RRB Clerk Pre 2022 (7th August) Shift-Wise Previous Year Papers Mock 03

Directions (1-5): Study the following series carefully and answer the questions given below.
TCB YUQ IFL BND DNU ACT

Q1. When first and second letter of each word is interchanged, then how many meaning full word will be formed?
(a) Three
(b) Two
(c) One
(d) Five
(e) None of these

Q2. If each consonant is changed to its previous letter in the alphabetical order and each vowel is changed to its next letter in the alphabetical order, then how many words contain at least one vowel?
(a) None
(b) One
(c) Two
(d) Three
(e) None of these

Q3. If words are arranged according to the alphabetical order from left to right, which word is third from the right end?
(a) BND
(b) DNU
(c) ACT
(d) IFL
(e) YUQ

Q4. If each letter in each word is arranged according to the alphabetical order from left to right, and then first and second letter are interchanged in each word then how many meaningful words will be formed?
(a) One
(b) Two
(c) None
(d) More than three
(e) None of these

Q5. If last letter of each given word is changed to its next letter according to alphabetical order, then how many words contain more than one vowel?
(a) One
(b) Two
(c) None
(d) More than three
(e) None of these

Directions (6-10): Study the following information carefully and answer the questions given below.
Six vaccine boxes are placed one above the other i.e. AstraZeneca, Pfizer, Sputnik, Moderna, Covishield and Covaxin but not necessarily in the same order. At most two boxes are placed above the Covishield. Two boxes are placed between Covishield and Covaxin. The box of Pfizer vaccine is placed below the Covaxin vaccine box. The box of Sputnik vaccine is placed three places above the Moderna vaccine box. No box is placed between Covishield and AstraZeneca. AstraZeneca vaccine box is placed below the Sputnik vaccine box.

Q6. Which of the following vaccine box is placed just above AstraZeneca vaccine box?
(a) Sputnik
(b) Moderna
(c) Pfizer
(d) Covishield
(e) None of these

Q7. How many vaccine boxes are placed between Sputnik and Covishield?
(a) One
(b) None
(c) Three
(d) Two
(e) None of these

Q8. If Moderna and Pfizer vaccine boxes are interchanged then, which of the following box is placed just above of Pfizer vaccine box?
(a) Sputnik
(b) Moderna
(c) AstraZeneca
(d) Covishield
(e) Covaxin

Q9. Three boxes are placed between __ and __.
(a) Covishield, Pfizer
(b) Sputnik, Covaxin
(c) Moderna, Covaxin
(d) Both (a) and (b)
(e) None of these

Q10. Which of the following box is placed just below the Covishield vaccine box?
(a) Sputnik
(b) Covaxin
(c) AstraZeneca
(d) Moderna
(e) None of these

Directions (11-13): Study the following information carefully and answer the questions given below.
Six persons A, B, C, D, E and F have different amount of money. D has less money than B and F. C has less money than only two persons. E has more money than only one person. D has not the least amount of money. B has not the highest money. The persons who have second highest and the third lowest money have 500 rupees and 300 rupees respectively.

Q11. Who among the following have least amount of money?
(a) B
(b) C
(c) A
(d) F
(e) None of these

Q12. What is the possible amount of money C have?
(a) 600
(b) 550
(c) 580
(d) 450
(e) None of these

Q13. Who among the following have second highest amount of money?
(a) D
(b) B
(c) F
(d) A
(e) None of these

Directions (14-18): Study the following series carefully and answer the questions given below.
In a certain code language:
"Slow motion cricket camera" is coded as "wq dr eg pq"
"Ultra motion sensor review" is coded as "sa pq vx zh"
"Third umpire review pending" is coded as "yt rs ub zh"
"Cricket review ultra pending" is coded as "eg zh sa ub"

Q14. What is the code for "Sensor" in the given code language?
(a) sa
(b) pq
(c) zh
(d) vx
(e) None of these

Q15. The code "rs" is code for which of the following word?
(a) Third
(b) Review
(c) Umpire
(d) Pending
(e) Can't be determined

Q16. What may be the code "Third review" in the given code language?
(a) zh rs
(b) vx yt
(c) Either (a) or (b)
(d) yt zh
(e) Either (a) or (d)

Q17. If "slow network" is coded as "tw dr" then what is the code for "Camera"?
(a) wq
(b) eg
(c) vx
(d) dr
(e) pq

Q18. What is the code for "Cricket sensor" in the given code language?
(a) pq sa
(b) eg vx
(c) eg pq
(d) zh sa
(e) None of these

Directions (19-22): Study the following information carefully and answer the questions given below.
A certain number of persons sit in a row. All of them are facing north. G sits sixth to the right of D. Four persons sit between D and B who is not an immediate neighbor of G. F sits second to the left of H who is an immediate neighbour of G. The number of persons sit to the left of B is one more than the number of persons sit to the right of N. L sits exactly between G and M who sits second to the left of N. The number of persons sit between M and L is same as the number of persons sit between B and A who sits one of the extreme ends. H sits fourth to the left of L. Not more than ten persons sit to the right of G.

