

RRB Clerk Pre 2022 (13th August) Shift-Wise Previous Year Papers Mock 08

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

Eight boxes are placed one above the other in a stack. There are three boxes placed between the box U and box Y. There are two boxes placed between the box Y and box S which is placed below box Y. There are three boxes placed between the box S and box X. There are two boxes placed between the box X and box T. Box W does not place immediately above box S. More than three boxes are placed between the box T and box Z. Box V is placed second from the topmost position.

Q1. Which of the following box is placed immediately above box V?

- (a) Box Y
- (b) Box U
- (c) Box Z
- (d) Box W
- (e) None of these

Q2. How many boxes are placed between box U and box X?

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

Q3. Four of the following pairs of boxes are placed immediately adjacent to each other. Which of the following is not one of the pairs?

- (a) Z-X
- (b) Y-T
- (c) S-W
- (d) V-T
- (e) V-Y

Q4. How many boxes are placed between box T and box Z?

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

Q5. Which of the following box is placed exactly in the middle of the box Z and box S?

- (a) Box Y
- (b) Box W
- (c) Box X
- (d) Box T
- (e) None of these

Directions (6-8): Study the following information carefully and answer the questions given below.

Seven persons of a family are living in a house. There are three generations and three married couples in this family. Q is grandmother of T. S is the father-in-law of V. R has only two children. P is father of R who is a married woman. S is not the child of Q. U is the brother of T. There are four females in this family.

Q6. Who among the following is sister-in-law of T?

- (a) R
- (b) Q
- (c) V
- (d) S
- (e) None of these

Q7. How is U related to R?

- (a) Nephew
- (b) Brother
- (c) Son
- (d) Grandson
- (e) None of these

Q8. If L is husband of Q, how is L related to R?

- (a) Father
- (b) Son-in-law
- (c) Son
- (d) Father-in-law
- (e) None of these

Q9. How many such pairs of letters are there in the word 'LEGENDARY' each of which has as many letters between them in the word as in the English alphabet (From both backward and forward)?

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

Q10. Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to that group?

- (a) RSW
- (b) STX
- (c) OPT
- (d) FGK
- (e) LMP

Directions (11-15): In each of the questions some statements are given below 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.

Q11. Statements:

Only a few Rain are Water

All Water are Winter

No Water is Cold

Conclusions:

I: Some Win

II: Some Rai

(a) If only co

(b) If only co

(c) If either

(d) If neithe

(e) If both co

Q12. Staten

Only a few P

No Purple is

Only a few Y

Conclusion

I: All White

II: Some Bla

(a) If only co

(b) If only co

(c) If either

(d) If neithe

(e) If both co

Q13. Staten

All Rabbit are Horse.

All Horse are Dog.

Only a few Horse are Bird

Conclusions:

I. Some Bird being Dog is a possibility

II. No Rabbit is Bird

(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.

Q14. Statements:

Only a few Date is Year.

No Year is a Month.

All Months are Leap

Conclusions:

I. Some Leap are definitely not Year

II. Some Month are Date

(a) If only conclusion I follows.

(b) If only conclusion II follows.

(c) If either conclusion I or II follows

(d) If neither

(e) If both c

Q15. Statem

Only a few P

Only a few M

Only Father

Conclusion

I: All Mother

II: Some Fat

(a) If only co

(b) If only co

(c) If either

(d) If neither

(e) If both co

Q16. Which of the following meaningful words cannot be formed with the letters of the given word?

(a) Rectum

(b) Concert

(c) Concur

(d) Tenor

(e) Corner

Directions (17-21): Study the following information carefully and answer the given questions.

Twelve persons are sitting in two parallel rows at an equal distance such that six persons sit in each row facing each other. A, B, C, D, E and F are sitting in Row 1 facing south. P, Q, R, S, T and U are sitting in Row 2 facing north (but not necessarily in the same order).

U sits third to the right of P and one of them sits at the end of the row. A sits at the right end of the row. Three persons sit between A and D. T sits to the immediate left of U. Two persons sit between T and Q. Q faces B and sits to the immediate right of S. C faces R. E sits to the immediate left of C.

Q17. Which of the following pair sits at the extreme ends of Row 2?

- (a) P & S
- (b) U & S
- (c) P & Q
- (d) U & Q
- (e) None of these

Q18. Who sits second to the left of the person who is facing F?

- (a) P
- (b) R
- (c) T
- (d) Q
- (e) U

Q19. What

- (a) 3rd to the
- (b) 2nd to the
- (c) 2nd to the
- (d) 3rd to the
- (e) None of

Q20. Who is

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

Q21. If all the

to right, the

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



er from left

Directions (22-25): In these questions, relationship between different elements is shown in the statements. The statements are followed by two conclusions. Give answer.

Q22.

Statements: $Q > R = S$; $S \geq T < V$; $V > B$

Conclusions: I: $Q > V$ II: $S \geq B$

- (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.

Q23.

Statements: $P < O \geq K$; $K = U < W$; $W > D$

Conclusions: I: $O \geq W$ II: $O \geq U$

- (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.

Q24.

Statements: $X > C > V$; $V \leq E < R$; $R > T$

Conclusions: I: $X > E$ II: $V \geq T$

- (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.

Q25.

Statements: $S > D < F$; $F = G \geq C$; $C > M$

Conclusions: I: $F > M$ II: $S \geq C$

- (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
below.

Directions given

Eight persons K, L, M, N, O, P, Q and R are sitting around a circle facing the centre but not necessarily in the same order. L is an immediate neighbour of K who faces P. O sits second to the right of K. R is an immediate neighbour of O and faces N. M is an immediate neighbour of N. L is not an immediate neighbour of O.

Q26. Who among the following sits second to the left of R?

- (a) K
 (b) L
 (c) M
 (d) N
 (e) None of these

Q27. How many persons sit between O and M?

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

Q28. Four of the following five are alike in a certain way and form a group, which among the following does not belong to that group?

- (a) N, L
- (b) M, K
- (c) R, Q
- (d) P, N
- (e) O, P

Q29. Who sits second to the left of the person who sits second to the right of O?

- (a) L
- (b) R
- (c) Q
- (d) M
- (e) None of these

Q30. Who sits third from the left?

- (a) K
- (b) R
- (c) L
- (d) Q
- (e) O

Directions: Read the following information carefully and answer the questions given below.

1 % K \$ E J B € * 2 H O @ L 6 Q 9 M T U F 7 D 5 # A © 8 W

Q31. How many such symbols are there in the above arrangement each of which is immediately preceded by a vowel and also immediately followed by a number?

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

Q32. How many such numbers are there in the above arrangement each of which is immediately preceded by a symbol and also immediately followed by a letter?

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

Q33. Which of the following element is 8th from the right of the element which is 13th from the left end?

- (a) F
- (b) 7
- (c) D
- (d) 5
- (e) None of these

Q34. Which of the following element is 9th from the right end?

- (a) F
- (b) 9
- (c) D
- (d) T
- (e) None of these

Q35. How many such numbers are there in the above arrangement each of which is immediately preceded by a symbol and also immediately followed by a letter?

