SBI Junior Associates (PT)
(Based on memory)

Test-I: English Language

Directions (Q. 1-5): In each question, a sentence with four words in bold type is given. One of these four words given in bold may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word which is wrongly spelt or inappropriate, if any. That word is your answer. If all the words given in bold are correctly spelt and also appropriate in the context of the sentence, mark 'All correct' as your answer.

1. To **prompt** a significant **increase** in the number of apprentices being **trainned** PSUs are launching novel **efforts**.
   1) prompt   2) increase   3) trainned
   4) efforts   5) All correct

2. The phytochemicals responsible for the orange colour in fruits and vegetables help **maintain** **healthy** eyes and **improve** one's immune **system**.
   1) maintain   2) healthy   3) improve
   4) system   5) All correct

3. In the DBT system subsidies are **transferred** to beneficiaries **directively** **through** their bank **accounts**.
   1) transferred   2) directively   3) through
   4) accounts   5) All correct

4. A **surge** in inflation for both food and manufacturing goods **rules** out a rate cut by RBI in its next **monetory** policy **review**.
   1) surge   2) rules   3) monetory
   4) review   5) All correct

5. Many **borrowers** **found** themselves unable to **repay** loans that they took in the boom years to finance rapid **expantion**.
   1) borrowers   2) found   3) repay
   4) expantion   5) All correct

Directions (Q. 6-10): Rearrange the given six sentences/group of sentences (A), (B), (C), (D), (E) and (F) in a proper sequence so as to form a meaningful paragraph and then answer the given questions.

(A) 'Oh what a fool I was! It was an extraordinary animal and I never knew it!' the man thought to himself, when he suddenly realised that the bidding was about to close.

(B) Hearing this, a man came forward and offered forty dinars for the donkey while another offered fifty dinars and soon a crowd gathered.

(C) The man was standing nearby and was amazed at the interest shown in the donkey he had sold by the crowd.

(D) One day a man took his donkey to the market and sold it for thirty dinars to the first bidder.

(E) 'Eighty dinars!' shouted the man in desperation and bought back his donkey.

(F) The man who bought it immediately put it up for auction. He started the bidding and shouted to the passers-by about the donkey's qualities, calling it a rare specimen.

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

7. Which of the following should be the **THIRD** sentence after the rearrangement?
   1) A   2) B   3) C
   4) E   5) F

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

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

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

Directions (Q. 11-15): Read each sentence to find out whether there is any grammatical error in it. The error, if any will be in one part of the sentence. Mark the part with the error as your answer. If there is no error, mark 'No error' as your answer. (Ignore the errors of punctuation, if any.)

11. The entire family / welcomed the three / old men and / requested them to relaxing.
    1) The entire family
    2) welcomed the three
    3) old men and
    4) requested them to relaxing
    5) No error

12. On her way home, / Mira saw a / strange house with / an enormous gate.
    1) On her way home,   2) Mira saw a
    3) strange house with   4) an enormous gate
    5) No error

13. He seem / to be very / hungry, we must / give him some food.

1) He seem
2) to be very
3) hungry, we must
4) give him some food.
5) No error

14. The chilly winds tried / to follow, but the birds fly / so swiftly that they / were quickly out of sight.
1) The chilly winds tried
2) to follow, but the birds fly
3) so swiftly that they
4) were quickly out of sight.
5) No error

15. As they watched the ship / come into port, / all they could thought about / was their families.
1) As they watched the ship
2) come into port,
3) all they could thought about
4) was their families.
5) No error

Directions (Q. 16-25): Read the passage carefully and answer the questions given below it. Certain words/ phrases have been given in bold to help you locate them while answering some of the questions.

One day all the employees reached the office and they saw a big advice on the door on which it was written: "Yesterday the person who has been hindering your growth in this company passed away. We invite you to join the **funeral** in the room that has been prepared in the gym." In the beginning, they all got sad for the death of one of their colleagues, but after a while they started getting curious to know who was that man who **hindered** the growth of his colleagues and the company itself.

The excitement in the gym was such that security agents were ordered to control the crowd within the room. The more people reached the coffin, the more the excitement heated up. Everyone thought: "Who is this guy who was hindering my progress? Well, at least he died!" One by one the **thrilled** employees got closer to the coffin, and when they looked inside it they suddenly became speechless. They stood nearby the coffin, shocked and in silence, as if someone had touched the deepest part of their soul. There was a mirror inside the coffin: everyone who looked inside it could see himself.

There was also a sign next to the mirror that said: "There is only one person who is capable to set limits to your growth: it is YOU." You are the only person who can **revolutionise** your life. You are the only person who can **influence** your happiness, your realisation and your success. You are the only person who can help yourself. Your life does not change when your boss changes, when your friends change, when your partner changes, when your company changes. Your life changes when YOU change, when you go beyond your limiting beliefs, when you realise that you are the only one responsible for your life. "The most important relationship you can have is the one you have with yourself."