Q19. How many persons sit between D and F?
(a) One
(b) Two
(c) Four
(d) Six
(e) None of these

Q20. Who among the following person sits fifth to the right of L?
(a) G
(b) D
(c) N
(d) F
(e) None of these

Q21. If O sits exactly between A and D, then what is the position of O with respect to B?
(a) Second to the left
(b) Second to the right
(c) Immediate left
(d) Immediate right
(e) None of these

Q22. How many persons sit in the row?
(a) 25
(b) 23
(c) 18
(d) 22
(e) None of these

Q23. In a class of 50 students, Tina rank is 21st from the top. Ram is 9th ranks below Tina. What is Ram rank from the bottom?
(a) 22nd
(b) 20th
(c) 21st
(d) 23rd
(e) 25th

Q24. If in the given number '5078612493' positions of the first and the second digits are interchanged, positions of the third and fourth digits are interchanged and so on till the positions of 9th and 10th digits are interchanged, then which digit will be seventh from the right end?
(a) 8
(b) 4
(c) 7
(d) 1
(e) None of these

Q25. Rama is facing south. He turns right and walks 20m. Then he turns right again and walks 10m. After that, he turns left and walks 10m and then turns right and walks 20m. In which direction he is from the starting point?
(a) North
(b) North- West
(c) East
(d) North-East
(e) None of these

Directions (26-29): Study the following information carefully and answer the questions given below.
Ten persons are sitting in two parallel rows containing five persons in each row in such a way that there is an equal distance between adjacent persons. In the first row- M, N, O, P and Q are seated and all of them are facing south. In the second row- K, L, A, B and C are seated and all of them are facing north. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row.
K faces the one who sits immediate right of O. K sits 2nd from one of the ends of the row. N faces the one who sits 3rd to the right of B. Only one person sits between A and L who faces M. More than one person sits between Q and N. C sits to the right of K.

Q26. How many persons sit between C and B?
(a) Two
(b) Three
(c) None
(d) One
(e) Can't be determined

Q27. Who among the following person faces to O?
(a) A
(b) K
(c) C
(d) B
(e) Can't be determined

Q28. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) C
(b) L
(c) M
(d) Q
(e) B

Q29. Who among the following person faces the one who sits 2nd to the left of C?
(a) N
(b) M
(c) O
(d) P
(e) Q

Q30. If in the given number "8639726545", positions of the first and the second digits are interchanged, positions of the third and fourth digits are interchanged and so on till the positions of 9th and 10th digits are interchanged, then what is the sum of 4th digit and 7th digit from left respectively?
(a) 7
(b) 1
(c) 3
(d) 9
(e) None of these

Directions (31-34): In each of the questions below are given some statements followed by some conclusions. You have to take the given statements to be true even, if they seem to be at variance from 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.

Q31. Statements:
Only a few Gain are Loss
Only a few Loss are Profit
All Profit are Sale
Conclusions:
I: Some Gain are not Sale
II: All Loss being sale 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

Q32. Statements:
Only Grapes are Mango
Some Grapes are Banana
No Banana are Guava

Conclusions:
I: Some Grapes is not Guava
II: All Grapes are Banana
(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:
Only a few Noble are Good
No Good is Honest
All Honest are Kind
Conclusions:
I: Some Kind are not Good
II: Some Noble are not Honest
(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. Statements:
Only a few Yellow is Green.
Some Green is Pink.
No Pink is Purple.
Conclusion:
I. All Yellow can be Green
II. Some Green is Purple.
(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

Q35. How many such numerals are there in the given number '4728468472', which will remain at the same position when they are arranged in ascending order from right to left?
(a) One
(b) Two
(c) Three
(d) Four
(e) None

Directions (36-40): Study the following information carefully and answers the given questions below.
Six persons M, N, X, P, Q and Z are getting married on two different dates i.e., 18th and 23rd of different months in the same year but not necessarily in the same order. The months are June, August and October.
X is getting married in the month having 31 days and does not marry on an odd date. One person is getting married between X and N. N and Q are getting married in same month. X and Z are getting married in the same month. M is getting married before P. Not more than one person gets married between M and N.

Q36. Who among the following is getting married on 18th June?
(a) M
(b) Q
(c) P
(d) X
(e) N

Q37. Who among the following is getting married on 23rd August?
(a) X
(b) P
(c) Z
(d) N
(e) None of these

Q38. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) N
(b) M
(c) X
(d) Z
(e) Q

Q39. Who among the following is getting married between X and Q?
(a) N
(b) Q
(c) Z
(d) None
(e) None of these

Q40. Who among the following is getting married on 18th October?
(a) M
(b) Q
(c) X
(d) Z
(e) P

Directions (41 -45): **The table given below shows number of orders received by three (A, B & C) companies of their three (Pen, Pencil & Eraser) items. Read the data carefully and answer the questions.**

Companies	Pen	Pencil	Eraser
A	160	120	100
B	80	140	180
C	160	200	60

Q41. Total orders of item Pen & Pencil received by C is how much more than total orders of item Pencil & Eraser received by B?
(a) 50
(b) 10
(c) 40
(d) 20
(e) 30

Q42. Find total orders (all three items) received by C is what percent more than that of total orders (all three items) received by B?
(a) 5%
(b) 12.5%
(c) 10%
(d) 15%
(e) 20%

Q43. Find ratio of total orders of item Pen & Pencil received by A to total orders of item Pencil & Eraser received by B?
(a) 7 : 9
(b) 8 : 7
(c) 4 : 7
(d) 5 : 6
(e) 7 : 8

Q44. Find average number of orders of Pencil received by B & C is what percent of total orders of Pen received by A?
(a) 104.25 %
(b) 106.25 %
(c) 108.25 %
(d) 102.25 %
(e) 110.25 %

Q45. Find total orders of item Pen, Pencil & Eraser received by A?
(a) 440
(b) 420
(c) 380
(d) 360
(e) 400

Directions (46-50): What will come in the place of question (?) mark in following number series:

Q46. 24, 24, 48, 144, ?, 2880
(a) 512
(b) 576
(c) 598
(d) 612
(e) 636

Q47. 32, 33.8, 37.4, 44.6, 59, ?
(a) 81.8
(b) 83.8
(c) 89.8
(d) 85.8
(e) 87.8

Q48. 12, 7, 8, 13, ?, 68.5
(a) 28
(b) 27
(c) 26
(d) 27.5
(e) 26.5

Q49. 72, 81, 63, 99, ?, 171
(a) 36
(b) 31
(c) 37
(d) 27
(e) 35

Q50. 8, 9, 19, 58, 233, ?
(a) 1164
(b) 1166
(c) 1156
(d) 1152
(e) 1158

Q51. If the difference between the present age of A and B is three years and age of A will be is 25% more than that of B after two years, then find the age of A after two years (in years)?
(a) 15
(b) 13
(c) 18
(d) 16
(e) 14