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

Directions: Study the following information carefully and answer the questions given below:

Seven employees of a company are working in different designations in the company, viz. CMD, MD, CEO, COO, SE, JE and Trainee. All the designations are given in descending order such as CMD is considered as Senior-most and Trainee is considered as the Junior-most designation.

Only two persons are senior to A. There is only one designation between A and C. E is junior to G. There are three designations between B and F who is senior to A. G is just junior to D.

Q36. Who among the following is a trainee of the company?

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

Q37. Who among the following is just senior to D?

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

Q38. How many persons are posted between E and F?

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

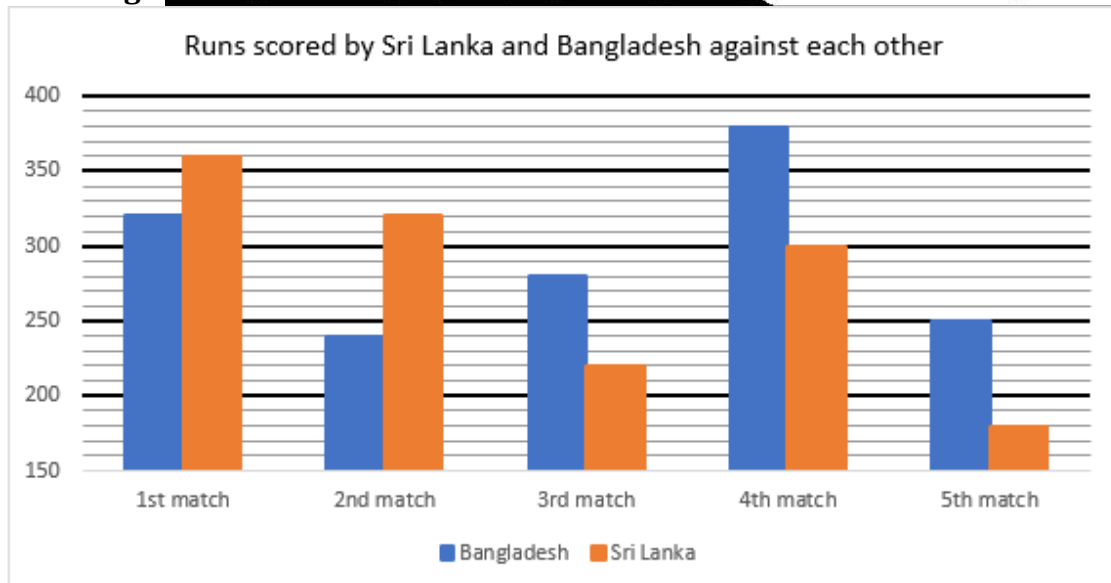
Q39. What is the position of D?

- (a) SE
- (b) JE
- (c) COO
- (d) CMD
- (e) None of these

Q40. Which of the following is true about D?

- (a) D is CMD
- (b) D is just senior to E
- (c) C is junior to D
- (d) More than 50 persons are posted between D and E
- (e) None is true

Directions (Q37-Q40): Study the bar graph carefully and answer the following questions.
The bar graph shows runs scored by two different teams in series of five matches.



Q41. Runs scored by Bangladesh in first and third match together is what percent of runs scored by Sri Lanka in second and fifth match together?

- (a) 100%
- (b) 125%
- (c) $83\frac{1}{3}\%$
- (d) 120%
- (e) 75%

Q42. Find the difference between maximum runs scored by Sri Lanka and minimum runs scored by Bangladesh

- (a) 120 runs
- (b) 80 runs
- (c) 150 runs
- (d) 200 runs
- (e) 180 runs

Q43. What is the ratio of runs scored by Bangladesh in all matches?

- (a) 25 : 23
- (b) 46 : 47
- (c) 43 : 46
- (d) 49 : 46
- (e) 23 : 43

Q44. Runs scored by Bangladesh in second match is what percent more/less than runs scored by Sri Lanka in fourth match?

- (a) 25%
- (b) 20%
- (c) 35%
- (d) 10%
- (e) 50%

Q45. Bangladesh won how many matches out of all the five matches?

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

Directions (46-50): Study the table given below and answer the following questions.

Table gives information about units of 5 different types of biscuits sold by a store in 2017 & 2018.

Biscuits	2017	2018
Bourbon	1200	1500
Oreo	1800	2000
Dark Fantasy	400	800
Hide & seek	1000	1500
Jim Jam	900	1000

Q46. Dark Fantasy & Jim Jam sold by store in 2018 together are what percent of Bourbon sold by store in 2017?

- (a) 180%
- (b) 150%
- (c) 120%
- (d) 90%
- (e) 60%

Q47. Find difference between units sold by store in 2018 and units sold by store in 2017.

- (a) 500
- (b) 100
- (c) 400
- (d) 200
- (e) 300

Q48. If units sold by store in 2017 are 20% less than units sold by store in 2018, then find units sold by store in 2017.

- (a) 3740 units
- (b) 3560 units
- (c) 2980 units
- (d) 3120 units
- (e) 3380 units

Q49. Dark Fantasy & Hide & Seek together sold by store in 2017 are what percent more or less than Oreo & Hide & Seek together sold by store in 2018?

- (a) 50%
- (b) 60%
- (c) 90%
- (d) 80%
- (e) 70%

Q50. If per unit selling price of Dark Fantasy is Rs.30 in 2017 & 2018, then find revenue earned by the store by selling Dark Fantasy in 2017 & 2018 together.

-
- (a) Rs.32000
(b) Rs.48000
(c) Rs.40000
(d) Rs.36000
(e) Rs.45000

Directions (51-65): What will come in place of question mark(?) in the following questions.

