

RBI Assistant Prelims - Previous Year Solved Paper

Held on: 29th Dec 2016

(Based on Memory)

Test-I: English Language

Directions (Q. 1-8): Read the following passage and answer the given questions. Certain words/phrases are given in bold to help you locate them while answering some of the questions.

One day, a farmer was hoeing his vineyard when he struck something hard. He bent over and saw that he had unearthed a fine mortar beautifully engraved. When he cleared the dirt of it he saw it was made of solid gold. 'I do not own it, I ought to give it to the king,' he said. When he went home with the fine mortar he saw his daughter and announced his intention of presenting it to the king. 'It is a good idea, father,' she said. 'It is worthy of a king but the king will find fault with it since something is missing – the pestle.' The farmer shrugged off her words and marched straight to the king's palace. The guards weren't going to let him in but seeing the wonderful gift, they did. The farmer bowed low before the king and said, 'I found this mortar in my vineyard, your Majesty, and I am giving it to you to do with it as you deem fit.' The king took the mortar and turned it around, examining it carefully and said, 'Where is the pestle, my dear man?' These were his daughter's words exactly and the farmer slapped his brow and exclaimed out loud, 'She guessed it!' 'Guessed what?' said the king. 'My daughter told me that you would say those words and I refused to believe her.' 'This daughter of yours must be very clever. Take this flax and tell her to make the shirts for a whole regiment of soldiers. But tell her to do it quickly since I need the shirts right now.' The farmer was stunned. But he did not argue with the king and picked up the bundle which contained only a few measly strands of flax and set out for home. 'My daughter,' he said, when he reached home, 'you really are in for it.' And he told her what the king had said. 'You get upset over nothing,' said his daughter. 'Give me the flax.' And taking it, she shook it out until a few scales from the flax fell onto the floor – hardly a handful. The farmer's daughter gathered those up and gave them to her father, 'Go to the king tomorrow and tell him I will make the shirts but since I have no loom to weave the cloth I will have to have one made for me with this handful of scales to carry out his order to the letter.' The farmer did not have the nerve to go back to the king with this reply but he did fearing for his daughter's life. The king was eager to meet the farmer's daughter on hearing the reply

she sent through her father and said, 'Tell your daughter to come to the palace when it is neither day nor night, neither on foot nor on horseback. She is to obey on both these conditions or both your head and hers will roll'. The farmer arrived home in the lowest of spirits. But his daughter told him not to worry. She rose and set out for the palace seated on a nanny goat with one foot touching the ground and the other off it. She managed to reach the palace after the difficult journey just as dawn was breaking (neither day nor night completely). The guards were reluctant to let her in but learning that the king had commanded it, they finally did. 'Your Majesty, I am here in compliance with your order,' she said. The king burst into laughter on seeing the girl and announced that she was worthy of being a ruler's wife. He married her and they ruled in wisdom.

1. Which of the following cannot replace the word **STRUCK** as used in the passage?
1) discovered 2) uncovered 3) attacked
4) stumbled on 5) turned up
2. What impact did the farmer's encounters with the king have on his (the king's) life?
1) The king stopped harassing his subjects.
2) The king got married.
3) The king gave up his throne to marry the farmer's daughter.
4) The king gained fine ornaments and clothes for his soldiers.
5) The king was humiliated by the farmer's daughter and he left the kingdom.
3. Which of the following is most nearly the **OPPOSITE** of the word **NERVE** as used in the passage?
1) calm 2) anger 3) demotivated
4) tearfulness 5) boldness
4. Why did the farmer utter the words, 'You really are in for it'?
1) He was conveying to his daughter the king's desire to marry her.
2) He was angry with his daughter for disagreeing with him.
3) He was upset because his daughter refused to weave the clothes as the king had ordered her to.
4) He did not see how his daughter could accomplish the seemingly impossible task set by the king.
5) He was feeling sorry for himself as his daughter was bullying him.

5. Why did the farmer present the mortar to the king?
- 1) He saw the markings on it and realised that it belonged to the king.
 - 2) He thought it was the right thing to do.
 - 3) He wanted a handsome reward.
 - 4) It was an excuse to meet the king and get him to marry his daughter.
 - 5) It was useless to him as it was broken and the pestle was missing.
6. Which of the following describes the farmer's daughter's reaction to her father finding the mortar?
- 1) She was thrilled and urged him to present it to the king.
 - 2) She was against it as she thought it was evil and had been buried for that reason.
 - 3) She begged her father to let her accompany him on his trip to present it to the king.
 - 4) She was greedy and wanted to sell it and make a handsome profit.
 - 5) None of the given options
7. Which of the following is true in the context of the story?
- 1) The farmer's daughter was disrespectful to the king.
 - 2) The king should have impressed the farmer and his daughter.
 - 3) The king had lost the mortar.
 - 4) The king made a laughing stock out of the farmer's daughter and punished her.
 - 5) None of the given options is true in the context of the story
8. Which of the following can be said about the king?
- (A) He appreciated cleverness.
 - (B) He was tricked by the farmer into marrying his daughter.
 - (C) He was greedy and treated his subjects badly.
- 1) Only (A) 2) Only (C) 3) Only (A) and (B)
4) Only (B) and (C) 5) All (A), (B) and (C)

Directions (Q. 9-13): Rearrange the given five sentences/group of sentences (A), (B), (C), (D) and (E) in a proper sequence so as to form a meaningful paragraph and then answer the given question.

