

Solutions

1. Ans. C.

1. Conference on Hospitality was held in Hyderabad on Friday.

2. Only one conference was held between conference on hospitality and Finance.

3. The conference held on Monday was held in Delhi.

4. Conference on Management was held immediately after HR but immediately before Banking.

5. Only one Conference was held between conferences on Banking and the conference held in Mumbai.

6. The conference on HR was not held in Mumbai.

7. Conference in Pune was held immediately before conference in Indore.

8. Conference on Management was not held in Indore.

9. Conference on Real Estate was not held on Monday. Conference in Chennai was not held after conference in Mumbai.

Day	Conference	City
Monday	Marketing	Delhi
Tuesday	Hr	Chennai
Wednesday	Management	Pune
Thursday	Banking	Indore
Friday	Hospitality	Hyderabad
Saturday	Real state	Mumbai
Sunday	Finance	Bhopal

2. Ans. E.

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4. Ans. B.

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Day	Conference	City
Monday	Marketing	Delhi
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Wednesday	Management	Pune
Thursday	Banking	Indore
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5. Ans. D.

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Sunday	Finance	Bhopal

6. Ans. C.

19th from the right is W, and 7th to the right of W is Z
Hence option C is correct

7. Ans. B.

In all others Ist character + 3 = second character and
First character -2 = third character
Hence option B is correct

8. Ans. E.

@ D F, # R N, © W P and \$ H U
Hence option E is correct

9. Ans. C.

F 3 # and B 7 \$
Hence option C is correct

10. Ans. A.

8 @ D
↑ ↑
-2 +1

Similarly for # N 1, W δ J, 5 ★ 6 and 7 H U
Hence option A is correct

11. Ans. B.

From the given conditions, we can conclude:

○ — ○ — ○ — ○ — ○ — ○ — ○ Facing North
R S P T X Q W

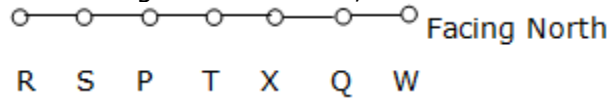
After arranging in alphabetical order,

X W T S R Q P
○ — ○ — ○ — ○ — ○ — ○ — ○
R S P T X Q W

Hence, only Q's position will remain unchanged.

12. Ans. A.

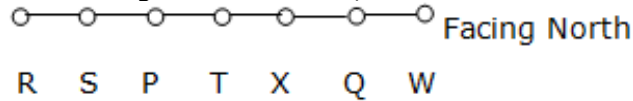
From the given conditions, we can conclude:



Hence 4 people sit to the right of P.

13. Ans. E.

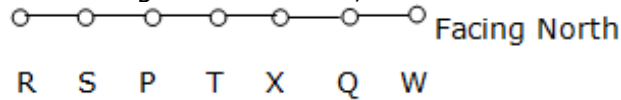
From the given conditions, we can conclude:



Only W is sitting on the extreme ends of the row.
Hence, W does not belong to group formed by rest of the other people.

14. Ans. D.

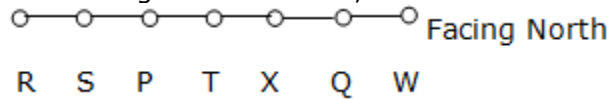
From the given conditions, we can conclude:



Hence R and P are the immediate neighbours of S.

15. Ans. B.

From the given conditions, we can conclude:



Position can be determined as $4 - 2 = 2^{\text{nd}}$ from right end.

Hence Q is the person who sits second to the right of the fourth person from the right end of the line.

16. Ans. E.

$$G = D \leq C = B \leq A$$

$$F = E > D > H > I$$

$$G \leq A \text{ (True)}$$

$$F > I \text{ (True)}$$

17. Ans. B.

$$M = G \geq D \geq F$$

I. $N < F$ (There is no relation between N and F.)

II. $M \geq F$ (True)

18. Ans. A.

$$W > E = D > J = Q$$

$$I. W > Q \text{ (True)}$$

$$II. K > C \text{ (Not true)}$$

19. Ans. A.

$$A > B > G > E > F$$

So, conclusion I follows $A > F$

So, conclusion II does not follow as there is no relation between B and D

Only conclusion I follows

20. Ans. A.

$$Z \leq X < O = R \leq E \leq C = Q$$

$$Q > Z \text{ (True)}$$

$$Z = Q \text{ (False)}$$

Only I follows.