Q51. $2\frac{1}{3} + 5\frac{2}{3} - 3\frac{3}{4} = ? - 8\frac{3}{4}$

- (a) 14
(b) 13
(c) 12
(d) 15
(e) 16

Q52. $\frac{2^5 \times 3^6}{9^2 \times 4^2} + 7 = (?)^2$

- (a) 4
(b) 5
(c) 7
(d) 6
(e) 3

Q53. $9097 \div 11 \div 10 = ? + 15.7$

- (a) 87
(b) 77
(c) 67
(d) 57
(e) 47

Q54. $15 \times 12 - 10 \times 11 = -15 \times 17 + ?$

- (a) 330
(b) 345
(c) 335
(d) 325
(e) 365

Q55. $35 \times 5 + 19 \times 7 + ? = (20)^2$

- (a) 95
(b) 103
(c) 97
(d) 92
(e) 90

Q56. $? \div 9 \times 17 = 1156$

- (a) 702
- (b) 504
- (c) 558
- (d) 612
- (e) 666

Q57. $96 \div 168 \times 588 \div 12 = ?$

- (a) 28
- (b) 32
- (c) 22
- (d) 27
- (e) 35

Q58. $11\frac{1}{9}\% \text{ of } 873 - ? = \sqrt{2116}$

- (a) 60
- (b) 51
- (c) 55
- (d) 58
- (e) 49

Q59. $2\frac{4}{7} + 4\frac{1}{3} - 3\frac{2}{3} + \frac{16}{21} = ?$

- (a) 4
- (b) 5
- (c) 3
- (d) 7
- (e) 6

Q60. $(? \times 48) \div 54 + 8^2 = 96$

- (a) 45
- (b) 36
- (c) 72
- (d) 54
- (e) 27

Q61. $4520 + 3560 - 2680 + 1680 = ?$

- (a) 7050
- (b) 7080
- (c) 8080
- (d) 6080
- (e) 5080

Q62. $\frac{11}{23} \times 6969 + 55 \times 20 - 200 = ?$

- (a) 4122
- (b) 4222
- (c) 4233
- (d) 4344
- (e) 4455

Q63. $\sqrt{256 \times 81 \times 4} - 160 \times 2.5 + 400 = ?$

- (a) 248
- (b) 348
- (c) 358
- (d) 288
- (e) 378

Q64. $250\% \text{ of } 1600 - 320 \times \frac{3}{8} + 1120 = ?$

- (a) 3000
- (b) 4000
- (c) 5000
- (d) 6000
- (e) 7000

Q65. $5400 - (3 \times 1450 \div 2) + 175 = ?$

- (a) 3200
- (b) 3400
- (c) 3500
- (d) 3600
- (e) 3700

Q66. Train crosses a platform in 72 seconds. Find the length of the platform.

- (a) 240 m
- (b) 600 m
- (c) 320 m
- (d) 450 m
- (e) 360 m

Q67. In a series of 11 matches of Cricket, average runs of Virat Kohli is 85. In first 4 matches his average runs was 72 and in next 6 matches his average runs was 90. How many runs scored by Virat Kohli in last match?

-
- (a) 115
 - (b) 120
 - (c) 107
 - (d) 97
 - (e) 112

Q68. 4 Men can complete a task in 80 days working 9 hours a day. Find how much time 6 women will take to complete the same task with 80% of man's efficiency working 8 hours a day?

- (a) 120 days
- (b) 75 days
- (c) 125 days
- (d) 90 days
- (e) 50 days

Q69. Radius

- (a) 20%
- (b) 12.5%
- (c) $8\frac{1}{3}\%$
- (d) $16\frac{2}{3}\%$
- (e) 25%

Q70. Ratio of the

- (a) 15 : 19
- (b) 3 : 4
- (c) 7 : 9
- (d) 9 : 11
- (e) 11 : 13

Q71. If a regular iron slab of length, breadth and thickness of 12 cm, 10 cm and 4 cm respectively is melted to form a cube, then find the side of the cube.

- (a) 12 cm
- (b) 10 cm
- (c) 16 cm
- (d) 15 cm
- (e) 18 cm

Q72. 50% of a mixture containing water and Spirit in ratio 1 : 2 is mixed with 40% of another mixture containing syrup and water in ratio 3 : 2 so that ratio of syrup: water : spirit becomes 12 : 13 : 10 in the final mixture. If spirit in initial mixture is 40 liters, Find total quantity of water and syrup in final mixture?

- (a) 25 liters
- (b) 50 liters
- (c) 75 liters
- (d) 15 liters
- (e) None of these

Q73. P invested a sum of Rs. 15332 in two schemes for two years, one at 5% per annum on simple interest and another at 10% per annum S.I and got total interest of Rs. 2334.8 (after 2 years). Find sum invested at 10% per annum?

- (a) Rs. 7316
- (b) Rs. 7016
- (c) Rs. 8316
- (d) Rs. 8016
- (e) None of these

Q74. A and B invested Rs. 1000 and Rs. 1600 in a business respectively. After four months, B withdrew 50% of his investment. After one year, the profit was Rs. 1914. Find the profit share of A (in Rs.)?

- (a) 1914
- (b) 1595
- (c) 1605
- (d) 1714
- (e) none of these

Q75. A shopkeeper bought an article for Rs. 200 and sold it at a profit of 50%. He then sold the article at a discount of 10% on the marked price. Find the profit or loss.

- (a) Rs 200
- (b) Rs 300
- (c) Rs 400
- (d) Rs 500
- (e) Rs 600

Directions

Q76. 1, 35

- (a) 121
- (b) 125
- (c) 101
- (d) 105
- (e) 111

Q77. 5, 10, 30, 150, ?, 11550

- (a) 1050
- (b) 2400
- (c) 1700
- (d) 500
- (e) 1250

Q78. 5, 11, 23, ?, 65, 95

- (a) 33
- (b) 54
- (c) 41
- (d) 39
- (e) 51

Q79. 5, 17, 65, 257, 1025, ?

- (a) 3087
- (b) 3907
- (c) 4107
- (d) 4097
- (e) 4201

Q80. 313, 3

- (a) 178
- (b) 200
- (c) 208
- (d) 180
- (e) 198



Solutions

S1. Ans.(c)

Sol. From the given information, there are three boxes placed between the box U and box Y. There are two boxes placed between the box Y and box S which is placed below box Y. There are three boxes placed between the box S and box X. Box V is placed second from the topmost position. There are three possibilities:

Case-1 Boxes	Case-2 Boxes	Case-3 Boxes
U		Y
V	V	V
	X	
X	Y	S
Y		U
	S	
S	U	X

There are two possibilities for the arrangement of boxes U, V, X, Y, S, and box W. More than three boxes are placed between box U and box X. Box W does not exist. The final arrangement is ruled out.

Boxes
Z
V
X
Y
W
T
S
U

S2. Ans.(b)

Sol. From the given information, there are three boxes placed between the box U and box Y. There are two boxes placed between the box Y and box S which is placed below box Y. There are three boxes placed between the box S and box X. Box V is placed second from the topmost position. There are three possibilities:

Case-1 Boxes	Case-2 Boxes	Case-3 Boxes
U		Y
V	V	V
	X	
X	Y	S
Y		U
	S	
S	U	X

There are two boxes placed between the box X and box T. From this case-3 will be eliminated. More than three boxes are placed between the box T and box Z. From this condition case-1 will be ruled out. Box W does not place immediate above box S. The final arrangement is-

Boxes
Z
V
X
Y
W
T
S
U

S3. Ans.(d)

Sol. From the given information, there are three boxes placed between the box U and box Y. There are two boxes placed between the box Y and box S which is placed below box Y. There are three boxes placed between the box S and box X. Box V is placed second from the topmost position. There are three possibilities:

Case-1 Boxes	Case-2 Boxes	Case-3 Boxes
U		Y
V	V	V
	X	
X	Y	S
Y		U
	S	
S	U	X

There are two boxes placed between the box X and box T. From this case-3 will be eliminated. More than three boxes are placed between the box T and box Z. From this condition case-1 will be ruled out. Box W does not place immediate above box S. The final arrangement is-

Boxes
Z
V
X
Y
W
T
S
U

S4. Ans.(e)

Sol. From the given information, there are three boxes placed between the box U and box Y. There are two boxes placed between the box Y and box S which is placed below box Y. There are three boxes placed between the box S and box X. Box V is placed second from the topmost position. There are three possibilities:

Case-1 Boxes	Case-2 Boxes	Case-3 Boxes
U		Y
V	V	V
	X	
X	Y	S
Y		U
	S	
S	U	X

There are two boxes placed between the box X and box T. From this case-3 will be eliminated. More than three boxes are placed between the box T and box Z. From this condition case-1 will be ruled out. Box W does not place immediate above box S. The final arrangement is-