- (A) Learning the reason for this, the monk laughed and said, 'If only you had purchased a pair of green spectacles worth just a few rupees, you could have saved these walls, pots and a large share of your fortune.'
- (B) The millionaire hired a group of painters and instructed them to paint green, every object his eye was likely to fall on, just as the monk had directed.
- (C) Lara was an extremely wealthy man who was bothered by severe eye pain and despite being treated by several physicians, his ache persisted, with more vigour than before.

- (D) When the monk came to visit him after a few days, the millionaire servants ran with buckets of green paint and poured it on him since he was in red clothes, lest their master's ache come back.
- (E) At last, a monk, who was an expert in treating such patients, was called for by the suffering man who told him to concentrate only on the colour green and not let his eyes fall on any other colour.
9. Which of the following should be the **SECOND** sentence after the rearrangement?
1) C 2) B 3) A 4) D 5) E
10. Which of the following should be the **FOURTH** sentence after the rearrangement?
1) D 2) B 3) C 4) E 5) A
11. Which of the following should be the **FIFTH (LAST)** sentence after the rearrangement?
1) E 2) D 3) B 4) A 5) C
12. Which of the following should be the **THIRD** sentence after the rearrangement?
1) E 2) D 3) B 4) A 5) C
13. Which of the following should be the **FIRST** sentence after the rearrangement?
1) A 2) C 3) B 4) D 5) E

Directions (Q. 14-18): 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.

14. The impressed crowd / applauded Ginaji's ability / to solved any problems / within minutes.
1) The impressed crowd
2) applauded Ginaji's ability
3) to solved any problems
4) within minutes
5) No error
15. A businessman was stood / at the pier of a small coastal village / when a small boat with just / one fisherman arrived.
1) A businessman was stood
2) at the pier of a small coastal village
3) when a small boat with just
4) one fisherman arrived
5) No error
16. All the participants were / shocked to hear the criterion / for the competition and looked / at each other in amazement.
1) All the participants were
2) shocked to hear the criterion
3) for the competition and looked
4) at each other in amazement.
5) No error
17. Kinu's neighbour was / a very nosy person / and always harassed him / by asked silly questions.

- 1) Kinu's neighbour was
- 2) a very nosy person
- 3) and always harassed him
- 4) by asked silly questions
- 5) No error

18. One day, the wise king Solomon / was approached of / two women arguing / over a goal.
- 1) One day, the wise king Solomon
 - 2) was approached of
 - 3) two women arguing
 - 4) over a goal
 - 5) No error

Directions (Q. 19-23): In this question, four words are given in bold. One of these words given in bold may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word that is inappropriate or wrongly spelt, if any. That word is your answer. If all the words given in bold are correctly spelt or appropriate in the context of the sentence, mark 'All correct' as your answer.

19. The **regeon** has been in a state of perpetual conflict for the last two **decades**.
- 1) regeon
 - 2) state
 - 3) perpetual
 - 4) decades
 - 5) All correct
20. **Electricity** is the most **important** input for any sector as the lives of every **individual** depends on it.
- 1) Electricity
 - 2) important
 - 3) lives
 - 4) individual
 - 5) All correct
21. Ramesh **were** gifted a watch by his father on **having** got his first job.
- 1) were
 - 2) gifted
 - 3) having
 - 4) first
 - 5) All correct
22. Due to **surplus** stock, **vegetables** are being soled in the **market** at very low prices.
- 1) surplus
 - 2) vegetables
 - 3) soled
 - 4) market
 - 5) All correct
23. Any **further** sharp **raise** in rates will bring emerging market yield under **pressure**.
- 1) further
 - 2) raise
 - 3) emerging
 - 4) pressure
 - 5) All correct

Directions (Q. 24-30): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word(s) from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningful.

Once upon a time, there lived a generous and kind-hearted king. He (24) birds and animals and had a huge bird sanctuary in his kingdom.

One day, he was gifted two beautiful falcons by a businessman. Those two falcons (25) to different climatic conditions. The king thanked the businessman and ordered the head bird-trainer to provide all the facilities to those beautiful falcons and make them feel (26) in their country. The bird-trainer took care of the birds. Gradually, the birds

adapted to the country's climate.

