

RRB Clerk Pre 2022 (7th August) Shift-Wise Previous Year Papers Mock 04

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

Eight persons are sitting around a square table in such a way that four of them are sitting at the corners and they are facing towards the center of table, while other four persons who are sitting in the middle of the side of the square table are facing away from the center.

C sits second to the right and immediate right of F and G respectively. A sits opposite to F. Two persons sit between B and A. E faces C. D sits second to the left of H.

Q1. Who are sitting at the corners?

- (a) A
- (b) G
- (c) F
- (d) E
- (e) None of these

Q2. How many persons are sitting in the middle of the side of the table?

- (a) One
- (b) Three
- (c) Two
- (d) Four
- (e) None of these

Q3. Who are sitting at the corners of the table if the one who sits third to the left of F?

- (a) G
- (b) C
- (c) D
- (d) A
- (e) None of these

Q4. Which of the following is true?

- (a) C faces inwards
- (b) G and B are immediate neighbors of C
- (c) C sits third to the left of H
- (d) A sits second to the right of C
- (e) None is true

Q5. Who among the following is/are immediate neighbors of H?

- (a) E
- (b) C
- (c) G
- (d) A
- (e) Both E and A

Directions (6-9): Study the information carefully and answer the questions given below.

A person starts his journey from point A. He walks 10m towards the east direction and reaches at point B. Now, turning to the right, he walks 5m to reach point C and then he takes a left turn and walk 10m to reach point D. From point D, he walks 10m in the north direction and reaches at point E.

Q6. In which direction is point A with respect to the point which is 5m north of point D?

- (a) Northwest
- (b) West
- (c) Northeast
- (d) East
- (e) None of these

Q7. Find the distance between point A and point E.

- (a) $17\sqrt{5}$ m
- (b) $5\sqrt{17}$ m
- (c) $\sqrt{423}$ m
- (d) $\sqrt{426}$ m
- (e) None of these

Q8. In which direction is point A with respect to point E?

- (a) Northwest
- (b) Southwest
- (c) Northeast
- (d) Southeast
- (e) None of these

Q9. If Point A is in west of Point E, then what is the shortest distance between Point X and Point C?

- (a) 5m
- (b) 10m
- (c) 15m
- (d) 12m
- (e) None of these

Directions (10-14): In each of the questions below some statements are given 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.

Q10. Statements:

Some rat is pat
All pat are hak
No hak is dak

Conclusion

I: No pat is dak

II: Some rat are not dak

- (a) If only conclusion I is true
- (b) If only conclusion II is true
- (c) If either conclusion I or II is true
- (d) If neither conclusion I nor II is true
- (e) If both conclusions I and II are true

Q11. Statements:

Some 22 are 34.

Only a few 34 are 17.

Some 17 are 12.

Conclusion

I: No 22 is 17.

II: Some 17 is 22.

- (a) If only conclusion I is true
- (b) If only conclusion II is true
- (c) If either conclusion I or II is true
- (d) If neither conclusion I nor II is true
- (e) If both conclusions I and II are true

Q12. Statements:

Only a few Sky are Blue

Some Blue are Black

Only a few Black are Sky

No Blue is Pink

Conclusion

I: Some Black are Pink

II: All Blue being Pink is a possibility.

- (a) If only conclusion I is true
- (b) If only conclusion II is true
- (c) If either conclusion I or II is true
- (d) If neither conclusion I nor II is true
- (e) If both conclusions I and II are true

Q13. Statements:

All Lily are Sun.

All Rose are Lotus

No Sun is Lotus

Conclusion

I: All Lotus are Rose.

II: No Lotus is Lily.

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- (a) If only conclusion I is true
 - (b) If only conclusion II is true
 - (c) If either conclusion I or II is true
 - (d) If neither conclusion I nor II is true
 - (e) If both conclusions I and II are true

Q14. Statements:

All Ear are Nose

No Ear is Hand

No Nose is Eye

Conclusion

I: All Eye are Ear

II: No Eye is Hand

(a) If only conclusion I is true

(b) If only conclusion II is true

(c) If either conclusion I or II is true

(d) If neither conclusion I nor II is true

(e) If both conclusions I and II are true

Directions

Eight persons A, B, C, D, E, F, G and H are sitting around a circular table. A is facing the center to take corona vaccine. B is sitting immediately to the right of A. C is sitting between G and H. D is sitting between F and E. E is sitting between G and H. F sits 2nd to the right of D. G is sitting between F and E. H is sitting between G and F. M who is not sitting between G and F.

Q15. Who is sitting between G and F?

- (a) B
- (b) L
- (c) G
- (d) H
- (e) None of these

Q16. Four persons are sitting between G and F. Who is sitting between G and F?

that does not sit between G and F?

- (a) G-F
- (b) H-K
- (c) F-B
- (d) M-B
- (e) D-L

Q17. How many persons sit between K and F when counted to the right of K?

- (a) Four
- (b) Two
- (c) One
- (d) Three
- (e) None

Q18. The number of persons sit between H and M when counted to the left of M is the same as the number of persons sit between ___ and B when counted to the left of ___.

- (a) F
- (b) G
- (c) L
- (d) D
- (e) None of these

Q19. Who among the following sits 3rd to the left of B?

- (a) F
- (b) M
- (c) G
- (d) D
- (e) H

Directions: Study the following symbols and answer the questions given below.
M 3 2 D % N

Q20. How many symbols are there which are immediately preceded by a number and immediately followed by an alphabet and a symbol?

- (a) One
- (b) Two
- (c) Three
- (d) Four
- (e) None

Q21. Which of the following is true?

- (a) 5
- (b) F
- (c) 3
- (d) S
- (e) None of these

Q22. How many such symbols are there which are immediately preceded by a number and immediately followed by a vowel?

- (a) Two
- (b) None
- (c) One
- (d) Four
- (e) Three

Q23. How many such alphabets are there which are immediately preceded and immediately followed by the same number?

- (a) Three
- (b) Two
- (c) One
- (d) Four
- (e) None

Q24. If all the numbers are eliminated from the given series, then, which of the following element is 11th from the right end?

- (a) F
- (b) S
- (c) B
- (d) *
- (e) None of these

Q25. If 2 is added to each even number in the given series, how many numbers are repeated more than once?

- (a) None
- (b) One
- (c) Two
- (d) Three
- (e) More than three

Directions (Q26-30): Study the following information and answer the questions below:

Seven persons A, B, C, D, E, F and G go to market once a week from Monday to Sunday.

Three persons go to market on Monday, which A goes to market. Only one person goes to market between F and G. Two persons go to market between G and B. Only one person goes to market between B and E. D does not go to market immediately after the days on which G goes to market. D goes to market immediately before the days on which C goes to market.

Q26. Who among the following person goes to market on Wednesday?

- (a) A
- (b) C
- (c) D
- (d) E
- (e) None of these

Q27. Who among the following goes to the market immediately before E?

- (a) C
- (b) G
- (c) A
- (d) F
- (e) None of these

Q28. G goes to the market on which day of the week?

- (a) Friday
- (b) Tuesday
- (c) Monday
- (d) Sunday
- (e) None of these

Q29. Which of the following is true?

- (a) A goes to the market on Friday
- (b) E goes to the market on Tuesday
- (c) Only two persons go to the market on Monday
- (d) A goes to the market on Sunday
- (e) None is true

Q30. How many persons go to the market on Friday?