Boxes
Z
V
X
Y
W
T
S
U

S5. Ans.(a)

Sol. From the condition, there are three boxes placed between box Y and box T. There are two boxes placed between box T and box Z. From this condition case-1 will be ruled out. More than three boxes are placed between the box T and box Z. From this condition case-1 will be ruled out. Box W does not place immediate above box S. The final arrangement is-

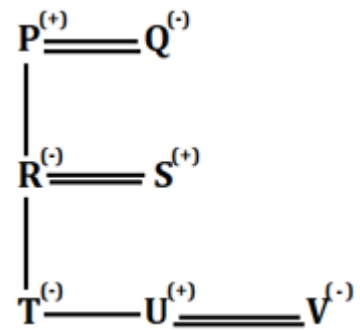
Case-1 Boxes	Case-2 Boxes	Case-3 Boxes
U		Y
V	V	V
	X	
X	Y	S
Y		U
	S	
S	U	X

There are two boxes placed between the box X and box T. From this case-3 will be eliminated. More than three boxes are placed between the box T and box Z. From this condition case-1 will be ruled out. Box W does not place immediate above box S. The final arrangement is-

Boxes
Z
V
X
Y
W
T
S
U

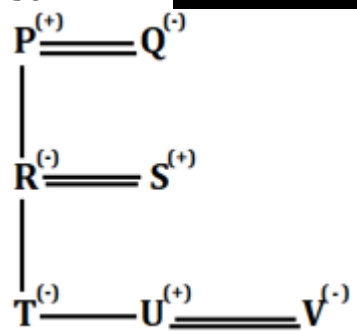
S6. Ans.(c)

Sol.



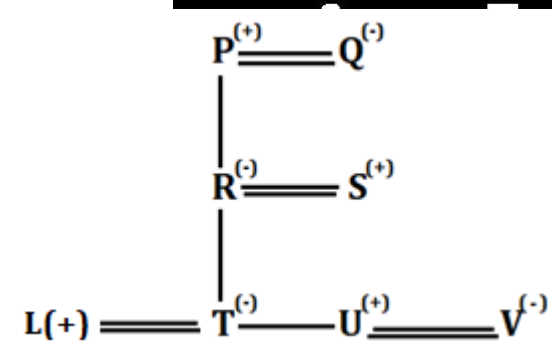
S7. Ans.(d)

Sol.



S8. Ans.(b)

Sol.



S9. Ans.(b)

Sol.

LEGENDARY
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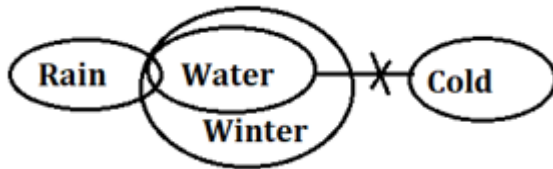
S10. Ans.(e)

Sol.

Series pattern $R + 1 = S$, $S + 4 = W$

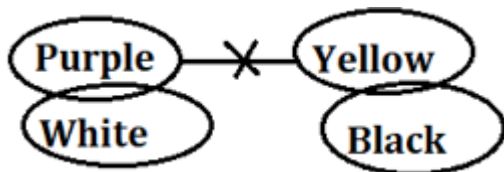
S11. Ans.(e)

Sol.



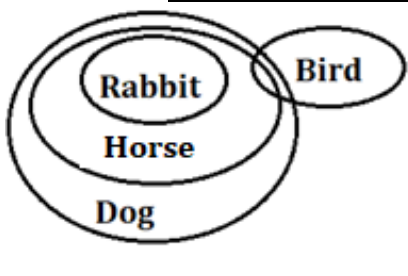
S12. Ans.(a)

Sol.



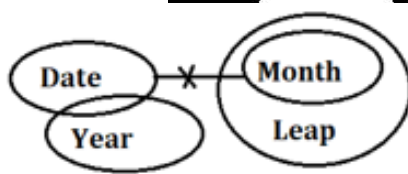
S13. Ans.(d)

Sol.



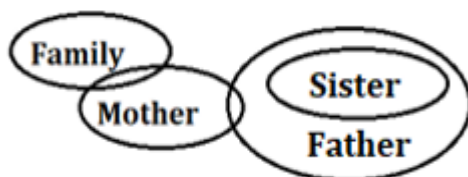
S14. Ans.(a)

Sol.



S15. Ans.(b)

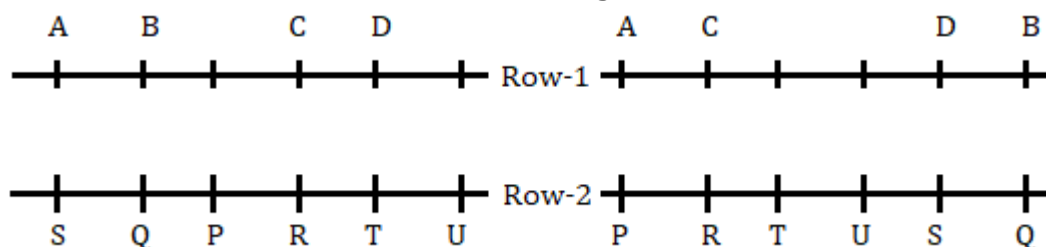
Sol.



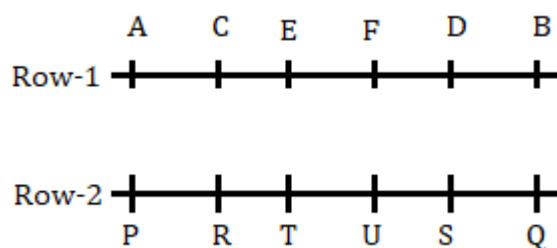
S16. Ans.(a)

S17. Ans.(c)

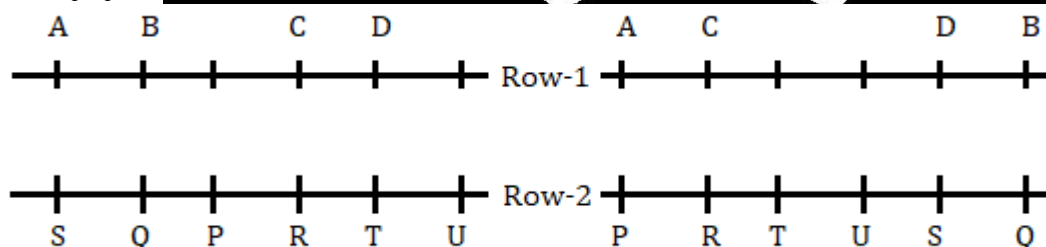
Sol. U sits third to the right of P and one of them sits at the end of the row. A sits at the right end of the row. Three persons sit between A and D. T sits to the immediate left of U. Two persons sit between T and Q. Q faces B and sits to the immediate right of S. C faces R. There will be two possibilities.