One day, the king wanted to see the falcons fly. The bird-trainer let one falcon out of the enclosure. It flew very high, very quickly, and (27) to the enclosure within minutes. The king was quite surprised and rewarded the bird trainer (28) a handful of gold coins. However, when he inquired about the other falcon the bird-trainer stated with regret that the other falcon (29) even a step from day one and had just sat on the branch, even though the trainer had tried everything. The king consoled him and told him that he would bring someone more experienced than he to try to train the other falcon.

Soon, the king announced that he needed someone (30) the other falcon to move and fly. Hearing this announcement, an old man reached the king's palace and assured him that he would make the bird fly – the other one. The next day, the king was very surprised to see the other falcon fly like the first one to great height at rapid speed. The king was very happy and gifted the old man a handful of gold coins.

24. 1) likes 2) was fond of 3) was adorable
4) had a likelihood for 5) is collecting
25. 1) have stayed 2) are staying in 3) adapted to
4) acclimatised 5) were used
26. 1) like commodity 2) hospitable 3) comfortable
4) ordinarily 5) discomfited
27. 1) out of 2) flew under 3) away from
4) came down 5) returned back
28. 1) with 2) to 3) for
4) of 5) buy
29. 1) yet to fly 2) had been flowing
3) flew 4) was moving
5) had not moved
30. 1) to training 2) who could 3) to get
4) enable the 5) for flying the

Test-II: Numerical Ability

31. Jar A has $3x$ litres of milk and Jar B has x litres of water. 25 litres each of milk and water was taken out from the respective jars and the resultant quantities from both the jars were mixed in Jar C. If the ratio of milk to water in Jar C was 19 : 3, what was the initial quantity of milk in Jar A? (in litres)
- 1) 90
 - 2) 60
 - 3) 180
 - 4) 150
 - 5) Other than those given as options

Directions (Q. 32-36): What will come in place of question mark (?) in the given number series?

32. 4 11 24 44 72 ?
- 1) 121
 - 2) 113
 - 3) 109
 - 4) 118
 - 5) 105
33. 13 21 37 69 ? 261
- 1) 133
 - 2) 125
 - 3) 141
 - 4) 139
 - 5) Other than the given as options

34. 17 25 15 27 13 ?
 1) 29 2) 31 3) 27 4) 35 5) 33
35. 11 12 20 29 93 ?
 1) 104 2) 116 3) 108 4) 120 5) 118
36. 11 12 26 81 328 ?
 1) 1720 2) 1645 3) 1540 4) 1625 5) 1575
37. Out of their respective monthly salaries, Soma spends $\frac{7}{8}$ and Tina spends $\frac{4}{5}$ on various expenses. The salary remaining with Tina after the expenses is ₹2000 more than that of Soma. If Tina's monthly salary is ₹4000 more than that of Soma, then what is Soma's monthly salary?
 1) ₹18000 2) ₹24000 3) ₹32000
 4) ₹20000 5) ₹16000
38. A and B started a business with respective investments of ₹25000 and ₹15000. The number of months for which B invested was 4 less than the number of months for which A had invested. If the ratio of the total profit to A's share in profit was 7 : 5, then what was the number of months for which B invested in the business?
 1) 5 2) 6 3) 7 4) 7 5) 8
39. When the breadth of a rectangle is reduced by 4 cm (keeping the length constant), its area reduces by 72 cm² and when the length is reduced by 4 cm (keeping the breadth constant) its area reduces by 64 cm². What is the perimeter of the rectangle? (in cm)
 1) 68 2) 72 3) 66
 4) 76 5) 82
40. Car M takes 5 hours to travel from Point A to B. It would have taken 6 hours, if the same car had travelled the same distance at a speed which was 15 kmph less than its original speed. What is the distance between points A and B?
 1) 350 km 2) 300 km 3) 450 km 4) 420 km 5) 400 km
41. When 24 men work for only 3 days, $\frac{5}{6}$ of the work remains unfinished. How much work will remain unfinished if 27 men work for only 2 days?
 1) $\frac{7}{8}$ 2) $\frac{9}{12}$ 3) $\frac{9}{10}$ 4) $\frac{5}{6}$ 5) $\frac{3}{4}$
42. The compound interest (compounded annually) on ₹8200 for 2 years at R% pa is ₹1722. Had the rate of interest been (R + 10)% what would have been the interest on the same sum of money for the same time (2 years)?
 1) ₹3616 2) ₹3484 3) ₹3608
 4) ₹3712 5) ₹3552
43. Sam invested a certain sum in scheme A for 5 years and in scheme B for 3 years, a sum which was double of that invested in scheme A. Both the schemes offer simple interest at the rate of 8% pa. The difference

between the amounts received from both the schemes was ₹12960. How much did Sam invest in scheme A?

- 1) ₹18000 2) ₹12000 3) ₹14000
 4) ₹15000 5) ₹16000
44. The average of 10 numbers is 21.8. The average of the last four numbers is 15. If the average of the first five numbers is 23, then what is the value of the sixth number?
 1) 32 2) 43 3) 48
 4) 38 5) 42

Directions (Q. 45-54): What will come in place of question mark (?) in the given questions?