- (a) Four
- (b) Three
- (c) Two
- (d) One
- (e) None of these

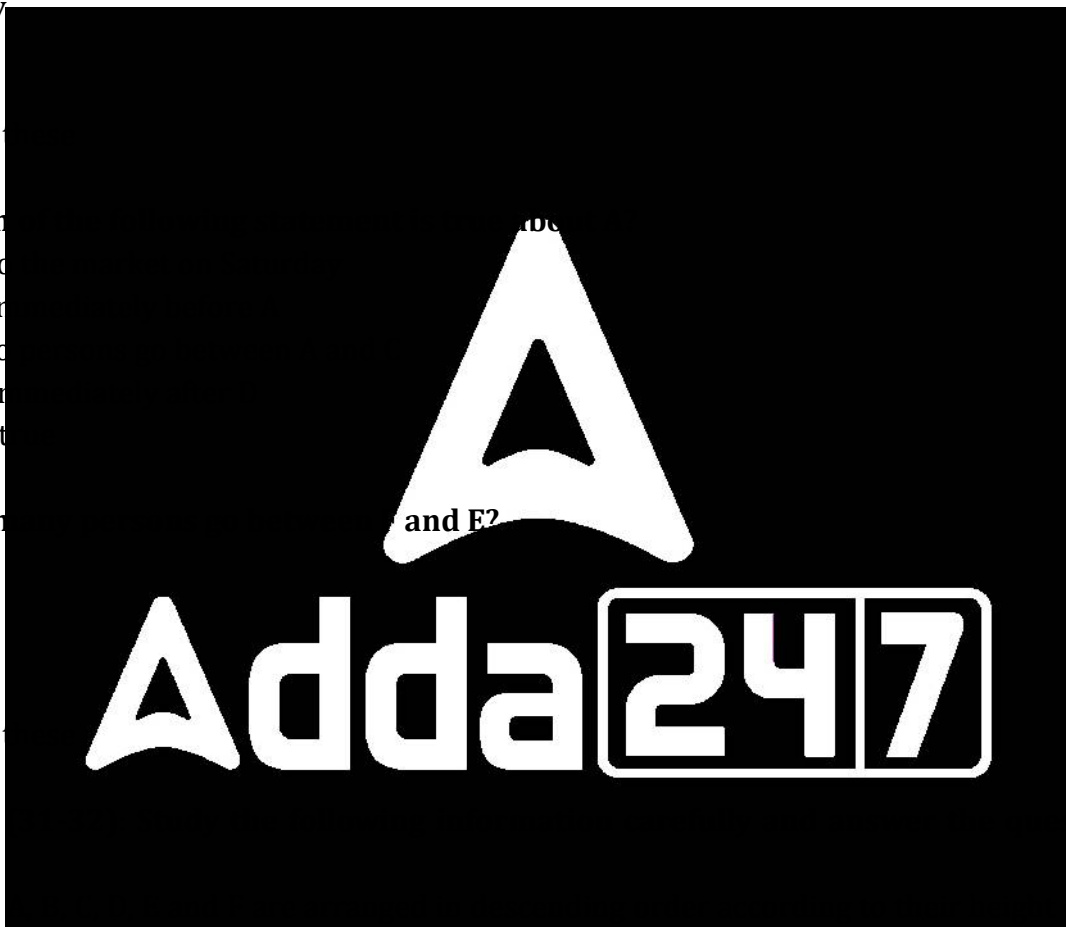
Directions
below.

Six persons

are standing in a line from left to right but not necessarily in the same order. The height of A is 130cm and F's height is more than the one whose height is 130cm. D is taller than F. A is taller than B. The height of D is 150cm but he is not the tallest. E is taller than F and shorter than D.

Q31. What can be the possible height of E?

- (a) 135cm
- (b) 161cm
- (c) 129cm
- (d) 120cm
- (e) 164cm



- (a) None of these
- (b) C
- (c) E
- (d) F
- (e) A

There are six persons D, E, F, G, H and J living on six floors building, but not necessarily in the same order. The ground floor is numbered as 1 and the floor just above it is numbered as 2 so on till the topmost floor. The one who lives on the topmost floor likes Papaya and Mango, F lives on the 2nd floor, D lives on the 3rd floor, E and H live on the 4th floor, G lives on the 5th floor and J lives on the 6th floor. The one who lives on the 1st floor likes Apple. The one who lives on the 6th floor likes Pineapple. The one who lives on the 3rd floor likes Orange. The one who lives on the 5th floor likes Guava. The one who lives on the 4th floor likes Banana. The one who lives on the 2nd floor likes Kiwi. The one who lives on the 1st floor likes Apple. The one who lives on the 6th floor likes Pineapple. The one who lives on the 3rd floor likes Orange. The one who lives on the 5th floor likes Guava. The one who lives on the 4th floor likes Banana. The one who lives on the 2nd floor likes Kiwi.

(a) Apple
(b) Either a
(c) Grapes
(d) Banana
(e) None of

(a) F
(b) G
(c) J
(d) D
(e) None of these

(a) 3rd floor
(b) 5th floor
(c) 1st floor
(d) 4th floor
(e) None of these

(a) D
(b) G
(c) F
(d) E
(e) None of these



Q37. Who among the following likes Banana?

- (a) G
- (b) F
- (c) D
- (d) Either G or D
- (e) None of these

Directions (38-40): In these questions, relationship between different elements is show in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer.

Q38.

Statements:

$Z \geq S > O = T > X = V < W = U$

Conclusion:

I. $V < Z$

II. $V = Z$

- (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

Q39.

Statements:

$A > J \geq L = C < B = E \geq F > G = D$

Conclusion:

I. $L \geq G$

II. $G < L$

- (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.

Q40.

Statements:

$K \geq E < P \leq B \leq N < M < O > Q > R$

Conclusion:

I. $M > E$

II. $O > K$

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- The logo for Adda247 features a large, stylized white letter 'A' at the top. Below it, the word 'Adda' is written in a bold, white, sans-serif font. To the right of 'Adda', the numbers '247' are enclosed within a white rectangular border, also in a bold, sans-serif font. The entire logo is centered on a black background.

(a) 2400 Rs.
(b) 2200 Rs.
(c) 2000 Rs.
(d) 2600 Rs.
(e) 2800 Rs.

(a) 4 hr
(b) 6 hr
(c) 8 hr
(d) 10 hr
(e) 12 hr

(a) 160 days
(b) 480 days
(c) 300 days
(d) 180 days
(e) 225 days

(a) 39 years
(b) 35 years
(c) 31 years
(d) 33 years
(e) 37 years

(a) 10
(b) 9
(c) 8
(d) 11
(e) 7

Directions (46-50): The table chart given below shows the number of males and females in six (P, Q, R, S, T, and U) different companies. Study the data carefully and answer the question given below.

Companies	Number of males	Number of females
P	120	170
Q	150	140
R	80	90
S	100	70
T	60	110
U	160	180

Q46. Total number of females in P is what per cent of total number of males in P?

- (a) 40%
- (b) 50%
- (c) 60%
- (d) 45%
- (e) 65%

Q47. Find the difference between total number of males in R, S, and T together

- (a) 40
- (b) 60
- (c) 80
- (d) 100
- (e) 120

Q48. Find the difference between total number of females in S and total number of males in R?

- (a) 40
- (b) 50
- (c) 60
- (d) 30
- (e) 20

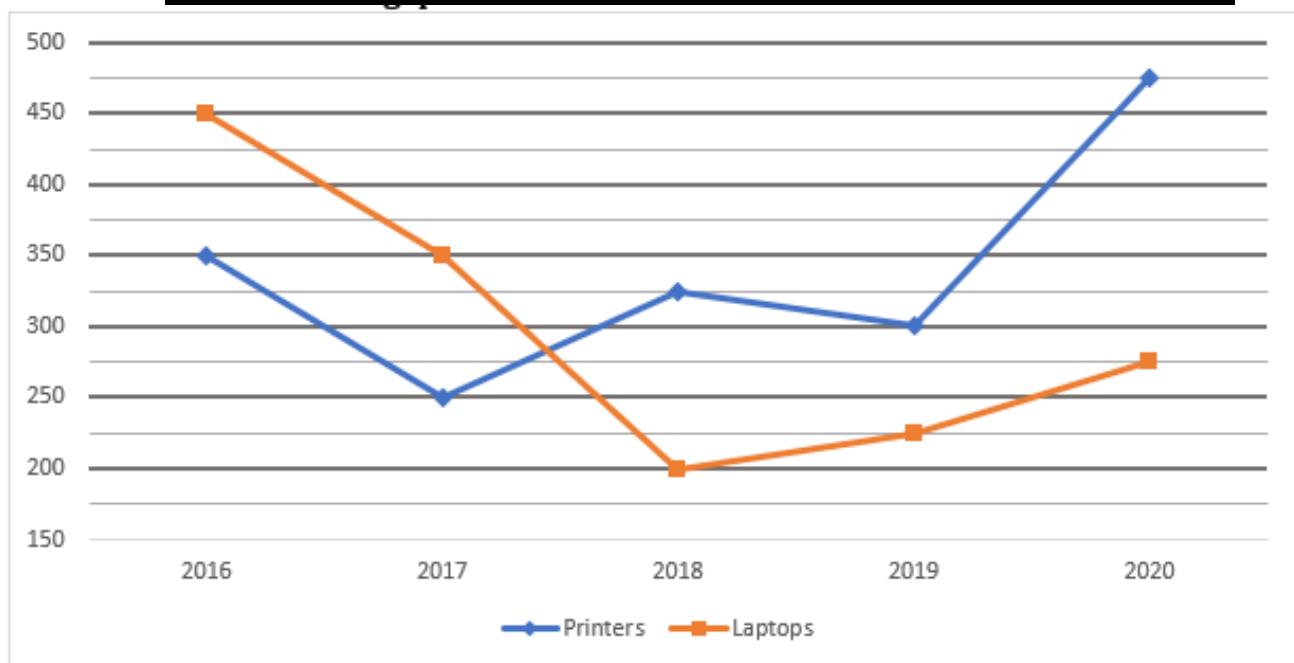
Q49. Find the ratio between total numbers of females in Q to total number of males in U?