Q52. Aman and Bhanu both spend 30% of their income together which is equal to Rs. 13200. If ratio of income of Aman to that of Bhanu 6 : 5, then find the income of Bhanu (in Rs.)?
(a) 26000
(b) 28000
(c) 20000
(d) 18000
(e) 15000

Q53. Gita invests equal sum on two different schemes at the same rate of interest on simple interest for X years and X+4 years and the respective ratio of interest gets by Gita is 1:2 respectively, then find 'X'?
(a) 6
(b) 2
(c) 5
(d) 3
(e) 4

Q54. Six men can complete a work in 128 days, then find how many men will be required to complete 66 ⅔% of the same work in 32 days?
(a) 14
(b) 12
(c) 18
(d) 16
(e) 24

Q55. A train running at the speed of 144 kmph crosses a pole in 15 seconds. Find the time taken by the same train to cross the pole with the speed of 108 kmph (in seconds)?
(a) 21
(b) 24
(c) 27
(d) 22.5
(e) 20

Q56. The upstream speed and downstream speed of a boat is 20 kmph and 28 kmph respectively and boat travelled for X hours & 6 hours in upstream and downstream respectively. If the distance travelled in downstream is 88 km more than upstream, then find the value of 'X'
(a) 4
(b) 3
(c) 6
(d) 5
(e) 8

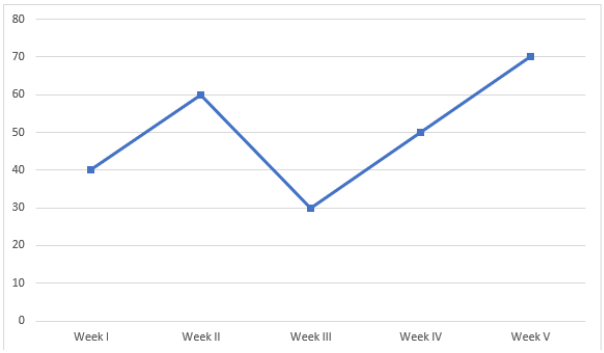
Q57. The ratio of cost price to marked price of an article is 2 : 3 and shopkeeper allows Rs 50 discount on marked price. If shopkeeper still made a profit of Rs. 50, then find the selling price of the article (in Rs.)?
(a) 350 Rs.
(b) 300 Rs.
(c) 250 Rs.
(d) 200 Rs.
(e) 150 Rs.

Q58. A invested Rs. Y and B invested Rs. 800 more than A for same period of time in a partnership. If A gets Rs. 3200 as profit share out of total profit of Rs. 6800, then find 'Y'?
(a) 7800
(b) 6000
(c) 8400
(d) 7200
(e) 6400

Q59. A vessel contains 30 liters of milk and 6 liters of water. X liter of water is added in it. In final mixture water is 30% of the milk. Find the value of 'X'.
(a) 3 liters
(b) 6 liters
(c) 9 liters
(d) 12 liters
(e) 10 liters

Q60. Area of rectangle is 144 cm^2 and the length of rectangle is 10 cm more than its breadth. Find the perimeter of the rectangle.
(a) 62 cm
(b) 54 cm
(c) 56 cm
(d) 52 cm
(e) None of these

Directions (61-65): The line graph given below shows number of new admissions taken in a music class in five consecutive weeks I, II, III, IV, and V. Study the chart carefully and answer the questions given below.



Q61. Find the ratio between number of new admissions taken in a music class in week III to that of in week V.
(a) 5:6
(b) 3:7
(c) 7:6
(d) 7:3
(e) 3:5

Q62. Find the average number of new admissions taken by a music class in all the given five weeks?
(a) 40
(b) 50
(c) 60
(d) 30
(e) 70

Q63. Total new admissions taken by a music class in week II is what percent more than that of in week IV?
(a) 25%
(b) 15%
(c) 20%
(d) 10%
(e) 30%

Q64. The number of new admissions taken by a music class in week I is how much less than the number of new admissions taken by a music class in week V?
(a) 50
(b) 60
(c) 40
(d) 30
(e) 20

Q65. In which week the number of new admissions taken by a music class was second lowest?
(a) week I
(b) week III
(c) week IV
(d) week V
(e) week II

Directions (66-75): What will come in the place of question (?) mark in following questions.

Q66. $256 \div 16 \times 4 \div ? = 8$
(a) 4
(b) 64
(c) 2
(d) 8
(e) 16

Q67. $\sqrt{40\% \text{ of } (?+10)} = \frac{200}{3}\% \text{ of } 6$
(a) 20
(b) 35
(c) 30
(d) 40
(e) 25

Q68. $? = 3\frac{1}{2} + 4\frac{3}{4} + 9\frac{3}{4}$
(a) 13
(b) 11
(c) 16
(d) 12
(e) 18

Q69. $40\% \text{ of } 75\% \text{ of } 50\% \text{ of } 1540 = ?$
(a) 251
(b) 231
(c) 221
(d) 241
(e) 211

Q70. $0.32 \times (0.6)^2 \div 8 = ? \div 50$
(a) 3.6
(b) 0.072
(c) 0.36
(d) 7.2
(e) 0.72

Q71. $\frac{16}{?} + \frac{48}{2\times?} = \sqrt{400}$
(a) 4
(b) 1
(c) 3
(d) 2
(e) 5

Q72. $\frac{(12+44)}{8} \times 28 = ?^2$
(a) 13
(b) 16
(c) 17
(d) 14
(e) 19

Q73. $64\% \text{ of } 850 \div 16 - ? = \sqrt{784}$
(a) 7
(b) 5
(c) 4
(d) 8
(e) 6

Q74. $? = 225 \div 45 \div 0.5 \times 75$
(a) 250
(b) 750
(c) 500
(d) 150
(e) 900

Q75. $(256)^{\frac{1}{4}} \times (512)^{-\frac{1}{3}} \times 6^2 = ?$
(a) 18
(b) 12
(c) 16
(d) 13
(e) 24

Directions(76-80): Read the following data carefully and answer the following question.
There are 210 students in a class and all of them like three different players(Dhoni, Rohit and virat). 40 students like only Dhoni, 30 studets like all three players ,there are total 130 students who like Dhoni and 100 students like Rohit. 40 students like both Dhoni and Rohit only and 10 students like both Virat and Rohit only.

