(e) 502

Q74. \[ 16.004\sqrt{7} + 68.899\sqrt{7} - 10.001\sqrt{7} = \frac{75.11}{33.99} \times (?) \]
(a) 1225
(b) 961
(c) 1024
(d) 729
(e) 1156

Q75. \[ 56.08\% \text{ of } 149.92 + \sqrt{28.02} \times 6.98 - 11\frac{1}{9} \% \text{ of } 998.9 = ? \]
(a) 17
(b) -13
(c) 8
(d) -16
(e) 22
Q76. Ayush divided 2189 in three parts such that interest on them after 1, 2, 3 years respectively may be equal. The rate of SI is 4% per annum in all case. The smallest part is ?
(a) 702  
(b) 398  
(c) 425  
(d) 756  
(e) 1093

Q77. If Priya and Monika working Separately can do a piece of work in 18 days and 30 days respectively. If they work in alternate days beginning with Priya, then the work will be completed in ?
(a) \( \frac{10}{5} \) days  
(b) \( \frac{22}{5} \) days  
(c) \( \frac{9}{5} \) days  
(d) \( \frac{12}{5} \) days  
(e) \( \frac{8}{5} \) days

Q78. A vegetable seller buy potato and tomato in Rs. 7.5 per kg. He sells potato at a profit of 22% and tomato at a loss of 8%, What is the S.P. of tomato, if in whole transaction there is no profit no loss ?
(a) 5.08 Rs.  
(b) 4.97Rs.  
(c) 5.07Rs.  
(d) 5.06Rs.  
(e) 5.66Rs.

Q79. A bag contains 6 red balls, 4 green balls and 8 white balls. If three balls are drawn at random, find the probability that one is red ball and two are green balls?
(a) \( \frac{3}{69} \)  
(b) \( \frac{3}{68} \)  
(c) \( \frac{3}{65} \)  
(d) \( \frac{4}{67} \)  
(e) \( \frac{3}{71} \)

Q80. Two vessels contains milk and water in the ratio 3 : 2 and 7 : 3. Find the ratio in which the contents of two vessels have to be mixed to get a new mixture in which ratio of milk to water is 2 : 1?
(a) 2 : 1  
(b) 1 : 2  
(c) 4 : 1  
(d) 1 : 4  
(e) 3 : 4