16. Which of the following is true in the context of the passage?
1) The crowd gathered in the office for the funeral.
2) The coffin was empty.
3) The employee who died was hindering everybody's growth.
4) Only a person himself is responsible for his own success.
5) The crowd loved the employee who died.

17. What can we learn from this passage?
1) Never trust anyone without confirming it yourself.
2) One who is not hardworking is not loved by the employees.
3) Good relation with your employees is most important in your life.
4) Your relationship with your friend is the most important one that can influence your happiness.
5) The most important relationship you can have is the one you have with yourself.

18. What was inside the coffin?
1) The corpse of the employee who died
2) The coffin was empty.
3) A note on which there were instructions
4) There was a mirror inside the coffin.
5) Photos of every employee

19. What was the reason of the employees' excitement?
1) They were expecting a bonus or promotion.
2) The employee who had hindered their growth died.
3) They were happy they would succeed now since no one would hinder their growth now.
4) They were excited because what they found inside the box was completely opposite of what they expected.
5) They were curious to know the identity of the man who hindered the growth of his colleagues.

20. Why was everyone speechless and shocked?
1) They were shocked as the employee who had died was the most hardworking one.
2) They never expected that their growth was actually hindered by one of their own.
3) They found a mirror inside the coffin.
4) One of the employees died.
5) They were shocked to find that the coffin was empty.

21. Which is MOST SIMILAR in meaning to the word/ group of words printed in bold as used in the passage? THRILLED
1) Tedious
2) Monotonous
3) Delighted
4) Dull
5) Boring

22. Which is MOST SIMILAR in meaning to the word / group of words printed in bold as used in the passage? INFLUENCE
1) Insignificance
2) Domination
3) Underwhelming
4) Triviality
5) Weakness

23. Which is the **MOST SIMILAR** in meaning to the word printed in bold as used in the passage?
REVOLUTIONISE
1) Harmony   2) Calm   3) Uprising
4) Stagnation   5) Obedience

24. Choose the word which is **MOST OPPOSITE** in meaning of the word printed in bold as used in the passage.
FUNERAL
1) Nativity   2) Burial   3) Cremation
4) Entombment   5) Inhumation

25. Choose the word which is **MOST OPPOSITE** in meaning of the word printed in bold as used in the passage
HINDERED
1) Hamper   2) Inhibit   3) Impede
4) Retard   5) Expedite

Direction (Q. 26-30): In the following passage, there are blanks, each of which has been numbered. Against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

Tara and Lara were (26) twins. Even their parents found it difficult to identify the physical difference between them. Although they looked the same, both girls differed in everything else. They didn't have many (27) favourites. Spicy food was Lara's favourite and Tara loved sweet food. Lara was a late sleeper and studied all night until she finished. On the (28), Tara was a morning person and would wake up early in the morning. As a result, they fought with each other all the time and insisted that the other was wrong. One day, their parents finally decided to put an end to their arguments. They blindfolded Lara and Tara with a black ribbon and brought them to the dining room. In the dining room, a big board was placed in the middle. Lara stood on one side of the board and Tara on the other. Each was not able to see the other's side of the board when the ribbons were removed. Their father then asked Lara, 'What is the colour of the board?' She replied, 'It is black!' Their mother asked Tara the same question. She replied 'It is white!'

They began to (29). While Lara insisted that it was black, Tara was confident it was white. Their parents then asked them to switch places. On doing so, both were surprised. The board on Lara's side had been painted black and Tara's white. This (30) both of them were right. They finally understood that each person was right in his perspective.

26. 1) three   2) same   3) identical
4) together   5) sister

27. 1) other   2) common   3) types
4) more   5) likeness

28. 1) side   2) next   3) flip
4) study   5) contrary

29. 1) eat   2) cry   3) hit
4) argue   5) worry

30. 1) meant   2) told   3) felt
4) times   5) day

Test-II: Reasoning Ability

Directions (Q. 31-35): In this question, relationship between different elements is shown in the statements. The statements are followed by two conclusions numbered I and II. Study the conclusions based on the given statements and select the appropriate answer. Give answer
1) if only conclusion I is true.
2) if both conclusion I and II are true.
3) if only conclusion II is true.
4) if either conclusion I or II is true.
5) if neither conclusion I nor II is true.