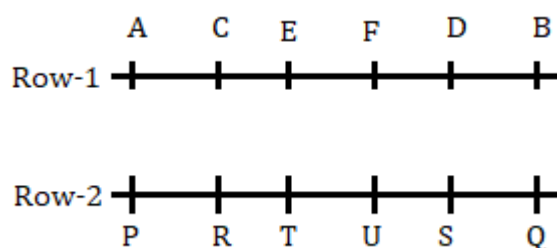
E sits to the

**S18. Ans.(b)**

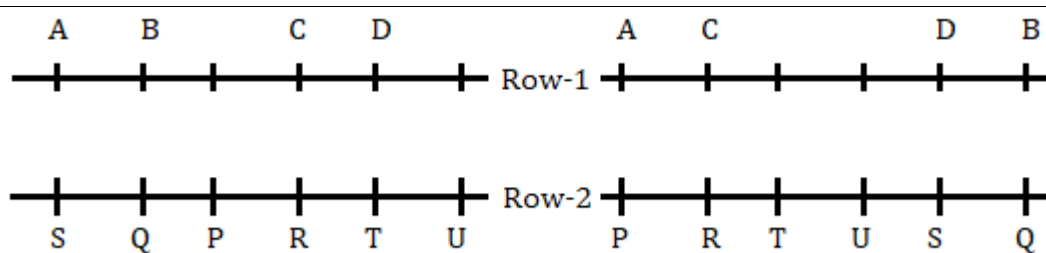
Sol. U sits third to the right of P and one of them sits at the end of the row. A sits at the right end of the row. Three persons sit between A and D. T sits to the immediate left of U. Two persons sit between T and Q. Q faces B and sits to the immediate right of S. C faces R. There will be two possibilities.



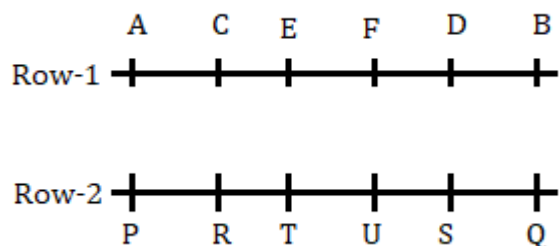
E sits to the

**S19. Ans.(d)**

Sol. U sits third to the right of P and one of them sits at the end of the row. A sits at the right end of the row. Three persons sit between A and D. T sits to the immediate left of U. Two persons sit between T and Q. Q faces B and sits to the immediate right of S. C faces R. There will be two possibilities.

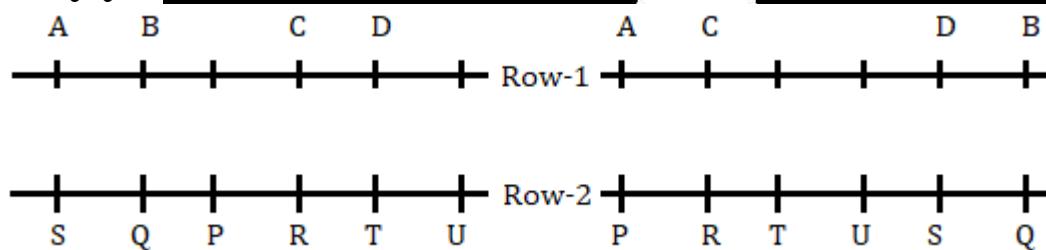


E sits to the immediate left of C. So, case 1 will be eliminated. The final arrangement is:

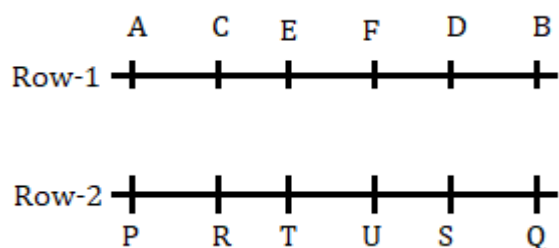


S20. Ans.(b)

Sol. U sits third to the right of P and one of them sits at the end of the row. A sits at the right end of the row. Three persons sit between A and D. T sits to the immediate left of U. Two persons sit between T and Q. Q faces B and sits to the immediate right of S. C faces R. There will be two possibilities.

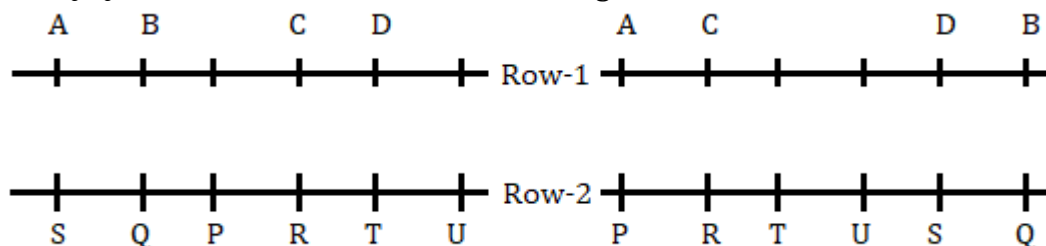


E sits to the immediate left of C. So, case 1 will be eliminated. The final arrangement is:

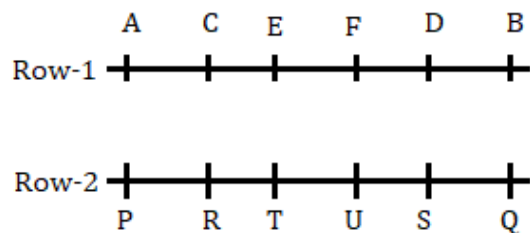


S21. Ans.(e)

Sol. U sits third to the right of P and one of them sits at the end of the row. A sits at the right end of the row. Three persons sit between A and D. T sits to the immediate left of U. Two persons sit between T and Q. Q faces B and sits to the immediate right of S. C faces R. There will be two possibilities.



E sits to the immediate left of C. So, case 1 will be eliminated. The final arrangement is:



S22. Ans.(d)

Sol. I: $Q > V$ (False) II: $S \geq B$ (False)

S23. Ans.(b)

Sol. I: $O \geq W$ (False) II: $O \geq U$ (True)

S24. Ans.(d)

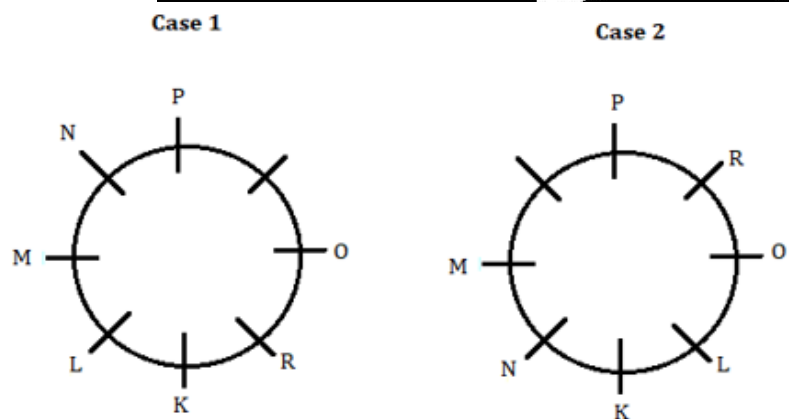
Sol. I: $X > E$ (False) II: $V \geq T$ (False)

S25. Ans.(a)

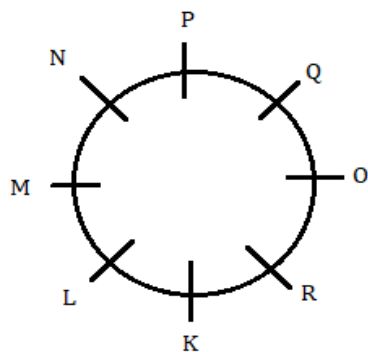
Sol. I: $F > M$ (True) II: $S \geq C$ (False)

S26. Ans.(b)

Sol. L is an immediate neighbour of O. If L is to face P, we get the arrangement as in Case 2. O sits second to the right of P. L is the immediate neighbour of O and is not an immediate neighbour of N.



