SBI Clerical Cadre (Pre.) Exam
Practice Set 2

► Part 1 English Language

Directions (Q.Nos. 1-5) *Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.*

A. ''Certainly,'' said the wolf and began to howl.
B. ''I Know,'' said the sheep, ''but please grant me my last wish.''
C. Hearing him howl, the farmer's dogs rushed to the spot and drove him away.
D. A young wolf cornered a sheep in the farm.
E. ''My wish is for you to sing me a song so that I may dance one last time.''
F. ''You can't escape from me,'' said the proud wolf.

1. Which of the following should be the **SIXTH** (LAST) sentence after in the rearrangement?
(1) E (2) B (3) D
(4) C (5) F

2. Which of the following should be the **FIRST** sentence after the rearrangement?
(1) A (2) D (3) F
(4) C (5) E

3. Which of the following should be the **FIFTH** sentence after the rearrangement?
(1) A (2) D (3) F
(4) B (5) E

4. Which of the following should be the **SECOND** sentence after the rearrangement?
(1) B (2) C (3) E
(4) D (5) F

5. Which of the following should be the **FOURTH** sentence after the rearrangement?
(1) D (2) F (3) B
(4) E (5) C

Directions (Q.Nos. 6-10) *Which of the phrases (1), (2), (3) and (4) given below each sentence should replace the phrase printed in bold in the sentence to make it grammatically correct ? If the sentence is correct as it is given and 'No correction is required', mark (5) as the answer.*

6. He has visited many places all over the city **looked at** the perfect location to setup his factory.
(1) looking out (2) looking for (3) looking after
(4) looked forward to (5) No correction required

7. No traffic will be allowed in this area since the **minister visit** scheduled today.
(1) minister's visit (2) minister is visiting
(3) minister's visit is (4) visit of the minister
(5) No correction required

8. Medical treatment here is **very expensive that** they had to sell off their land to pay for it.
(1) quite expensive and (2) too expensive for
(3) so expensive but (4) more expensive
(5) No correction required

9. To be successful it is important to know **why your failure** in the past and ensure that it doesn't happen again.
(1) why you failed (2) because you have failed
(3) that your failure (4) where you were failed
(5) No correction required

10. These hand woven shawls **are much in demand** in many European countries.
(1) were much demand (2) are lots of demand
(3) demanded much (4) will be lot of demand
(5) No correction required

Directions (Q.Nos. 11-15) *Pick out the most effective word from the given words to fill in the blank to make the sentence meaningfully complete.*

11. It is .... for everyone to abide by the laws of the land.
(1) expected (2) obligatory (3) meant
(4) optional (5) recommended

12. They work hard not because of the .... , but because of their inner urge.
(1) desire (2) drive (3) energy
(4) incentive (5) motivation

13. .... he is a hard worker, his quality of work is not of a desirable level.
(1) Despite (2) Because (3) Although
(4) Somehow (5) However

14. In spite of repeated instructions, he....... the same mistakes.
(1) commits (2) detects (3) corrects
(4) imitates (5) exhibits

15. His .... background has made him so docile.
(1) famous (2) lucrative (3) rich
(4) advanced (5) humble

Directions (Q. Nos. 16-20) *Read each sentence to find out whether there is any grammatical mistake/error in it. The error if any, will be in one part of the sentence. Mark the number of the part with error as your answer. If there is no error, mark (5).*

16. The manager has not (1)/ yet replied to the (2)/ customer letter asking (3)/ about her loan application. (4)/ No error (5)
17. While the formation of RBI (1)/ was approved in March, 1934 (2)/ it was inaugurated (3)/ only in April 1,1935. (4)/ No error (5)
18. The Insurance Regulatory Development Authority has (1)/ asked all insurance (2)/ companies submitting their (3)/ balance sheets by June. (4)/ No error (5)
19. Arun's father has been ill (1)/ since last year and Arun (2)/ has spend his entire (3)/ savings on his treatment. (4)/ No error (5)
20. There are a large number (1)/ of Chinese workers which (2)/ are employed by (3)/ software companies in India. (4)/ No error (5)

Directions (Q. Nos. 21-30) *Read the following passage carefully and answer the questions given below it.*

Passage

Once upon a time, there lived a herd of elephants at the bottom of the majestic Himalayas. Their leader was a rare white elephant who was an extremely kind-hearted soul. He greatly loved his mother who had grown blind and feeble and could not look out for herself. Each day this white elephant would go deep into the forest in search of food. He would look for the best of fruits to send to his mother through other elephants of the herd. But his mother never received any. This was because the other members of the herd would always eat then up themselves. Each night, when he returned home he would be surprised to hear that his mother had been starving all day. He was absolutely disgusted with his herd. Then one day, he decided to leave them all behind and disappeared in the middle of the night along with his dear mother. He took her to Mount Candorana to live in a cave besides a beautiful lake.

It so happened that one day, when the white elephant was feeding, he heard loud cries. A forester from Benaras had lost his way in the forest and was absolutely terrified. The white elephant told him not to worry as he knew every inch of this forest and could take him to safety. He then lifted him on to his back and carried him to the edge of the forest from where the forester went on his merry way back to Benaras.