- (a) 7:8
- (b) 3:7
- (c) 3:8
- (d) 5:8
- (e) 4:7

Q50. Total number of females in S is what percent of total number of males in same class?

- (a) 60%
- (b) 70%
- (c) 50%
- (d) 40%
- (e) 30%

Directions (51-55): The Line graph given below shows the number of Printers and Laptops manufactured by a company in five different years. Read the graph carefully and answer the following questions.



Q51. Find the difference between the number of printers manufactured in year 2017 and 2020?

- (a) 275
- (b) 350
- (c) 300
- (d) 320
- (e) 375

Q52. Total number of laptops manufactured in year 2016 & 2017 together is what percentage more or less than total number of printers manufactured in these two years?

- (a) $30\frac{1}{3}\%$
- (b) $66\frac{2}{3}\%$
- (c) 50%
- (d) $33\frac{1}{3}\%$
- (e) 75%

Q53. If 20% of total manufactured printers and 25% of total manufactured laptops remain unsold in 2018, then find the total number of sold units of printers and laptops in 2018?

- (a) 310
- (b) 420
- (c) 360
- (d) 470
- (e) 410

Q54. Find the ratio of total number of laptops manufactured in 2019 & 2020 together to total number of printers manufactured in 2018 & 2020 together?

- (a) 3 : 5
- (b) 4 : 5
- (c) 5 : 8
- (d) 2 : 5
- (e) 8 : 5

Q55. In which year the total number of units of both products together is maximum?

- (a) 2016
- (b) 2017
- (c) 2018
- (d) 2019
- (e) 2020

Q56. Gaurav sold 1400 units of printing machine in 2019 at Rs. 2400 per unit. He sold it for Rs. 30800, then find the profit percentage of Gaurav?

- (a) 10%
- (b) 5%
- (c) 20%
- (d) 15%
- (e) 25%

Q57. There are four consecutive even numbers. If sum of first three numbers is 108, then calculate the product of smallest and largest number?

- (a) 1260
- (b) 1292
- (c) 1280
- (d) 1360
- (e) 1428

Q58. What is the ratio between area of a circle with radius 7cm and perimeter of a circle with diameter 7 cm?

-
- (a) 2:1
 - (b) 3:2
 - (c) 7:5
 - (d) 4:3
 - (e) 7:1

Q59. A train crosses a man, who is running in the same direction of train at the speed of 2m/sec. in 10 seconds. The same train crosses a tunnel in 54 seconds. If speed of train is 72 km/h then what is the length of tunnel?

- (a) 850 m
- (b) 800 m
- (c) 900 m
- (d) 750 m
- (e) 650 m

Q60. 70% of a number is added to the number and the result is 48, then find the larger number.

- (a) 28.8
- (b) 65.2
- (c) 67.2
- (d) 57.2
- (e) 48.4

Directions What number is the product of question () marked following questions.

Q61. $80\% \text{ of } 170 + 75\% \text{ of } 216 - 10 = ? \times 6$

- (a) 36
- (b) 12
- (c) 63
- (d) 54
- (e) 48

Q62. $37\frac{1}{2}\% \text{ of } 600 + 14\frac{2}{7}\% \text{ of } 210 = ?$

- (a) 250
- (b) 260
- (c) 255
- (d) 265
- (e) 280

Q63. $48 + 8 \times 0.75 - 5 = ?$

- (a) 22
- (b) 36
- (c) 49
- (d) 56
- (e) 46

Q64. $2950 \div 12.5 + 160 = ?$

- (a) 392
- (b) 390
- (c) 396
- (d) 394
- (e) 400

Q65. $25\% \text{ of } 124 + 35\% \text{ of } 60 = ?$

- (a) 52
- (b) 57
- (c) 62
- (d) 67
- (e) 72

Q66. $\sqrt{\sqrt{225} \div 3} + \sqrt{\sqrt{576} \div 6} = ?$

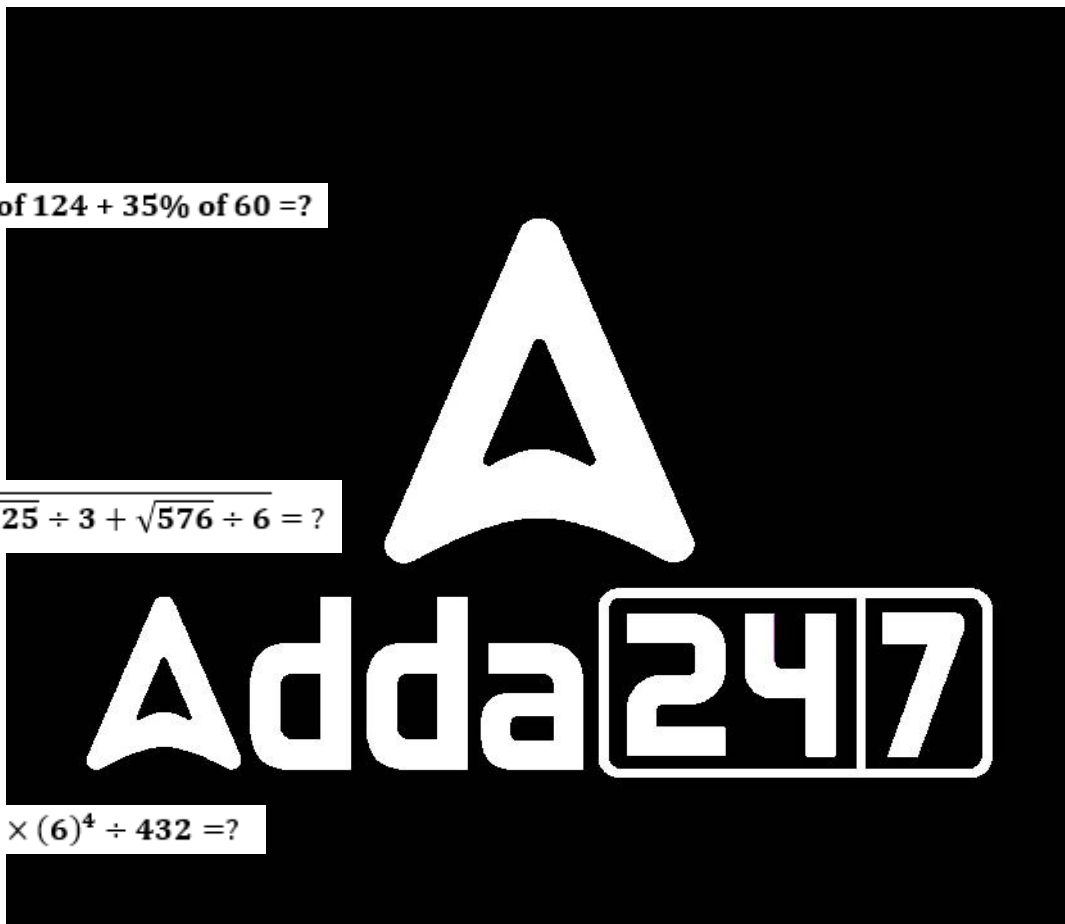
- (a) 3
- (b) 6
- (c) 9
- (d) 5
- (e) 12

Q67. $(12)^3 \times (6)^4 \div 432 = ?$

- (a) 5184
- (b) 5060
- (c) 5148
- (d) 5084
- (e) 5224

Q68. $45 + 20\% \text{ of } ? = 460 \div 4$

- (a) 250
- (b) 450
- (c) 400
- (d) 350
- (e) 360



Q69. $(11)^2 + (23)^2 + ? = 800$

- (a) 125
- (b) 100
- (c) 150
- (d) 50
- (e) 175

Q70. $? + 432 - 206 = 550$

- (a) 384
- (b) 244
- (c) 224
- (d) 276
- (e) 324

Q71. $2^5 + 2^{10} = ? \times 12$

- (a) 68
- (b) 72
- (c) 80
- (d) 88
- (e) 96

Directions

In a college, students participated in three games (Cricket, Hockey and Kabaddi). The ratio between boys and girls who participated in games is 5:4. 60% of the total students participated in Tennis, which is 25% of the girls who participated in Hockey. Total 243 students participated in Hockey. number of girls participated in Tennis are 20 more than that of Kabaddi.

Note- A student

Q72. Find the

- (a) 2070
- (b) 2400
- (c) 2530
- (d) 2050
- (e) 2490

Q73. Boys participated in Kabaddi is what percentage more/less than that of girls participated in the same sport?