45. $\left(4\frac{2}{3} + 3\frac{4}{9} + 6\frac{5}{9}\right) \div ? = 12$
 1) $2\frac{2}{9}$ 2) $2\frac{4}{9}$ 3) $1\frac{2}{9}$ 4) $1\frac{4}{9}$ 5) $1\frac{8}{9}$
46. $\sqrt{2^?} = (8^2 \times 5^2) + (200\sqrt{2})$
 1) 6 2) 4 3) 5 4) 8 5) 7
47. $(0.6)^2 \times 5 = ? - 348 \div 24$
 1) 16.3 2) 13.9 3) 15.2 4) 17.2 5) 14.3
48. $8\sqrt{8} \times 8^3 \div 8^{\frac{5}{2}} = 2^?$
 1) 24 2) 12 3) 18 4) 21 5) 7
49. ? of 420 + $486 \div 3 = (8)^?$
 1) $\frac{5}{7}$ 2) $\frac{6}{7}$ 3) $\frac{5}{6}$ 4) $\frac{4}{5}$ 5) $\frac{3}{4}$
50. $\sqrt{?} \div \sqrt{0.16} = 130$
 1) 2916 2) 1936 3) 3136 4) 2304 5) 2704
51. ?% of $(584.4 - 244.2) = (9)^2 + 21$
 1) 40 2) 45 3) 30 4) 60 5) 50
52. $\sqrt{625} \div 5 + ? = 18.9$
 1) 10.9 2) 13.9 3) 12.9 4) 11.9 5) 14.9
53. $210 - 1380 \div 11.5 = ? \times 45$
 1) 3 2) 4 3) 2 4) 1.5 5) 2.5
54. $(1.6)^2 \div (0.8)^2 = [(2.4)^2 \div (0.4)^2] - ?$
 1) 24 2) 32 3) 40 4) 36 5) 28

55. The total price of 6 shirts and 5 trousers is ₹3880 and the total price of 3 shirts and 2 trousers is ₹1750. What is the total price of 3 trousers?

- 1) ₹1320 2) ₹1080 3) ₹1110
4) ₹1140 5) ₹1260

56. The present age of B is more than twice A's present age by 4 years. The ratio of A's age 6 years hence to B's age 2 years hence will be 4 : 7. What is C's present age if C is 2 years older than B? (in years)

- 1) 42 2) 20 3) 36 4) 40 5) 32

57. A retailer bought a luxury pen after getting a discount of 30% on the marked price. He sold the luxury pen to a customer for ₹4536 and earned a profit of 20% on his cost price. What was the initial marked price of the luxury pen?

- 1) ₹6200 2) ₹5800 3) ₹5600
4) ₹5400

5) Other than those given as options

Directions (Q. 58-62): Study the table and answer the given questions.

No. of persons who visited different Museums on different days

Day → Museum ↓	Monday	Tuesday	Wednesday	Thursday	Friday
M	112	121	85	109	100
N	160	115	95	112	116
O	141	154	128	79	178
P	75	125	145	122	140
Q	100	150	167	80	85

58. The number of visitors in Museum P increased by 5% from Friday to Saturday and that in museum Q decreased by 40% from Friday to Saturday. What was the total number of visitors in museums P and Q together on Saturday?

- 1) 194 2) 188 3) 198 4) 204 5) 186

59. The number of visitors in Museum N decreased by what per cent from Monday to Thursday?

- 1) 40 2) 30 3) 45 4) 25 5) 35

60. What is the difference between the total number of visitors in museums M and N together on Tuesday and that in museums P and Q together on Wednesday?

- 1) 78 2) 72 3) 68 4) 84 5) 76

61. What is the ratio of the total number of visitors in museums N and P together on Tuesday to that in museums M and Q together on Wednesday?

- 1) 20 : 23 2) 20 : 21 3) 13 : 16 4) 11 : 14 5) 15 : 16

62. What is the average number of visitors in Museum O on Monday, Wednesday and Thursday?

- 1) 112 2) 116 3) 114 4) 120 5) 118

63. A boat takes a total time of 11 hours and 15 minutes to travel a distance of 60 km upstream and 60 km downstream together. If the speed of the boat in still

water is 12 kmph, what is the speed of the current? (in kmph)

- 1) 9 2) 2 3) 4 4) 8 5) 16

64. The sum of the diameter and the circumference of circle A is 174m. If the radius of circle B is 7m less than the radius of circle A then what is the circumference of circle B? (in m)

- 1) 88 2) 132 3) 110 4) 96 5) 66

65. The population of Village A is 20% more than the population of Village B. The population of Village C is 40% more than the population of Village A. If the difference between the population of Village B and that of C is 1122, then what is the population of Village A?