Oh reaching the city, he heard that King's personal elephant had just died and the King was looking for a new elephant. His heralds were roaming the city, announcing that any man who had seen or heard of an elephant fit for a King should come forward with the information. The forester was very excited and immediately went up to the King and told him about the white elephant that he had seen on Mount Candorana. The King was quite pleased with the information and immediately dispatched a number of soldiers and elephant trainers along with the forester. After travelling for many days, the group reached the lake besides which the elephants resided. They slowly crept down to the edge of the lake and hid behind the bushes. The white elephant was collecting lotus shoots for his mother's meal and could sense the presence of humans. When he looked up, he spotted the forester and realised that it was he who had led the King's men to him. He was very upset at the ingratitude but decided not to put up a struggle as many of the men would be killed. And he was just too kind to hurt anyone. So he decided to go along with them to Benaras and then seek a solution to this problem.

On reaching the beautiful city of Benaras, the trainers laid out a feast for their new State elephant but he refused to touch a morsel. He did not respond to any kind of stimuli, be it the fragrant flowers or the beautiful and comfortable stable. He just sat there looking completely despondent. The king was extremely concerned. He offered the elephant food from the royal table and asked him why he grieved in this manner. The white elephant replied that he would not eat a thing until he met his mother back home on Mount Candorana as she must be hungry because she was blind and had no one to feed her and take care of her. He was afraid that she would die. The compassionate King was touched by the elephant's story and assured him that his soldiers would bring his old mother to the palace as soon as possible. The king kept his promise and his soldiers took good care of his mother as well for as long as she lived. She blessed the kind King with peace, prosperity and joy till the end of his days. In this way the white elephant could serve the king and also enjoy the royal perks at the king's palace along with his mother.

21. What did the white elephant do when he realised that his mother had been starving even though he had been sending food for her?
    (1) He punished his herd members and told them to leave the jungle
    (2) He went to Benaras to report the happenings of the herd to the King
    (3) With the help of the King's soldiers, he got the herd members killed
    (4) He and his mother left the herd behind
    (5) None of the above

22. Why did the white elephant not put up a struggle against the King's soldiers?
    (1) He did not want anyone to get hurt in the struggle
    (2) He was blind and feeble and thus could not put up a struggle
    (3) He surrendered as he realised that he would not be able to fight so many soldiers
    (4) He feared that the King may kill his mother if he did not go to the palace
    (5) None of the above

23. Why did the white elephant collect food for his mother daily?
    (1) The king did not provide food to the elephant's mother
    (2) All the elephants from the herd refused to collect food for the old mother elephant
    (3) The elephant's mother could not fend for herself
    (4) The white elephant's mother would not accept food from anyone but her son
    (5) None of the above

24. Why was the white elephant upset to see the forester along with the King's soldiers?
    (1) He had invited only the forester and not the King's soldiers to the forest
    (2) The king's soldiers had arrested the forester for concealing the whereabouts of the white elephant
    (3) He did not expect such ingratitude from the forester as he had helped him once
    (4) The forester, along with the soldiers had captured the white elephant's mother
    (5) None of the above

25. Which of the following best describes the King as mentioned in the passage?
(1) Ungrateful   (2) Weak & feeble   (3) Dishonest
(4) Sympathetic   (5) Ingenious

26. What did the King do when the forester told him about a white elephant?
(1) He rewarded the forester with lots of valuables
(2) He sent his soldiers to the forest to bring the white elephant to Benaras
(3) He sent his soldiers to the forest to hunt down the white elephant
(4) He ordered the forester to bring the white elephant to him from the forest
(5) None of the above

27. Why was the forester terrified and crying for help in the forest?
(1) He was scared to see a white elephant
(2) The elephant had lifted him forcefully to his back
(3) He wanted to warn the white elephant against the King men
(4) He had lost his way and wanted someone's help
(5) None of the above

28. Why did the white elephant's mother never receive the fruits sent by her son?
(1) The other members of the herd would eat up the fruits themselves instead of taking them to her
(2) The King's soldiers blocked her food supply in order to make her weak and capture her to be taken to the king
(3) Because the King would never let any food sent by the white elephant reach his mother
(4) Because the ungrateful forester sold the fruits collected by the white elephant in Benaras
(5) None of the above

29. Why was the white elephant unhappy and refused to eat in the King's palace?
(1) He was unhappy with the royal treatment and expected more comforts
(2) He was worried about his mother who was blind and weak
(3) He was protesting against the forester's ingratitude towards him
(4) The King's soldiers had injured him and his mother while captivating both of them
(5) None of the above

30. Which of the following is true in the context of the passage?
(1) The forester could never go back to Benaras from the forest.
(2) The white elephant's herd members were cooperative and honest
(3) The forester ultimately became a good friend of the white elephant
(4) The white elephant's mother was finally left alone in the forest
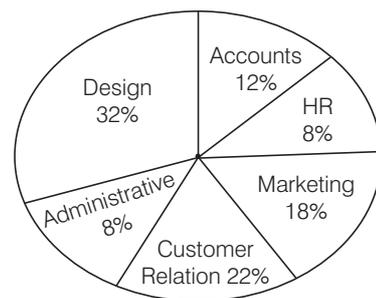(5) None is true

Part 2 Numerical Ability

Directions (Q.Nos. 31-40) *What should come in place of the question mark (?) in the following questions?*

31. $(12 \times 7) - (13 \times 5) - 10 = ? \div 5$
(1) $1\frac{4}{5}$ (2) 25   (3) $1\frac{3}{5}$
(4) 90   (5) None of these

32. $(6)^4 \div (36)^3 \times 216 = 6^{(?-2)}$
(1) 3   (2) 6   (3) 1
(4) 4   (5) None of these