21. Ans. E.

1. D sits fourth to left of P. P sits at one of the extreme ends of the line.

2. E sits second to left of R. R is not an immediate neighbor of D. Neither R nor F sits at the extreme end of the line.

3. H sits to the immediate left of Q.

4. G faces south direction.

5. F faces opposite direction to G.

6. Both the immediate neighbours of D face North.

7. Both the immediate neighbors of F face North. Immediate neighbours of G face opposite directions

South	South	South	North	North	North	North	North
P	R	G	E	D	F	H	Q

22. Ans. C.

1. D sits fourth to left of P. P sits at one of the extreme ends of the line.

2. E sits second to left of R. R is not an immediate neighbor of D. Neither R nor F sits at the extreme end of the line.

3. H sits to the immediate left of Q.

4. G faces south direction.

5. F faces opposite direction to G.

6. Both the immediate neighbours of D face North.

7. Both the immediate neighbors of F face North. Immediate neighbours of G face opposite directions

South	South	South	North	North	North	North	North
P	R	G	E	D	F	H	Q

23. Ans. C.

1. D sits fourth to left of P. P sits at one of the extreme ends of the line.

2. E sits second to left of R. R is not an immediate neighbor of D. Neither R nor F sits at the extreme end of the line.

3. H sits to the immediate left of Q.

4. G faces south direction.

5. F faces opposite direction to G.
 6. Both the immediate neighbours of D face North.
 7. Both the immediate neighbors of F face North. Immediate neighbours of G face opposite directions

South	South	South	North	North	North	North	North
P	R	G	E	D	F	H	Q

24. Ans. B.

1. D sits fourth to left of P. P sits at one of the extreme ends of the line.
 2. E sits second to left of R. R is not an immediate neighbor of D. Neither R nor F sits at the extreme end of the line.
 3. H sits to the immediate left of Q.
 4. G faces south direction.
 5. F faces opposite direction to G.
 6. Both the immediate neighbours of D face North.
 7. Both the immediate neighbors of F face North. Immediate neighbours of G face opposite directions

South	South	South	North	North	North	North	North
P	R	G	E	D	F	H	Q

25. Ans. A.

1. D sits fourth to left of P. P sits at one of the extreme ends of the line.
 2. E sits second to left of R. R is not an immediate neighbor of D. Neither R nor F sits at the extreme end of the line.
 3. H sits to the immediate left of Q.
 4. G faces south direction.
 5. F faces opposite direction to G.
 6. Both the immediate neighbours of D face North.
 7. Both the immediate neighbors of F face North. Immediate neighbours of G face opposite directions

South	South	South	North	North	North	North	North
P	R	G	E	D	F	H	Q

26. Ans. E.

428 → 427
 682 → 681
 391 → 392
 745 → 746
 534 → 533
 Required difference → 427 - 392 = 35

27. Ans. A.

428 → 248
 391 → 931
 745 → 475
 682 → 862

534 → 354

Required difference → 931 - 862 = 69

28. Ans. D.

428 → 418
 391 → 381
 745 → 735
 682 → 672
 534 → 524
 Number divisible by 3
 $\frac{381}{3} = 127; \frac{735}{3} = 245; \frac{672}{3} = 224$

29. Ans. C.

745 > 682 > 534 > 428 > 391
 Required sum = 4+2+8 = 14

30. Ans. B.

Lower number = 391

$$\frac{9}{3} = 3$$

31. Ans. E.

I. Jason > (Shane and Joseph)
 II. Joseph > Shaun
 So, from both statements, Jason is oldest among all.
 So, data in both statements I and II together are necessary to answer the question.

32. Ans. D.

I. I happy today = ke ne que ... (i)
 Today happy day = ke joi ne ... (ii)
 From (i) and (ii), the code of 'happy' = ke or ne
 II. I play = que pa
 So, from both statements, the code of happy cannot exactly determined.
 So, the data even in both statements I and II together are not sufficient to answer the question.

33. Ans. B.

Color of white snow is 'white'.
 From II 'white' is called 'orange'
 So, the white snow is 'orange'
 So, data in statement II alone are sufficient to answer the question.

34. Ans. E.

From I and II: D > N > M > P > K.