- 1) 2100 2) 1660 3) 1980 4) 1960 5) 1920

Test-III: Reasoning Ability

Directions (Q. 66-70): In this question, two statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

66. **Statements:** Some plugs are tablets.
No tablet is a door.

Conclusions: I. Some plugs are definitely not doors.
II. All doors are plugs.

- 1) Either conclusion I or II follows.
2) Both conclusion I and II follow.
3) Neither conclusion I nor II follows.
4) Only conclusion II follows.
5) Only conclusion I follows.

67. **Statements:** All flowers are thorns.
Some flowers are leaves.

Conclusions: I. No leaf is a thorn.
II. Some thorns are leaves.

- 1) Either conclusion I or II follows.
2) Both conclusion I and II follow.
3) Neither conclusion I nor II follows.
4) Only conclusion II follows.
5) Only conclusion I follows.

68. **Statements:** No dog is a cat.
All cats are mats.

Conclusions: I. Some dogs are mats.
II. All dogs can never be mats.

- 1) Only conclusion II follows.
2) Only conclusion I follows.
3) Neither conclusion I nor II follows.
4) Either conclusion I or II follows.
5) Both conclusion I and II follow.

69. **Statements:** All balls are pencils.
All keys are balls.

Conclusions: I. At least some pencils are keys.

II. All pencils are balls.

- 1) Only conclusion I follows.
- 2) Only conclusion II follows.
- 3) Either conclusion I or II follows.
- 4) Neither conclusion I nor II follows.
- 5) Both conclusion I and II follow.

Statements: Some candles are matches.

Some matches are rockets.

Conclusions: I. At least some rockets are candles.

II. No rocket is a candle.

- 1) Either conclusion I or II follows.
- 2) Neither conclusion I nor II follows.
- 3) Both conclusion I and II follow.
- 4) Only conclusion II follows.
- 5) Only conclusion I follows.

Directions (Q. 71-75): Study the following information and answer the given questions.

Eight persons F, G, H, I, Q, R, S and T are sitting around a circular table facing the centre at equal distances between each other, but not necessarily in the same order. G sits on the immediate left of R. Only two persons sit between G and I. Q sits third to the left of H. H is an immediate neighbour of neither G nor I. S sits on the immediate right of F. T is an immediate neighbour of H.

71. Who are sitting exactly between G and I when counted from the right of G?
1) Q, T 2) R, Q 3) S, T 4) R, S 5) F, H
72. How many persons are sitting between S and Q when counted from the right of S?
1) None 2) Two 3) Three
4) One 5) More than three
73. What is H's position with respect to G?
1) Third to the left 2) Second to the left
3) Fourth to the left 4) Second to the right
5) Fourth to the right
74. Who is sitting on the immediate right of R?
1) T 2) Q 3) F 4) S 5) H

75. Which of the following is true regarding F?
1) F is an immediate neighbour of both S and T.
2) None of the given options is true
3) Only three persons sit between F and R.
4) F sits second to the right of H.
5) F sits on the immediate right of G.

Directions (Q. 76-77): Study the given information carefully to answer the given questions.

P is 8m east of Q. R is 15m south of Q. S is 6m west of R. T is 20m south of S. T is 9m west of U.

76. If X is 5m south of P and Z is 14m west of X, then what is the distance between Z and T?
1) 5m 2) 20m 3) 15m
4) 30m 5) 12m
77. In what direction is U with respect to R?
1) North 2) East 3) Southeast
4) Northwest 5) Northeast

Directions (Q. 78-80): Study the following information carefully and answer the questions given below:

W is mother of both M and L. L is married to D. D is sister-in-law of M. M is married to P. J is father of L. M is brother-in-law of K.

78. How is M related to J?
1) Son 2) Father-in-law
3) Daughter-in-law 4) Son-in-law
5) Daughter
79. How is D related to W?
1) Can't be determined 2) Son-in-law
3) Daughter 4) Daughter-in-law
5) Son
80. If K is son of X, then how is L related to P?
1) Sister 2) Sister-in-law
3) Mother 4) Brother-in-law
5) Aunt

Directions (Q. 81-85): In these questions, a relationship between different elements is shown in the statements. The statements are followed by two conclusions. 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 conclusion I and II are true.
81. **Statement:** $C < X \leq B > E < L < I$
Conclusions: I. $X > L$ II. $B > C$
82. **Statement:** $C < X \leq B > E < L < I$
Conclusions: I. $I > E$ II. $C < I$
83. **Statement:** $F \geq I \geq S \geq H \geq Y$
Conclusions: I. $H \leq F$ II. $Y \leq I$
84. **Statement:** $G \leq L \geq O \geq W \geq I < N$
Conclusions: I. $I < L$ II. $L = I$
85. **Statement:** $G \leq L \geq O \geq W \geq I < N$
Conclusions: I. $O > G$ II. $W < N$

Directions (Q. 86-90): Study the following information to answer the given questions.