33. $0.4 \times 7.5 \div 0.6 \times 25 = ?$
(1) 125   (2) 155   (3) 115
(4) 145   (5) None of these

34. 66% of ? + 61 = 490
(1) 750   (2) 850   (3) 650
(4) 550   (5) None of these

35. $92 \times 5 \div 10 + 3 = (?)^2$
(1) $\sqrt{7}$ (2) −7   (3) 28
(4) $(49)^2$ (5) $(28)^2$

36. $22 \times 12 + 134 + 43 = 132 + ?$
(1) 309   (2) 329   (3) 209
(4) 229   (5) None of these

37. $2\frac{1}{3}$ of $1\frac{1}{4}$ of (?) = 280
(1) 116   (2) 124   (3) 48
(4) 96   (5) None of these

38. 9% of 5600 − 45% of 340 = ?
(1) 331   (2) 401   (3) 431
(4) 351   (5) None of these

39. 15.96 − 42.94 + 75.17 = ?
(1) 48.19   (2) 48.36
(3) 44.36   (4) 45.29
(5) None of these

40. $\frac{7}{15}$ of $\frac{5}{12}$ of 540 = ?
(1) 160   (2) 150
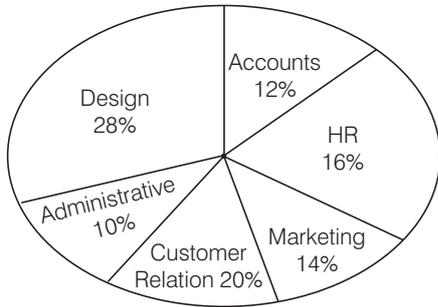(3) 210   (4) 105
(5) None of these

Directions (Q.Nos. 41-45) *Study the following graph carefully and answer the questions that follow.*

Percentage of Employees in Different Departments of a Company
Total Number of Employees = 4500

Design 32%, Accounts 12%, HR 8%, Marketing 18%, Customer Relation 22%, Administrative 8%

Percentage of Females in Each Department in the Same Company
Total Numbers of Females in the Organization = 2000

41. What is the total number of males from Design, Customer Relation and HR departments together?
(1) 1550   (2) 1510
(3) 1540   (4) 1580
(5) None of these

42. What is the ratio of number of males in HR department to the number of males in Accounts department respectively?
(1) 3 : 17   (2) 4 : 15
(3) 2 : 15   (4) 2 : 13
(5) None of these

43. The number of females in the Marketing department are approximately what per cent of the total employees in Marketing and Customer Relation departments together?
(1) 26   (2) 36
(3) 6   (4) 46
(5) 16

44. What is the respective ratio of number of employees in Administrative department to the number of males in the same department?
(1) 9 : 4   (2) 8 : 3
(3) 7 : 2   (4) 8 : 5
(5) None of these

45. The total number of females are what per cent of the total number of males in the organization?
(1) 90   (2) 70
(3) 80   (4) 60
(5) None of these

46. If the numerator of a fraction is increased by 200% and the denominator of the fraction is increased by 120%, the resultant fraction is $\frac{4}{11}$. What is the original fraction?

(1) $\frac{4}{15}$ (2) $\frac{3}{11}$
(3) $\frac{5}{12}$ (4) $\frac{6}{11}$
(5) None of these

47. Mr. Rao invests a sum of ₹ 41250 at the rate 6% per annum. What approximate amount of compound interest will he obtain at the end of 3 yr?
(1) ₹ 8100   (2) ₹ 7425
(3) ₹ 8210   (4) ₹ 7879
(5) ₹ 7295

48. The profit after selling a pair of trousers for ₹ 863 is the same as the loss incurred after selling the same pair of trousers for ₹ 631. What is the cost price of the pair of trousers?
(1) ₹ 750   (2) ₹ 800
(3) ₹ 763   (4) Cannot be determined
(5) None of these

49. The ratio of the length and the breadth of a rectangular plot is 6 : 5 respectively; if the breadth of the plot is 34 m less than the length, what is the perimeter of the rectangular plot?
(1) 374 m   (2) 408 m   (3) 814 m
(4) 748 m   (5) None of these

50. Ninad, Vikas and Manav enter into a partnership. Ninad invests some amount at the beginning. Vikas invests double the amount after 6 months and Manav invests thrice the amount invested by Ninad after 8 months. They earn a profit of ₹ 45000 at the end of the year. What is Manav's share in the profit?
(1) ₹ 25000   (2) ₹ 15000   (3) ₹12000
(4) ₹ 9000   (5) None of these

51. The cost of 7 tables and 12 chairs is ₹ 48250. What is the cost of 21 tables and 36 chairs?
(1) ₹ 96500   (2) ₹ 125500
(3) ₹ 144750   (4) Cannot be determined
(5) None of these

52. '*A*' can complete a piece of work in 12 days. '*A*' and '*B*' together can complete the same piece of work in 8 days. In how many days can '*B*' alone complete the same piece of work?
(1) 15 days   (2) 18 days   (3) 24 days
(4) 28 days   (5) None of these

53. What approximate value should come in place of the question mark (?) in the following question?
$$6523 \div 544 \times 1.2 = ?$$
(1) 21   (2) 33   (3) 14
(4) 8   (5) 28

54. Raman drove from home to a neighbouring town at the speed of 50 km/h and on his returning journey, he drove at the speed of 45 km/h and also took an hour longer to reach home. What distance did he cover each way?
(1) 450 km   (2) 225 km   (3) 900 km
(4) 500 km   (5) None of these