31. Statement: $C \geq D > E = M < J = L$
Conclusions: I. $L > E$ II. $C \geq J$

32. Statement: $P = N \leq Q > R > T = S$
Conclusions: I. $N \geq S$ II. $P \leq Q$

33. Statement: $J \geq P = I \geq M < T \geq V > H$
Conclusions: I. $M \leq J$ II. $H \leq M$

34. Statement: $Q \leq X \leq E > F = D < O < K = G$
Conclusions: I. $D > Q$ II. $K \leq E$

35. Statement: $Q \leq X \leq E > F = D < O < K = G$
Conclusions: I. $Q \leq E$ II. $G > F$

Directions (Q. 36-40): The following questions are based on the five three-digit numbers given below:
684   512   437   385   296

36. If 2 is added to the first digit of each of the numbers how many numbers thus formed will be divisible by three?
1) None   2) One   3) Two
4) Three   5) None of these

37. If all the digits in each of the numbers are arranged in descending order within the number, which of the following will be the highest number in the new arrangement of the numbers?
1) 684   2) 385   3) 296   4) 437   5) None of these

38. What will be the resultant number if the second digit of the second lowest number is divided by the third digit of the highest number?
1) 2   2) 3   3) 0   4) 1   5) 4

39. If 1 is added to the first digit and 2 is added to the last digit of each of the numbers then which of the following numbers will be the second highest number?
1) 385   2) 684   3) 437
4) 296   5) 512

40. If in each number the first and the second digits are interchanged then which of the following numbers will be the highest number?
1) 296   2) 512   3) 437   4) 684   5) 385

Directions (Q. 41-45): Study the following information carefully to answer the given questions:

W % 9 3 G 6 H # 7 K $ L 2 ? B M J © 4 5 E 8 @ Z

41. If all the numbers are deleted from the above arrangement, then which of the following elements will be seventh to the left of the sixth from the right end?
1) H   2) J   3) M
4) $ 5) None of these

42. How many such numbers are there in the above arrangement each of which is immediately preceded by a symbol?
1) One   2) Two   3) Three
4) Four   5) None of these

43. '9W' is to 'GH#' and '$7' is to '2BM' in the same way as '4J' is to .... in given the arrangement.
1) E@Z   2) 58@   3) B2L
4) 58Z   5) None of these

44. How many such symbols are there in the above arrangement each of which is immediately followed by a letter?
1) None 2) One   3) Two 4) Three 5) None of these

45. If all the symbols are deleted from the above arrangement then which of the following will be fourth to the left of twelfth from the right end?
1) 9   2) 3   3) W   4) M   5) None of these

Directions (Q. 46-50): Study the following information carefully to answer these questions.

Eight friends A, B, C, D, E, F, G and H are sitting around a circle facing the centre. A sits third to the left of B, and second to the right of F. D does not sit next to A or B. C and G always sit next to each other. H never sits next to D and C does not sit next to B.

46. Which of the following pairs sit between H and E?
1) F, D   2) G, B   3) C, G
4) E, G   5) None of these

47. Starting from A's position, if all the eight were arranged in alphabetical order in clockwise direction the seating positions of how many members (excluding A) would not change?
1) None   2) One   3) Two
4) Three   5) None of these

48. In which of the following pairs only one person is sitting between them, if counting is done in clockwise direction?
1) A, B   2) C, D   3) F, E
4) G, H   5) None of these

49. Who sits on the immediate right of E?
1) A   2) D   3) F
4) H   5) None of these

50. What is the position of B with respect to C?
1) Second to the left   2) Third to the right
3) Third to the left   4) Can't be determined
5) None of these

51. In a certain code language SERIES is written as QCGTGU. How is EXPERT written in that code language?
1) VTGRZG   2) RPCRZG   3) GZRCPR
4) RPCGZR   5) None of these

52. How many such pairs of letters are there in the word COMPOSE each of which has as many letters between them in the word as they have between them in the English alphabetical series?
1) None   2) One   3) Two
4) Three   5) None of these

Directions (Q. 53-55): Study the following information carefully and answer the questions given below.

In a certain code 'all aspirants must qualify' is written as 'na li ja pa', 'qualify in all subjects' is written as 'ta ja li ra' and 'aspirants read all subjects' is written as 'sa li na ra'.

53. What does 'li' stand for?
1) subjects   2) qualify   3) must
4) all   5) None of these

54. What will 'ja na' stand for?
1) must qualify   2) aspirants subjects
3) qualify subjects   4) Can't be determined
5) None of these

55. What will be the code for 'qualify'?
1) li   2) sa   3) ja
4) pa   5) Can't be determined

Directions (Q. 56-57): Study the following information carefully to answer the given questions.

A vehicle starts from point P and runs 10 km towards north. It takes a right turn and runs 15 km. Now, it runs 6 km after taking a left turn. Finally, it takes a left turn, runs 15 km and stops at point Q.

56. How far is point Q with respect to point P?
1) 16 km   2) 25 km   3) 4 km
4) 0 km   5) None of these

57. Towards which direction was the vehicle moving before stopping at point Q?
1) North   2) East   3) South
4) West   5) Northwest

58. The position of how many digits in the number 54327618 will remain unchanged if the digits within the number are written in ascending order from left to right?
1) None   2) One   3) Two
4) Three   5) None of these

59. In a row of 34 students, W is fifth after X from the front and X is 20th from the back. What is the position of W from the front?
   1) 20   2) 25   3) 30
   4) 22   5) None of these

60. What will come in place of question mark (?) in the following series?
   TG   HU   VI   JW   ?
   1) KY   2) KX   3) YK
   4) XK   5) None of these

Directions (Q. 61-65) Study the following information carefully and answer the questions given below.