Seven friends, viz Bharat, Kamal, Ashok, Ali, Harleen, Serena and Joel, have birthdays on one of the seven days of the same week starting from Monday and ending on Sunday but not necessarily in the same order. Joel's birthday is on one of the days before Wednesday. Only three persons have birthdays between those of Joel and Kamal. Only two persons have birthdays between those of Ashok and Harleen. Harleen's birthday is before Ashok's but not on Thursday. As many persons have birthdays between those of Ashok and Kamal as between those of Serena and Bharat. Serena's birthday is on one of the days before that of Ashok.

86. Harleen is related to Wednesday in a certain way based on the given arrangement. In the same way Bharat is related to Sunday. Which of the following days is Joel related to following the same pattern?

- 1) Tuesday 2) Thursday 3) Monday
4) Friday 5) Saturday

87. On which of the following days is Bharat's birthday?

- 1) Friday 2) Tuesday 3) Wednesday
4) Sunday 5) Saturday

88. Whose birthday is on Sunday?

- 1) Kamal 2) Ashok 3) Ali
4) Bharat 5) Cannot be determined

89. Whose birthday is on the day immediately after Joel's birthday?

- 1) Ali 2) Serena 3) Bharat
4) Harleen 5) Ashok

90. How many persons have their birthdays before Harleen?

- 1) Four 2) None 3) Two 4) Three 5) One

Directions (Q. 91-95): Study the given information carefully to answer the given questions.

Eight persons M, N, O, P, Q, R, S and T are sitting in a straight line facing north at equal distances between each other, but not necessarily in the same order.

R sits second from one of the extreme ends of the line. N sits fourth to the left of P. Neither N nor P is an immediate neighbour of R. Only one person sits between N and S. As many persons sit between N and M as between M and R. T sits second to the right of O. T does not sit at an extreme end of the line.

91. Which of the following statements is true as per the given arrangement?

- 1) N sits at an extreme end of the line.
2) Only two persons sit between Q and M.
3) T sits on the immediate left of P.
4) Q sits third to the left of O.
5) None of the given statements is true

92. How many persons sit between M and T?

- 1) Two 2) One 3) None
4) Three 5) More than three

93. Who sits second to the right of Q?

- 1) S 2) M
3) N 4) P

5) No one as Q sits at an extreme end of the line

94. If all the persons are made to sit in alphabetical order from right to left, the positions of how many persons will remain unchanged?

- 1) One 2) Two
3) More than three 4) Three
5) None

95. As per the given arrangement, O : R in the same way as N : Q. Following the same pattern, P : ?

- 1) N 2) T 3) M 4) O 5) S

Directions (Q. 96-100): Study the following arrangement of letters, numbers and symbols carefully to answer the given questions.

9 Ω 1 & LY © EK SR 8 % WH 7 \$ 5 UG 4 # 6 2 NA
3 @ Z * D

96. As per the given arrangement, four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to the group?

- 1) W\$H 2) %H8 3) U#G 4) 3*@ 5) IY&

97. How many letters are there between the eighth element from the right and the seventh letter from the left end of the given arrangement?

- 1) Nine 2) Six 3) Eight 4) Five 5) Ten

98. Which of the following will be ninth to the right of the sixteenth element from the right end of the given arrangement?

- 1) # 2) 3 3) Z 4) 6 5) N

99. What will be the sum of all the numbers between the tenth element from the left end and the tenth element from the right end of the given arrangement?

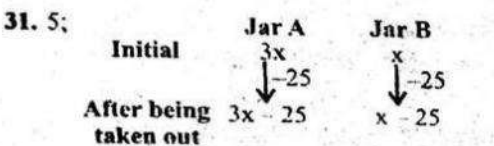
- 1) 28 2) 21 3) 24 4) 18 5) 19

100. If all the letters from the given arrangement are deleted, then which of the following will represent the fifth element to the right of '4' and the fourth element to the left of '%' respectively?

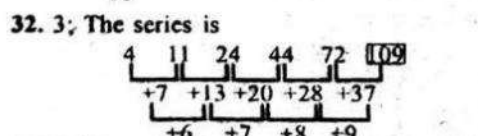
- 1) 3, & 2) *, @ 3) @, © 4) 3, 1 5) @, 1

Answers

1. 3 2. 2 3. 3 4. 4 5. 2
 6. 5 7. 5 8. 1
- (9-13): CEBDA
 9. 5 10. 1 11. 4 12. 3 13. 2
 14. 3; Replace 'solved' with 'solve'
 15. 1; Replace 'stood' with 'standing'
 16. 4; Replace 'each other' with 'one another'
 17. 4; Replace 'asked' with 'asking'
 18. 2; Replace 'of' with 'by'
 19. 1; The correct spelling is 'region'
 20. 3; The appropriate word should be 'life'
 21. 1; The appropriate word should be 'was'
 22. 3; The correct spelling is 'sold'
 23. 2; The appropriate word should be 'rise'
 24. 2 25. 5 26. 3 27. 4 28. 1
 29. 5 30. 3