- (a) $242\frac{6}{7}\%$
- (b) $132\frac{1}{7}\%$

-
- (c) $580\frac{14}{17}\%$
(d) $142\frac{6}{7}\%$
(e) $146\frac{1}{7}\%$

Q74. Find the ratio between number of boys participated in Hockey to the number of girls participated in Kabaddi.

- (a) 27 :14
(b) 29 :15
(c) 29 :14
(d) 15 :28
(e) None of

Q75. Girls p

- (a) 150%
(b) $133\frac{1}{3}\%$
(c) 75%
(d) $66\frac{2}{3}\%$
(e) 85%

Directions (Choose the correct answer from among the following)

Q76. 9, 14,

- (a) 9
(b) 134
(c) 179
(d) 29
(e) 89

Q77. 1, 3, 7,

- (a) 2677
(b) 22
(c) 89
(d) 1
(e) 446

Q78. 5, 8, 17, 24, 39, 48, 65

- (a) 8
(b) 48
(c) 65
(d) 5
(e) 39



Q79. 32, 64, 16, 96, 12, 120, 8

- (a) 64
- (b) 96
- (c) 8
- (d) 120
- (e) 32

Q80. 17, 21, 26, 33, 44, 57, 74

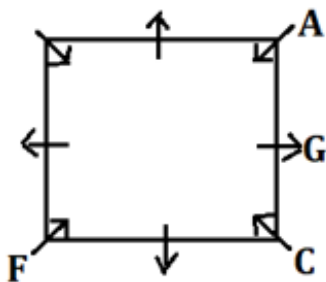
- (a) 17
- (b) 26
- (c) 44
- (d) 74
- (e) 57

Solutions

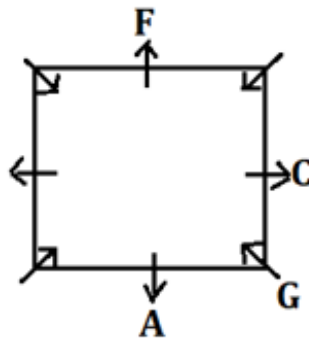
S1. Ans.(d)

Sol. From the information given, we can see that A sits opposite to the right and G sits opposite to the left respectively. A sits opposite to the right and G sits opposite to the left respectively. There are two possible arrangements.

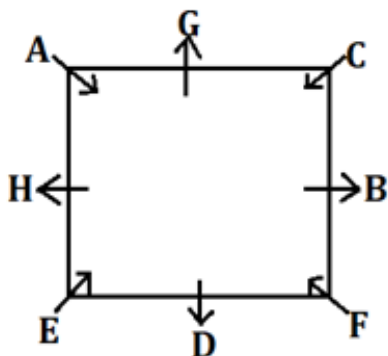
Case-1



Case-2



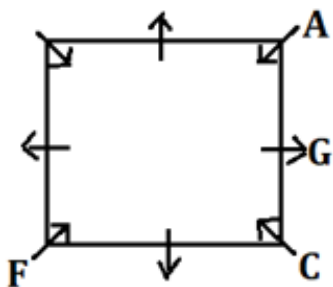
Two persons are sitting opposite to each other. H sits second to the left of H. The final arrangement is-



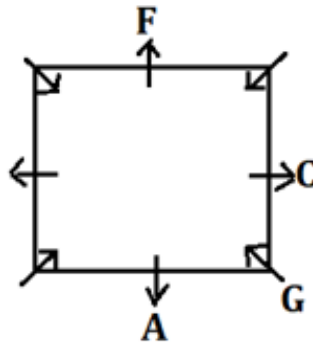
S2. Ans.(b)

Sol. From the given conditions, C sits second to the right and immediate right of F and G respectively. A sits opposite to F. From these conditions there are two possibilities-

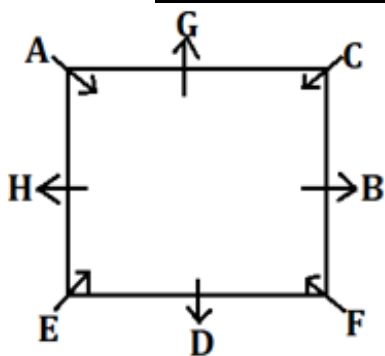
Case-1



Case-2



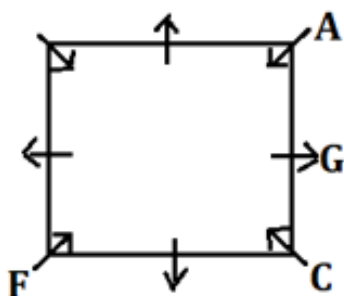
Two persons sit between B and A. E faces C. From this condition case-2 will be eliminated. D sits second to the left of H. The final arrangement is-



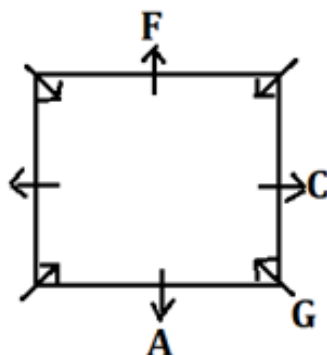
S3. Ans.(a)

Sol. From the given conditions, C sits second to the right and immediate right of F and G respectively. A sits opposite to F. From these conditions there are two possibilities-

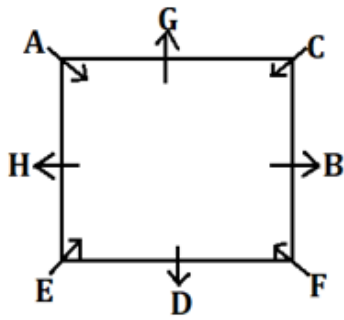
Case-1



Case-2



Two persons sit between B and A. E faces C. From this condition case-2 will be eliminated. D sits second to the left of H. The final arrangement is-

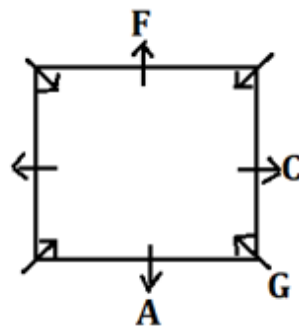
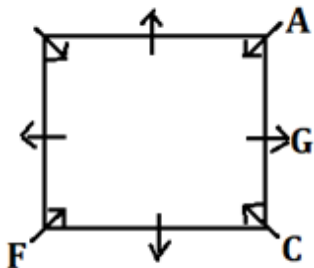


S4. Ans.(c)

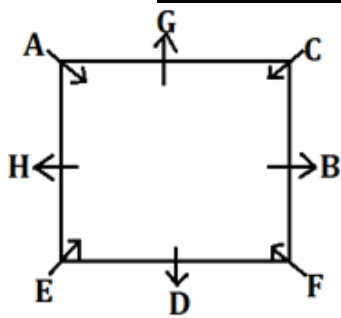
Sol. From the given conditions, C sits second to the right and immediate right of F and G respectively. A sits opposite

Case-1

Case-2



Two persons sit opposite to each other. From this condition, we can conclude that C sits second to the left of A.



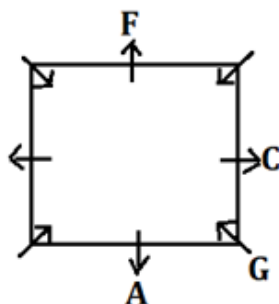
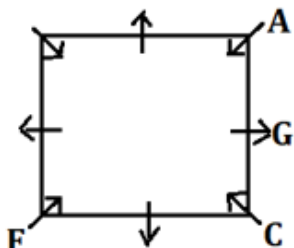
dda247

S5. Ans.(e)

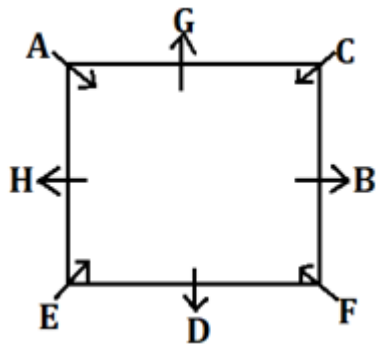
Sol. From the given conditions, C sits second to the right and immediate right of F and G respectively. A sits opposite to F. From these conditions there are two possibilities-

Case-1

Case-2

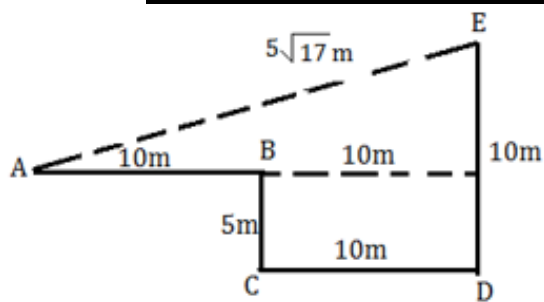


Two persons sit between B and A. E faces C. From this condition case-2 will be eliminated. D sits second to the left of H. The final arrangement is-



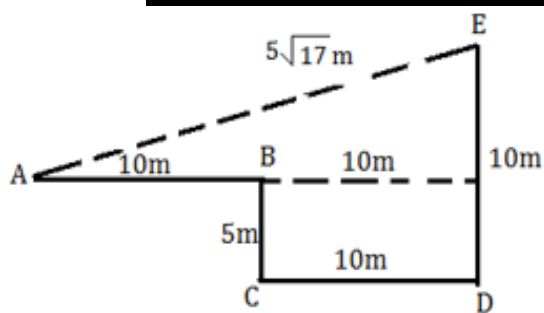
S6. Ans.(b)

Sol.



