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

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Monday	Marketing	Delhi
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Monday	Marketing	Delhi
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4. Ans. B.
1. Conference on Hospitality was held in Hyderabad on Friday.
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6. The conference on HR was not held in Mumbai.
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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

5. Ans. D.
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

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
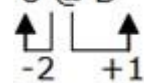Hence option B is correct

8. Ans. E.
@ D F, # R N, © W P and $ H U
Hence option E is correct
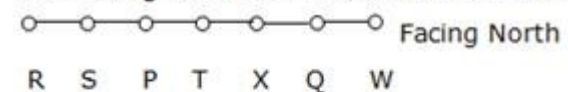
9. Ans. C.
F 3 # and B 7 $
Hence option C is correct

10. Ans. A.
8 @ D
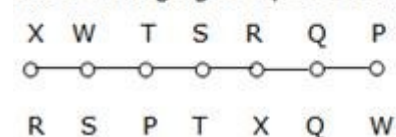
-2   +1

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

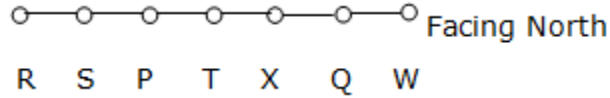11. Ans. B.
From the given conditions, we can conclude:

o—o—o—o—o—o—o Facing North

R   S   P   T   X   Q   W

After arranging in alphabetical order,

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

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:

R   S   P   T   X   Q   W — Facing North

Hence 4 people sit to the right of P.

13. Ans. E.
From the given conditions, we can conclude:

R   S   P   T   X   Q   W — Facing North
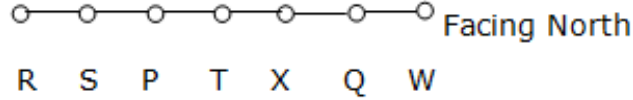
Only W is sitting on the extreme ends of the row. Hence, W does not belong to group formed by rest of the other people.
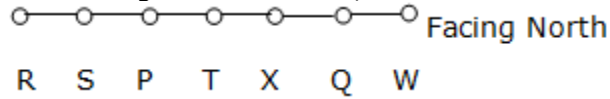
14. Ans. D.
From the given conditions, we can conclude:

R   S   P   T   X   Q   W — Facing North
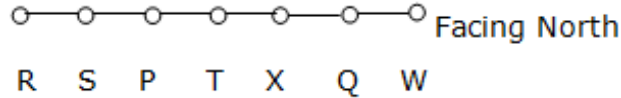
Hence R and P are the immediate neighbours of S.

15. Ans. B.
From the given conditions, we can conclude:

R   S   P   T   X   Q   W — Facing North

Position can be determined as 4-2 =2nd 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.
$G = D \leq C = B \leq A$
$F = E > D > H > I$
$G \leq A$ (True)
$F > I$ (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. $W > Q$ (True)
II. $K > C$ (Not true)

19. Ans. A.
$A > B > G > E > F$
So, conclusion I follows $A > F$
So, conclusion II does not follows as there is no relation between B and D
Only conclusion I follows

20. Ans. A.
$Z \leq X < O = R \leq E \leq C = Q$
$Q > Z$ (True)
$Z = Q$ (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 = kejoi 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.
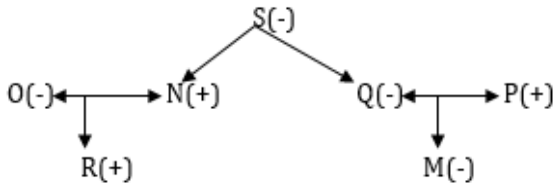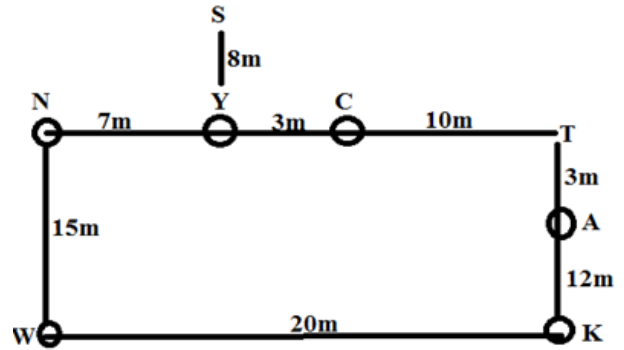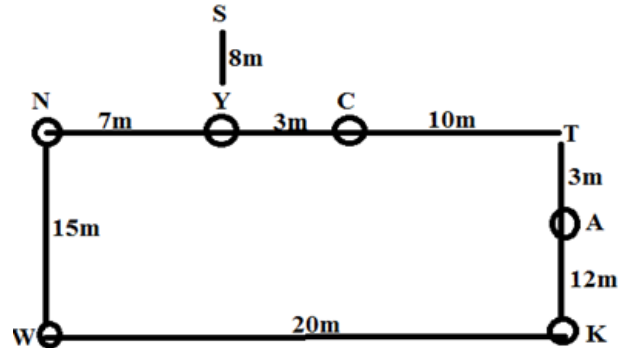

