RRB Clerk Pre 2022 (13th August) Shift-Wise Previous Year Papers Mock 05

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

M 4 E T % J 9 O B @ U 8 © N # W F 1 V 7 * 2 A H 3 Y 5 $ 6 K

Q1. Which of the following is the ninth to the right of the seventeenth from the right end of the above arrangement?

(a) A

(b) %

(c) O

(d) Y

(e) None of these

Q2. What should come in place of the question mark (?) in the following series based on the above arrangement?

4T% 9B@ 8N# FV7 ?

(a) 2 H 3

(b) 2 H Y

(c) * A H

(d) * A 3

(e) None of these

Q3. 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) J O T

(b) 3 5 A

(c) $ K Y

(d) A 3 *

(e) 8 © @

Q4. How many such vowels are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a consonant?

(a) None

(b) One

(c) Two

(d) Three

(e) Four

Q5. How many such numbers are there in the above arrangement, each of which is immediately followed by a symbol and immediately preceded by a consonant?
(a) None
(b) One
(c) Two
(d) Three
(e) More than three

Directions (6-10): **Study the following information carefully and answer the questions given below:**
Eight persons have different designations in a fashion designing company i.e., HR Manager, Head of Marketing, Head of Design, Graphic designer, Designer, Customer service manager, Commination officer and Buyer assistant. The order of seniority is the same as given above i.e., HR Manager is the senior-most designation and Buyer assistant is the junior-most designation.
W is not Customer service manager. More than three persons have their designations between P and U. R is just senior to V. P is not the senior-most person. P is senior to U. Only two designations are there between S and T who is just junior to P. Not more than one designation is between S and U. Neither V nor Q is a Designer. V is not junior to P.

Q6. Who among the following is the Head of Marketing of the company?
(a) T
(b) R
(c) V
(d) P
(e) None of these

Q7. Which of the following statements is not true?
I. R is the senior-most person.
II. S is the Commination officer.
III. U is just senior to S.
(a) Both I and II
(b) Only III
(c) Only I
(d) Only II
(e) Both II and III

Q8. Four of the following five are alike in a certain way and hence form a group which of the following does not belong to that group?
(a) V- Head of Design
(b) P- Graphic designer
(c) W- Commination officer
(d) W- Customer service manager
(e) S- Buyer assistant

Q9. How many persons are junior to Q?
(a) One
(b) Two
(c) Three
(d) Four
(e) None of these

Q10. Who among the following is just junior to Graphic designer?
(a) Q
(b) U
(c) R
(d) V
(e) W

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

Eight persons A, B, C, D, E, F, G and H are sitting around a rectangular table in such a way that four persons sit on each of the four corners of the table and the other four persons sit on the middle of each side. All of them are facing towards the center of the table.

B sits third to the right of H. B does not sit on any of the middle side of the table. One person sits between B and G. Two persons sit between G and A. C sits second to the right of A. Two persons sit between C and F. B does not sit opposite to F and D.

Q11. Who among the following sits opposite to H?
(a) E
(b) C
(c) A
(d) F
(e) None of these

Q12. Who among the following sits immediate left of A?
(a) B
(b) E
(c) C
(d) F
(e) None of these

Q13. How many persons sit between A and D?
(a) None
(b) Two
(c) Three
(d) One
(e) None of these

Q14. What is the position of F with respect to D?
(a) Third to the right
(b) Immediate right
(c) Second to the left
(d) Immediate to the left
(e) None of these

Q15. Who among the following sits immediate right of G?
(a) E
(b) D
(c) A
(d) B
(e) None of these

Directions (16-20): These questions are based on the following five numbers:
514   658   245   732   321

Q16. If we arrange all numbers in descending order from left to right, then the position of how many numbers remains unchanged?
(a) One
(b) None
(c) Three
(d) Two
(e) More than three

Q17. If we interchange the 1ˢᵗ and the 3ʳᵈ digit of each number then how many numbers become even?
(a) Two
(b) None
(c) Three
(d) One
(e) More than three

Q18. If we interchange 1ˢᵗ and 2ⁿᵈ digit of each number then which of the following number becomes 3ʳᵈ highest number?
(a) 514
(b) 732
(c) 321
(d) 245
(e) 658

Q19. What is the sum of 2ⁿᵈ digit of 3ʳᵈ number from left, 1ˢᵗ digit of 2ⁿᵈ number from right and 3ʳᵈ digit of 1ˢᵗ number from left?
(a) 18
(b) 22
(c) 17
(d) 13
(e) None of these

Q20. What is the difference between the number which is 2ⁿᵈ and 5ᵗʰ from the left respectively?
(a) 337
(b) 227
(c) 117
(d) 327
(e) None of these

Directions (21-23): **Study the following information carefully and answer the questions given below:**
There are nine family members in a family. J is the daughter of K. E is the father of C who is married to F. N is the father of K. G is married to E. G is the sister of K. L is the mother of J. D is the only son of G.

Q21. Who among the following is the brother-in-law of D?
(a) K
(b) L
(c) F
(d) J
(e) None of these

Q22. How C is related to J?
(a) Mother
(b) Father
(c) Brother
(d) Cousin
(e) None of these

Q23. Who among the following is the uncle of D?
(a) F
(b) N
(c) K
(d) E
(e) None of these

Q24. How many such numerals are there in the number '2349759648745' which will remain at the same position when arranged in descending order from left to right?
(a) One
(b) Two
(c) Three
(d) None
(e) More than Three

Directions (25-29): **Study the following information carefully and answer the questions given below:**
Eight persons are sitting in a linear row such that some of them are facing north while some are facing south. N is sitting fourth from the left end of the row. R is sitting second to the left of N and they are facing opposite directions. B is sitting to the immediate right of R. A is sitting second to the right of B. L is sitting second to the left of A. E is sitting to the immediate right of L. T is sitting second to the right of E. D is sitting to the immediate left of T and they are facing opposite directions.

Q25. Who among the following sits second to the right of N?
(a) L
(b) T
(c) D
(d) E
(e) None of these

Q26. How many persons sit between B and E?
(a) One
(b) Two
(c) Four
(d) Three
(e) None

Q27. The number of persons sit between R and L is same as the number of persons sit between ____ and _____.
(a) T, E
(b) N, D
(c) R, N
(d) E, N
(e) None of these

Q28. Who among the following sits fourth left of A?
(a) D
(b) E
(c) B
(d) T
(e) None of these

Q29. Which of the following statement is true about T?
(a) Two persons sit between T and N
(b) T and N faces same directions
(c) T sits immediate right of D
(d) More than three persons sit between T and R
(e) Both (b) and (d)

Directions (30-33): **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 follow from the given statements disregarding commonly known facts.**

Q30. Statements:
All Moderna are Pfizer.
All Pfizer are Covishield.
Some SputnikV are Pfizer.
Conclusions:
I. Some Covishield are SputnikV.
II. Some SputnikV are not Covishield.
(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.

Q31. Statements:
Only a few Garbage are Dustbin.
Only Bag is Clean.
No Bag is Garbage.
Conclusions:
I. All Clean can be Dustbin.
II. At least some Dustbin are Bag.
(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.

Q32.Statements:
Some Book are Pen.
Only a few Pen are Glue.
All Glue are Eraser.

Conclusions:
I. Some Glue are not Pen.
II. Some Pen are Eraser is a possibility.
(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.