55. $\frac{3}{4}$th of $\frac{2}{9}$th of $\frac{1}{5}$th of a number is 249.6. What is 50% of that number?
(1) 3794   (2) 3749   (3) 3734
(4) 3739   (5) None of these

56. The average weight of a group of 75 girls was calculated as 47 kg. It was later discovered that the weight of one of the girls was read as 45 kg, whereas her actual weight was 25 kg. What is the actual average weight of the group of 75 girls? (Rounded off to two digits after decimal)
(1) 46.73 kg   (2) 46.64 kg
(3) 45.96 kg   (4) Cannot be determined
(5) None of these

57. In how many different ways can the letters of the word 'MIRACLE' be arranged?
(1) 720 (2) 5040 (3) 2520
(4) 40320 (5) None of these

58. The sum of the two digits of a two-digit number is 12 and the difference between the two digits of the two-digit number is 6. What is the two-digit number?
(1) 39 (2) 84
(3) 93 (4) Cannot be determined
(5) None of these

59. If an amount of ₹ 74336 is equally divided amongst 150 people, how much approximate amount would each person get?
(1) ₹ 522 (2) ₹ 485
(3) ₹ 496 (4) ₹ 488
(5) ₹ 510

60. Mr. Sarang invests 6% of his monthly salary *i.e.,* ₹ 2100 on insurance policies. Also, he invests 8% of his monthly salary on family mediclaim policies and another 9% of his salary on NSCs. What is the total annual amount invested by Mr. Sarang?
(1) ₹ 11400 (2) ₹ 96600
(3) ₹ 8050 (4) ₹ 9500
(5) None of these

Directions (Q. Nos. 61-65) *What will come in place of question mark (?) in the given number series?*

61. 37,?,103,169,257,367
(1) 61 (2) 59
(3) 67 (4) 55
(5) 71

62. 4,6,34,?,504,1234
(1) 194 (2) 160
(3) 186 (4) 156
(5) 172

63. 3,?,14,55,274,1643
(1) 11 (2) 5
(3) 6 (4) 8
(5) 7

64. 960,839,758,709,?,675
(1) 696 (2) 700
(3) 688 (4) 678
(5) 684

65. 61,72,?,73,59,74,58
(1) 70 (2) 60
(3) 71 (4) 62
(5) 63

▶ Part 3 Reasoning Ability

Directions (Q.Nos. 66-69) *To answer these questions study carefully the following arrangement of letters, digits and symbols.*

M 7 Σ 8 L P @ ? 6 N B T Y 3 2 = E $ 4 9 © G H 5

66. How many such letters are there in the arrangement each of which is immediately followed by a number?
(1) Three (2) Four
(3) One (4) Two
(5) None of these

67. How many such symbols are there in the arrangement each of which is immediately preceded by a number?
(1) Two (2) Three
(3) Four (4) Nil
(5) None of these

68. If all the symbols are deleted from the arrangement, then which of the following will be fourth to the left of the 17th element from the left end?
(1) 9 (2) E
(3) 2 (4) Y
(5) None of these

69. '78' is to 'P? 6' and '?N' is to 'T32' in the same way as '2E' is to .... in the arrangement.
(1) 4©H (2) 49G
(3) 4©G (4) 9GH
(5) None of these

70. If 'REMIT' is written as '✳ £ 3 2 7' and 'CONSUL' is written as ' = %8 B $ 5'; then 'OCELOT' will be written as
(1) % = 3 5 8 7 (2) % = £ 5%7
(3) % = 3 5 % ▯ (4) % = 3 5%7
(5) None of these

71. Among M, N, O, P, & Q, (i) N is taller than only P and (ii) O is the 2nd tallest person. To decide the tallest among them, the data in which of the following statements is (are) sufficient?
(A) M is taller than N
(B) M, though taller than N, is not as tall as Q
(C) Q is taller than N
(D) O is taller than both M and N
(1) Only (D)
(2) Either (B) or only (A) and (C) together
(3) Only (B) or only (A) and (C) together
(4) (B) and (D) together
(5) None of the above

72. If 'AMONG' is written as 'NAOGM' and 'SPINE' is written as 'NSIEP'; then 'LAMON' will be written as
(1) OALNM (2) MLONA
(3) OLMNA (4) OLNMA
(5) None of these

73. Four of the following five are alike in a certain way and hence form group. Which one does not belong to the group?
(1) 72 (2) 96
(3) 68 (4) 28
(5) 82

74. In the case of how many letters in the word CLIENT, their serial order in the word will not differ than their serial order in the arrangement where the letters of the word are arranged alphabetically?
(1) Four (2) One
(3) Three (4) Two
(5) None of these

Directions (Q. Nos. 75-79) *Study the information given below and answer these questions.*

 (i) P, Q, R, S, T, U and V are sitting along a circle facing the center.
 (ii) P is between V and S.
(iii) R, who is 2nd to the right of S, is between Q and U.
(iv) Q is not the neighbour of T.