Six friends A, B, C, D, E and F are going for entrance exam starting from Monday to Saturday. Only one exam will be held on each day.
- C takes exam at least before three exams.
- F takes exam on Tuesday.
- Both B and E do not take exam on an even day.
- D takes the exam immediately after C.
- At least four persons take exam after E.

61. On which day does E takes the entrance exam?
   1) Wednesday   2) Monday   3) Friday
   4) Tuesday   5) None of these

62. Who takes the exam immediately after 'B'?
   1) E   2) D   3) A   4) B   5) None of these

63. How many persons take the exam before C?
   1) One   2) Two   3) Three
   4) Four   5) None

64. 'A' takes the exam on which day?
   1) Monday   2) Wednesday   3) Saturday
   4) Tuesday   5) None of these

65. How many persons takes the exam between B and the one whose exam is on Monday?
   1) One   2) Two   3) Three
   4) Four   5) None

Test-III: Quantitative Aptitude

Directions (Q. 66-70): What should come in place of question mark (?) in the following number series?

66. 68 ? 77 104 168 293
   1) 69   2) 70
   3) 68   4) 74
   5) Other than those given as options

67. 19.7 16.3 23.1 9.5 ?
   1) 36.5   2) 36.6
   3) 36.7   4) 36.8
   5) Other than those given as options

68. 2 5 12 27 58 ?
   1) 122   2) 121   3) 123
   4) 120   5) None of these

69. 8 12 30 ? 472.5 2598.75
   1) 104   2) 103   3) 106
   4) 105   5) Other than given as options

70. 334 ? 226 217 214 213
   1) 253   2) 251   3) 252
   4) 254   5) None of these

71. Suhas decided to donate 15% of his salary. On the day of donation he changed his mind and donated ₹1,650, which was $\frac{11}{15}$ of what he had decided to donate earlier. How much is Suhas' salary?
   1) ₹12000   2) ₹13500
   3) ₹15000   4) ₹16000
   5) Other than those given as options

72. Work done by A in one day is four times the work done by B in one day, while the work done by B in one day is one-third of the work done by C in one day. C alone can complete the work in 16 days. In how many days can all the three together complete the work?
   1) 12 days   2) 10 days
   3) 8 days   4) 6 days
   5) Other than those given as options

73. The total of the ages of a class of 60 girls is 900 years. The average age of 20 girls is 12 years and that of another 20 girls is 16 years. What is the average age of the remaining girls?
   1) 14 years   2) 15 years
   3) 16 years   4) 17 years
   5) Other than those given as options

74. A and B started a business with initial investments in the ratio of 5 : 7. If after one year their profits were in the ratio of 1 : 2 and the period for A's investment was 7 months, then B invested the money for how many months?
   1) 6 months   2) $2\frac{1}{2}$ months   3) 10 months
   4) 4 months   5) 7 months

75. A shopkeeper sold an article for ₹1,380 at a loss of 8%. At what price should it be sold to earn a profit of 8%?
   1) ₹1560   2) ₹1620
   3) ₹1680   4) ₹1740
   5) Other than those given as options

Directions (Q. 76-80): What should come in place of question mark (?) in the following questions?

76. 60% of 480 + 48% of 600 = ?
   1) 766   2) 288   3) 576   4) 276   5) 476

77. 5580 − 73 × 12 + ? = 4824
   1) 160   2) 320   3) 180   4) 120   5) 280

78. $\sqrt{3969} + \sqrt{7921} = ?$
   1) 148   2) 150   3) 152   4) 154   5) 156

79. $\sqrt{?} + 416 = (60\%$ of 920) − 110
   1) 576   2) 676   3) 784   4) 1024   5) 1156

80. 1170 ÷ 26 + (785 − 423 + ?) = 440
   1) 37   2) 33   3) 38   4) 43   5) 53

81. A profit of 25% is earned on a certain good when a discount of 20% is allowed on the marked price. What profit percentage will be earned when a discount of 10% is allowed on the marked price?

1) $45\frac{9}{11}\%$ 2) $42\frac{3}{4}\%$

3) $40\frac{5}{8}\%$ 4) $37\frac{2}{3}\%$

5) Other than those given as options

82. The compound interest on a certain sum for 2 years at 20% per annum is ₹880. The simple interest on the same sum for double the time at half the rate per cent per annum is

1) ₹800   2) ₹1000
3) ₹1200   4) ₹1600
5) Other than those given as options

83. A tap can empty a tank in one hour. A second tap can empty it in 30 minutes. If both the taps operate simultaneously, how much time is needed to empty the tank?

1) 20 min   2) 30 min
3) 40 min   4) 45 min
5) Other than those given as options

84. When the price of sugar decreases by 10%, a man could buy 1 kg more for ₹270. What is the original price of the sugar per kg?