Q33. Statements:
All Moderna are Pfizer.
All Pfizer are Covishield.
Only a few SputnikV are Pfizer.
Conclusions:
I. Some Moderna are SputnikV
II. Some SputnikV can never be Pfizer
(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.

Q34. There are 45 students in a class. D ranks fifth from the topmost in class. L ranks eighth from the bottommost in the class. Find how many students are between them?
(a) 31
(b) 32
(c) 28
(d) Can't be determined
(e) None of these

Q35. In the word 'EXECUTIVE', how many pairs of the letters have the same number of letters between them (both forward and backward direction) in the word as in the alphabet?
(a) Four
(b) Two
(c) One
(d) Three
(e) More than four

Directions (36-40): **Study the following information carefully and answer the questions given below.**
Eight persons are living in an eight-storey building in which the ground floor is numbered as 1 and the topmost floor is numbered as 8.

A live on even numbered floor but above the floor numbered as four. Three persons live between A and E. One person lives between E and H. Two persons live between H and B. Three persons live between B and G. One person lives between C and G, who lives below C's floor. Not more than two persons live between C and D. F lives above D's floor.

Q36. Four of the five following are alike in a certain way so form a group, which of the following does not belong to that group?
(a) A
(b) G
(c) B
(d) C
(e) F

Q37. Which of the following statement is true about D?
(a) D lives on an odd numbered floor
(b) More than two persons live between D and H
(c) D lives just above E's floor
(d) D lives on 4th floor
(e) None is true

Q38. Who among the following lives just above H's floor?
(a) F
(b) D
(c) C
(d) E
(e) None of these

Q39. How many persons live between F and H?
(a) One
(b) Two
(c) Three
(d) More than three
(e) No one

Q40. The number of persons live between A and B is same as the number of persons live between ___ and ___.
(a) E, H
(b) D, F
(c) B, C
(d) H, D
(e) G, E

Directions (41-45): The table given below shows total number of Mouse sold by five different shopkeepers. Study the data carefully and answer the following questions.

	Total Mouse Sold	Wired Mouse: Wireless Mouse
A	840	9: 5
B	650	7: 6
C	750	2: 3
D	480	3: 5
E	550	7: 4

Q41. Total number of Wireless mouse sold by D are what percent of total number of Wired mouse sold by C?
(a) 0%
(b) 50%
(c) 66.67%
(d) 100%
(e) 25%

Q42. What is the difference between the average number of wired mouse sold by A and B and total number of mouse sold by D?
(a) 25
(b) 15
(c) 35
(d) 20
(e) 30

Q43. What is the ratio between the wireless mouse sold by shopkeeper B and wired mouse sold by shopkeeper E?
(a) 3: 4
(b) 4: 3
(c) 5: 4
(d) 6: 7
(e) 4: 7

Q44. Total number of mouse sold by B and E together is what percentage more or less than total number of mouse sold by C.

(a) 60%
(b) 30%
(c) 75%
(d) 25%
(e) 20%

Q45. A shopkeeper – X sold Wired mouse and wireless mouse in the ratio of 23: 29 and total mouse sold by him is 20% more than that by shopkeeper B. Find the difference between the wired mouse and wireless mouse sold by him.
(a) 120
(b) 90
(c) 125
(d) 160
(e) 145

Q46. A container contains 160-liter mixture in which water to milk is in ratio of 3:7. If 10 liter of mixture is taken out and 20 liter of water is added in the container, the find the final ratio of water to milk in container?
(a) 12: 19
(b) 13: 21
(c) 9: 17
(d) 14: 17
(e) 3: 8

Q47. Rahul and Ayush can complete a piece a work alone in 12 days and 20 days respectively, while Deepak takes 2.5 days more than time taken by Rahul & Ayush together to complete the same work. Find the time taken by Deepak to complete the work alone?
(a) 12 days
(b) 10 days
(c) 9 days
(d) 7.5 days
(e) 12.5 days

Q48. What is the radius of circle which area is 124.74 cm^2?
(a) 4.9 cm
(b) 6.3 cm
(c) 0.63 cm
(d) 0.49 cm
(e) 7.2 cm

Q49. There were two candidates in an election and 15% of the total voters didn't cast their vote. If 20% of the total cast votes declared invalid and the winning candidate got 50% of the total votes & he win by 3200 votes, then find total number of voters?

(a) 10000
(b) 12000
(c) 15000
(d) 80000
(e) 16000

Q50. A shopkeeper sold article A and article B each at Rs. 1050. On article A, he incurred a loss of 6.25%, while on article B, profit gained by him is 16 ⅔%. Find the sum of cost price (in Rs.) of article A and B?
(a) 1960
(b) 1920
(c) 2020
(d) 2140
(e) 1980

Q51. Five years ago, the ratio of ages of Pankaj to Pradeep was 4:7. If after two years the ratio of ages of Pankaj to Pradeep becomes 5:8 respectively, then find the present age of Pradeep?
(a) 35 years
(b) 28 years
(c) 56 years
(d) 49 years
(e) 54 years

Q52. Harsh and Veer started a business with the investment of Rs. 2500 and Rs. 4000 respectively. If the ratio of time period of investment of Harsh and Veer is 7: 5 respectively and the profit share of Harsh is Rs. 350, then find the profit share of Veer?
(a) Rs 400
(b) Rs 540
(c) Rs 490
(d) Rs 280
(e) Rs 420

Q53. Jagdish invested Rs X at 12.5% per annum for four years on simple interest in scheme A and he invested same amount in scheme B at 16% per annum on simple interest for three years. If the difference between interest earned from both schemes is Rs. 122, then find the value of X?
(a) 5200
(b) 4800
(c) 5300
(d) 6100
(e) 6300

Q54. In an examination, the average marks scored by 15 girls of a class is 54 and the average marks scored by 25 boys from the same class is 42. Find the average marks scored by the class?
(a) 46.5
(b) 48.5
(c) 41.5
(d) 44.5
(e) 47.5

Q55. Manoj goes office from platform with speed of 12 km/hr and comes back with 10 km/hr. If he takes 5 ½ hours in all, then find distance between office and platform?
(a) 75 km
(b) 60 km
(c) 30 km
(d) 15 km
(e) 45 km