37. Ans. D.
Q is sister of R's grandmother's only son. Q must be S's daughter. Since N and P are not blood relatives and O is the sister in law of P so Q must be P's wife and N must be O's husband. M must be Q's daughter and since S has only one granddaughter so R must be N's Son.
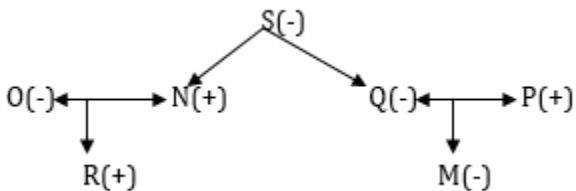
38. Ans. B.
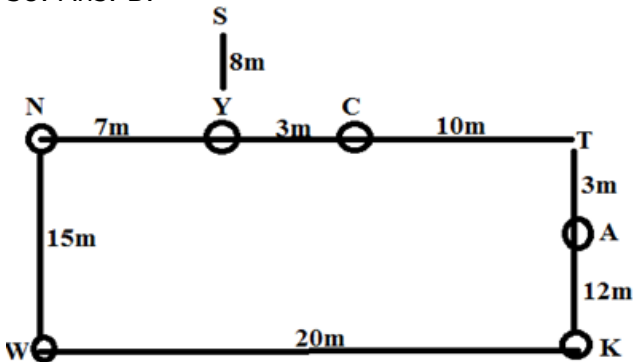
N is at 25m to the north-west direction of K.

39. Ans. B.

40. Ans. B.

41. Ans. C.
Let the speed of stream be x km/hr
Then,
Speed of upstream = x × 600/100= 18
⇒ x = 3km/hr
Speed of boat in still water = 18 + 3 = 21 km/hr
Distance covered in 3 hours in downstream = (21 + 3) × 3 = 72 km

42. Ans. A.
(A + B)(A − B) = 252
⇒ 42 × (A− B) = 252 [A + B = 42 given]
⇒ (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.
⇒ 5x = 40 days
⇒ x = 8 days
B's time = 3 × 8 = 24 days
Time taken by both together to complete the work = (40 * 24)/(40+24) = 15 days

44. Ans. B.
Speed of train =72 km/hr= 30 m/s
Length of train = 18 × 20 = 360 m
Length of (train + platform) = 20 × 33 = 660 m
∴ length of platform = 660 m – 360 m = 300 m

45. Ans. E.
radius = 66* 7/(2*22) = 21/2
Side of square = 21/4
Area of square= (21/4)^2 = 441/16= 28 sq. cm. (approx.)

46. Ans. D.
Let total employees in company be 100x
ATQ, (25/100)*100X= 90
⇒ Total employees in company = 100 X = 360 Employees working in HR department = (2/9) × 360 = 80
Employees working in Sales department = (125/100)× 80 = 100 Remaining employees = 360 − 90 − 80 − 100 = 90
Employees working in Security department = (4/9) × 90 = 40
Employees working in Housing department = (5/9)× 90 = 50

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

{(80-40)/40}*100 = 100%

47. Ans. C.
Let total employees in company be 100x
ATQ, (25/100)*100X= 90
⇒ Total employees in company = 100 X = 360 Employees working in HR department = (2/9) × 360 = 80
Employees working in Sales department = (125/100)× 80 = 100 Remaining employees = 360 − 90 − 80 − 100 = 90
Employees working in Security department = (4/9) × 90 = 40
Employees working in Housing department = (5/9)× 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
ATQ, (25/100)*100X= 90
⇒ Total employees in company = 100 X = 360 Employees working in HR department = (2/9) × 360 = 80
Employees working in Sales department = (125/100)× 80 = 100 Remaining employees = 360 − 90 − 80 − 100 = 90
Employees working in Security department = (4/9) × 90 = 40
Employees working in Housing department = (5/9)× 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, (25/100)*100X= 90
⇒ Total employees in company = 100 X = 360 Employees working in HR department = (2/9) × 360 = 80
Employees working in Sales department = (125/100)× 80 = 100 Remaining employees = 360 − 90 − 80 − 100 = 90
Employees working in Security department = (4/9) × 90 = 40
Employees working in Housing department = (5/9)× 90 = 50