Q76. What is number of students who like Virat only?
(a) 50
(b) 40
(c) 30
(d) 60
(e) 70

Q77. Students like both Virat and Dhoni only are what percent of students like Dhoni only?
(a) 50%
(b) 60%
(c) 25%
(d) 30%
(e) 40%

Q78.Number of students like Rohit only is how much less than the students like all three players?
(a) 15
(b) 20
(c) 30
(d) 10
(e) 25

Q79. Students like Virat are what percent of students like Rohit?
(a) 100%
(b) 130%
(c) 110%
(d) 120%
(e) 90%

Q80. What is the ratio of students like only Virat and only Dhoni together to the students like only Rohit?
(a) 2:9
(b) 9:2
(c) 3:7
(d) 7:3
(e) 5:3

Solutions

S1. Ans.(c)
Sol.
TCB YUQ IFL BND DNU ACT
CTB UYQ FIL NBD NDU CAT

S2. Ans.(d)
Sol.
TCB YUQ IFL BND DNU ACT
SBA XVP JEK AMC CMV BBS

S3. Ans.(d)
Sol.
TCB YUQ IFL BND DNU ACT
ACT BND DNU IFL TCB YUQ

S4. Ans.(a)
Sol.
TCB YUQ IFL BND DNU ACT
CBT UQY IFL DBN NDU CAT

S5. Ans.(a)
Sol.
TCB YUQ IFL BND DNU ACT
TCC YUR IFM BNE DNV ACU

S6. Ans. (d)
Sol. From the given statements, at most two boxes are placed above the Covishield. Here we get 3 possible cases- Case 1, Case 2 and Case 3. Two boxes are placed between Covishield and Covaxin.

Case 1	Case 2	Case 3
Boxes	**Boxes**	**Boxes**
		Covishield
	Covishield	
Covishield		
		Covaxin
	Covaxin	
Covaxin		

Pfizer box is placed below the Covaxin box. Here Case 1 is ruled out now. The box of Sputnik vaccine is placed three places above the Moderna vaccine box. AstraZeneca vaccine box is placed below the Sputnik vaccine box. No box is placed between Covishield and AstraZeneca. Here Case 3 is ruled out now. So, the final arrangement is -

Boxes
Sputnik
Covishield
AstraZeneca
Moderna
Covaxin
Pfizer

S7. Ans. (b)

Sol. From the given statements, at most two boxes are placed above the Covishield. Here we get 3 possible cases- Case 1, Case 2 and Case 3. Two boxes are placed between Covishield and Covaxin.

Case 1	Case 2	Case 3
Boxes	**Boxes**	**Boxes**
		Covishield
	Covishield	
Covishield		
		Covaxin
	Covaxin	
Covaxin		

Pfizer box is placed below the Covaxin box. Here Case 1 is ruled out now. The box of Sputnik vaccine is placed three places above the Moderna vaccine box. AstraZeneca vaccine box is placed below the Sputnik vaccine box. No box is placed between Covishield and AstraZeneca. Here Case 3 is ruled out now. So, the final arrangement is -

Boxes
Sputnik
Covishield
AstraZeneca
Moderna
Covaxin
Pfizer

S8. Ans. (c)

Sol. From the given statements, at most two boxes are placed above the Covishield. Here we get 3 possible cases- Case 1, Case 2 and Case 3. Two boxes are placed between Covishield and Covaxin.

Case 1	Case 2	Case 3
Boxes	**Boxes**	**Boxes**
		Covishield
	Covishield	
Covishield		
		Covaxin
	Covaxin	
Covaxin		

Pfizer box is placed below the Covaxin box. Here Case 1 is ruled out now. The box of Sputnik vaccine is placed three places above the Moderna vaccine box. AstraZeneca vaccine box is placed below the Sputnik vaccine box. No box is placed between Covishield and AstraZeneca. Here Case 3 is ruled out now. So, the final arrangement is -

Boxes
Sputnik
Covishield
AstraZeneca
Moderna
Covaxin
Pfizer

S9. Ans. (d)

Sol. From the given statements, at most two boxes are placed above the Covishield. Here we get 3 possible cases- Case 1, Case 2 and Case 3. Two boxes are placed between Covishield and Covaxin.

Case 1	Case 2	Case 3
Boxes	**Boxes**	**Boxes**
		Covishield
	Covishield	
Covishield		
		Covaxin
	Covaxin	
Covaxin		

Pfizer box is placed below the Covaxin box. Here Case 1 is ruled out now. The box of Sputnik vaccine is placed three places above the Moderna vaccine box. AstraZeneca vaccine box is placed below the Sputnik vaccine box. No box is placed between Covishield and AstraZeneca. Here Case 3 is ruled out now. So, the final arrangement is -

Boxes
Sputnik
Covishield
AstraZeneca
Moderna
Covaxin
Pfizer

S10. Ans. (c)
Sol. From the given statements, at most two boxes are placed above the Covishield. Here we get 3 possible cases- Case 1, Case 2 and Case 3. Two boxes are placed between Covishield and Covaxin.