35. Ans. D.

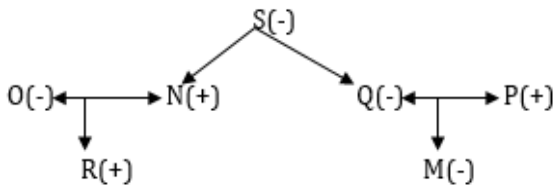
From I, we have: $R > Q$, $R > T$, $S > R$ i.e. $S > R > Q > T$ or $S > R > T > Q$.

From II, S is not the heaviest. So, P is the heaviest. Thus, we have: $P > S > R > Q > T$ or $P > S > R > T > Q$.

Hence, either T or Q is the lightest.

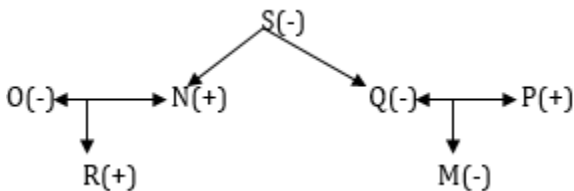
36. Ans. C.

Q is sister of R's grandmother's only son. Q must be S's daughter. Since N and P are not blood relatives and O is the sister in law of P so Q must be P's wife and N must be O's husband. M must be Q's daughter and since S has only one granddaughter so R must be N's Son.

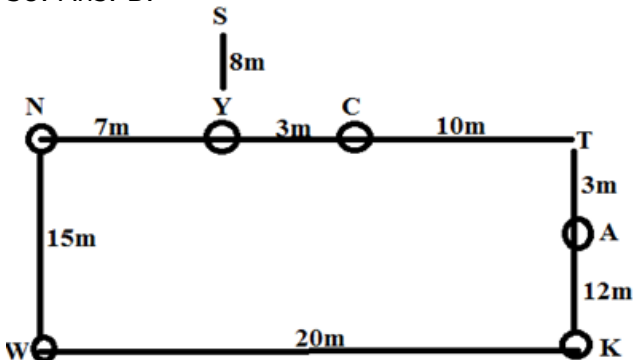


37. Ans. D.

Q is sister of R's grandmother's only son. Q must be S's daughter. Since N and P are not blood relatives and O is the sister in law of P so Q must be P's wife and N must be O's husband. M must be Q's daughter and since S has only one granddaughter so R must be N's Son.

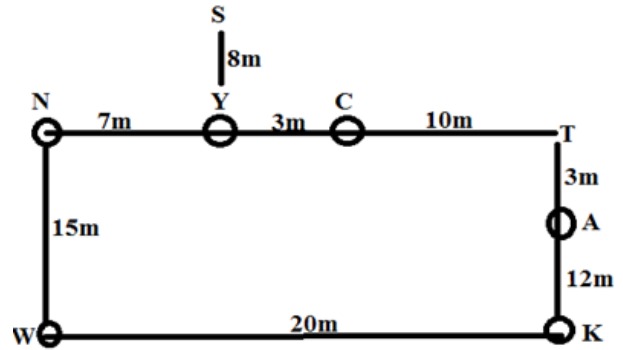


38. Ans. B.

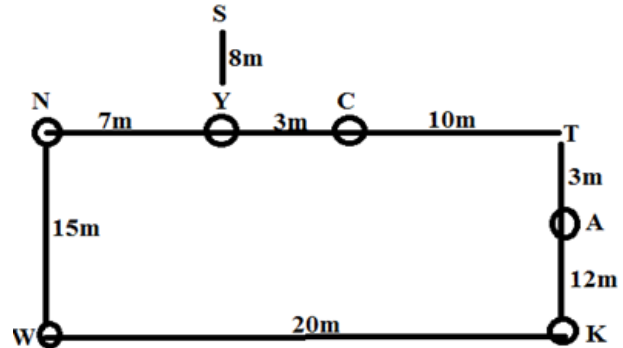


N is at 25m to the north-west direction of K.

39. Ans. B.



40. Ans. B.



41. Ans. C.

Let the speed of stream be x km/hr

Then,

Speed of upstream = $x \times 600/100 = 18$

$\Rightarrow x = 3$ km/hr

Speed of boat in still water = $18 + 3 = 21$ km/hr

Distance covered in 3 hours in downstream = $(21 + 3) \times 3 = 72$ km

42. Ans. A.

$(A + B)(A - B) = 252$

$\Rightarrow 42 \times (A - B) = 252$ [$A + B = 42$ given]

$\Rightarrow (A - B) = 6$... (i)

And $A + B = 42$... (ii)

Solve (i) and (ii), we get

$B = 18$

43. Ans. D.

Let the time taken by A and B be $5x$ days and $3x$ days respectively.