75. Which of the following is correct statement?
(1) V is between P and S (2) S is 2nd to the left of V
(3) R is third to the left of P (4) P is to the immediate left of S
(5) None of these

76. What is the position of T?
(1) Between R and V (2) To the immediate left of V
(3) 2nd to the left of R (4) 2nd to the right of P
(5) None of these

77. Who is between R and T?
(1) U (2) S
(3) V (4) Q
(5) None of these

78. Which of the following is wrong statement?
(1) R is to the immediate right of U
(2) Q is to the immediate left of R
(3) T is third to the right of Q
(4) U is 2nd to the left of T
(5) (1) and (4)

79. Which of the following pairs has 2nd member sitting to the immediate right of the first member?
(1) QS (2) PV
(3) RU (4) VT
(5) None of these

Directions (Q.Nos. 80 and 81) *Study the following information and answer the questions given below.*

A, B, C and D live on floors 3 to 6 of the same six storeyed building. A lives on fourth floor. Only one person lives on the floor between A and B. C does not live on a floor above A's floor.

80. Who lives on a floor immediately above B's floor?
(1) A (2) C
(3) D (4) A or C
(5) B lives on top floor

81. Who lives on the fifth floor?
(1) A (2) B
(3) C (4) D
(5) None of these

Directions (Q.Nos. 82-86) *In each question below are three statements followed by two conclusions numbered I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts. Read the statements and the conclusions which follow it and*

Give answer
(1) If only Conclusion I is true
(2) If only Conclusion II is true
(3) If either Conclusion I or II is true
(4) If neither Conclusion I nor II is true
(5) If both Conclusions I and II are true

82. **Statements** All erasers are pencils. Some pencils are pens. No pen is a paper.
Conclusions I. Some erasers are papers.
II. No paper is an eraser.

83. **Statements** All boxes are tables. All windows are tables. All tables are fans.
Conclusions I. All windows are fans.
II. Some tables are boxes.

84. **Statements** Some poles are lights. All lights are bulbs. Some bulbs are wires.
Conclusions I. Some poles are bulbs.
II. Some lights are wires.

85. **Statements** All buildings are roads. All roads are trucks. All trucks are mountains.
Conclusions I. Some buildings are mountains.
II. Some mountains are roads.

86. **Statements** Some spoons are bowls. Some pans are both spoons and bowls. Some forks are bowls.
Conclusions I. Some forks are spoons.
II. Some pans are forks.

Directions (Q.Nos. 87-89) *In these questions symbols $, #, % are used for different meanings as follows.*

$ means 'neither greater nor equal to'.
# means 'neither greater nor smaller than'.
% means 'neither smaller nor equal to'.

In each of the following questions assuming the given statements to be true, find out which of the two Conclusions I and II given below them is/are definitely true.
Give answer
(1) If only Conclusion I is true
(2) If only Conclusion II is true
(3) If either Conclusion I or II is true
(4) If neither Conclusion I nor II is true
(5) if both Conclusions I and II are true

87. **Statements** S $ P, P % Q, Q # R
Conclusions I. R $ S II. R % S

88. **Statements** A $ B, B # D, D % C
Conclusions I. D $ A II. B % C

89. **Statements** M # K, K % P, P $ R
Conclusions I. R $ M II. P % M

Directions (Q.Nos. 90-94) *Study the following information to answer these questions.*

Seven Professors A, B, C, D, E, F and G are engaged in evaluation of answer papers in three different subjects English, Mathematics and History. Atleast two persons evaluate the papers in each subject. Each of the evaluators stay in different Buildings P, Q, R, S, T, V and W not necessarily in the same order.

A evaluates English papers only with E and stays in Building R. D stays in Building W and does not evaluate Maths papers. The one who stays in Building V evaluates History papers. B and C do not evaluate the papers in the same subject. Those who evaluate English papers do not stay in Building Q. F stays in Building P but does not evaluate History papers. G evaluates same papers as F. C stays in Building T.

90. Who stays in Building V?
(1) E   (2) F
(3) G   (4) B
(5) None of these

91. Which of the following combinations of subject, person and building is definitely correct?
(1) Mathematics-F-Q   (2) Mathematics-G-Q
(3) History-D-T   (4) History-E-S
(5) None of these

92. Which of the following groups of persons evaluate the Mathematics paper?
(1) CF   (2) EFG
(3) CFG   (4) FG
(5) None of these

93. Papers in which subject is evaluated by D?
(1) History   (2) Mathematics
(3) English   (4) (2) or (3)
(5) (1) or (2)

94. E stays in which building?
(1) P   (2) Q
(3) T   (4) Can't be determined
(5) None of these

Directions (Q.Nos. 95-97) *Study the following information carefully and answer the questions given below.*

(i) 'P × Q' means 'P is brother of Q'.
(ii) 'P ÷ Q' means 'P is sister of Q'.
(iii) 'P + Q' means 'P is mother of Q'.
(iv) 'P − Q' means 'P is father of Q'.