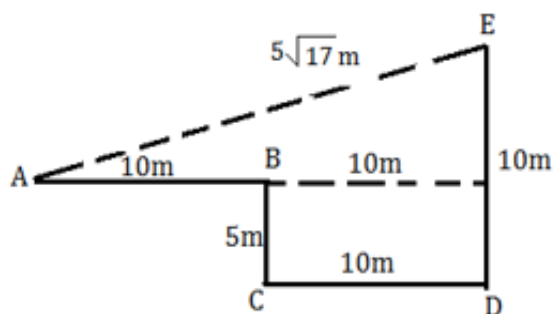
S7. Ans.(b)

Sol.



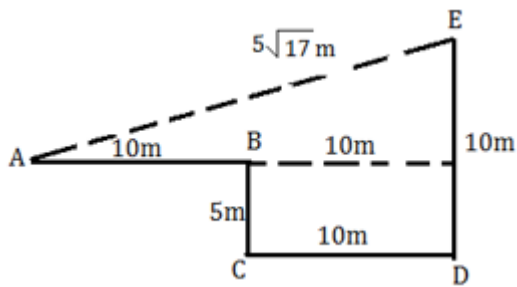
S8. Ans.(c)

Sol.



S9. Ans.(b)

Sol.



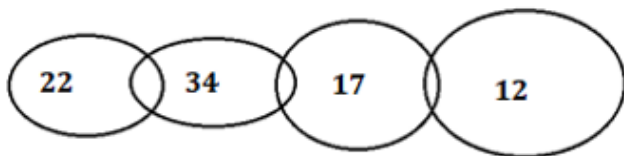
S10. Ans.(e)

Sol.



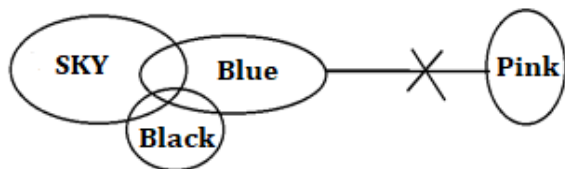
S11. Ans.(c)

Sol.



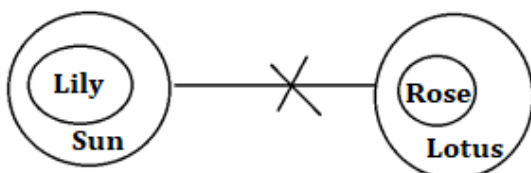
S12. Ans.(d)

Sol.



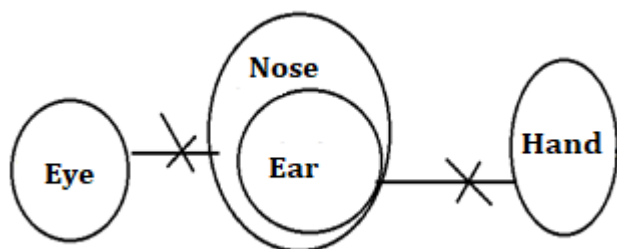
S13. Ans.(b)

Sol.



S14. Ans.(d)

Sol.

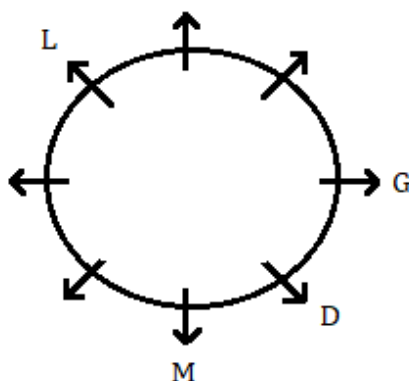
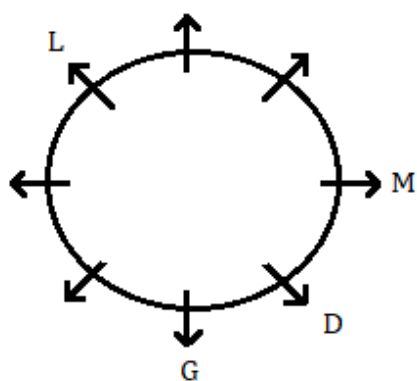


S15. Ans.(b)

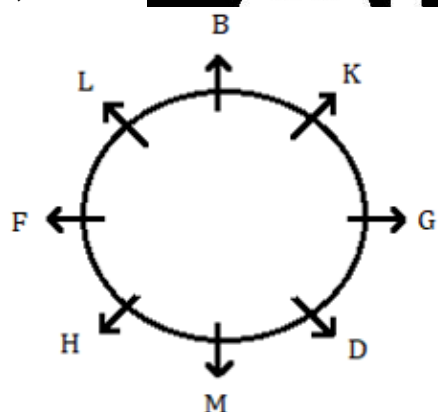
Sol. From the given statements, we know that L is an immediate neighbour of G. Here we get 2 possible cases – Case 1 and Case 2. One person sits between G and M who is not an immediate neighbour of L.

Case 1

Case 2



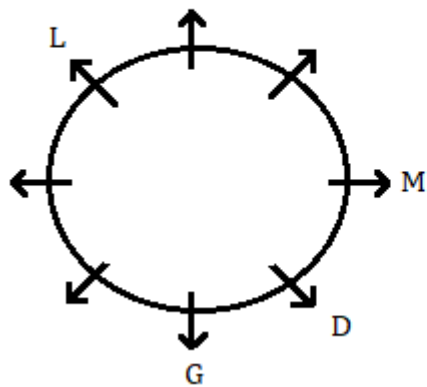
F sits 2nd to the left of M. Hence Case 1 is ruled out now. B is the immediate left of L. Hence the final arrangement is –



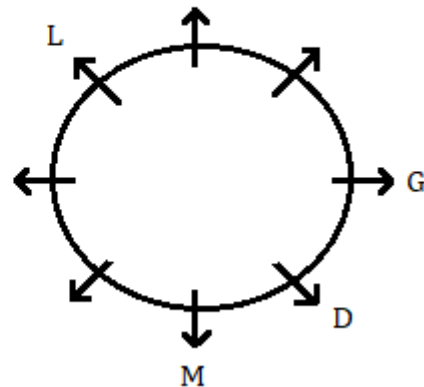
S16. Ans.(c)

Sol. From the given statements, three persons sit between L and D who is an immediate neighbour of G. Here we get 2 possible cases – Case 1 and Case 2. One person sits between G and M who is not an immediate neighbour of L.

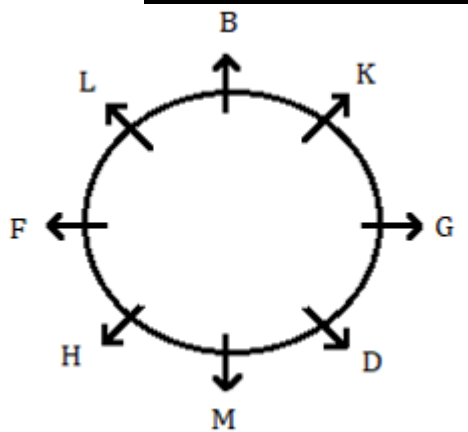
Case 1



Case 2



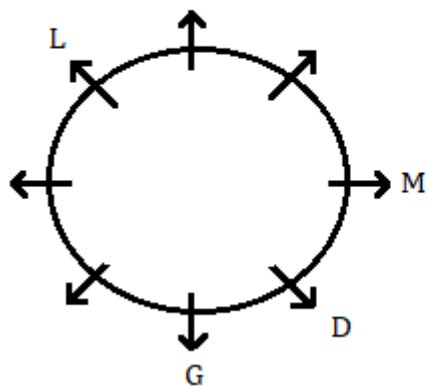
F sits 2nd to the right of M. So, the final arrangement of the persons.