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

Q56. 41, 30, 52, 19, 63, ?
(a) 11
(b) 9
(c) 10
(d) 12
(e) 8

Q57. 16, 47, 80, 115, 152, ?
(a) 197
(b) 193
(c) 191
(d) 195
(e) 189

Q58. ?, 10, 20, 60, 240, 1200
(a) 5
(b) 10
(c) 2
(d) 20
(e) 4
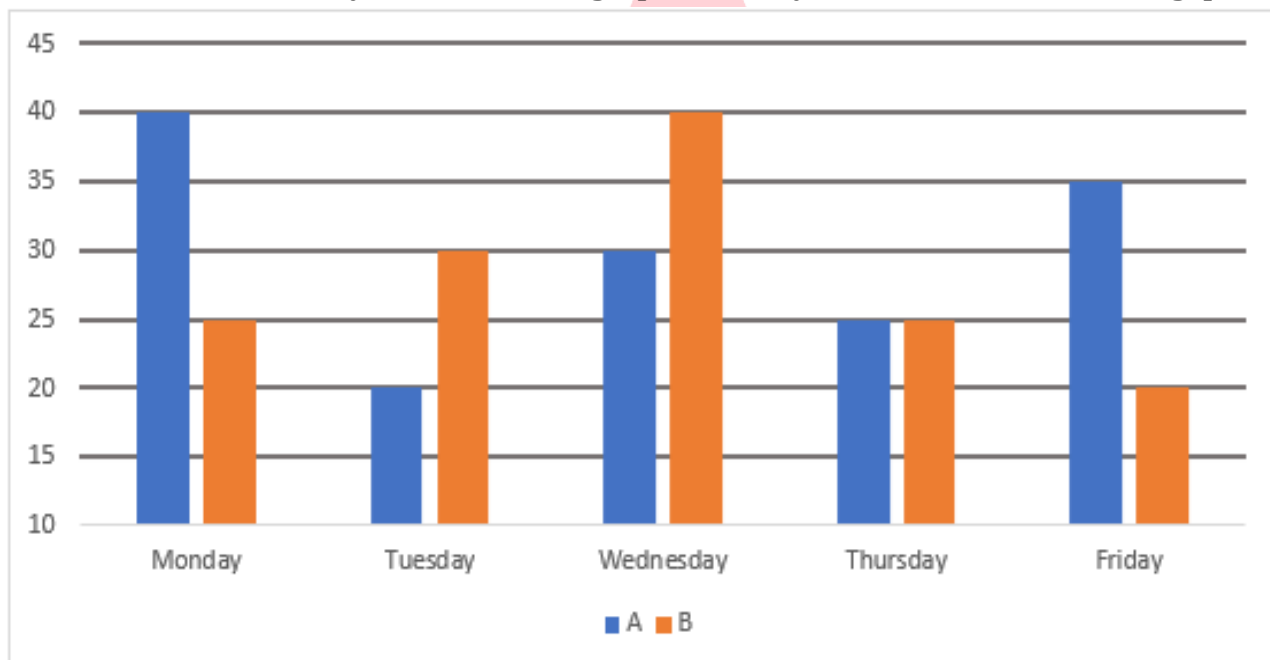
Q59. 8, 21, 47, 86, 138, 203, ?
(a) 287
(b) 281
(c) 372
(d) 278
(e) 268

Q60. 11, 12, 16, 43, 59, ?
(a) 190
(b) 188
(c) 186
(d) 184
(e) 182

Directions (61-65): The bar Graph given below shows total number cakes sold by two bakeries A and B in five different days. Read the bar graph carefully and answer the following questions.

Q61. Total number of cakes sold by A on Monday & Tuesday together is what percentage more or less than total number of cakes sold by both the bakeries together on Thursday?
(a) 10%
(b) 25%
(c) 20%
(d) 12.5%
(e) 16%

Q62. Find the average number of cakes sold by B in given five days?

(a) 25

(b) 35

(c) 24

(d) 28

(e) 20

Q63. If on Saturday, A sold $28\frac{4}{7}\%$ more cakes than that on Friday and B sold 15% more cakes than that on Wednesday, then find total number of cakes sold by A & B together on Saturday?

(a) 84

(b) 91

(c) 96

(d) 103

(e) 89

Q64. Find the ratio of total number of cakes sold by A on Tuesday, Wednesday and Thursday together to total number of cakes sold by B on Wednesday, Thursday and Friday together?

(a) 15 : 17

(b) 15 : 19

(c) 17 : 16

(d) 12 : 17

(e) 13 : 15

Q65. Total number of cakes sold by B in these five days is how much more or less than that of by A?

(a) 20

(b) 10

(c) 15

(d) 25

(e) 5

Directions (66-80): **What should come in the place of question (?) mark in the following questions.**

Q66. $42 \times \frac{22}{7} + 20\%$ **of** $530 - 26 = ?$

(a) 244

(b) 198

(c) 236

(d) 212

(e) 252

Q67. $(23 \times 23) + 21 \times 7 = ?^2$

(a) 8

(b) 38

(c) 26

(d) 12

(e) 44

Q68. $\sqrt{1444} \div 19 + 3.5 \times \sqrt{16} = (?)$

(a) 16

(b) 30

(c) 8

(d) 26

(e) 10

Q69. $780 \div 48 \times 16 = ?$

(a) 280

(b) 248

(c) 275

(d) 242

(e) 260

Q70. $1486 + 212 - 1704 = ? - (11)^2$

(a) 95

(b) 115

(c) 130

(d) 102

(e) 135

Q71. $? \times (8^2 + 26) = 60^2$

(a) 36

(b) 60

(c) 80

(d) 40

(e) 20

Q72. $? \% \text{ of } 800 + 8^3 = 1024$

(a) 60

(b) 64

(c) 84

(d) 72

(e) 80

Q73. $281 + ? = 32\% \text{ of } 1700$

(a) 265

(b) 267

(c) 261

(d) 263

(e) 259

Q74. $2\frac{1}{3} + 3\frac{1}{6} = ? - 1\frac{1}{2}$

(a) 11

(b) 6

(c) 7

(d) 8

(e) 9

Q75. $20\% \text{ of } (? + 96) = 30 \times 1.6$

(a) 128

(b) 168

(c) 140

(d) 144

(e) 160

Q76. $24\% \text{ of } ? + 48\% \text{ of } 250 = 240$

(a) 250

(b) 300

(c) 500

(d) 400

(e) 600

Q77. $\frac{288}{?} + 12^2 = 40\%$ of 420

(a) 12

(b) 8

(c) 18

(d) 6

(e) 24

Q78. $17.5 \times 8 + ? = 20^2 + 100$

(a) 360

(b) 240

(c) 320

(d) 300

(e) 400

Q79. 25% of $960 + 24 \times 15 = ?$

(a) 640

(b) 720

(c) 500

(d) 600

(e) 400

Q80. $\sqrt[3]{?} + 24^2 = 29.2 \times 20$

(a) 512

(b) 64

(c) 216

(d) 1000

(e) 1728

S1. Ans.(a)
Sol. 9th to right of 17th from right= 8th from right= A

S2. Ans.(a)
Sol. 2H3

S3. Ans.(e)
Sol. 8 © @

S4. Ans.(d)
Sol. 4ET, 2AH, 9OB

S5. Ans.(c)
Sol. V7*, Y5$

S6. Ans.(c)
Sol. Final arrangement:

DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

Explanation:
Clues: More than three persons have their designations between P and U. P is not the senior-most person. P is senior to U. Only two designations are there between S and T who is just junior to P.
Inference: Here we have three possible cases i.e., case1, case2 and case3.

DESIGNATIONS	Case 1 PERSONS	Case 2 PERSONS	Case 3 PERSONS
HR Manager			S/
Head of Marketing	P	P	
Head of Design	T	T	P
Graphic designer			T
Designer			
Customer service manager	S	S	
Commination officer	U		S/
Buyer assistant		U	U

Clues: R is just senior to V and it is given that V is not a Designer. Not more than one designation is between S and U. V is not junior to P. W is not a customer service manager and Q is not a Designer.

Inference: Only one position is left for W. Case 1 and case 2 get eliminated here. Final arrangement is:

DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

S7. Ans.(b)
Sol. Final arrangement:

DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

Explanation:
Clues: More than three persons have their designations between P and U. P is not the senior-most person. P is senior to U. Only two designations are there between S and T who is just junior to P.
Inference: Here we have three possible cases i.e., case1, case2 and case3.