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

40-(40/100)*40 = 24

50. Ans. A.
Let total employees in company be 100x
ATQ, (25/100)*100X= 90
⇒ Total employees in company = 100 X = 360 Employees working in HR department = (2/9) × 360 = 80
Employees working in Sales department = (125/100)× 80 = 100 Remaining employees = 360 − 90 − 80 − 100 = 90
Employees working in Security department = (4/9) × 90 = 40
Employees working in Housing department = (5/9)× 90 = 50

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

80× (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 % =120/160×100 = 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)× 100 = Rs. 1275
Selling price = 1275 – 199 = Rs. 1076

57. Ans. C.
Sum of present age of A, B and C
= 98 – 4 × 3
= 98 – 12
= 86 yr.
Present age of C = 86 – (32 + 23) = 31 yr.
Age of C four years hence = 31 + 4 = 35 yr.

58. Ans. B.

Profit share ratio of	A	B
	12000 × x	16000 × 9
	x	:	12

ATQ,

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

59. Ans. E.
Let, total quantity = 100ℓ
Quantity of milk = 60 ℓ
And quantity of water = 40 ℓ
ATQ,

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

2 (100 + x) = 5 × 60
200 + 2x = 300
2x = 100
x = 50 ℓ

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

60. Ans. E.
Let the sum be Rs. P.
Difference = P(1+ 0.1)^2-P×(1.16)
$\Rightarrow$ P = Rs. 4500

61. Ans. D.
($\sqrt{1443}$) ÷ 19.01 + 328 = ? × 22
$\Rightarrow$ 38/19 + 328 = ? × 22
? = (330/22) = 15

62. Ans. B.
30% of 880 = ? + 111
$\Rightarrow$ (30*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)* ? = 324
?= 432

66. Ans. D.

100	119	136	149	160	167	172
+19	+17	+13	+11	+7	+5	

67. Ans. B.

1.5	2.5	7	24	100	505	3036
×1+1	×2+2	×3+3	×4+4	×5+5	×6+6	

68. Ans. D.

160	80	80	120	240	600	1800
×0.5	×1	×1.5	×2	×2.5	×3	

69. Ans. A.

5040	2520	840	210	42	7	1
÷2	÷3	÷4	÷5	÷6	÷7	

70. Ans. C.

16	17	26	151	200	929	1050
+1	+9	+125	+49	+729	+121	
1^3	3^2	5^3	7^2	9^3	11^2	
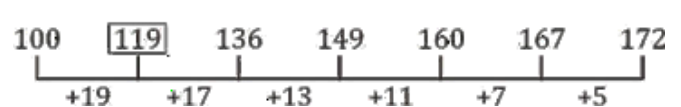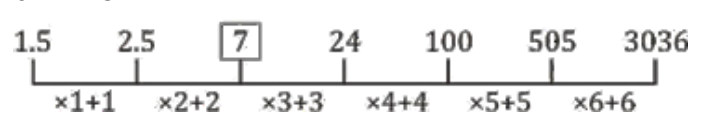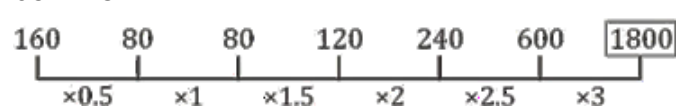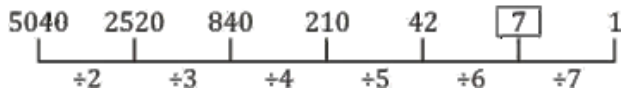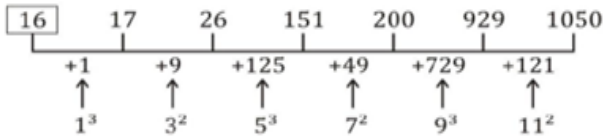
71. Ans. B.
$?^2 = 49$
$? = 7$

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