1) ₹25   2) ₹30
3) ₹27   4) ₹32
5) Other than those given as options

85. A train passes a 50m-long platform in 14 seconds and a man standing on a platform in 10 seconds. The speed of the train is

1) 24 km/h   2) 26 km/h
3) 40 km/h   4) 45 km/h
5) Other than those given as options

Direction (Q. 86-90): What should come in place of question mark (?) in the following questions?

86. $\sqrt[3]{17.576} \times 15 = ?$

1) 36   2) 39   3) 42
4) 45   5) 48

87. 40% of 60% of $\frac{3}{5}$ of 2750 = ?

1) 372   2) 384   3) 396   4) 412   5) 424

88. $134.27 - 48.76 + 519.08 - 178.60 = ?$

1) 421.49   2) 425.99   3) 427.89
4) 431.19   5) 437.49

89. $44544 \div 348 = ?$

1) 122   2) 124   3) 126   4) 128   5) 132

90. $3939 \div 3 + 6363 \div 3 - 9696 \div 6 = ?$

1) 2064   2) 1572   3) 1464
4) 1818   5) 1564

Directions (Q. 91-95): Study the following table and answer the questions given below it.

Expenditures of a company (in ₹ lakh) per annum over items in different years

Years	Salary	Fuel and transport	Bonus	Interest on loans	Taxes
2006	288	98	3.00	23.4	83
2007	342	11	2.52	32.5	108
2008	324	101	3.84	41.6	74
2009	336	133	3.68	36.4	88
2010	420	142	3.96	49.4	98

91. What is the average amount of interest per year which the company had to pay during this period?

1) ₹32.43 lakh   2) ₹33.72 lakh
3) ₹34.18 lakh   4) ₹36.66 lakh
5) Other than those given as options

92. The total amount of bonus paid by the company during the given period is approximately what per cent of the total amount of salary paid during this period?

1) 0.1%   2) 0.5%
3) 1%   4) 1.25%
5) Other than those given as options

93. The total expenditure on all these items in 2006 was approximately what per cent of the total expenditure in 2010?

1) 62%   2) 66%
3) 69%   4) 71%
5) Other than those given as options

94. What is the total expenditure of the company on these items during the year 2008?

1) ₹544.44 lakh   2) ₹501.11 lakh
3) ₹446.46 lakh   4) ₹4,..37 lakh
5) Other than those given as options

95. The ratio of the total expenditure on taxes for all the years to the total expenditure on fuel and transport for all the years, respectively is approximately

1) 4 : 7   2) 10 : 13
3) 15 : 18   4) 5 : 8
5) Other than those given as options

96. The difference between a number and 45% of the number is 88. What is 65% of that number?

1) 96   2) 104
3) 112   4) 120
5) Other than those given as options

97. A man can row three-quarters of a kilometre against the stream in $\frac{45}{4}$ minutes and returns in $\frac{15}{2}$ minutes

The speed of the man in still water is

1) 2 km/hr   2) 3 km/hr   3) 4 km/hr
4) 5 km/hr   5) 6 km/hr

98. Three numbers A, B and C are in the ratio of 1 : 2 : 3 and their average is 600. If A is increases by 10% and B is decreased by 20% and the average increases by 5%, then C will be increase by?
    1) 250   2) 150   3) 200
    4) 160   5) 180
99. Some milk and water in two vessels A and B are in the ratio of 4 : 3 and 2 : 3 respectively. In what ratio should the liquids in both the vessels be mixed to obtain a new mixture in vessel C consisting of half milk and half water?
    1) 8 : 3   2) 7 : 5
    3) 4 : 3   4) 2 : 3
    5) Other than those given as options
100. What would be the area of a rectangle whose area is equal to the area of a circle of radius 7 cm?
    1) 77 cm²   2) 154 cm²   3) 184 cm²
    4) 180 cm²   5) 150 cm²

Answers

1. 3; The correct spelling is 'trained'
2. 5
3. 2; The appropriate word should be 'directly'
4. 3; The correct spelling is 'monetary'
5. 4; The correct spelling is 'expansion'
(6-10): DFBCAE
6. 4   7. 2   8. 4   9. 1   10. 5
11. 4; Replace 'relaxing' with 'relax'
12. 5
13. 1; Replace 'seem' with 'seems'
14. 2; Replace 'fly' with 'flew'
15. 3; Replace 'thought' with 'think'
16. 4   17. 5   18. 4   19. 5   20. 3
21. 3   22. 2   23. 3   24. 1   25. 5
26. 3   27. 2   28. 5   29. 4   30. 1
31. 1; Given statement:
    $C \geq D > E = M < J = L$ ... (i)
Thus, E < L or L > E is true.
But, we can't compare C and J. So, conclusion (C ≥ J) is not true. Hence only conclusion I is true.
32. 3; Given statement:
    $P = N \leq Q > R > T = S$
We can't compare N and S. Hence I (N ≥ S) is not true.
Again, P ≤ Q is true. Thus, only conclusion II is true.
33. 1; Given statement:
    $J \geq P = I \geq M < T \geq V > H$
Thus, J ≥ M is true. Hence conclusion I (M ≤ J) is true.
But, we can't compare M and H.
Hence II (H ≤ M) is not true.
34. 5; Given statement:
    $Q \leq X \leq E > F = D < O < K = G$
We can't compare Q and D. Hence conclusion I (D > Q) is not true.
Again, we can't compare K and E. Hence II (K < E) is not true.
Thus, neither conclusion I nor II is true.
35. 2; Given statement:
    $Q \leq X \leq E > F = D < O < K = G$
Thus, Q ≤ E is true. Hence conclusion I is true.
Again, F < G or G > F is true. Hence conclusion II is also true.
36. 2; The new numbers become:

If the sum of digits of a number is divisible by 3 then the number is also divisible by 3. So, sum of digits of the number 585 → 5 + 8 + 5 = 18. Hence only one such number can be formed.
37. 3; The new numbers become:
    684 → 864
    512 → 521
    437 → 743
    385 → 853
    296 → 962
Hence the highest number will be 296 → 962.
38. 1; The second lowest no. → 385
The second digit of the second lowest no. → 8
The highest no. → 684
The third digit of the highest no. → 4
∴ Reqd resultant = $\frac{8}{4}$ = 2
39. 5; The new numbers become:

40. 1; The new numbers become:

Hence the highest number = 926 → 296
41. 1; The new sequence becomes:
W%GH#K$L?BMJGF@Z
Seventh to the left of sixth from the right = (7 + 6 =) 13th from the right end, ie H.
42. 3; [Symbol] [Number]
ie %9, #7, ©4
Thus, there are three such numbers.

43. 1; As,

Similarly,

So,

44. 4; [Symbol] [Letter]
ie $L, ?B, @Z
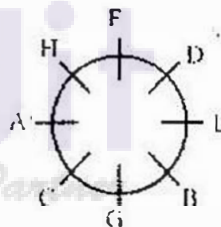Thus, there are three such symbols in the given sequence.
45. 2; The new sequence becomes:
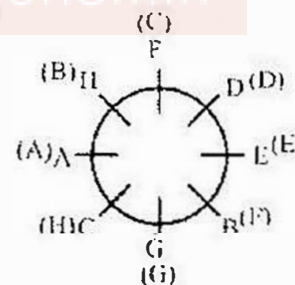W93G6H7KL2BMJ45E8Z
Now, fourth to the left of twelfth from the right
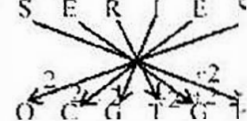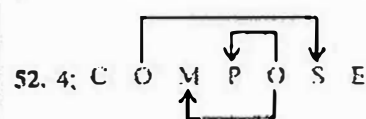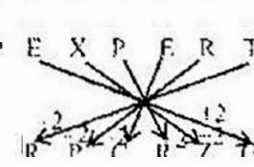= (4 + 12 =) 16th from the right end, ie 3.
(46-50):

46. 1
47. 4;

48. 3
49. 2
50. 5; Second to the right
51. 2;

Similarly,

52. 4; C O M P O S E

(53-55):
all aspirants must qualify
→ na li ja pa ... (i)

qualify in all subjects
→ ta ja li ra   ... (ii)
aspirants read all subjects
→ sa li na ra   ... (iii)
From (i), (ii) and (iii),
all → li   ... (iv)
From (i), (ii) and (iv),
qualify → ja   ... (v)
From (i), (iii) and (iv),
aspirants → na   ... (vi)
From (i), (iv), (v) and (vi),
must → pa   ... (vii)
From (ii), (iii) and (iv),
subjects → ra   ... (viii)
From (ii), (iv), (v) and (viii),
in → ta   ... (ix)
From (iii), (iv), (vi) and (viii),
read → sa   ... (x)

53. 4
54. 5; ja na → qualify aspirants
55. 3
(56-57):
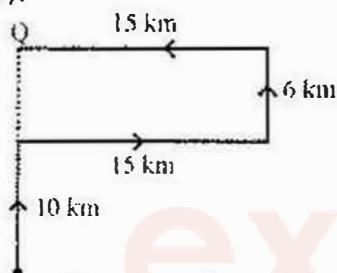
56. 1; PQ = 10 + 6 = 16 km
57. 4
58. 4;

Given number: 5 4 [3] 2 7 [6] 1 [8]

Ascending order: 1 2 |3| 4 5 |6| 7 |8|

Thus, there are three such digits.

59. 1; X from the front = (34 − 20 + 1)
= 15th
∴ W's position from the front
= (15 + 5 =) 20th

60. 4; The letters in a pair move one place forward in the next pair and shift places within the pair.
TG → UH → HU; HU → IV → VI; VI → WJ → JW; JW → KX → XK.