Case 1	Case 2	Case 3
Boxes	**Boxes**	**Boxes**
		Covishield
	Covishield	
Covishield		
		Covaxin
	Covaxin	
Covaxin		

Pfizer box is placed below the Covaxin box. Here Case 1 is ruled out now. The box of Sputnik vaccine is placed three places above the Moderna vaccine box. AstraZeneca vaccine box is placed below the Sputnik vaccine box. No box is placed between Covishield and AstraZeneca. Here Case 3 is ruled out now. So, the final arrangement is -

Boxes
Sputnik
Covishield
AstraZeneca
Moderna
Covaxin
Pfizer

S11. Ans.(c)
Sol. F > B (500)> C > D (300) > E > A

S12. Ans.(d)
Sol. F > B (500)> C > D (300) > E > A

S13. Ans.(b)
Sol. F > B (500)> C > D (300) > E > A

S14. Ans. (d)
Sol.

Word	Code
Slow/Camera	Dr/wq
Motion	Pq
Cricket	Eg
Ultra	Sa
Sensor	Vx
Review	Zh
Third/umpire	Rs/yt
Pending	ub

S15. Ans. (e)
Sol.

Word	Code
Slow/Camera	Dr/wq
Motion	Pq
Cricket	Eg
Ultra	Sa
Sensor	Vx
Review	Zh
Third/umpire	Rs/yt
Pending	ub

S16. Ans. (e)
Sol.

Word	Code
Slow/Camera	Dr/wq
Motion	Pq
Cricket	Eg
Ultra	Sa
Sensor	Vx
Review	Zh
Third/umpire	Rs/yt
Pending	ub

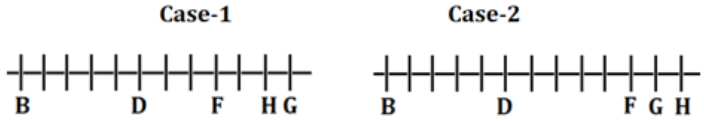
S17. Ans. (a)
Sol.

Word	Code
Slow/Camera	Dr/wq
Motion	Pq
Cricket	Eg
Ultra	Sa
Sensor	Vx
Review	Zh
Third/umpire	Rs/yt
Pending	ub

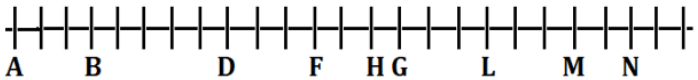
S18. Ans. (b)
Sol.

Word	Code
Slow/Camera	Dr/wq
Motion	Pq
Cricket	Eg
Ultra	Sa
Sensor	Vx
Review	Zh
Third/umpire	Rs/yt
Pending	ub

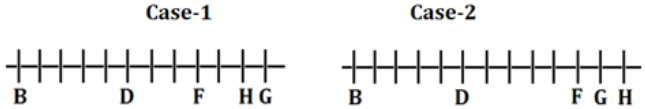
S19. Ans.(b)
Sol. G sits sixth to the right of D. Four persons sit between D and B who is not an immediate neighbour of G. F sits second to the left of H who is an immediate neighbor of G. There are two possibilities-



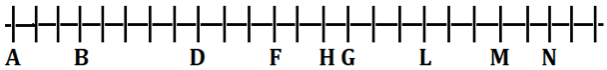
L sits exactly between G and M who sits second to the left of N. H sits fourth to the left of L. The number of persons sit between M and L is same as the number of persons sit between B and A who sits one of the extreme ends. The number of persons sit to the left of B is one more than the number of persons sit to the right of N. Not more than ten persons sit to the right of G. From these conditions case-2 will be eliminated and the final arrangement is-



S20. Ans.(c)
Sol. G sits sixth to the right of D. Four persons sit between D and B who is not an immediate neighbour of G. F sits second to the left of H who is an immediate neighbor of G. There are two possibilities-

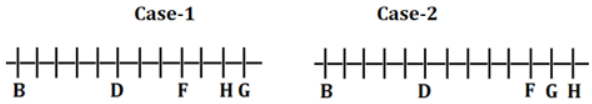


L sits exactly between G and M who sits second to the left of N. H sits fourth to the left of L. The number of persons sit between M and L is same as the number of persons sit between B and A who sits one of the extreme ends. The number of persons sit to the left of B is one more than the number of persons sit to the right of N. Not more than ten persons sit to the right of G. From these conditions case-2 will be eliminated and the final arrangement is-

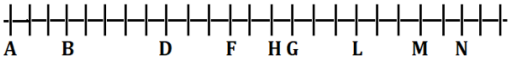


S21. Ans.(d)

Sol. G sits sixth to the right of D. Four persons sit between D and B who is not an immediate neighbour of G. F sits second to the left of H who is an immediate neighbor of G. There are two possibilities-

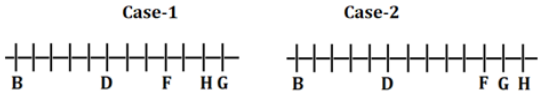


L sits exactly between G and M who sits second to the left of N. H sits fourth to the left of L. The number of persons sit between M and L is same as the number of persons sit between B and A who sits one of the extreme ends. The number of persons sit to the left of B is one more than the number of persons sit to the right of N. Not more than ten persons sit to the right of G. From these conditions case-2 will be eliminated and the final arrangement is-

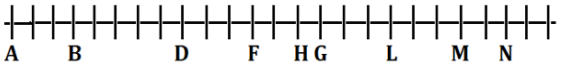


S22. Ans.(a)

Sol. G sits sixth to the right of D. Four persons sit between D and B who is not an immediate neighbour of G. F sits second to the left of H who is an immediate neighbor of G. There are two possibilities-



L sits exactly between G and M who sits second to the left of N. H sits fourth to the left of L. The number of persons sit between M and L is same as the number of persons sit between B and A who sits one of the extreme ends. The number of persons sit to the left of B is one more than the number of persons sit to the right of N. Not more than ten persons sit to the right of G. From these conditions case-2 will be eliminated and the final arrangement is-



S23. Ans. (c)

Sol.

Ram rank from top = $21^{st} + 9^{th} = 30^{th}$

Ram rank from bottom = $50 - 30 + 1 = 21^{st}$

S24. Ans(c)

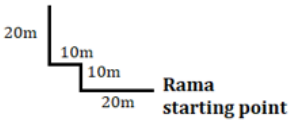
Sol.