DESIGNATIONS	Case 1	Case 2	Case 3
	PERSONS	PERSONS	PERSONS
HR Manager			S/
Head of Marketing	P	P	
Head of Design	T	T	P
Graphic designer			T
Designer			
Customer service manager	S	S	
Commination officer	U		S/
Buyer assistant		U	U

Clues: R is just senior to V and it is given that V is not a Designer. Not more than one designation is between S and U. V is not junior to P. W is not a customer service manager and Q is not a Designer.
Inference: Only one position is left for W. Case 1 and case 2 get eliminated here. Final arrangement is:

DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

S8. Ans.(c)
Sol. Final arrangement:

DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

Explanation:

Clues: More than three persons have their designations between P and U. P is not the senior-most person. P is senior to U. Only two designations are there between S and T who is just junior to P.

Inference: Here we have three possible cases i.e., case1, case2 and case3.

DESIGNATIONS	Case 1	Case 2	Case 3
	PERSONS	PERSONS	PERSONS
HR Manager			S/
Head of Marketing	P	P	
Head of Design	T	T	P
Graphic designer			T
Designer			
Customer service manager	S	S	
Commination officer	U		S/
Buyer assistant		U	U

Clues: R is just senior to V and it is given that V is not a Designer. Not more than one designation is between S and U. V is not junior to P. W is not a customer service manager and Q is not a Designer.

Inference: Only one position is left for W. Case 1 and case 2 get eliminated here. Final arrangement is:

DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

S9. Ans.(b)
Sol. Final arrangement:

DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

Explanation:

Clues: More than three persons have their designations between P and U. P is not the senior-most person. P is senior to U. Only two designations are there between S and T who is just junior to P.

Inference: Here we have three possible cases i.e., case1, case2 and case3.

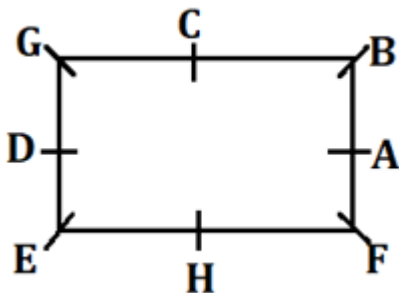| DESIGNATIONS	Case 1 PERSONS	Case 2 PERSONS	Case 3 PERSONS
HR Manager			S/
Head of Marketing	P	P	
Head of Design	T	T	P
Graphic designer			T
Designer			
Customer service manager	S	S	
Commination officer	U		S/
Buyer assistant		U	U

Clues: R is just senior to V and it is given that V is not a Designer. Not more than one designation is between S and U. V is not junior to P. W is not a customer service manager and Q is not a Designer.

Inference: Only one position is left for W. Case 1 and case 2 get eliminated here. Final arrangement is:

DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

S10. Ans.(e)

Sol. Final arrangement:

DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

Explanation:

Clues: More than three persons have their designations between P and U. P is not the senior-most person. P is senior to U. Only two designations are there between S and T who is just junior to P.

Inference: Here we have three possible cases i.e., case1, case2 and case3.

DESIGNATIONS	Case 1 PERSONS	Case 2 PERSONS	Case 3 PERSONS
HR Manager			S/
Head of Marketing	P	P	
Head of Design	T	T	P
Graphic designer			T
Designer			
Customer service manager	S	S	
Commination officer	U		S/
Buyer assistant		U	U

Clues: R is just senior to V and it is given that V is not a Designer. Not more than one designation is between S and U. V is not junior to P. W is not a customer service manager and Q is not a Designer.

Inference: Only one position is left for W. Case 1 and case 2 get eliminated here. Final arrangement is:

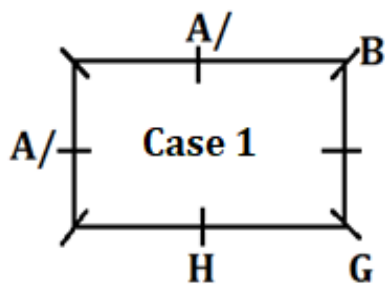| DESIGNATIONS	PERSONS
HR Manager	R
Head of Marketing	V
Head of Design	P
Graphic designer	T
Designer	W
Customer service manager	Q
Commination officer	S
Buyer assistant	U

S11. Ans.(b)
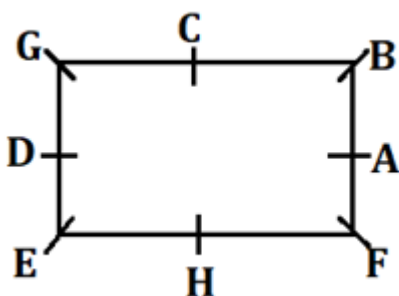**Sol.** Final arrangement:

Explanation:
Clues: B sits third to right of H. B does not sit any of the middle side of table. One person sits between B and G. Two persons sit between G and A.
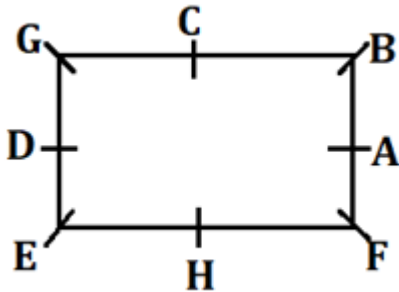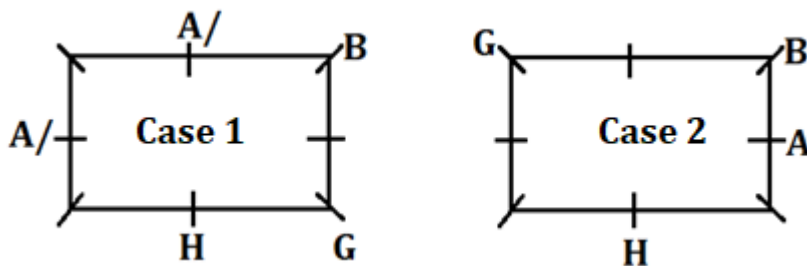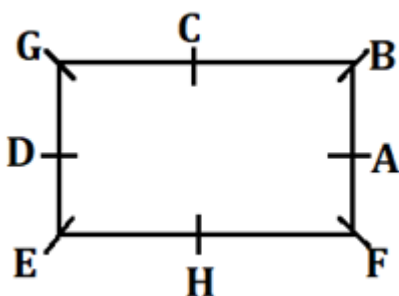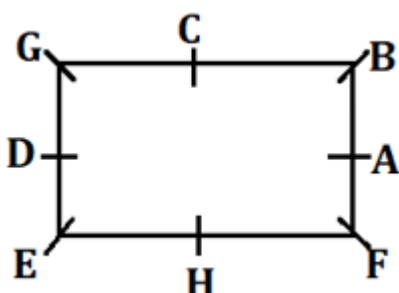**Inference:** There are two possibilities-

Clues: C sits second to right of A. Two persons sit between C and F. B does not sit opposite to F and D.
Inference: From the above conditions case-1 will be eliminated. Final arrangement:

```
G            C            B
  +------+--------+------+
D |                      | A
  |                      |
E +------+--------+------+ F
               H
```

S12. Ans.(d)
Sol. Final arrangement:

```
G            C            B
  +------+--------+------+
D |                      | A
  |                      |
E +------+--------+------+ F
               H
```