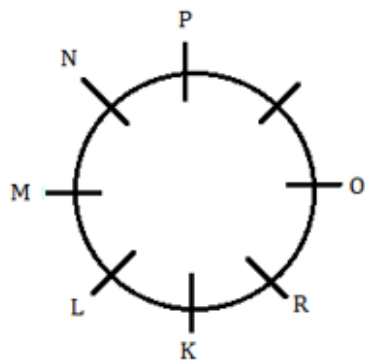
L is not an immediate neighbour of O. Here Case 2 is ruled out now. The final arrangement is-



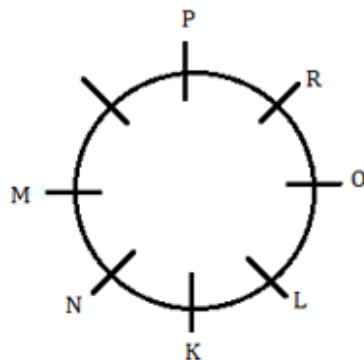
S27. Ans.(c)

Sol. L is an immediate neighbour of K who faces P. We get two possibilities- Case 1 and Case 2. O sits second to the right of K. R is an immediate neighbour of O and faces N. M is an immediate neighbour of N.

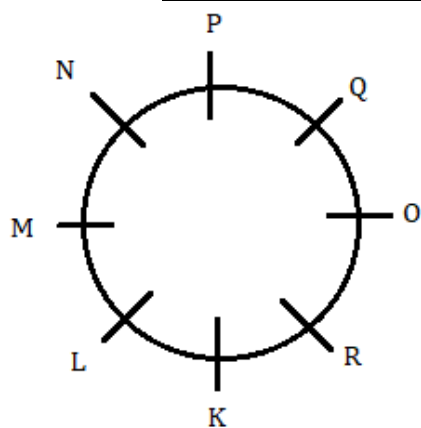
Case 1



Case 2



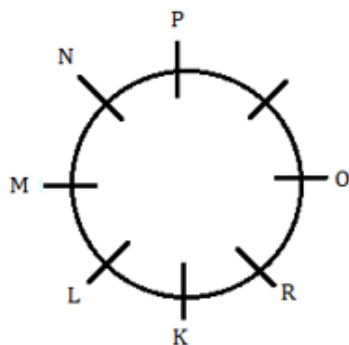
L is not an immediate neighbour of K. Case 2 is rejected. Case 1 is the correct arrangement.



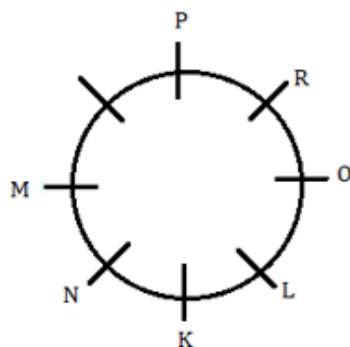
S28. Ans.(d)

Sol. L is an immediate neighbour of K who faces P. We get two possibilities- Case 1 and Case 2. O sits second to the right of K. R is an immediate neighbour of O and faces N. M is an immediate neighbour of N.

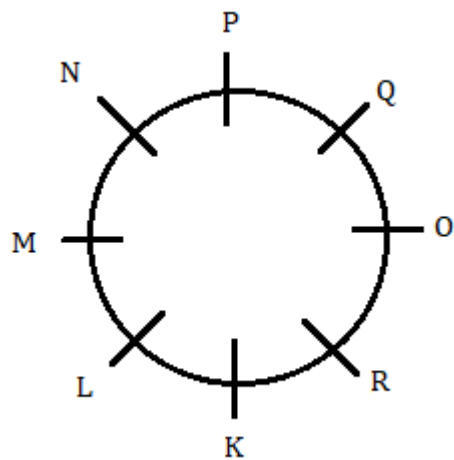
Case 1



Case 2



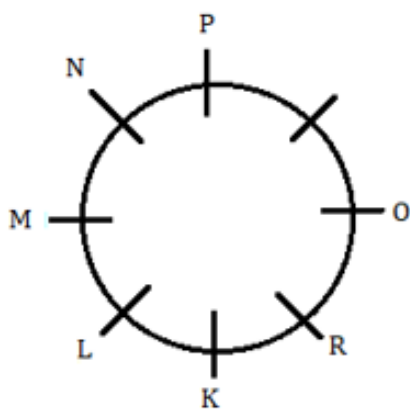
L is not an immediate neighbour of O. Here Case 2 is ruled out now. The final arrangement is-



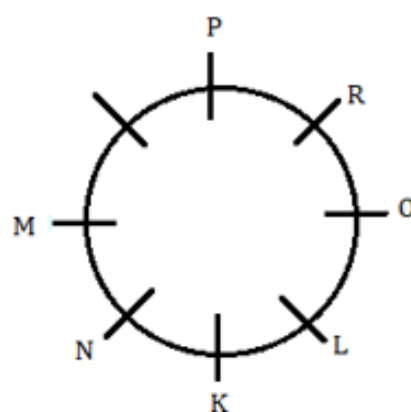
S29. Ans.(b)

Sol. L is an immediate neighbour of N. Case 2. O sits second to the right of N. Immediate neighbour of

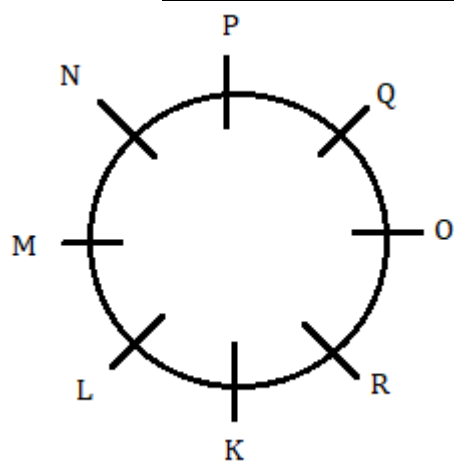
Case 1



Case 2



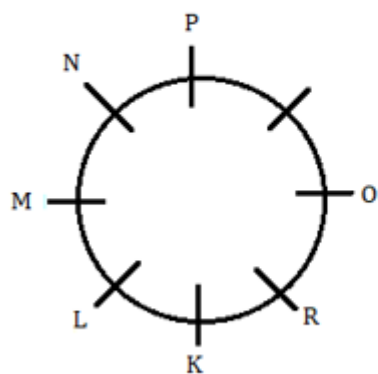
L is not an immediate neighbour of O. Here Case 2 is ruled out now. The final arrangement is-



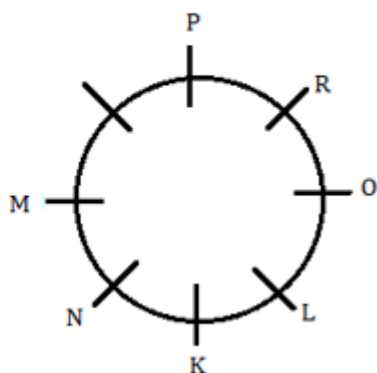
S30. Ans.(e)

Sol. L is an immediate neighbour of K who faces P. We get two possibilities- Case 1 and Case 2. O sits second to the right of K. R is an immediate neighbour of O and faces N. M is an immediate neighbour of N.