$\Rightarrow 5x = 40$ days

$\Rightarrow x = 8$ days

B's time = $3 \times 8 = 24$ days

Time taken by both together to complete the work = $(40 \times 24)/(40 + 24) = 15$ days

44. Ans. B.

Speed of train = 72 km/hr = 30 m/s

Length of train = $18 \times 20 = 360$ m

Length of (train + platform) = $20 \times 33 = 660$ m

\therefore length of platform = 660 m - 360 m = 300 m

45. Ans. E.

radius = $66 \times \frac{7}{(2 \times 22)} = \frac{21}{2}$

Side of square = $\frac{21}{4}$

Area of square = $(\frac{21}{4})^2 = \frac{441}{16} = 28$ sq. cm.
(approx.)

46. Ans. D.

Let total employees in company be $100x$

ATQ, $(\frac{25}{100}) \times 100x = 90$

\Rightarrow Total employees in company = $100x = 360$

Employees working in HR department =

$(\frac{2}{9}) \times 360 = 80$

Employees working in Sales department =

$(\frac{125}{100}) \times 80 = 100$ Remaining employees = 360

$- 90 - 80 - 100 = 90$

Employees working in Security department =

$(\frac{4}{9}) \times 90 = 40$

Employees working in Housing department =

$(\frac{5}{9}) \times 90 = 50$

Sales	Finance	HR	Security	Housing	Total
100	90	80	40	50	360

$\{(\frac{80-40}{40}) \times 100\} = 100\%$

47. Ans. C.

Let total employees in company be $100x$

ATQ, $(\frac{25}{100}) \times 100x = 90$

\Rightarrow Total employees in company = $100x = 360$

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Employees working in Housing department =

$(\frac{5}{9}) \times 90 = 50$

Sales	Finance	HR	Security	Housing	Total
100	90	80	40	50	360

$(100 + 90 + 50) / 3 = 240 / 3 = 80$

48. Ans. A.

Let total employees in company be $100x$

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\Rightarrow Total employees in company = $100x = 360$

Employees working in HR department =

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$(\frac{4}{9}) \times 90 = 40$

Employees working in Housing department =

$(\frac{5}{9}) \times 90 = 50$

Sales	Finance	HR	Security	Housing	Total
100	90	80	40	50	360

$(50 - 40) = 10$

49. Ans. E.

Let total employees in company be $100x$

ATQ, $(\frac{25}{100}) \times 100x = 90$

\Rightarrow Total employees in company = $100x = 360$

Employees working in HR department =

$(\frac{2}{9}) \times 360 = 80$

Employees working in Sales department =

$(\frac{125}{100}) \times 80 = 100$ Remaining employees = 360

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Employees working in Housing department =

$(\frac{5}{9}) \times 90 = 50$

Sales	Finance	HR	Security	Housing	Total
100	90	80	40	50	360

$40 - (\frac{40}{100}) \times 40 = 24$

50. Ans. A.

Let total employees in company be $100x$

ATQ, $(\frac{25}{100}) \times 100x = 90$

\Rightarrow Total employees in company = $100x = 360$

Employees working in HR department =

$(\frac{2}{9}) \times 360 = 80$

Employees working in Sales department =

$(\frac{125}{100}) \times 80 = 100$ Remaining employees = 360

$- 90 - 80 - 100 = 90$

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Employees working in Housing department =

$(\frac{5}{9}) \times 90 = 50$

Sales	Finance	HR	Security	Housing	Total
100	90	80	40	50	360

$80 \times (\frac{2}{5}) = 32$

51. Ans. C.

Marks scored by Sandy in English and Maths together = $60 + 60 = 120$

Marks scored by Aditya and Neeraj in English together = $75 + 85 = 160$

Required % = $120/160 \times 100 = 75\%$

52. Ans. A.

Required ratio = $(60 + 75 + 55 + 60)/(80 + 60 + 90 + 65) = 5:6$

53. Ans. D.

Total marks scored by Paul = $65 + 60 + 80 + 65 = 270$

Total marks scored by Neeraj = $85 + 55 + 95 + 85 = 320$

Required difference = $320 - 270 = 50$

54. Ans. E.

Required average = $(75 + 75 + 60)/3 = 70$

55. Ans. B.

Required % = $(60 + 60 + 65 + 60)/4 = 61.25\%$

56. Ans. B.

MP of article = $(1020/80) \times 100 = \text{Rs. } 1275$

Selling price = $1275 - 199 = \text{Rs. } 1076$

57. Ans. C.

Sum of present age of A, B and C

= $98 - 4 \times 3$

= $98 - 12$

= 86 yr.