Explanation:
Clues: B sits third to right of H. B does not sit any of the middle side of table. One person sits between B and G. Two persons sit between G and A.
Inference: There are two possibilities-

```
      A/                B          G                  B
  +------+-----+------+        +------+-----+------+
A/|   Case 1   |      |        |   Case 2   |      | A
  |            |      |        |            |      |
  +------+-----+------+        +------+-----+------+
      H          G                    H
```

Clues: C sits second to right of A. Two persons sit between C and F. B does not sit opposite to F and D.
Inference: From the above conditions case-1 will be eliminated. Final arrangement:

```
G            C            B
  +------+--------+------+
D |                      | A
  |                      |
E +------+--------+------+ F
               H
```
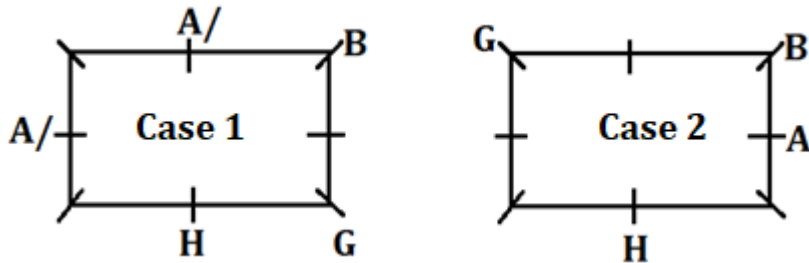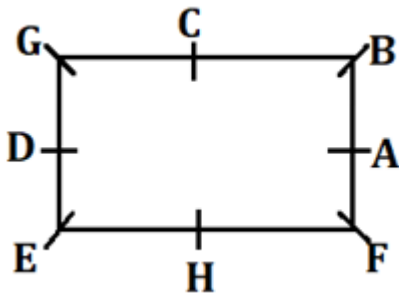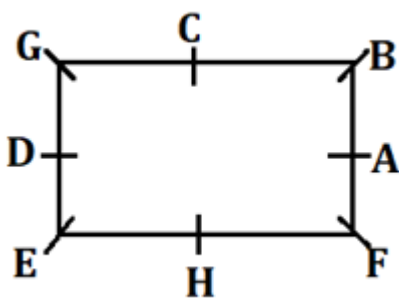
S13. Ans.(c)
Sol. Final arrangement:

Explanation:
Clues: B sits third to right of H. B does not sit any of the middle side of table. One person sits between B and G. Two persons sit between G and A.
Inference: There are two possibilities-

Clues: C sits second to right of A. Two persons sit between C and F. B does not sit opposite to F and D.
Inference: From the above conditions case-1 will be eliminated. Final arrangement:

S14. Ans.(a)
**Sol.** Final arrangement:

Explanation:
Clues: B sits third to right of H. B does not sit any of the middle side of table. One person sits between B and G. Two persons sit between G and A.
Inference: There are two possibilities-

Clues: C sits second to right of A. Two persons sit between C and F. B does not sit opposite to F and D.
Inference: From the above conditions case-1 will be eliminated. Final arrangement:

S15. Ans.(b)
Sol. Final arrangement:

Explanation:
Clues: B sits third to right of H. B does not sit any of the middle side of table. One person sits between B and G. Two persons sit between G and A.
Inference: There are two possibilities-
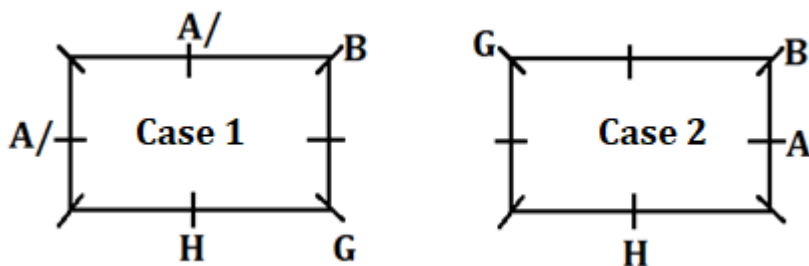
Clues: C sits second to right of A. Two persons sit between C and F. B does not sit opposite to F and D.
Inference: From the above conditions case-1 will be eliminated. Final arrangement:
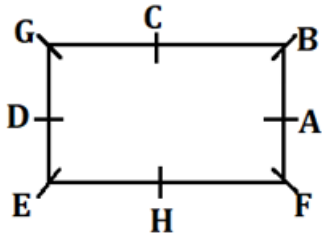
S16. Ans.(a)
Sol.

514	658	245	732	321
732	**658**	514	321	245

S17. Ans.(a)
Sol.

514	658	245	732	321
415	**856**	**542**	237	123

S18. Ans.(b)
Sol.

514	658	245	732	321
154	568	425	372	231

S19. Ans.(e)
Sol.
2nd digit of 3rd number from left = 4
1st digit of 2nd number from right = 7
3rd digit of 1st number from left = 4
So, 4 + 7 + 4 = 15

S20. Ans.(a)
Sol.
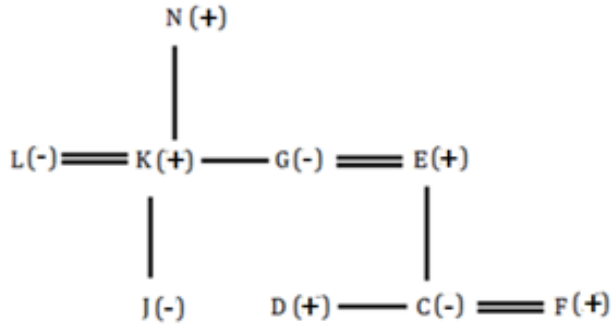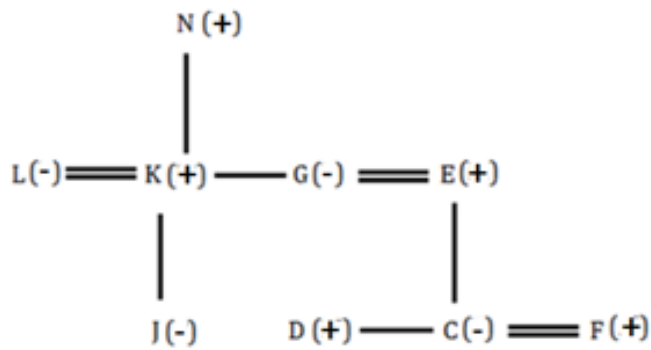2nd and 5th from the left respectively = 658-321 = 337

S21. Ans.(c)
Sol.

S22. Ans.(d)
Sol.

N (+)
|
L(-) ══ K(+) ── G(-) ══ E(+)
| |
J(-)   D(+) ── C(-) ══ F(+)

S23. Ans.(c)
Sol.

N (+)
|
L(-) ══ K(+) ── G(-) ══ E(+)
| |
J(-)   D(+) ── C(-) ══ F(+)
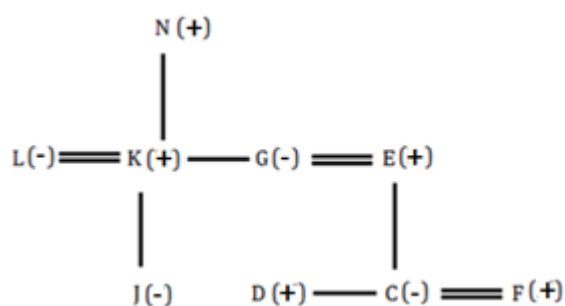
S24. Ans.(b)
Sol.