5 0 7 8 6 1 2 4 9 3

0 5 8 (7) 1 6 4 2 3 9

S25. Ans.(b)

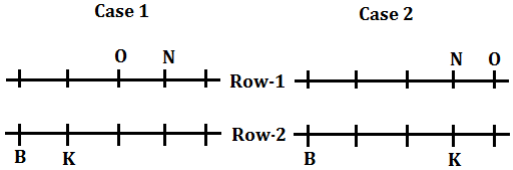
Sol.



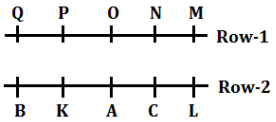
S26. Ans. (a)

Sol.

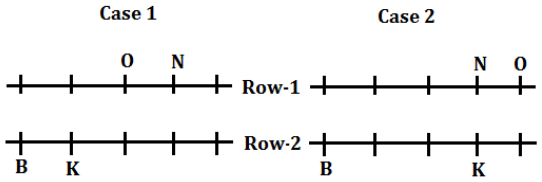
From the given statements, K faces to the one who sits immediate right of O. K sits 2nd from one of the ends of the row. Here we get 2 possibilities i.e. Case 1 and Case 2. N faces the one who sits 3rd to the right of B.



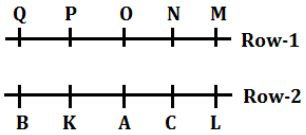
From the given statements, only one person sits between A and L who faces M. C sits to the right of K. Here Case 2 is ruled out now. More than one person's sit between Q and N.
So, the final arrangement is-



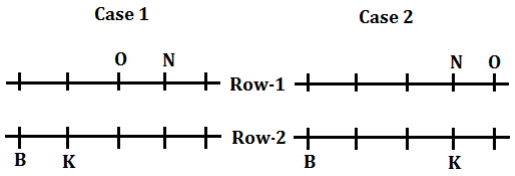
S27. Ans. (a)
Sol.
From the given statements, K faces to the one who sits immediate right of O. K sits 2nd from one of the ends of the row. Here we get 2 possibilities i.e. Case 1 and Case 2. N faces the one who sits 3rd to the right of B.



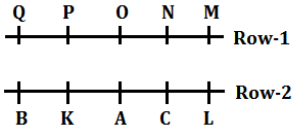
From the given statements, only one person sits between A and L who faces M. C sits to the right of K. Here Case 2 is ruled out now. More than one person's sit between Q and N.
So, the final arrangement is-



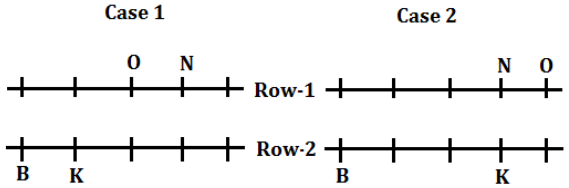
S28. Ans. (a)
Sol.
From the given statements, K faces to the one who sits immediate right of O. K sits 2nd from one of the ends of the row. Here we get 2 possibilities i.e. Case 1 and Case 2. N faces the one who sits 3rd to the right of B.



From the given statements, only one person sits between A and L who faces M. C sits to the right of K. Here Case 2 is ruled out now. More than one person's sit between Q and N.
So, the final arrangement is-

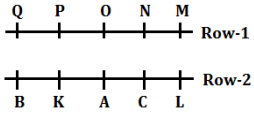


S29. Ans. (d)
Sol.
From the given statements, K faces to the one who sits immediate right of O. K sits 2nd from one of the ends of the row. Here we get 2 possibilities i.e. Case 1 and Case 2. N faces the one who sits 3rd to the right of B.



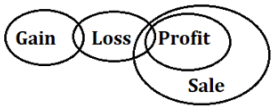
From the given statements, only one person sits between A and L who faces M. C sits to the right of K. Here Case 2 is ruled out now. More than one person's sit between Q and N.

So, the final arrangement is-

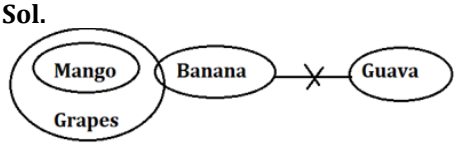


S30. Ans. (e)
Sol.
8639726545
6893275654
Required sum=3 + 5 = 8

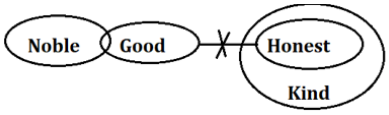
S31. Ans.(b)
Sol.



S32. Ans.(a)
Sol.



S33. Ans.(e)
Sol.



S34. Ans.(d)
Sol.

S35. Ans.(b)
Sol.
4 7 2 8 4 6 8 4 7 2
8 8 7 7 6 4 4 4 2 2

S36. Ans. (a)
Sol.
It is given that X is getting married in the month having 31 days and does not marry on an odd date. One person is getting married between X and N. N and Q are getting married on same month. X and Z are getting married in the same month. M is getting married before P. Here we get 3 possibilities i.e., Case 1, Case 2 and Case 3.

Month	Dates	Case 1	Case 2	Case 3
		Persons	Persons	Persons
June	18	N	M	M
	23	Q	P	P
August	18	X	N	X
	23	Z	Q	Z
October	18	M	X	N
	23	P	Z	Q

Not more than one person gets married between M and N. So, case 1 and Case 3 get eliminated. Final arrangement:-

Month	Dates	Persons
June	18	M
	23	P
August	18	N
	23	Q
October	18	X
	23	Z

S37. Ans. (e)

Sol. It is given that X is getting married in the month having 31 days and does not marry on an odd date. One person is getting married between X and N. N and Q are getting married on same month. X and Z are getting married in the same month. M is getting married before P. Here we get 3 possibilities i.e., Case 1, Case 2 and Case 3.