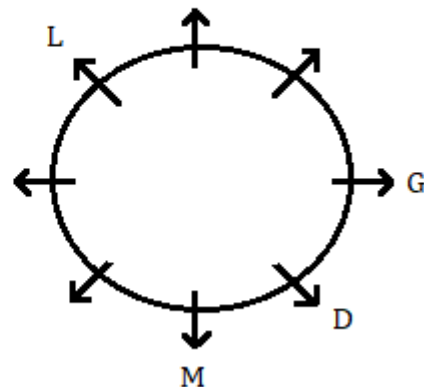
S17. Ans. (a)

Sol. From the statements, three persons sit between L and D who is immediate neighbour of G. Here we get two possible cases - Case 1 and Case 2. One person sits between L and D who is not an immediate neighbour of G.

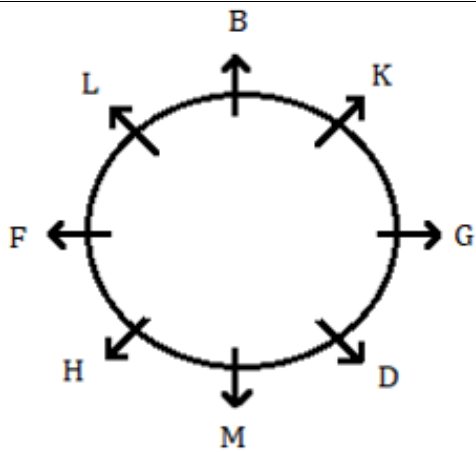
Case 1



Case 2



F sits 2nd to the right of M. Here Case 1 is ruled out now. B sits immediate left of K. H is one of the persons. So, the final arrangement -



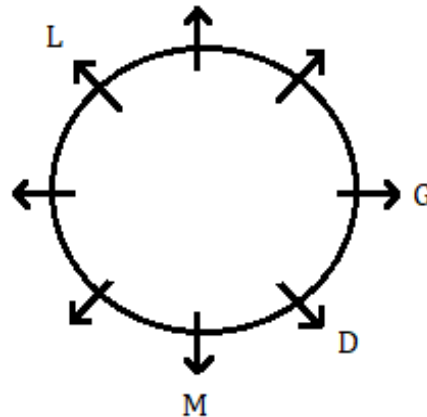
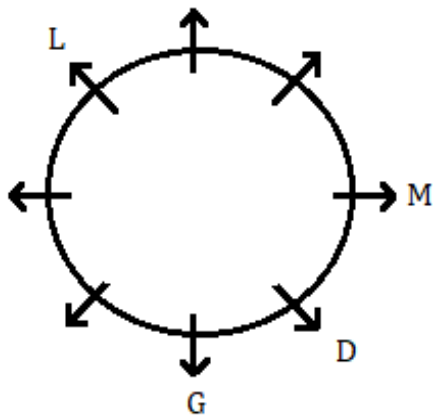
S18. Ans.(c)

Sol. From the
G. Here we
immediate n

neighbour of
who is not an

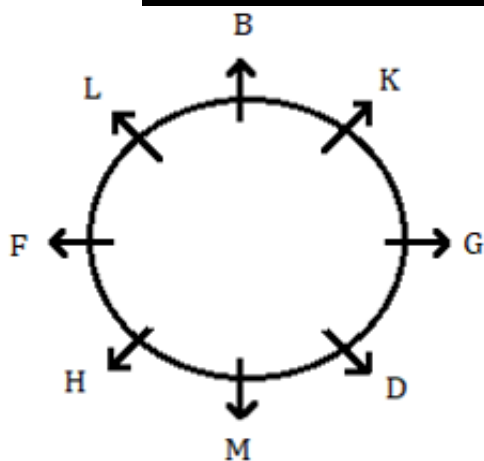
Case 1

Case 2



F sits 2nd to t
So, the final

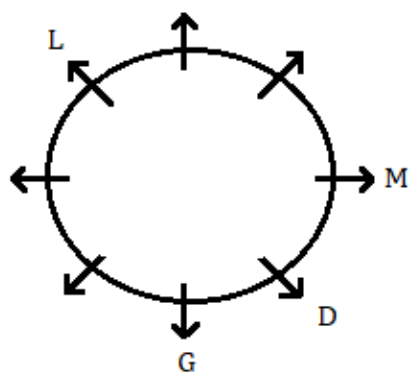
the persons.



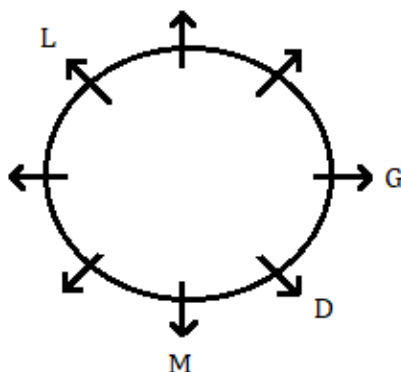
S19. Ans.(e)

Sol. From the given statements, three persons sit between L and D who is an immediate neighbour of G. Here we get 2 possible cases – Case 1 and Case 2. One person sits between G and M who is not an immediate neighbour of L.

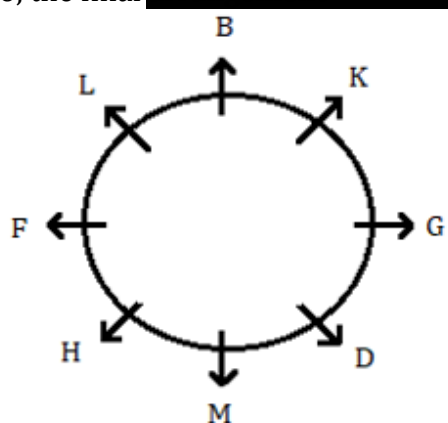
Case 1



Case 2



F sits 2nd to the left of M. So, the final arrangement is as follows.



S20. Ans.(a)

S21. Ans.(c)

S22. Ans.(c)

S23. Ans.(b)

S24. Ans.(b)

S25. Ans.(c)

Sol.

Given Number=4679758258

After applied given condition= 5757539339

Thus, two digits (3 and 5) repeated more than two times.

S26. Ans.(b)

Sol. From the given conditions, three persons go to market between F and A. F goes to market one of the days before on which A goes to market. Only one person goes to market between A and G. There are three possible cases.

Days	Case-1	Case-2	Case-3
	Persons	Persons	Persons
Monday	F		
Tuesday		F	
Wednesday	G/		F
Thursday		G	
Friday	A		G
Saturday		A	
Sunday	G/		A

Two persons go to market between F and A. The day on which C goes to market is immediately before the day on which A goes to market. Only one person goes to market between A and G. The final arrangement is-

Days	Persons
Monday	F
Tuesday	D
Wednesday	C
Thursday	B
Friday	A
Saturday	E
Sunday	G

S27. Ans.(c)

Sol. From the given conditions, three persons go to market between F and A. F goes to market one of the days before on which A goes to market. Only one person goes to market between A and G. There are three possible cases.

Days	Case-1	Case-2	Case-3
	Persons	Persons	Persons
Monday	F		
Tuesday		F	
Wednesday	G/		F
Thursday		G	
Friday	A		G
Saturday		A	
Sunday	G/		A

Two persons go to market between G and B. D goes to market immediately before the days on which C goes to market. From these conditions case-2 and case-3 will be eliminated. Only one person goes to market between B and E. The final arrangement is-

Days	Persons
Monday	F
Tuesday	D
Wednesday	C
Thursday	B
Friday	A
Saturday	E
Sunday	G

S28. Ans.(d)

Sol. From the given conditions, three persons go to market between F and A. F goes to market one of the days before on which A goes to market. Only one person goes to market between A and G. There are three possible cases.

Days	Case-1	Case-2	Case-3
	Persons	Persons	Persons
Monday	F		
Tuesday		F	
Wednesday	G/		F
Thursday		G	
Friday	A		G
Saturday		A	
Sunday	G/		A

Two persons go to market between F and A. D goes to market on which C goes to market. In case-2 and case-3, only one person goes to market between A and G. Hence, the correct management is-

Days	Persons
Monday	F
Tuesday	D
Wednesday	C
Thursday	B
Friday	A
Saturday	E
Sunday	G

S29. Ans.(e)

Sol. From the given conditions, three persons go to market between F and A. F goes to market one of the days before on which A goes to market. Only one person goes to market between A and G. There are three possible cases.

Days	Case-1	Case-2	Case-3
	Persons	Persons	Persons
Monday	F		
Tuesday		F	
Wednesday	G/		F
Thursday		G	
Friday	A		G
Saturday		A	
Sunday	G/		A

Two persons go to market between G and B. D goes to market immediately before the days on which C goes to market. From these conditions case-2 and case-3 will be eliminated. Only one person goes to market between B and E. The final arrangement is-

Days	Persons
Monday	F
Tuesday	D
Wednesday	C
Thursday	B
Friday	A
Saturday	E
Sunday	G

S30. Ans.(a)

Sol. From the conditions, we know that one person goes to market one of the days before the days on which C goes to market. There are three possibilities.