2 3 4 9 7 5 9 6 4 8 7 4 5
9 9 8 7 7 6 5 5 4 4 4 3 2

S25. Ans.(d)
Sol. Final arrangement:
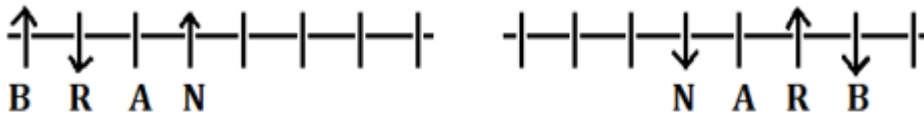
↑ ↓ ↓ ↑ ↑ ↑ ↓ ↑
B R A N L E D T

Explanation:

Clues: N is sitting fourth from the left end of the row. R is sitting second to the left of N and they are facing opposite directions. B is sitting to the immediate right of R. A is sitting second to the right of B.

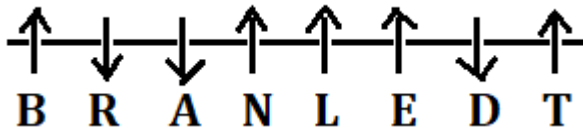**Inference:** From the above conditions there are two possibilities.

Case-1

Case-2

B R A N

N A R B

Clues: L is sitting second to the left of A. E is sitting to the immediate right of L. T is sitting second to the right of E. D is sitting to the immediate left of T and they are facing opposite directions.

Inference: From these conditions case-2 will be eliminated. The final arrangement is:

B R A N L E D T

S26. Ans.(c)
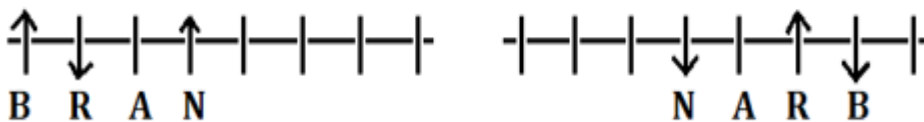**Sol.** Final arrangement:

B R A N L E D T

Explanation:
Clues: N is sitting fourth from the left end of the row. R is sitting second to the left of N and they are facing opposite directions. B is sitting to the immediate right of R. A is sitting second to the right of B.
Inference: From the above conditions there are two possibilities.

Case-1

Case-2

B R A N

N A R B

Clues: L is sitting second to the left of A. E is sitting to the immediate right of L. T is sitting second to the right of E. D is sitting to the immediate left of T and they are facing opposite directions.
Inference: From these conditions case-2 will be eliminated. The final arrangement is:

B R A N L E D T

S27. Ans.(b)
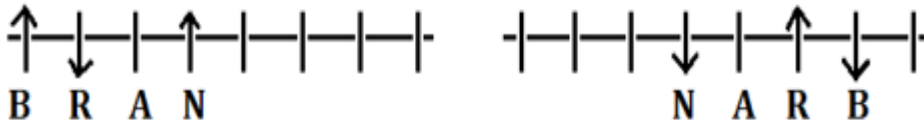**Sol.** Final arrangement:

B R A N L E D T

Explanation:
Clues: N is sitting fourth from the left end of the row. R is sitting second to the left of N and they are facing opposite directions. B is sitting to the immediate right of R. A is sitting second to the right of B.
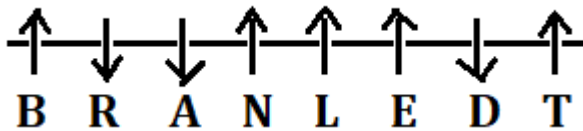**Inference:** From the above conditions there are two possibilities.

Case-1   Case-2
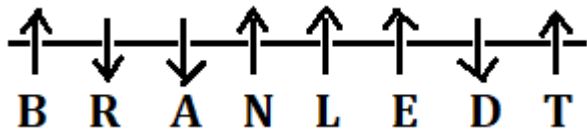

B R A N   N A R B

Clues: L is sitting second to the left of A. E is sitting to the immediate right of L. T is sitting second to the right of E. D is sitting to the immediate left of T and they are facing opposite directions.
Inference: From these conditions case-2 will be eliminated. The final arrangement is:

B R A N L E D T

S28. Ans.(a)
Sol. Final arrangement:
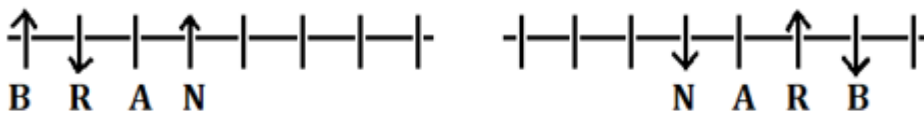

B R A N L E D T

Explanation:
Clues: N is sitting fourth from the left end of the row. R is sitting second to the left of N and they are facing opposite directions. B is sitting to the immediate right of R. A is sitting second to the right of B.
Inference: From the above conditions there are two possibilities.

Case-1   Case-2

B R A N   N A R B
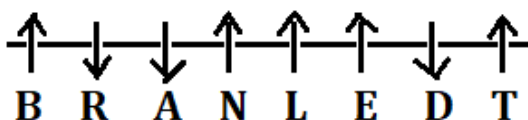
Clues: L is sitting second to the left of A. E is sitting to the immediate right of L. T is sitting second to the right of E. D is sitting to the immediate left of T and they are facing opposite directions.
Inference: From these conditions case-2 will be eliminated. The final arrangement is:

B R A N L E D T

S29. Ans.(e)
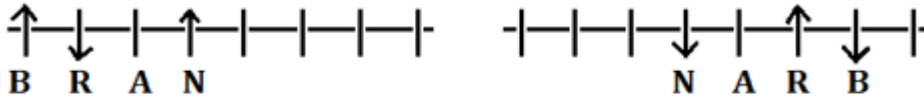**Sol.** Final arrangement:

B R A N L E D T

Explanation:
Clues: N is sitting fourth from the left end of the row. R is sitting second to the left of N and they are facing opposite directions. B is sitting to the immediate right of R. A is sitting second to the right of B.
Inference: From the above conditions there are two possibilities.

Case-1   Case-2

B   R   A   N   N   A   R   B
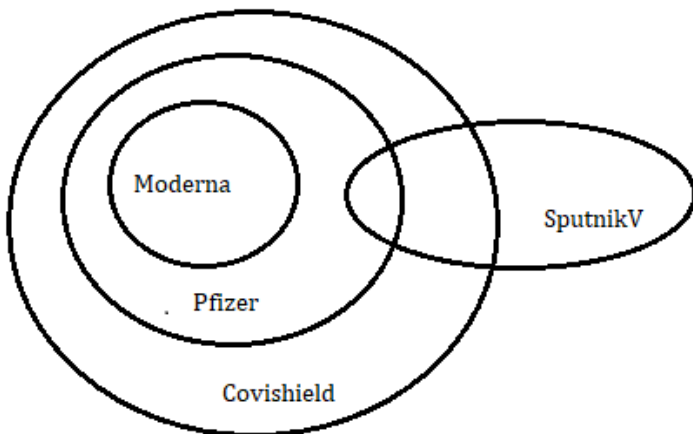
Clues: L is sitting second to the left of A. E is sitting to the immediate right of L. T is sitting second to the right of E. D is sitting to the immediate left of T and they are facing opposite directions.
Inference: From these conditions case-2 will be eliminated. The final arrangement is:

B   R   A   N   L   E   D   T

S30. Ans.(a)
Sol.