95. Which of the following means 'M is nephew of R'?
(1) M × T + J ÷ R   (2) R × K − M × T
(3) R × K − M   (4) R × K + M × T
(5) None of these

96. Which of the following means 'D is maternal uncle of T'?
(1) D × J + T   (2) D × J − T
(3) D ÷ J + T   (4) D ÷ J − T
(5) None of these

97. Which of the following means 'R is grand daughter of B'?
(1) R ÷ M + K − B   (2) K + M ÷ R − B
(3) B − T + R ÷ D   (4) B − T + R
(5) None of these

Directions (Q.Nos. 98-100) *Given an input line the machine rearranges them step-by-step as per the illustration given below.*

Input	show must 73 85 go 69 on 32
Step I	32 show must 73 85 go 69 on
Step II	32 go show must 73 85 69 on
Step III	32 go 69 show must 73 85 on
Step IV	32 go 69 must show 73 85 on
Step V	32 go 69 must 73 show 85 on
Step VI	32 go 69 must 73 on show 85
Step VII	32 go 69 must 73 on 85 show

Step VII is the last step and the arrangement in Step VII is the final arrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

98. What will be the fourth step for the following input?
Input   just in time for 36 48 14 59
(1) 14 for 36 in just time 48 59
(2) 14 for 36 just in time 48 59
(3) 14 for 36 in 48 just time 59
(4) Cannot be determined
(5) None of the above

99. If the second step for an input is '17 do foreign 95 74 heights mountain 29', what will be the fifth step?
(1) 17 do 29 foreign heights 74 95 mountain
(2) 17 do 29 foreign 74 mountain heights 95
(3) 17 do 29 foreign 74 heights 95 mountain
(4) There will be no such step
(5) None of the above

100. First step of an input is '34 fire dress well 63 43 prime 52'. Which step is the last but one?
(1) IV   (2) III   (3) VI
(4) VII   (5) V

Answers

1. (4)	**2.** (2)	**3.** (1)	**4.** (5)	**5.** (4)	**6.** (2)	**7.** (3)	**8.** (1)	**9.** (1)	**10.** (5)
11. (2)	**12.** (4)	**13.** (3)	**14.** (1)	**15.** (5)	**16.** (3)	**17.** (4)	**18.** (3)	**19.** (3)	**20.** (2)
21. (4)	**22.** (1)	**23.** (3)	**24.** (3)	**25.** (4)	**26.** (2)	**27.** (4)	**28.** (1)	**29.** (2)	**30.** (5)
31. (5)	**32.** (1)	**33.** (1)	**34.** (3)	**35.** (2)	**36.** (1)	**37.** (4)	**38.** (4)	**39.** (1)	**40.** (4)
41. (2)	**42.** (3)	**43.** (5)	**44.** (1)	**45.** (3)	**46.** (1)	**47.** (4)	**48.** (5)	**49.** (4)	**50.** (2)
51. (3)	**52.** (3)	**53.** (3)	**54.** (1)	**55.** (5)	**56.** (1)	**57.** (2)	**58.** (5)	**59.** (3)	**60.** (2)
61. (2)	**62.** (2)	**63.** (2)	**64.** (5)	**65.** (2)	**66.** (1)	**67.** (2)	**68.** (2)	**69.** (3)	**70.** (2)
71. (2)	**72.** (3)	**73.** (5)	**74.** (3)	**75.** (4)	**76.** (2)	**77.** (1)	**78.** (5)	**79.** (3)	**80.** (5)
81. (3)	**82.** (2)	**83.** (5)	**84.** (5)	**85.** (5)	**86.** (4)	**87.** (3)	**88.** (2)	**89.** (4)	**90.** (4)
91. (2)	**92.** (3)	**93.** (1)	**94.** (5)	**95.** (2)	**96.** (1)	**97.** (3)	**98.** (1)	**99.** (3)	**100.** (5)

Hints *and* **Solutions**

16. It should be 'customer's letter'.

17. Use 'on' in place of 'in'.

18. Use to 'submit' in place of 'submitting'.

19. Use 'spent' in place of 'spend'.

20. Use 'who' or 'that' in place of 'which'.

31. $(12 \times 7) - (13 \times 5) - 10 = ? \div 5$

$\Rightarrow \quad 84 - 65 - 10 = ? \div 5$

$\Rightarrow \quad ? = 9 \times 5 = 45$

32. $(6)^4 \div (36)^3 \times 216 = 6^{(?-2)}$

$\Rightarrow \quad 6^4 \div 6^6 \times 6^3 = 6^{?-2}$

$\Rightarrow \quad 6^{4+3-6} = 6^{?-2}$

$\Rightarrow ? - 2 = 1 \Rightarrow ? = 3$

33. $? = 0.4 \times 7.5 \div 0.6 \times 25$

$= \dfrac{0.4 \times 7.5 \times 25}{0.6} = 125$

34. 66% of ? + 61 = 490

$\Rightarrow \dfrac{66 \times ?}{100} + 61 = 490$

$? = \dfrac{(490 - 61) \times 100}{66} = 650$

35. $(?)^2 = 92 \times 5 \div 10 + 3 = \dfrac{92 \times 5}{10} + 3$

$= 46 + 3 = 49$

$\Rightarrow \quad ? = \sqrt{49} = -7$

36. $22 \times 12 + 134 + 43 = 132 + ?$

$? = 441 - 132 = 309$

37. $2\dfrac{1}{3}$ of $1\dfrac{1}{4}$ of ? = 280 = $? \times \dfrac{5}{4} \times \dfrac{7}{3}$

$= 280$

$? = \dfrac{280 \times 4 \times 3}{5 \times 7} = 96$

38. ? = 9% of 5600 − 45% of 340

$= 504 - 153 = 351$

39. ? = 15.96 − 42.94 + 75.17

$= 48.19$

40. $? = \dfrac{7}{15}$ of $\dfrac{5}{12}$ of $540 = \dfrac{540 \times 5 \times 7}{12 \times 15} = 105$