(61-65):

Monday	E
Tuesday	F
Wednesday	C
Thursday	D
Friday	B
Saturday	A

61. 1   62. 3   63. 2   64. 3   65. 3
66. 1; The series is $+1^3$, $+2^3$, $+3^3$, $+4^3$, $+5^3$, ...
ie $68 + 1^3 = 69$, $69 + 2^3 = 77$, $77 + 3^3 = 104$, $104 + 4^3 = 168$, $168 + 5^3 = 293$, ...
67. 3; The series is −3.4, +6.8, −13.6, +27.2,
ie $19.7 − 3.4 = 16.3$, $16.3 − 6.8 = 23.1$, $23.1 − 13.6 = 9.5$, $9.5 + 27.2 = 36.7$, ...

68. 2; The series is ×2 + 1, ×2 + 2, ×2 + 3, ×2 + 4, ×2 + 5, ...
ie $2 × 2 + 1 = 5$, $5 × 2 + 2 = 12$,
$12 × 2 + 3 = 27$, $27 × 2 + 4 = 58$, $58 × 2 + 5 = 121$, ...
69. 4; The series is ×1.5, ×2.5, ×3.5, ×4.5, ×5.5, ...
ie $8 × 1.5 = 12$, $12 × 2.5 = 30$,
$30 × 3.5 = 105$, $105 × 4.5 = 472.5$,
$472.5 × 5.5 = 2598.75$, ...
70. 1; The series is −81, −27, −9, −3, −1, ...
ie $334 − 81 = 253$, $253 − 27 = 226$,
$226 − 9 = 217$, $217 − 3 = 214$,
$214 − 1 = 213$, ...
71. 3; Let Suhas's salary be ₹100.
Then, he decided to donate = 15% of 100
= ₹15

But he actually donates = $15 × \frac{11}{15} = ₹11$

∵ 11 = 1650

∴ $100 = \frac{1650}{11} × 100 = ₹15000$

Hence Suhas's salary = ₹15000
72. 4;   A : B : C

Ratio of efficiencies = $\frac{4}{3} : \frac{1}{3} : 1$

$= 4 : 1 : 3$

With 3 efficiency C takes 16 days
∴ With (4 + 1 + 3 =) 8 efficiency they will

take $\frac{16 × 3}{8} = 6$ days

73. 4; Average age of the remaining girls

$= \frac{900 − (20 × 12 + 20 + 16)}{60 − 20 − 20}$

$= \frac{900 − (240 + 320)}{20} = \frac{900 − 560}{20}$

$= \frac{340}{20} = 17$ years

74. 3;   A : B
Ratio of investments   5 : 7
Ratio of profits   1 : 2

Now, $\frac{5 × 7}{7 × B's month} = \frac{1}{2}$

∴ B invests for 5 × 2 = 10 months
75. 2; Reqd selling price

$= 1380 × \frac{100}{92} × \frac{108}{100} = ₹1620$

76. 3; ? = 60% of 480 + 48% of 600
= 60% of 480 + 60% of 480
= (60 + 60)% of 480

$= 120\%$ of $480 = \frac{6}{5} × 480 = 6 × 96 = 576$

77. 4; $5580 − 73 × 12 + ? = 4824$
$⇒ ? = 4824 + 73 × 12 − 5580$
$= 4824 + 876 − 5580$
$= 5700 − 5580 = 120$

78. 3; ? = $\sqrt{3969} + \sqrt{7921}$

= 63 + 89 = 152
79. 2; $\sqrt{?} + 416 = 60\%$ of 920 − 110
or, $\sqrt{?} + 416 = 6 × 92 − 110 = 552 − 110$
= 442

or, $\sqrt{?} = 442 − 416 = 26$
∴ ? = 26 × 26 = 676
80. 2; $1170 ÷ 26 + (785 − 423 + ?) = 440$
or, $45 + 362 + ? = 440$
or, ? = 440 − 407 = 33
81. 3; Marked price of goods = ₹100
⇒ SP = ₹80
According to the question, in 1st case CP of

goods = $80 × \frac{100}{125} = ₹64$

In 2nd case SP of goods = 100 − 10 = ₹90

∴ Percentage profit = $\frac{90 − 64}{64} × 100$

$= \frac{26}{64} × 100 = \frac{325}{8} = 40\frac{5}{8}\%$

82. 1; 20% per annum compound rate of interest for 2 years is equivalent to

$20 + 20 + \frac{20 × 20}{100} = 44\%$

10% simple rate of interest for 4 years is equivalent to 40%.
Now, 44% = 880
∴ 40% = 800
83. 1; Let the capacity of tank be 60 lit (LCM of 30 & 60)

Tap A can empty $\frac{60}{60} = 1$ lit/m

Tap B can empty $\frac{60}{30} = 2$ lit/m

Now, Tap (A + B) can empty the tank in

$\left(\frac{60}{1+2} =\right) \frac{60}{3} = 20$ minutes

84. 2; The person could buy 1 kg more due to 10% reduction is price ⇒ 1 kg extra got for 10% of 270

$⇒$ Reduced price = $\frac{10\% \text{ of } 270}{1 \text{ kg}} = ₹27/kg$

∴ Original price = $27\left(\frac{100}{90}\right) = ₹30/kg$

85. 4; Let the length of the train be L and that of platform be P.