Now, $\frac{3x-25}{x-25} = \frac{19}{3}$
 or, $19x - 25 \times 19 = 9x - 25 \times 3$
 or, $10x = 475 - 75 = 400$
 $\therefore x = 40$ litres
 Hence the quantity of milk in Jar A was $3x = 3 \times 40 = 120$ litres
Quicker Approach:
 Initial ratio of milk and water = $3 : 1 \times (19 - 3 = 16)$... (i)
 Final ratio of milk and water = $19 : 3 \times (3 - 1 = 2)$... (ii)
 Now, new initial M : W = $48 \downarrow -10$ $16 \downarrow -10$
 New final ratio M : W = $38 \downarrow -10$ $6 \downarrow -10$
 $\therefore 10 = 25$ litres
 $\therefore 48 = \frac{25}{10} \times 48 = 120$ litres



33. 1; The series is +8, +16, +32, +64, +128, ...
 ie $13 + 8 = 21$, $21 + 16 = 37$, $37 + 32 = 69$,
 $69 + 64 = 133$, $133 + 128 = 261$
 34. 1; The series is +8, -10, +12, -14, +16, ...
 ie $17 + 8 = 25$, $25 - 10 = 15$, $15 + 12 = 27$,
 $27 - 14 = 13$,
 $\therefore ? = 13 + 16 = 29$
 35. 5; The series is $+1^2, +2^2, +3^2, +4^2, +5^2, +6^2, \dots$
 ie $11 + 1 = 12$, $12 + 8 = 20$, $20 + 9 = 29$,
 $29 + 16 = 45$, ...
 $\therefore ? = 45 + 25 = 70$
 36. 2; The series is $\times 1 + 1, \times 2 + 2, \times 3 + 3, \times 4 + 4, \times 5 + 5, \dots$
 ie $11 \times 1 + 1 = 12$, $12 \times 2 + 2 = 26$,
 $26 \times 3 + 3 = 81$, $81 \times 4 + 4 = 328$, ...
 $\therefore ? = 328 \times 5 + 5 = 1640 + 5 = 1645$

37. 5; Let the monthly salary of Soma be y and that of Tina be x .
 Then,

	Soma	Tina
Amount spent	$\frac{7y}{8}$	$\frac{4x}{5}$
Remaining amount	$\frac{y}{8}$	$\frac{x}{5}$

Now, according to the question,
 $\frac{y}{8} + 2000 = \frac{x}{5}$... (i)
 Again, $y + 4000 = x$... (ii)
 Solving (i) and (ii), we get
 $\frac{y}{8} + 2000 = \frac{y+4000}{5}$
 or, $\frac{y}{8} + 2000 = \frac{y}{5} + 800$
 or, $\frac{y}{5} - \frac{y}{8} = 1200$
 or, $\frac{8y - 5y}{40} = 1200$
 or, $3y = 1200 \times 40$
 $\therefore y = \frac{1200 \times 40}{3} = 400 \times 40 = ₹16000$

Quicker (Logical Approach):

	Salary	Exp	Remaining
Soma	8	4	1
Tina	5	4	1

Since Tina's salary amount as well as remaining amount is more than those of Soma, we change the ratio terms of Tina by multiplying by 2. Now new ratio terms are like:

	Salary	Exp	Remaining
Soma	8	7	1
Tina	10	8	2

 We see that the difference in salary = $10 - 8 = 2 = 4000$
 and difference in remaining = $2 - 1 = 2000$
 satisfy the conditions given in question.
 So, Soma's salary = $8 \times 2000 = ₹16000$.

38. 5;

	A	B
Investment amount	25000	15000
	5	3

Let they invest for x months $(x-4)$ months
 Now, $\frac{5x + 3(x-4)}{5x} = \frac{7}{5}$
 or, $\frac{5x - 3x - 12}{x} = \frac{7}{1}$
 or, $8x - 12 = 7x$
 $\therefore x = 12$ months.
 Hence B invested for $(x - 4 = 8)$ months
 $\Rightarrow 12 - 4 = 8$ months

Quicker Approach:
 B's investment is $\frac{3}{5}$ times of A's investment.
 Let B's time of investment be x times of A's time of investment.
 Then, B's profit is $\frac{3}{5}x$ times of A's profit.
 From the question A's profit : B's profit = $5 : (7 - 5) = 5 : 2$

\Rightarrow B's profit is $\frac{2}{5}$ of A's profit.

So, $\frac{3}{5}x = \frac{2}{5} \therefore x = \frac{2}{3}$
 \Rightarrow B's time of investment is $\frac{2}{3}$ times of A's time of investment.