Days	Case-1	Case-2	Case-3
	Persons	Persons	Persons
Monday	F		
Tuesday		F	
Wednesday	G/		F
Thursday		G	
Friday	A		G
Saturday		A	
Sunday	G/		A

Two persons go to market between G and B. D goes to market immediately before the days on which C goes to market. From these conditions case-2 and case-3 will be eliminated. Only one person goes to market between B and E. The final arrangement is-

Days	Persons
Monday	F
Tuesday	D
Wednesday	C
Thursday	B
Friday	A
Saturday	E
Sunday	G

S31. Ans.(a)

Sol.

$$C > D > E > F > A > B$$

150 130

S32. Ans.(b)

Sol.

$$C > D > E > F > A > B$$

150 130

S33. Ans.(c)

Sol. From the given statements, the one who lives on 6th floor likes Apple. The one who lives on 2nd floor likes Grapes.

Floor	Person	Fruit
6		Apple
5		
4		
3		
2		Grapes
1		

There are three persons live between H and D. D lives above the floor of H. E and H live on the odd number floor

Floor	Person	Fruit
6		Apple
5	D	
4		
3	E	Papaya
2		Grapes
1	H	Melon

J likes Mango. There are three persons live between the floor of J and D. One of them likes Apple. The statement is-

Floor	Person	Fruit
6	G	Apple
5	D	Banana
4	J	Mango
3	E	Papaya
2	F	Grapes
1	H	Melon

S34. Ans.(b)

Sol. From the given statements, the one who lives on 6th floor likes Apple. The one who lives on 2nd floor likes Grapes.

Floor	Person	Fruit
6		Apple
5		
4		
3		
2		Grapes
1		

There are three persons live between H and D. D lives above the floor of H. E and H live on the odd number floor and they like Papaya and Melon respectively.

Floor	Person	Fruit
6		Apple
5	D	
4		
3	E	Papaya
2		Grapes
1	H	Melon

J likes Mango. G does not live immediately above the floor of H. We know F is one of the persons and one of them likes banana. So, the final arrangement is-

Floor	Person	Fruit
6	G	Apple
5	D	Banana
4	J	Mango
3	E	Papaya
2	F	Grapes
1	H	Melon

S35. Ans.(d)

Sol. From the given statements, the one who lives on 6th floor likes Apple. The one who lives on 2nd floor likes G

Floor	Person	Fruit
6		Apple
5		
4		
3		
2		Grapes
1		

There are three persons who live on the odd number floors. D lives on the 5th floor. E lives on the 3rd floor. J lives on the 1st floor. So, the final arrangement is-

Floor	Person	Fruit
6		Apple
5	D	
4		
3	E	Papaya
2		Grapes
1	H	Melon

J likes Mango. G does not live immediately above the floor of H. We know F is one of the persons and one of them likes banana. So, the final arrangement is-

Floor	Person	Fruit
6	G	Apple
5	D	Banana
4	J	Mango
3	E	Papaya
2	F	Grapes
1	H	Melon

S36. Ans.(a)

Sol. From the given statements, the one who lives on 6th floor likes Apple. The one who lives on 2nd floor likes Grapes.

Floor	Person	Fruit
6		Apple
5		
4		
3		
2		Grapes
1		

There are three persons live between H and D. D lives above the floor of H. E and H live on the odd number floor and they like Papaya and Melon respectively.

Floor	Person	Fruit
6		Apple
5	D	
4		
3	E	Papaya
2		Grapes
1	H	Melon

J likes Mango. G does not live immediately above the floor of H. We know F is one of the persons and one of them likes banana. So, the final arrangement is-

Floor	Person	Fruit
6	G	Apple
5	D	Banana
4	J	Mango
3	E	Papaya
2	F	Grapes
1	H	Melon

S37. Ans.(c)

Sol. From the given conditions, we can deduce that D lives on 6th floor, E lives on 2nd floor likes Grapes.

Floor	Person	Fruit
6		Apple
5		
4		
3		
2		Grapes
1		

There are three persons live between H and D. D lives above the floor of H. E and H live on the odd number floor and they like Papaya and Melon respectively.

Floor	Person	Fruit
6		Apple
5	D	
4		
3	E	Papaya
2		Grapes
1	H	Melon

J likes Mango. G does not live immediately above the floor of H. We know F is one of the persons and one of them likes banana. So, the final arrangement is-

Floor	Person	Fruit
6	G	Apple
5	D	Banana
4	J	Mango
3	E	Papaya
2	F	Grapes
1	H	Melon

S38. Ans.(a)

Sol. I. $V < Z$ (True)

II. $V = Z$ (False)

S39. Ans.(d)

Sol. I. $L \geq G$ (False)

II. $G < L$ (False)

S40. Ans.(a)

Sol. I. $M > E$ (True)

II. $O > K$ (False)

S41. Ans.(a)

Sol.

Given sum = Rs. X.

ATQ,

$$X \times \frac{120}{100} \times \frac{120}{100} = 3456$$

$$X = 2400 \text{ Rs.}$$

S42. Ans.(d)

Sol.

Let the speed of the boat in still water = $5s$

$$\text{So, speed of the stream} = 5s \times \frac{40}{100} = 2s$$

ATQ,

$$(5s + 2s) = \frac{140}{10}$$

$$s = 2 \text{ km/hr}$$

$$\text{Required time} = \frac{60}{5s - 2s}$$

$$= \frac{60}{3s} = \frac{60}{3 \times 2} = 10 \text{ hr.}$$

S43. Ans.(b)

Sol.

$$\text{Required number of days} = \frac{48 \times 80 \times 2}{16} = 480 \text{ days}$$

S44. Ans.(d)

Sol.

Let the present age of son = x

$$\text{So, present age of father} = x \times \left(1 + \frac{200}{100}\right) = 3x$$

ATQ

$$\frac{3x+5}{x+5} = \frac{7}{3}$$

$$9x+15 = 7x+35$$

$$x = 10 \text{ years}$$

$$\text{Required age} = 3x+3 = 33 \text{ years}$$

S45. Ans.(a)

Sol.

$$\text{ATQ, } \frac{11000 \times 12}{13200 \times X} = \frac{1}{1}$$

$$X = 10$$

S46. Ans.(b)

Sol.

$$\text{Required percentage} = \frac{180-120}{120} \times 100 = 50\%$$

S47. Ans.(c)

Sol.

$$\text{Required average} = \frac{80+100+60}{3} = 80$$

S48. Ans.(d)

Sol.

$$\text{Required difference} = 90-60 = 30$$

S49. Ans.(a)

Sol.

$$\text{Required ratio} = \frac{140}{160} = 7:8$$

S50. Ans.(b)

Sol.

$$\text{Required percentage} = \frac{70}{100} \times 100 = 70\%$$

S51. Ans.(b)

Sol.

$$\begin{aligned} \text{Required average} &= \frac{350+250+325+475}{4} \\ &= \frac{1400}{4} = 350 \end{aligned}$$

S52. Ans.(d)

Sol.

Total number of laptops manufactured in year 2016 & 2017 = 450 + 350 = 800

Total number of printers manufactured in 2016 & 2017 = 350 + 250 = 600

$$\text{Required percentage} = \frac{800-600}{600} \times 100 = 33\frac{1}{3}\%$$

S53. Ans.(e)

Sol.

$$\text{Sold units of printers in 2018} = \frac{(100-20)}{100} \times 325 = 260$$

$$\text{Sold units of laptops in 2018} = \frac{(100-25)}{100} \times 200 = 150$$

$$\text{So, required sum} = 260 + 150 = 410$$

S54. Ans.(c)

Sol.

$$\text{Required ratio} = \frac{225+275}{325+475} = \frac{500}{800} = 5 : 8$$

S55. Ans.(a)

Sol.

From the line graph we can say,

$$\text{Maximum number of printers and laptops manufactured in 2016} = 350 + 450 = 800$$

S56. Ans.(a)

Sol.

$$\text{Profit percentage} = \frac{30800 - (26600 + 1400)}{26600 + 1400} \times 100 = 10\%$$

S57. Ans.(d)

Sol.

Let four consecutive even numbers are a , $a+2$, $a+4$ and $a+6$ respectively.