41. In department of design, customer relation and HR,

Total percentage of employees

$= (32 + 22 + 8)\% = 62\%$

Total number of employees

$= 62\% \text{ of } 4500$

$= \dfrac{4500 \times 62}{100} = 2790$

and total percentage of ladies

$= (28 + 20 + 16)\% = 64\%$

Total number of ladies = 64% of 2000

$= \dfrac{2000 \times 64}{100} = 1280$

∴ In the department of design, customer relation and HR, the total number of employees = 2790 − 1280 = 1510

42. Number of males in HR department
= Total number of employees in HR department − Total number of ladies in HR department

$= 8\% \text{ of } 4500 - 16\% \text{ of } 2000$

$= 360 - 320 = 40$

Number of males in accounts department
= Total number. of employees in account department − Total number of ladies in accounts department

$= 12\% \text{ of } 4500 - 12\% \text{ of } 2000$

$= 540 - 240 = 300$

∴ Required ratio = 40 : 300 = 2 : 15

43. Number of females in marketing department = 14% of 2000 = 280

Total number of employees in marketing and customer department

$= (18 + 22)\% \text{ of } 4500$

$= \dfrac{4500 \times 40}{100} = 1800$

∴ Required percentage $= \dfrac{280}{1800} \times 100$

= 16% (approx.)

44. Number of employees in administrative department = 8% of 4500 = 360

Number of males in administrative department

= Number of employees − Number of female = 360 − 10% of 2000

$= 360 - 200 = 160$

∴ Required ratio = 360 : 160 = 9 : 4

45. Total number of females in organization
= 2000

Total number of males in organization
= 2500

∴ Required percentage

$= \dfrac{2000}{2500} \times 100 = 80$

46. Suppose original fraction is $\dfrac{x}{y}$.

$\therefore \quad \dfrac{x + 2x}{y + 1.2y} = \dfrac{4}{11} \Rightarrow \dfrac{3x}{2.2y} = \dfrac{4}{11}$

$\therefore \qquad \dfrac{x}{y} = \dfrac{4 \times 2.2}{11 \times 3} = \dfrac{4}{15}$

47. $CI = P\left[\left(1 + \dfrac{r}{100}\right)^n - 1\right]$

$= 41250\left[\left(1 + \dfrac{6}{100}\right)^3 - 1\right]$

$= 41250\left[\left(\dfrac{53}{50}\right)^3 - 1\right]$

$= 41250\left[\dfrac{148877 - 125000}{125000}\right]$

$= \dfrac{41250 \times 23877}{125000} = ₹7879$

48. Cost price of the trouser

$= \dfrac{863 + 631}{2} = \dfrac{1494}{2} = ₹747$

49. Suppose, the length and breadth of the plot is 6x m and 5x m respectively.

$\therefore \qquad 6x - 5x = 34$

$x = 34$

∴ Perimeter of the plot

$= 2 (6 \times 34 + 5 \times 34)$

$= 2 (204 + 170) = 2 (374) = 748 \text{ m}$

50. Suppose, Ninad invested ₹ x.

∴ Amount invested by Vikas = ₹2x

Amount invested by Manav = ₹ 3x

∴ Ratio in received profit by invested amount = $x \times 12 : 2x \times 6 : 3x \times 4$

$= 12x : 12x : 12x = 1 : 1 : 1$

Share in profit of Manav $= \dfrac{1}{3} \times 45000$

$= ₹15000$

51. Cost of 7 tables and 12 chair = ₹48250

So, the cost of 21 tables and 36 chairs

= 3 × (cost of 7 tables and 12 chairs)

= 3 × 48250 = ₹144750

52. Work of A in a day $= \dfrac{1}{12}$

Work of (A + B) in a day $= \dfrac{1}{8}$

∴ Work of B in a day $= \dfrac{1}{8} - \dfrac{1}{12}$

$= \dfrac{3 - 2}{24} = \dfrac{1}{24}$

So, B can finish the work in 24 days.

53. $? = 6523 \div 544 \times 12 = \dfrac{6523}{544} \times 1.2$

= 14 (approx.)

54. Suppose, he covered x km each side

$\dfrac{x}{45} - \dfrac{x}{50} = 1$

$\Rightarrow \quad \dfrac{10x - 9x}{450} = 1$

$x = 450 \text{ km}$

55. Suppose, the number is x.

$\therefore \quad \dfrac{3}{4}$ of $\dfrac{2}{9}$ of $\dfrac{1}{5}$ of x = 249.6

$x \times \dfrac{1}{5} \times \dfrac{2}{9} \times \dfrac{3}{4} = 249.6$

$x = \dfrac{249.6 \times 5 \times 9 \times 4}{2 \times 3}$

$x = 7488$

∴ 50 % of x = $x \times \dfrac{50}{100}$

$= 7488 \times \dfrac{50}{100}$

$= 3744$

56. Actual average weight

$$= \frac{75 \times 47 + 25 - 45}{75}$$

$$= \frac{3525 - 20}{75}$$

$$= \frac{3505}{75}$$

$$= 46.73 \text{ kg}$$

57. There are seven letters in the word MIRACLE.

So, required no. of ways $= {}^7P_7$

$= 7! = 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$

$= 5040$

58. Suppose of the digits of the number are x and y.

$x + y = 12$

and $\quad x - y = 6$

$\therefore \quad x = 9$

and $\quad y = 3$

$\therefore$ Number is either 93 or 39.

59. Amount received by each person $= \dfrac{74336}{150}$

$= ₹ 496$ (approx.)