S31. Ans.(d)
Sol.

S32. Ans.(d)
Sol.
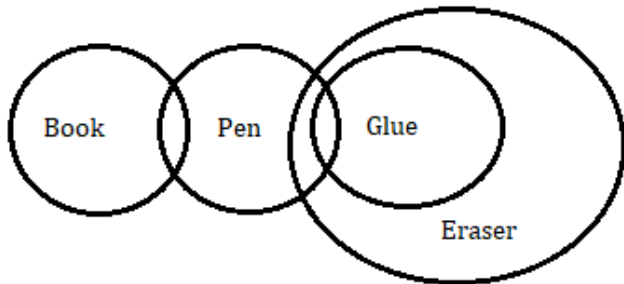
S33. Ans.(b)
Sol.
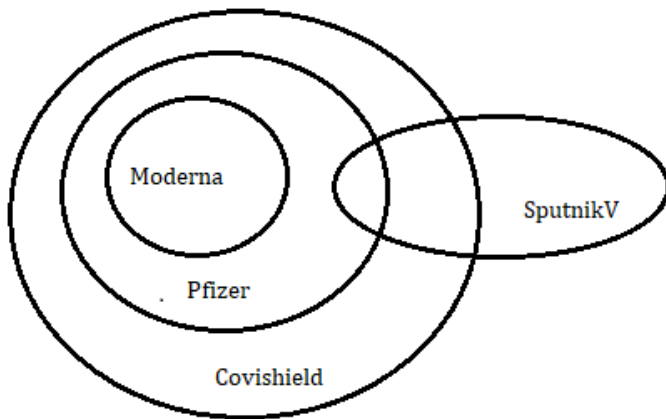
S34. Ans.(b)
Sol. $45 - (5+8) = 45 - 13 = 32$

S35. Ans.(e)
Sol.

EXECUTIVE

S36. Ans.(a)
Sol. Final arrangement:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

Explanation:

Clues: A lives on an even numbered floor but above the floor numbered as four. Three persons live between A and E. Only one person lives between E and H.

Inference: There are two possibilities.

Floors	Case-1 Persons	Caes-2 Persons
8		A
7		
6	A	H/
5		
4	H	E
3		
2	E	H/
1		

Clues: Two persons live between H and B. Three persons live between B and G. One person lives between C and G, who lives below C's floor. Not more than two persons live between C and D. F lives above D's floor.

Inference: From the above conditions case-1 will be eliminated. The final arrangement is:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

S37. Ans.(b)

Sol. Final arrangement:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

Explanation:

Clues: A lives on an even numbered floor but above the floor numbered as four. Three persons live between A and E. Only one person lives between E and H.

Inference: There are two possibilities.

Floors	Case-1 Persons	Caes-2 Persons
8		A
7		
6	A	H/
5		
4	H	E
3		
2	E	H/
1		

Clues: Two persons live between H and B. Three persons live between B and G. One person lives between C and G, who lives below C's floor. Not more than two persons live between C and D. F lives above D's floor.

Inference: From the above conditions case-1 will be eliminated. The final arrangement is:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

S38. Ans.(c)
Sol. Final arrangement:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

Explanation:
Clues: A lives on an even numbered floor but above the floor numbered as four. Three persons live between A and E. Only one person lives between E and H.
Inference: There are two possibilities.

Floors	Case-1 Persons	Caes-2 Persons
8		A
7		
6	A	H/
5		
4	H	E
3		
2	E	H/
1		

Clues: Two persons live between H and B. Three persons live between B and G. One person lives between C and G, who lives below C's floor. Not more than two persons live between C and D. F lives above D's floor.

Inference: From the above conditions case-1 will be eliminated. The final arrangement is:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

S39. Ans.(d)

Sol. Final arrangement:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

Explanation:

Clues: A lives on an even numbered floor but above the floor numbered as four. Three persons live between A and E. Only one person lives between E and H.

Inference: There are two possibilities.

Floors	Case-1 Persons	Caes-2 Persons
8		A
7		
6	A	H/
5		
4	H	E
3		
2	E	H/
1		

Clues: Two persons live between H and B. Three persons live between B and G. One person lives between C and G, who lives below C's floor. Not more than two persons live between C and D. F lives above D's floor.

Inference: From the above conditions case-1 will be eliminated. The final arrangement is:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

S40. Ans.(e)

Sol. Final arrangement:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

Explanation:

Clues: A lives on an even numbered floor but above the floor numbered as four. Three persons live between A and E. Only one person lives between E and H.

Inference: There are two possibilities.

Floors	Case-1 Persons	Case-2 Persons
8		A
7		
6	A	H/
5		
4	H	E
3		
2	E	H/
1		

Clues: Two persons live between H and B. Three persons live between B and G. One person lives between C and G, who lives below C's floor. Not more than two persons live between C and D. F lives above D's floor.

Inference: From the above conditions case-1 will be eliminated. The final arrangement is:

Floor	Persons
8	A
7	F
6	D
5	B
4	E
3	C
2	H
1	G

S41. Ans.(d)
Sol.
Wireless mouse sold by D = $\frac{480}{8} \times 5 = 300$
Wired mouse sold by C = $750 \times \frac{2}{5} = 300$
So, required percentage = $\frac{300}{300} \times 100 = 100\%$

S42. Ans.(c)
Sol.
Average wired mouse sold by A and B = $\frac{1}{2} \times \left[840 \times \frac{9}{14} + 650 \times \frac{7}{13}\right]$
= $\frac{1}{2} \times [540 + 350] = 445$
So, required difference = $480 - 445 = 35$

S43. Ans.(d)
Sol.
Wireless mouse sold by B = $650 \times \frac{6}{13} = 300$
Wired mouse sold by E = $550 \times \frac{7}{11} = 350$
So, required ratio = $\frac{300}{350} = \frac{6}{7}$

S44. Ans.(a)
Sol.
Required percentage = $\frac{(650+550)-750}{750} \times 100$
= $\frac{450}{750} \times 100$
= 60%

S45. Ans.(b)
Sol.
Total mouse sold by shopkeeper – X = $650 \times \frac{120}{100} = 780$
So, required difference = $780 \times \frac{(29-23)}{52} = 90$

S46. Ans.(b)
Sol.
Initial quantity of water in mixture = $160 \times \frac{3}{10} = 48$ liter
Initial quantity of milk in mixture = $160 - 48 = 112$ liter
ATQ,
Quantity of water in final mixture = $48 - \frac{3}{10} \times 10 + 20 = 65$ liter
Quantity of milk in final mixture = $112 - \frac{7}{10} \times 10 = 105$ liter
So, required ratio = $\frac{65}{105} = 13 : 21$

S47. Ans.(b)

Sol.

Time taken by Rahul and Ayush together to complete the work $= \frac{12 \times 20}{12 + 20}$

$= 7.5 \ days$

So, required time $= 7.5 + 2.5 = 10 \ days$

S48. Ans.(b)

Sol.

Let radius of circle is 'r' cm.

ATQ,

$\pi r^2 = 124.74$

$\frac{22}{7} \times r^2 = 124.74$

$r^2 = \frac{124.74 \times 7}{22}$

$r^2 = 5.67 \times 7$

$r^2 = 7 \times 0.81 \times 7$

$r = 7 \times 0.9$

$r = 6.3 \ cm$

S49. Ans.(a)

Sol.