Present age of C = $86 - (32 + 23) = 31 \text{ yr.}$

Age of C four years hence = $31 + 4 = 35 \text{ yr.}$

58. Ans. B.

Profit share ratio of

$$\begin{array}{ccc} \text{A} & & \text{B} \\ 12000 \times x & & 16000 \times 9 \\ x & : & 12 \end{array}$$

ATQ,
x 9000

$$\frac{12}{x} = \frac{12000}{9000} \\ \Rightarrow x = 9 \text{ months.}$$

59. Ans. E.

Let, total quantity = 100 l

Quantity of milk = 60 l

And quantity of water = 40 l

ATQ,

$$\frac{40}{100} = \frac{60}{100+x}$$

$$2(100 + x) = 5 \times 60$$

$$200 + 2x = 300$$

$$2x = 100$$

$$x = 50 \text{ l}$$

$$\text{Water added in \%} = \frac{50}{100} \times 100 = 50\%$$

60. Ans. E.

Let the sum be Rs. P.

$$\text{Difference} = P(1 + 0.1)^2 - P \times (1.16)$$

$$\Rightarrow P = \text{Rs. } 4500$$

61. Ans. D.

$$(\sqrt{1443}) \div 19.01 + 328 = ? \times 22$$

$$\Rightarrow 38/19 + 328 = ? \times 22$$

$$? = (330/22) = 15$$

62. Ans. B.

$$30\% \text{ of } 880 = ? + 111$$

$$\Rightarrow (30 \times 880)/100 = ? + 111$$

$$? = 264 - 111 = 153$$

63. Ans. A.

$$(?)^2 = 400 - 256 = 144$$

$$(?) = 12$$

64. Ans. E.

$$12 + ? = 256$$

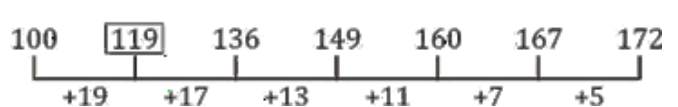
$$? = 244$$

65. Ans. D.

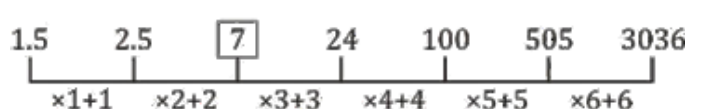
$$(75/100) \times ? = 324$$

$$? = 432$$

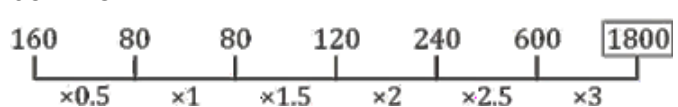
66. Ans. D.



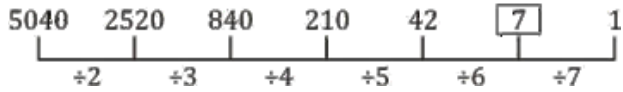
67. Ans. B.



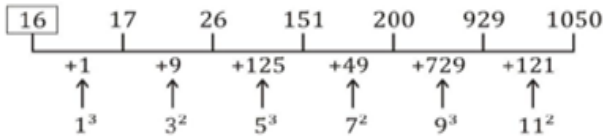
68. Ans. D.



69. Ans. A.



70. Ans. C.



71. Ans. B.

$$?^2 = 49$$

$$? = 7$$

72. Ans. D.

$$? = (126 - 108) / 4 = 12$$

73. Ans. A.

$$? = (5/2) * (80 + 120) = 500$$

74. Ans. C.

$$? = (121 + 36 - 37) = 120$$

75. Ans. E.

$$? = 360 / (72 - 27) = 8$$

76. Ans. D.

$$? = (15 + 21)^{(1/2)} = 6$$

77. Ans. A.

$$? = 128 - 64 = 64$$

78. Ans. B.

$$? = 24 + 6 = 30$$

79. Ans. E.

$$? = (90 + 310)^{(1/2)} = 20$$

80. Ans. C.

$$? = \{(18 * 8) - (36 * 3)\} / 2 = 18$$