Case 1



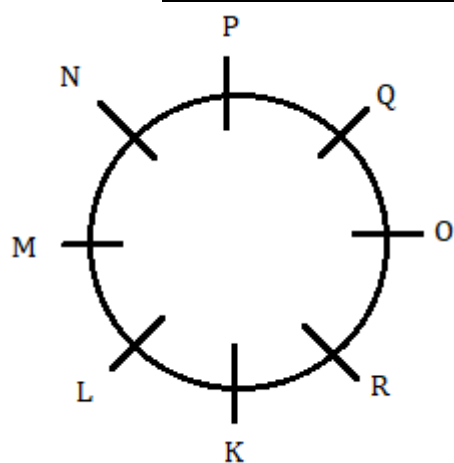
Case 2



L is not an immediate neighbour of K.

2 is not an immediate neighbour of 3.

5 is not an immediate neighbour of 6.



S31. Ans.(b)

Sol. A © 8

S32. Ans.(c)

Sol. * 2 H, © 8 W

S33. Ans.(a)

Sol. 8th from the right of the element which is 13th from the left end, i.e. $13 + 8 = 21^{\text{st}}$ from the left end = F

S34. Ans.(d)

Sol. 9th to the right of the element which is 20th from the right end, i.e. $20 - 9 = 11^{\text{th}}$ from the right end = T

S35. Ans.(d)

Sol. % K \$, # A ©

S36. Ans.(d)

Sol. Only two persons are senior to A. There is only one designation between A and C. There are two possibilities. There are three designations in between B and F, who is senior to A.

Designations	Case-1	Case-2
	Persons	Persons
CMD		C
MD	F	F
CEO	A	A
COO		
SE	C	
JE	B	B
Trainee		

G is just junior

Designations	Persons
CMD	C
MD	F
CEO	A
COO	D
SE	G
JE	B
Trainee	E

S37. Ans.(c)

Sol. Only two persons are senior to A. There is only one designation between A and C. There are two possibilities. There are three designations in between B and F, who is senior to A.

Designations	Case-1	Case-2
	Persons	Persons
CMD		C
MD	F	F
CEO	A	A
COO		
SE	C	
JE	B	B
Trainee		

G is just junior to D. Here Case 1 is ruled out now. E is junior to G. The final arrangement is-

Designations	Persons
CMD	C
MD	F
CEO	A
COO	D
SE	G
JE	B
Trainee	E

S38. Ans.(b)

Sol. Only two persons are senior to A. There is only one designation between A and C. There are two possibilities. There are three designations in between B and F, who is senior to A.

Designations	Case-1	Case-2
	Persons	Persons
CMD		C
MD	F	F
CEO	A	A
COO		
SE	C	
JE	B	B
Trainee		

G is just junior

Designations	Persons
CMD	C
MD	F
CEO	A
COO	D
SE	G
JE	B
Trainee	E

S39. Ans.(a)

Sol. Only two possibilities are there. There are two possibilities for the arrangement of persons in the hierarchy.

Designations	Case-1	Case-2
	Persons	Persons
CMD		C
MD	F	F
CEO	A	A
COO		
SE	C	
JE	B	B
Trainee		

G is just junior to D. Here Case 1 is ruled out now. E is junior to G. The final arrangement is-

Designations	Persons
CMD	C
MD	F
CEO	A
COO	D
SE	G
JE	B
Trainee	E

S40. Ans.(d)

Sol. Only two persons are senior to A. There is only one designation between A and C. There are two possibilities. There are three designations in between B and F, who is senior to A.

Designations	Case-1	Case-2
	Persons	Persons
CMD		C
MD	F	F
CEO	A	A
COO		
SE	C	
JE	B	B
Trainee		

G is just juni

Designations	Persons
CMD	C
MD	F
CEO	A
COO	D
SE	G
JE	B
Trainee	E

S41. Ans.(d)

Sol.

$$\begin{aligned}\text{Required percentage} &= \frac{320+280}{320+180} \times 100 \\ &= \frac{600}{500} \times 100 = 120\%\end{aligned}$$

S42. Ans.(a)

Sol. Required difference = $360 - 240 = 120 \text{ runs}$

S43. Ans.(d)

Sol.

$$\begin{aligned}\text{Required ratio} &= \frac{320+240+280+380+250}{360+320+220+300+180} = \frac{1470}{1380} \\ &= \frac{49}{46}\end{aligned}$$

S44. Ans.(b)

Sol.

$$\begin{aligned}\text{Required percentage} &= \frac{300-240}{300} \times 100 \\ &= 20\%\end{aligned}$$

S45. Ans.(c)

Sol. from graph, it is clearly visible that Bangladesh won 3 matches i.e., third, fourth and fifth match.

S46. Ans.(b)

Sol.

$$\text{Required \%} = \frac{800+1000}{1200} \times 100 = 150\%$$

S47. Ans.(d)

Sol.

$$\text{Average of units sold of Bourbon, Oreo \& Jim Jam by store in 2017} = \frac{1200+1800+900}{3} = 1300$$

$$\text{Required difference} = 1500 - 1300 = 200$$

S48. Ans.(a)

Sol.

$$\text{Units of Oreo sold by store in 2019} = \frac{130}{100} \times 1800 = 2340$$

$$\text{Units of Jim Jam sold by store in 2019} = \frac{140}{100} \times 1000 = 1400$$

$$\text{Required units} = 2340 + 1400 = 3740 \text{ units}$$

S49. Ans.(b)

Sol.

$$\text{Dark Fantasy \& Hide \& Seek together sold by store in 2017} = 400 + 1000 = 1400$$

$$\text{Oreo \& Hide \& Seek together sold by store in 2018} = 2000 + 1500 = 3500$$

$$\text{Required \%} = \frac{3500-1400}{3500} \times 100 = 60\%$$

S50. Ans.(d)

Sol.

$$\text{Required revenue} = (30 \times (400 + 800)) = \text{Rs.}36000$$

S51. Ans.(b)

Sol.

$$? = 2 + \frac{1}{3} + 5 + \frac{2}{3} - 3 - \frac{3}{4} + 8 + \frac{3}{4}$$

$$? = 13$$

S52. Ans.(b)

Sol.

$$\frac{32 \times 729}{81 \times 16} + 7 = (?)^2$$

$$(?)^2 = 18 + 7 = 25$$

$$? = 5$$

S53. Ans.(c)