Then, $\frac{L + P}{14} = $ Speed of the train   ...(i)

Again, $\frac{L}{10} = $ Speed of the train   ...(ii)

So, $\frac{L + P}{14} = \frac{L}{10}$

or, $10L + 10P = 14L$
or, $10 × 50 = 4L$

∴ L = 125

Therefore speed of the train

$= \dfrac{125}{10} \times \dfrac{18}{5} = 45$ km/h

Quicker Approach:

The train takes 14 − 10 = 4 sec extra to cover the length of platform (50m)

∴ Speed of train $= \dfrac{50}{4}$ m/s $= \dfrac{50}{4} \times \dfrac{18}{5}$

$= 45$ km/hr

86. 2; $? = \sqrt[3]{17.576} \times 15 = 2.6 \times 15 = 39$

87. 3; $? = 40\%$ of 60% of $\dfrac{3}{5}$ of 2750

$= \dfrac{2}{5} \times \dfrac{3}{5} \times \dfrac{3}{5} \times 2750 = 18 \times 22 = 396$

88. 2; $? = 134.27 − 48.76 + 519.08 − 178.60$
$= 653.35 − 227.36 = 425.99$

89. 4; $? = 44544 \div 348 = 128$

90. 4; $? = 3939 \div 3 + 6363 \div 3 − 9696 \div 6$
$= 1313 + 2121 − 1616 = 1818$

91. 4; Reqd average

$\dfrac{23.4 + 32.5 + 41.6 + 36.4 + 49.4}{5}$

$\dfrac{183.3}{5} = ₹36.66$ lakh

92. 3; Reqd %

$= \dfrac{3 + 2.52 + 3.84 + 3.68 + 3.96}{288 + 342 + 324 + 336 + 420} \times 100$

$= \dfrac{17}{1710} \times 100 = 0.99 \approx 1\%$

93. 3;

Reqd % $= \dfrac{288 + 98 + 3 + 23.4 + 83}{420 + 142 + 3.96 + 49.4 + 98} \times 100$

$= \dfrac{495.4}{713.36} \times 100 = 69.44 \approx 69\%$

94. 1; Total expenditure in 2008
$= 324 + 101 + 3.84 + 41.6 + 74$
$= ₹544.44$ lakh

95. 5; Reqd ratio $= \dfrac{83 + 108 + 74 + 88 + 98}{98 + 11 + 101 + 133 + 142}$

$= \dfrac{451}{485} \approx \dfrac{450}{485} = \dfrac{90}{97} = 90 : 97$

96. 2; Let the number be x.

Then, $x - \dfrac{x \times 45}{100} = 88$

$\Rightarrow \dfrac{55x}{100} = 88 \qquad \Rightarrow x = \dfrac{88 \times 100}{55} = 160$

Now, reqd number $= 160 \times \dfrac{65}{100} = 104$

Logical method:

Difference of the number = (100 − 45)
= 55%

∵ 55% = 88

∴ 65% $= \dfrac{88}{55} \times 65 = \dfrac{8}{5} \times 65 = 104$

97. 4; Upstream speed $= \dfrac{3}{4} \div \left(\dfrac{45}{4 \times 60} \right)$

$= \dfrac{3}{4} \times \dfrac{4 \times 60}{45} = 4$ km/hr

Downstream speed $= \dfrac{3}{4} \div \left(\dfrac{15}{2 \times 60} \right)$

$= \dfrac{3}{4} \times \dfrac{2 \times 60}{15} = 6$ km/hr

Speed of man in still water

$= \dfrac{4 + 6}{2} = 5$ km/hr

98. 5; ∵ $x + 2x + 3x = 600 \times 3$

$\Rightarrow 6x = 1800$

∴ $x = 300$

∴ A = 300, B = 600 and C = 900

New total $= (600 \times 3) \times \dfrac{105}{100} = 1890$

New quantity of A $= 300 \times \dfrac{110}{100} = 330$

New quantity of B $= 600 \times \dfrac{80}{100} = 480$

Now, new quantity of C
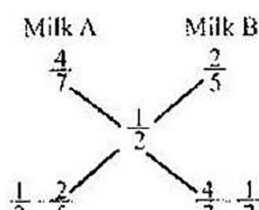= 1890 − (330 + 480) = 1080

∴ Increase in the number = 1080 − 900
= 180

99. 2; Milk in Vessel A $= \dfrac{4}{7}$

Water in Vessel A $= \dfrac{3}{7}$

Milk in Vessel B $= \dfrac{2}{5}$

Water in Vessel B $= \dfrac{3}{5}$

Now, **By alligation method:**

∴ Reqd ratio = 7 : 5

100. 2; Area of the rectangle = area of the

circle $= \pi r^2 = \dfrac{22}{7} \times 7 \times 7 = 154$ cm²