Month	Dates	Case 1	Case 2	Case 3
		Persons	Persons	Persons
June	18	N	M	M
	23	Q	P	P
August	18	X	N	X
	23	Z	Q	Z
October	18	M	X	N
	23	P	Z	Q

Not more than one person gets married between M and N. So, case 1 and Case 3 get eliminated. Final arrangement:-

Month	Dates	Persons
June	18	M
	23	P
August	18	N
	23	Q
October	18	X
	23	Z

S38. Ans. (b)

Sol. It is given that X is getting married in the month having 31 days and does not marry on an odd date. One person is getting married between X and N. N and Q are getting married on same month. X and Z are getting married in the same month. M is getting married before P. Here we get 3 possibilities i.e., Case 1, Case 2 and Case 3.

Month	Dates	Case 1	Case 2	Case 3
		Persons	Persons	Persons
June	18	N	M	M
	23	Q	P	P
August	18	X	N	X
	23	Z	Q	Z
October	18	M	X	N
	23	P	Z	Q

Not more than one person gets married between M and N. So, case 1 and Case 3 get eliminated. Final arrangement:-

Month	Dates	Persons
June	18	M
	23	P
August	18	N
	23	Q
October	18	X
	23	Z

S39. Ans. (d)

Sol. It is given that X is getting married in the month having 31 days and does not marry on an odd date. One person is getting married between X and N. N and Q are getting married on same month. X and Z are getting married in the same month. M is getting married before P. Here we get 3 possibilities i.e., Case 1, Case 2 and Case 3.

Month	Dates	Case 1	Case 2	Case 3
		Persons	Persons	Persons
June	18	N	M	M
	23	Q	P	P
August	18	X	N	X
	23	Z	Q	Z
October	18	M	X	N
	23	P	Z	Q

Not more than one person gets married between M and N. So, case 1 and Case 3 get eliminated. Final arrangement:-

Month	Dates	Persons
June	18	M
	23	P
August	18	N
	23	Q
October	18	X
	23	Z

S40. Ans. (c)

Sol. It is given that X is getting married in the month having 31 days and does not marry on an odd date. One person is getting married between X and N. N and Q are getting married on same month. X and Z are getting married in the same month. M is getting married before P. Here we get 3 possibilities i.e., Case 1, Case 2 and Case 3.

Month	Dates	Case 1	Case 2	Case 3
		Persons	Persons	Persons
June	18	N	M	M
	23	Q	P	P
August	18	X	N	X
	23	Z	Q	Z
October	18	M	X	N
	23	P	Z	Q

Not more than one person gets married between M and N. So, case 1 and Case 3 get eliminated. Final arrangement:-

Month	Dates	Persons
June	18	M
	23	P
August	18	N
	23	Q
October	18	X
	23	Z

S41. Ans(c)

Sol. Required difference = (160 + 200) – (140 + 180) = 40

S42. Ans(a)

Sol.

Total orders (all three items) received by C = (160 + 200 + 60) = 420

Total orders (all three items) received by B = (80 + 140 + 180) = 400

Required percentage = $\frac{420-400}{400} \times 100 = 5\%$

S43. Ans(e)

Sol.

Total orders of item Pen & Pencil received by A = 160 + 120 = 280

Total orders of item Pencil & Eraser received by B = 140 + 180 = 320

Required ratio = 280 : 320 = 7 : 8

S44. Ans(b)

Sol.

Average number of orders of item Pencil received by B & C = $\frac{140+200}{2} = 170$

Required percentage = $\frac{170}{160} \times 100 = 106.25\%$

S45.Ans(c)

Sol. Required sum = 160 + 120 + 100 = 380

S46. Ans(b)

Sol.

Pattern of series –

$24 \times 1 = 24$

$24 \times 2 = 48$

$48 \times 3 = 144$

$? = 144 \times 4 = 576$

$576 \times 5 = 2880$

S47. Ans(e)

Sol.

Pattern of series –

32 + 1.8 = 33.8

33.8 + 3.6 = 37.4

37.4 + 7.2 = 44.6

44.6 + 14.4 = 59

? = 59+ 28.8 = 87.8

S48. Ans(b)
Sol.
Pattern of series –
$12 \times 0.5 + 1 = 7$
$7 \times 1 + 1 = 8$
$8 \times 1.5 + 1 = 13$
$? = 13 \times 2 + 1 = 27$
$27 \times 2.5 + 1 = 68.5$

S49. Ans(d)
Sol.
Pattern of series –
$72 + 9 = 81$
$81 - 18 = 63$
$63 + 36 = 99$
$? = 99 - 72 = 27$
$27 + 144 = 171$

S50. Ans(b)
Sol.
Pattern of series –
$8 \times 1 + 1 = 9$
$9 \times 2 + 1 = 19$
$19 \times 3 + 1 = 58$
$58 \times 4 + 1 = 233$
$233 \times 5 + 1 = 1166$

S51. Ans(a)
Sol.
Let present age of B = a years
So, present age of A = (a + 3) years
ATQ –
$$\frac{a+2}{(a+3)+2} = \frac{100}{125}$$
$$\frac{a+2}{a+5} = \frac{4}{5}$$
a = 10 years
So, age of A after two years= (10 + 3) + 2 = 15 years

S52. Ans(c)
Sol.
Let total income of Bhanu = 100x Rs.
So, total income of Aman = $100x \times \frac{6}{5} = 120x\ Rs.$
ATQ –
$(100x + 120x) \times \frac{30}{100} = 13200$
$66x = 13200$
x = 200 Rs.
So, income of Bhanu = $200 \times 100 = 20000\ Rs.$

S53. Ans(e)
Sol.
Let sum invested by Gita = Rs. P
And, rate of interest = r%
ATQ-
$$\frac{P \times r \times X}{P \times r \times (X+4)} = \frac{1}{2}$$
$$\frac{X}{(X+4)} = \frac{1}{2}$$
X = 4