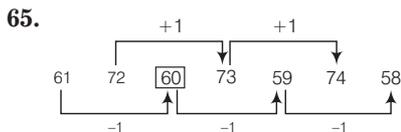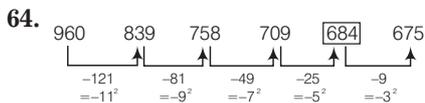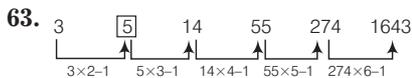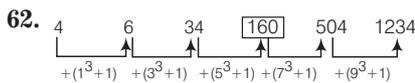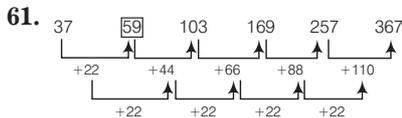**60.** Total monthly investment

$= (6 + 8 + 9) \% = 23\%$

Total invested amount $= \dfrac{2100 \times 23}{6}$

$= ₹ 8050$ monthly $\times 12$

$= ₹ 96600$ yearly

61.

37	59	103	169	257	367

+22　+44　+66　+88　+110

+22　+22　+22　+22

62.

4	6	34	160	504	1234

$+(1^3+1)$　$+(3^3+1)$　$+(5^3+1)$　$+(7^3+1)$　$+(9^3+1)$

63.

3	5	14	55	274	1643

$3 \times 2 - 1$　$5 \times 3 - 1$　$14 \times 4 - 1$　$55 \times 5 - 1$　$274 \times 6 - 1$

64.

960	839	758	709	684	675

-121　-81　-49　-25　-9

$= -11^2$　$= -9^2$　$= -7^2$　$= -5^2$　$= -3^2$

65.

+1　　　+1

61	72	60	73	59	74	58

-1　　-1　　-1

66. M 7, Y 3, H 5

67. 7 Σ, 2 =, 9 ©

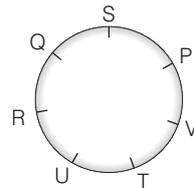**68.** M 7 8 L P 6 N T Y 3 2 E 4 9 G H 5

70. R E M I T　　C O N S U L
↓↓↓↓↓　　↓↓↓↓↓↓
＊£ 3 2 7　　= % 8 B $ 5

Similarly,
O C E L O T
↓↓↓↓↓↓
% = £ 5 % 7

72. A M O N G　　S P I N E
↓↓　↓↓↓　　↓↓↓↓↓
N A O G M　　N S I E P
L A M O N
↓↓↓　↓↓
O L M N A

73. Except option (5) all others four are divisible by 4.

74. C L | I | E | N T |
C E | I | L | N T |

Sol. (Q.Nos. 75-79)

Sol. (Q.Nos. 80 and 81)
3rd floor — D
4th floor — A
5th floor — C
6th floor — B

87. $S < P, P > Q, Q = R$

$\therefore S < P > Q = R$

Conclusions

I. $R \$ S \Rightarrow R < S$ (May be true)

II. $R \% S \Rightarrow R > S$ (May be true)

Hence, either I or II is true.

88. $A < B, B = D, D > C$

$\therefore A < B = D > C$

Conclusions

I. $D \$ A \Rightarrow D < A$　　(✗)

II. $B \% C \Rightarrow B > C$　　(✓)

Hence, only II is true.

89. $M = K, K > P, P < R$

$\therefore M = K > P < R$

Conclusions

I. $R \$ M \Rightarrow R < M$　　(✗)

II. $P \% M \Rightarrow P > M$　　(✗)

Hence, neither I nor II is true.

Sol. (Q.Nos. 90-94)

	Subject	Building
A	English	R
B	History	V
C	Mathematics	T
D	History	W
E	English	S
F	Mathematics	P
G	Mathematics	Q

90. B stays in Building V.

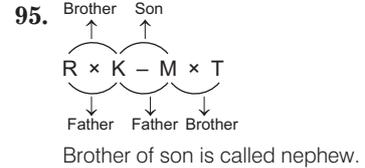**91.** Combination Mathematics-G-Q is definitely correct.

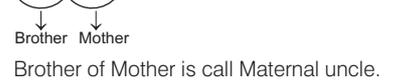**92.** C, F and G evaluate the Mathematics paper.

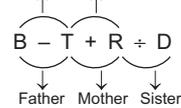**93.** D evaluate in subject History.

94. E stays in Building S.

Sol. (Q. Nos. 95-97)

95.

Brother of son is called nephew.

96.

Brother of Mother is call Maternal uncle.

97.

Sol. (Q.Nos. 98-100) *After careful study of the given input and various steps of a rearrangement we may conclude that in the first step, the smallest number is placed at the first position from the left and other terms are kept as as they are. In the second step, one word which comes last in dictionary order is placed at the second position keeping rest of the terms as they are and the same process is continued till the rearrangement ends.*

98. **Step I**　14 just in time for 36 48 59

Step II　14 for just in time 36 48 59

Step III　14 for 36 just in time 48 59

Step IV　14 for 36 in just time 48 59

99. **Step III**　17 do 29 foreign 95 74 heights mountain

Step IV　17 do 29 foreign 74 95 heights mountain

Step V　17 do 29 foreign 74 heights 95 mountain

100. **Step II**　34 dress fire well 63 43 prime 52

Step III　34 dress 43 fire well 63 prime 52

Step IV　34 dress 43 fire 52 well 63 prime

Step V　34 dress 43 fire 52 prime well 63

Step VI　34 dress 43 fire 52 prime 63 well

This is the last step.