Sol.

$$9097 \times \frac{1}{11} \times \frac{1}{10} = ? + 15.7$$

$$? = 82.7 - 15.7$$

$$? = 67$$

S54. Ans.(d)

Sol.

$$180 - 110 = -255 + ?$$

$$? = 70 + 255$$

$$? = 325$$

S55. Ans.(d)

Sol.

$$175 + 133 + ? = 400$$

$$? = 92$$

S56. Ans.(d)

Sol.

$$? \times \frac{1}{9} \times 17 = 1156$$

$$? = 612$$

S57. Ans.(a)

Sol.

$$96 \times \frac{1}{168} \times 588 \times \frac{1}{12} = ?$$

$$? = 28$$

S58. Ans.(b)

Sol.

$$\frac{1}{9} \times 873 - 46 = ?$$

$$? = 97 - 46$$

$$? = 51$$

S59. Ans.(a)

Sol.

$$? = (2 + 4 - 3) + \left(\frac{4}{7} + \frac{1}{3} - \frac{2}{3} + \frac{16}{21} \right)$$

$$? = 3 + 1$$

$$? = 4$$

S60. Ans.(b)

Sol.

$$(? \times 48) \times \frac{1}{54} = 32$$

$$? = 36$$

S61. Ans.(b)

Sol.

$$? = 7080$$

S62. Ans.(c)

Sol.

$$11 \times 303 + 1100 - 200 = ?$$

$$? = 4233$$

S63. Ans.(d)

Sol.

$$16 \times 9 \times 2 - 400 + 400 = ?$$

$$? = 288$$

S64. Ans.(c)

Sol.

$$4000 - 120 + 1120 = ?$$

$$? = 5000$$

S65. Ans.(b)

Sol.

$$5400 - 2175 + 175 = ?$$

$$? = 3400$$

S66. Ans.(c)

Sol.

Let length of the train B = x meter

length of the train A = $2x$ meter

ATQ

$$48 = \frac{2x+x}{(72+54) \times \frac{5}{18}}$$

$$48 = \frac{3x}{35}$$

$$x = 560 \text{ m}$$

So, length of train A = $2x = 1120 \text{ m}$

Now, let length of the platform be L meter.

$$72 = \frac{L+1120}{72 \times \frac{5}{18}}$$

$$L + 1120 = 1440$$

$$L = 320 \text{ meter}$$

S67. Ans.(c)

Sol.

Total score of Virat Kohli in 11 matches = $11 \times 85 = 935$

Total score in first four matches = $4 \times 72 = 288$

Total score in next six matches = $6 \times 90 = 540$

So, required runs = $935 - 288 - 540 = 107$

S68. Ans.(b)

Sol.

Let efficiency of a man is M.

Let time taken by 6 women is 'D' days.

ATQ,

$$4M \times 80 \times 9 = 6 \times \frac{80}{100} \times M \times D \times 8$$

$$D = \frac{4 \times 80 \times 9 \times 100}{6 \times 80 \times 8}$$

$$D = 75 \text{ days}$$

S69. Ans.(d)

Sol.

Let radius of circle = r cm

ATQ,

$$\pi r^2 = 38.5$$

$$r^2 = \frac{38.5}{22} \times 7$$

$$r^2 = 1.75 \times 7$$

$$r^2 = 12.25$$

$$r = 3.5 \text{ cm}$$

$$\text{Required percentage} = \frac{3.5}{21} \times 100$$

$$= 16\frac{2}{3}\%$$

S70. Ans.(a)

Sol.

Let two numbers are 4x and 5x respectively.

ATQ

$$\frac{4x+40}{5x+40} = \frac{5}{6}$$

$$24x + 240 = 25x + 200$$

$$x = 40$$

So, two numbers are 160 and 200 respectively.

$$\text{Now, required ratio} = \frac{160-10}{200-10} = \frac{150}{190} = \frac{15}{19}$$

S71. Ans.(a)

Sol.

volume of slab = volume of cube

Let side of cube be a cm.

$$\text{So, } 24 \times 18 \times 4 = a^3$$

$$a = \sqrt[3]{1728} = 12 \text{ cm}$$

S72. Ans.(b)

Sol.

Let syrup, water and spirit in final mixture are $12x$, $13x$ and $10x$ litre respectively.

Quantity of initial mixture containing water and spirit = $40 \times \frac{3}{2} = 60 \text{ litre}$

ATQ,

$$10x = 60 \times \frac{50}{100} \times \frac{2}{3}$$

$$10x = 20 \text{ liter}$$

$$x = 2 \text{ liter}$$

$$\text{So, } (12x + 13x) = 25x = 50 \text{ liter.}$$

S73. Ans.(d)

Sol.

Let sum invested at 10% per annum = Rs. x

And sum invested at 5% per annum = Rs. $(15332 - x)$

ATQ,

$$\frac{x \times 2 \times 10}{100} + \frac{(15332 - x) \times 5 \times 2}{100} = 2334.8$$

$$20x + 153320 - 10x = 233480$$

$$10x = 80160$$

$$x = \text{Rs } 8016$$

S74. Ans.(b)

Sol.

Ratio of profit share between A and B

$$= 1000 \times 12 : [(1600 \times 4) + (800 \times 4) + (1200 \times 4)]$$

$$\Rightarrow 12000 : (6400 + 3200 + 4800)$$

$$= 12000 : 14400$$

$$= 5 : 6$$

$$\text{Profit share of A} = \frac{3509}{(5+6)} \times 5 = \text{Rs. } 1595$$

S75. Ans.(c)

Sol.

Let discount given or profit earned is Rs x .

So, cost price and marked price be Rs $(500 - x)$ and Rs $(500 + x)$ respectively.

ATQ

$$\frac{500+x-500+x}{500-x} \times 100 = 50$$

$$\frac{2x}{500-x} = \frac{50}{100}$$

$$4x = 500 - x$$

$$x = 100$$

$$\text{So, cost price} = 500 - 100 = \text{Rs } 400$$

S76. Ans.(e)

Sol.



S77. Ans.(a)

Sol.

$$5 \times 2 = 10$$

$$10 \times 3 = 30$$

$$30 \times 5 = 150$$

$$? = 150 \times 7 = 1050$$

$$1050 \times 11 = 11550$$

S78. Ans.(c)

Sol.

$$5 + 6 \times 1 = 11$$

$$11 + 6 \times 2 = 23$$

$$23 + 6 \times 3 = 41$$

$$41 + 6 \times 4 = 65$$

$$65 + 6 \times 5 = 95$$

S79. Ans.(d)

Sol.

$$4 + 1 = 5$$

$$4^2 + 1 = 17$$

$$4^3 + 1 = 65$$

$$4^4 + 1 = 257$$

$$4^5 + 1 = 1025$$

$$? = 4^6 + 1 = 4097$$

Alternate

$$5 \times 4 - 3 = 17$$

$$17 \times 4 - 3 = 65$$

$$65 \times 4 - 3 = 257$$

$$257 \times 4 - 3 = 1025$$

$$1025 \times 4 - 3 = 4097$$

S80. Ans.(a)

Sol.