S54. Ans(d)
Sol.
Let total work = $6 \times 128 = 768$ units
Required men = $768 \times \frac{2}{3} \times \frac{1}{32} = 16$

S55. Ans(e)
Sol.
Let length of train be 'l' meters
ATQ –
$144 \times \frac{5}{18} = \frac{l}{15}$
l = 600 meters
Required time = $\frac{600}{108 \times \frac{5}{18}} = 20$ sec

S56. Ans(a)
Sol.
ATQ –
$28 \times 6 - 20 \times X = 88$
20X = 80
X = 4

S57. Ans(c)
Sol.
Let cost price of article = 100a Rs.
So, marked price of article = $100a \times \frac{3}{2} = 150a$ Rs.
And, selling price of article = (150a – 50) Rs.
ATQ –
(150a – 50) – 100a = 50
50a = 100
a = 2 Rs.
So, selling price of article = $(150 \times 2 - 50) = 250\ Rs.$

S58. Ans(e)
Sol.
B investment = (Y + 800) Rs.
ATQ –
$\frac{Y}{(Y+800)} = \frac{3200}{(6800-3200)}$
Y = 6400

S59. Ans.(a)
Sol.
Milk = 30 liters
Water = 6 liters
In final mixture water = 30% of milk
So, ratio of milk and water in the final mixture = 10:3
$\Rightarrow \frac{30}{6+X} = \frac{10}{3}$
9 = 6 + X
X = 3

S60. Ans.(d)
Sol.
Let length = x cm
So, breadth = $(x - 10)\ cm$
Now,
$x(x - 10) = 144$
$x^2 - 10x - 144 = 0$
Solving $x = 18$
Length = 18 cm
Breadth = 8 cm
Perimeter = 2 × (18 + 8) = 52 cm

S61. Ans(b)
Sol.
Required ratio $= \frac{30}{70} = 3 : 7$

S62. Ans(b)
Sol.
Required average $= \frac{1}{5}(40 + 60 + 30 + 50 + 70) = 50$

S63. Ans(c)
Sol.
Required percentage $= \frac{60-50}{50} \times 100 = 20\%$

S64. Ans(d)
Sol. Required difference= 70-40 = 30

S65. Ans(a)
Sol. By graph it is clear the number of new admissions taken by a music class was second lowest in week I.

S66. Ans.(d)
Sol.
$\frac{256}{16} \times \frac{4}{?} = 8$
$\frac{64}{?} = 8$
$? = 8$

S67. Ans.(c)
Sol.
$\sqrt{\frac{2}{5} \text{ of } (? + 10)} = 4$
$\frac{2}{5} \times (? + 10) = 16$
$? + 10 = 40$
$? = 30$

S68. Ans.(e)
Sol.
$? = \frac{7}{2} + \frac{19}{4} + \frac{39}{4}$
$? = \frac{14+19+39}{4}$
$? = 18$

S69. Ans.(b)
Sol.
$\frac{40}{100} \times \frac{75}{100} \times \frac{50}{100} \times 1540 = ?$
$\frac{2}{5} \times \frac{3}{4} \times \frac{1}{2} \times 1540 = ?$
$? = 231$

S70. Ans.(e)
Sol.
$\frac{0.32 \times 0.36}{8} \times 50 = ?$
$? = 0.72$

S71. Ans.(d)
Sol.
$\frac{16}{?} + \frac{24}{?} = 20$
$\frac{40}{?} = 20$
$? = 2$

S72. Ans.(d)
Sol.

$?^2 = \frac{56}{8} \times 28$

$?^2 = 196$

$? = 14$

S73. Ans.(e)
Sol.

$\frac{64}{100} \times 850 \times \frac{1}{16} - ? = 28$

$? = 34 - 28$

$? = 6$

S74. Ans(b)
Sol.

$? = 225 \times \frac{1}{45} \times \frac{1}{0.5} \times 75$

$? = 750$

S75. Ans.(a)
Sol.

$\frac{4}{8} \times 36 = ?$

$? = 18$

S76. Ans(a)
Sol.

Students who like Rohit only = 100- (40+10+30) =20
Students who like Dhoni and Virat only = 130-(40+40+30) =20
Students who like Virat only= 210-(40+40+30+10+20+20) =50
Students who like Virat = 50+20+30+10= 110

Number of students who like Virat only =50

S77.Ans(a)
Sol.

Students who like Rohit only = 100- (40+10+30) =20
Students who like Dhoni and Virat only = 130-(40+40+30) =20
Students who like Virat only= 210-(40+40+30+10+20+20) =50
Students who like Virat = 50+20+30+10= 110
A.T.Q
Students like Virat and Dhoni only = 20
Students like Dhoni only =40

$\therefore required\ percentage = \frac{20}{40} \times 100 = 50\%$

S78.Ans(d)
Sol.

Students who like Rohit only = 100- (40+10+30) =20
Students who like Dhoni and Virat only = 130-(40+40+30) =20
Students who like Virat only= 210-(40+40+30+10+20+20) =50
Students who like Virat = 50+20+30+10= 110

Number of students like Rohit only = 20
students like all three players = 30
Required difference = 30- 20= 10

S79.Ans(c)
Sol.

Students who like Rohit only = 100- (40+10+30) =20
Students who like Dhoni and Virat only = 130-(40+40+30) =20
Students who like Virat only= 210-(40+40+30+10+20+20) =50
Students who like Virat = 50+20+30+10= 110

Students like Virat = 110
Students like Rohit = 100
$\therefore required\ percentage = \frac{110}{100} \times 100 = 110\ \%$

S80.Ans(b)
Sol.
Students who like Rohit only = 100- (40+10+30) =20
Students who like Dhoni and Virat only = 130-(40+40+30) =20
Students who like Virat only= 210-(40+40+30+10+20+20) =50
Students who like Virat = 50+20+30+10= 110

Students like only Virat and only Dhoni together = 50+40= 90
Students like only Rohit = 20
$\therefore required\ ratio = 9:2$