Let total number voters be 100x.

No. of voters who didn't cast their votes $= 100x \times \frac{15}{100} = 15x$

No. of invalid votes $= (100x - 15x) \times \frac{20}{100} = 17x$

So, total valid casted votes $= 100x - 15x - 17x = 68x$

No. of votes in favor of winning candidate $= \frac{50}{100} \times 100x = 50x$

No. of votes in favor of losing candidate $= 68x - 50x = 18x$

ATQ

$50x - 18x = 3200$

$32x = 3200$

$x = \frac{3200}{32} = 100$

So, required no. of voters $= 100x = 10000$

S50. Ans.(c)

Sol.

Cost price of article A $= 1050 \times \frac{100}{93.75} = 1120$ Rs.

Cost price of article B $= 1050 \times \frac{6}{7} = 900$ Rs.

So, required sum $= 1120 + 900 = 2020$ Rs.

S51. Ans.(e)
Sol.

Let the ages of Pankaj and Pradeep five year ago be 4x and 7x respectively.

ATQ,

$\frac{4x+7}{7x+7} = \frac{5}{8}$

$32x + 56 = 35x + 35$

$35x - 32x = 56 - 35$

$3x = 21$

$x = 7$

So, present age of Pradeep $= (7x + 5) = (7 \times 7 + 5) = 54\ years$

S52. Ans.(a)
Sol.

Ratio of profit share of Harsh to Veer $= 2500 \times 7 : 4000 \times 5$

$= 175 : 200$

$= 7 : 8$

So, profit $share\ of\ Veer = \frac{350}{7} \times 8 = Rs\ 400$

S53. Ans.(d)
Sol.

ATQ

$\frac{X \times 12.5 \times 4}{100} - \frac{X \times 16 \times 3}{100} = 122$

$\frac{50X}{100} - \frac{48X}{100} = 122$

$X = 122 \times \frac{100}{2}$

$X = 6100$

S54. Ans.(a)
Sol.

Required average $= \frac{15 \times 54 + 25 \times 42}{15 + 25}$

$= \frac{810 + 1050}{40}$

$= 46.5$

S55. Ans.(c)
Sol.

Let distance between office and platform be D km.

ATQ

$\frac{11}{2} = \frac{D}{12} + \frac{D}{10}$

$\frac{11}{2} = \frac{11D}{60}$

$D = 30\ km$

S56. Ans.(e)
Sol.

The pattern of the series is –
41 – 11 = 30
30 + 22 = 52
52 – 33 = 19
19 + 44 = 63
? = 63 – 55 = **8**

S57. Ans.(c)
Sol.

The pattern of the series is –
16 + 31 = 47
47 + 33 = 80
80 + 35 = 115
115 + 37= 152
? =152 + 39 = **191**

S58. Ans.(b)
Sol.

The pattern of the series is –
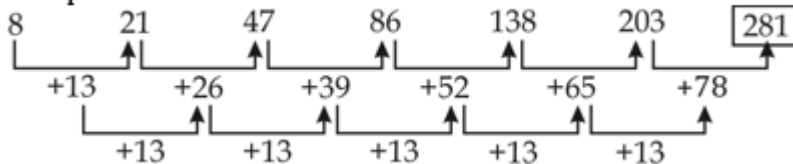$10 \times 1 = 10$
$10 \times 2 = 20$
$20 \times 3 = 60$
$60 \times 4 = 240$
$240 \times 5 = 1200$

S59. Ans.(b)
Sol.

The pattern of the series is -

S60. Ans.(d)
Sol.

The pattern of the series is –
$11 + 1^3 = 12$
$12 + 2^2 = 16$
$16 + 3^3 = 43$
$43 + 4^2 = 59$
$? = 59 + 5^3 = \mathbf{184}$

S61. Ans.(c)
Sol.

Required percentage $= \frac{(40+20)-(25+25)}{(25+25)} \times 100$

$= \frac{10}{50} \times 100 = 20\%$

S62. Ans.(d)
Sol.

Required average $= \frac{1}{5} \times [25 + 30 + 40 + 25 + 20]$

$= \frac{140}{5} = 28$

S63. Ans.(b)
Sol.

Number of cakes sold by A on Saturday $= 35 \times \frac{9}{7} = 45$

Number of cakes sold by B on Saturday $= 40 \times \frac{115}{100} = 46$

So, required sum $= 45 + 46 = 91$

S64. Ans.(a)
Sol.

Required ratio $= \frac{20+30+25}{40+25+20}$

$= \frac{75}{85} = \frac{15}{17}$

S65. Ans.(b)
Sol.

Total number of cakes sold by A in these five days $= 40 + 20 + 30 + 25 + 35 = 150$
Total number of cakes sold by B in these five days $= 25 + 30 + 40 + 25 + 20 = 140$
So, required difference $= 150 - 140 = 10$

S66. Ans.(d)
Sol.

$42 \times \frac{22}{7} + 20\%$ of $530 - 26 = ?$

$? = 132 + 106 - 26 = 212$

S67. Ans.(c)
Sol.

$(23 \times 23) + 21 \times 7 = ?^2$

$?^2 = 529 + 147 \approx 676$

$? = 26$

S68. Ans.(a)
Sol.

$\sqrt{1444} \div 19 + 3.5 \times \sqrt{16} \approx ?$

$? = \frac{38}{19} + 3.5 \times 4$

$? = 2 + 14 = 16$

S69. Ans.(e)
Sol.

$\frac{780}{48} \times 16 = ?$

$? = \frac{780}{3} = 260$

S70. Ans.(b)
Sol.

$1486 + 212 - 1704 = ? - (11)^2$

$? = 1698 - 1704 + 121 = 115$

S71. Ans.(d)
Sol.

$? \times (64 + 26) = 3600$

$? = \frac{3600}{90}$

$? = 40$

S72. Ans.(b)
Sol.

$? \times \frac{800}{100} = 1024 - 512$

$? = \frac{512}{8}$

$? = 64$

S73. Ans.(d)
Sol.

$281 + ? = \frac{32}{100} \times 1700$

$? = 544 - 281$

$? = 263$

S74. Ans.(c)
Sol.

$(2 + 3 + 1) + \frac{2+1+3}{6} = ?$

$? = 7$

S75. Ans.(d)
Sol.

$\frac{20}{100} \times (? + 96) = 48$

$? + 96 = 48 \times \frac{100}{20}$

$? + 96 = 240$

$? = 240 - 96$

$? = 144$

S76. Ans.(c)
Sol.

$\frac{24}{100} \times ? + \frac{48}{100} \times 250 = 240$

$\frac{24}{100} \times ? = 240 - 120$

$\frac{24}{100} \times ? = 120$

$? = 120 \times \frac{100}{24}$

$? = 500$

S77. Ans.(a)
Sol.

$\frac{288}{?} + 144 = \frac{40}{100} \times 420$

$\frac{288}{?} = 168 - 144$

$? = \frac{288}{24}$

$? = 12$

S78. Ans.(a)
Sol.

$140 + ? = 400 + 100$

$? = 500 - 140$

$? = 360$

S79. Ans.(d)
Sol.

$\frac{25}{100} \times 960 + 360 = ?$

$? = 240 + 360$

$? = 600$

S80. Ans.(a)
Sol.

$\sqrt[3]{?} + 576 = 584$

$\sqrt[3]{?} = 8$

$? = 512$