ATQ

$$a + a + 2 + a + 4 = 108$$

$$a = 34$$

$$\begin{aligned} \therefore \text{required no.} &= a \times (a + 6) = 34 \times 40 \\ &= 1360 \end{aligned}$$

S58. Ans.(e)

Sol.

$$\begin{aligned} \text{Required ratio} &= \pi \times 7 \times 7 : 2 \times \pi \times \frac{7}{2} \\ &= 7 : 1 \end{aligned}$$

S59. Ans.(c)

Sol.

$$\text{Speed of man} = 2 \text{ m/sec}$$

$$\text{Speed of train} = 72 \times \frac{5}{18} = 20 \text{ m/sec}$$

$$\therefore \text{Length of train} = (20 - 2) \times 10 = 180 \text{ m}$$

$$\therefore \text{Length of tunnel} = 54 \times 20 - 180 = 900 \text{ m}$$

S60. Ans.(c)

Sol.

Let two numbers are x and y respectively

According to question.

$$\frac{70 \times x}{100} = \frac{30 \times y}{100}$$

$$\Rightarrow \frac{x}{y} = \frac{3}{7}$$

$$\Rightarrow x = \frac{3}{7}y \dots(i)$$

$$\text{Now average of numbers} = \frac{x+y}{2} = 48$$

$$\Rightarrow x + y = 96 \dots(ii)$$

Put value of x from (i) into (ii)

$$\Rightarrow \frac{3}{7}y + y = 96$$

$$\Rightarrow \frac{10y}{7} = 96$$

$$\Rightarrow y = 67.2$$

$$\Rightarrow x = 96 - 67.2 = 28.8$$

Larger number = 67.2

S61. Ans.(e)

Sol.

$$\frac{80 \times 170}{100} + \frac{3}{4} \times 216 - 10 = ? \times 6$$

$$136 + 162 - 10 = ? \times 6$$

$$\frac{288}{6} = ?$$

$$48 = ?$$

S62. Ans.(c)

Sol.

$$? = \frac{3}{8} \times 600 + \frac{1}{7} \times 210$$

$$? = 225 + 30$$

$$? = 255$$

S63. Ans.(c)

Sol.

$$? = 48 + 6 - 5$$

$$? = 49$$

S64. Ans.(c)

Sol.

$$? = 236 + 160$$

$$? = 396$$

S65. Ans.(a)

Sol.

$$\frac{1}{4} \times 124 + 35\% \text{ of } 60 = ?$$

$$31 + \frac{7}{20} \times 60 = ?$$

$$31 + 21 = ?$$

$$52 = ?$$

S66. Ans.(a)

Sol.

$$? = \sqrt{15 \div 3 + 24 \div 6}$$

$$? = \sqrt{5 + 4}$$

$$? = \sqrt{9}$$

$$? = 3$$

S67. Ans.(a)

Sol.

$$\frac{144 \times 12 \times 36 \times 36}{432} = ?$$

$$? = 5184$$

S68. Ans.(d)

Sol.

$$45 + \frac{20}{100} \times ? = \frac{460}{4}$$

$$45 + \frac{?}{5} = 115$$

$$? = 350$$

S69. Ans.(c)

Sol.

$$11^2 + 23^2 + ? = 800$$

$$121 + 529 + ? = 800$$

$$? = 800 - 650$$

$$? = 150$$

S70. Ans.(e)

Sol.

$$? + 432 - 206 = 550$$

$$? = 550 - 226$$

$$? = 324$$

S71. Ans.(d)

Sol.

$$2^5 + 2^{10} = ? \times 12$$

$$\frac{2^5(1+32)}{12} = ?$$

$$\Rightarrow ? = 88$$

S72. Ans.(a)

Sol.

$$\text{Total number of boys participated} = 7000 \times \frac{9}{14} = 4500$$

$$\text{Total number of girls participated} = 7000 - 4500 = 2500$$

$$\text{number of boys participated in Tennis} = \frac{30}{100} \times 4500 = 1350$$

$$\text{number of girls participated in Hockey} = 1350 \times \frac{100}{125} = 1080$$

$$\text{number of boys participated in Hockey} = 2530 - 1080 = 1450$$

$$\text{number of boys participated in Kabaddi} = 4500 - 1350 - 1450 = 1700$$

$$\text{number of girls participated in Tennis and Kabaddi} = 2500 - 1080 = 1420$$

$$\text{number of girl participated in Tennis} = \text{No. of girls participated in Kabaddi} + 20$$

$$\text{So, number of girls participated in Tennis} = 720$$

$$\text{And number of girls participated in Kabaddi} = 700$$

$$\text{Required number} = 1350 + 720 = 2070$$

S73. Ans.(d)

Sol.

$$\text{Total number of boys participated} = 7000 \times \frac{9}{14} = 4500$$

$$\text{Total number of girls participated} = 7000 - 4500 = 2500$$

$$\text{number of boys participated in Tennis} = \frac{30}{100} \times 4500 = 1350$$

$$\text{number of girls participated in Hockey} = 1350 \times \frac{100}{125} = 1080$$

$$\text{number of boys participated in Hockey} = 2530 - 1080 = 1450$$

$$\text{number of boys participated in Kabaddi} = 4500 - 1350 - 1450 = 1700$$

$$\text{number of girls participated in Tennis and Kabaddi} = 2500 - 1080 = 1420$$

$$\text{number of girl participated in Tennis} = \text{No. of girls participated in Kabaddi} + 20$$

$$\text{So, number of girls participated in Tennis} = 720$$

$$\text{And number of girls participated in Kabaddi} = 700$$

$$\text{Required percentage} = \frac{1700-700}{700} \times 100 = 142\frac{6}{7}\%$$

S74. Ans.(c)

Sol.

$$\text{Total number of boys participated} = 7000 \times \frac{9}{14} = 4500$$

$$\text{Total number of girls participated} = 7000 - 4500 = 2500$$

$$\text{number of boys participated in Tennis} = \frac{30}{100} \times 4500 = 1350$$

number of girls participated in Hockey = $1350 \times \frac{100}{125} = 1080$
 number of boys participated in Hockey = $2530 - 1080 = 1450$
 number of boys participated in Kabaddi = $4500 - 1350 - 1450 = 1700$
 number of girls participated in Tennis and Kabaddi = $2500 - 1080 = 1420$
 number of girl participated in Tennis = No. of girls participated in Kabaddi + 20
 So, number of girls participated in Tennis = 720
 And number of girls participated in Kabaddi = 700
 Required ratio = $\frac{1450}{700} = \frac{29}{14}$

S75. Ans.(d)

Sol.

Total number of boys participated = $7000 \times \frac{9}{14} = 4500$
 Total number of girls participated = $7000 - 4500 = 2500$
 number of boys participated in Tennis = $\frac{30}{100} \times 4500 = 1350$
 number of girls participated in Hockey = $1350 \times \frac{100}{125} = 1080$
 number of boys participated in Hockey = $2530 - 1080 = 1450$
 number of boys participated in Kabaddi = $4500 - 1350 - 1450 = 1700$
 number of girls participated in Tennis and Kabaddi = $2500 - 1080 = 1420$
 number of girl participated in Tennis = No. of girls participated in Kabaddi + 20
 So, number of girls participated in Tennis = 720
 And number of girls participated in Kabaddi = 700

Required percentage = $\frac{720}{1080} \times 100 = \frac{200}{3}\%$
 $= 66\frac{2}{3}\%$

S76. Ans.(c)

Sol.

The pattern of the series is-

$$9 + 5 = 14$$

$$14 + 15 + 29$$

$$29 + 25 = 54$$

$$54 + 35 = 89$$

$$89 + 45 = 134$$

$$134 + 55 = 189$$

So, the wrong no. is 179.

S77. Ans.(d)

Sol.

The pattern of the series is -

$$2 \times 1 + 1 = 3$$

$$3 \times 2 + 1 = 7$$

$$7 \times 3 + 1 = 22$$

$$22 \times 4 + 1 = 89$$

$$89 \times 5 + 1 = 446$$

$$446 \times 6 + 1 = 2677$$

So, the wrong no. is 1.

S78. Ans.(e)

Sol.

The pattern of the series is –

$$2^2 + 1 = 5$$

$$3^2 - 1 = 8$$

$$4^2 + 1 = 17$$

$$5^2 - 1 = 24$$

$$6^2 + 1 = 37$$

$$7^2 - 1 = 48$$

$$8^2 + 1 = 65$$

So, the wrong no. is 39.

S79. Ans.(c)

Sol.

The pattern of the series is-

$$32 \times 2 = 64$$

$$64 \div 4 = 16$$

$$16 \times 6 = 96$$

$$96 \div 8 = 12$$

$$12 \times 10 = 120$$

$$120 \div 12 = 10$$

So, the wrong no. is 8.

S80. Ans.(a)

Sol.

The pattern of the series is –

$$18 + 3 = 21$$

$$21 + 5 = 26$$

$$26 + 7 = 33$$

$$33 + 11 = 44$$

$$44 + 13 = 57$$

$$57 + 17 = 74$$

So, the wrong no. is 17.