$\Rightarrow 3 - 2 = 1 = 4$ months (given in question)
 $\therefore 2 = 8$ months
 39. 1; Let the length of the rectangle be L and breadth be B .
 Then, $L \times (B - 4) = LB - 72$
 or, $LB - 4L = LB - 72$
 or, $4L = 72$
 $\therefore L = 18$
 Again, $(L - 4)B = LB - 64$
 or, $LB - 4B = LB - 64$
 or, $4B = 64$
 $\therefore B = 16$
 \therefore Perimeter of the rectangle = $2(L + B) = 2(18 + 16) = 2 \times 34 = 68$ cm
 When breadth is reduced by 4 cm and area reduces by 72 cm² then it implies that length = $\frac{72}{4} = 18$ cm

Similarly, breadth = $\frac{64}{4} = 16$ cm
 So, perimeter = $2(18 + 16) = 68$ cm

40. 3; Let the distance be D km.
 Then, $\frac{D}{5} = \frac{D}{6} + 15$
 or, $\frac{D}{5} - \frac{D}{6} = 15$
 or, $\frac{6D - 5D}{30} = 15$
 $\therefore D = 15 \times 30 = 450$ km
Method II. $S_1 \times T_1 = S_2 \times T_2$
 $S_2 = (S_1 - 15)$ kmph
 Now, $S_1 \times 5 = (S_1 - 15) \times 6$
 $\Rightarrow 5S_1 = 6S_1 - 90$
 $\therefore S_1 = 90$ kmph
 \therefore Distance = $5 \times 90 = 450$ km

41. 1; $\frac{M_1 D_1}{W_1} = \frac{M_2 D_2}{W_2}$

Here $M_1 = 24$, $D_1 = 3$ days, $W_1 = 1 - \frac{5}{6}$
 $= \frac{1}{6}$ work finished
 $M_2 = 27$, $D_2 = 2$ days, $W_2 = ?$
 $\therefore W_2 = \frac{M_2 D_2 \times W_1}{M_1 D_1} = \frac{27 \times 2 \times \frac{1}{6}}{24 \times 3} = \frac{9}{24 \times 3}$

$= \frac{1}{8}$ work finished
 \therefore Unfinished work = $1 - \frac{1}{8} = \frac{7}{8}$
Quicker Approach:
 $24 \times 3 = 72$ man-days = $\frac{1}{6}$
 $\therefore 27 \times 2 = 54$ man-days = $\frac{1}{6} \times \frac{54}{72} = \frac{1}{8}$

∴ Remaining work = $1 - \frac{1}{8} = \frac{7}{8}$

42. 3; $A = P + CI = 8200 + 1722 = 9922$

∴ $A = P \left(1 + \frac{r}{100}\right)^n$

or, $\frac{A}{P} = \left(1 + \frac{r}{100}\right)^2 \Rightarrow \frac{9922}{8200} = \left(1 + \frac{r}{100}\right)^2$

or, $\frac{121}{100} = \left(1 + \frac{r}{100}\right)^2$ or, $\frac{11}{10} = 1 + \frac{r}{100}$

or, $1 + \frac{10}{100} = 1 + \frac{r}{100}$

∴ $r = 10\%$
Now, Rate = $(R + 10)\% = 20\%$
For 2 years CI

Step I. $20 + 20 + \frac{20 \times 20}{100} = 40 + 4 = 44\%$

Step II. 44% of $8200 = 44 \times 82 = ₹3608$

43. 2;	Scheme A	Scheme B
Initial	P + SI	2P + SI
	$P + \frac{P \times 8 \times 5}{100}$	$2P + \frac{2P \times 3 \times 8}{100}$

Now, $\frac{100 + 40P}{100} + \frac{200P + 48P}{100} = 12960$

or, $\frac{108P}{100} = 12960$

∴ $P = \frac{12960 \times 100}{108} = ₹12000$

44. 2; Value of the sixth number
= $(10 \times 21.8) - (4 \times 15 + 23 \times 5)$
= $218 - (60 + 115)$
= $218 - 175 = 43$

45. 3; $\left(4\frac{2}{3} + 3\frac{4}{9} + 6\frac{5}{9}\right) + ? = 12$

∴ $? = \left(\frac{14}{3} + \frac{31}{9} + \frac{59}{9}\right) + 12$

= $\frac{42 + 31 + 59}{9 \times 12} = \frac{132}{9 \times 12} = \frac{11}{9} = 1\frac{2}{9}$

46. 3; $\sqrt{2^?} = 8^2 \times 5^2 + 200\sqrt{2}$

= $\frac{64 \times 25}{200\sqrt{2}} = \frac{8}{\sqrt{2}} = \frac{8}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = 4\sqrt{2}$

= $\sqrt{2^5}$
∴ $? = 5$

47. 1; $(0.6)^2 \times 5 = ? - 348 + 24$

or, $0.36 \times 5 = ? - 14.5$

or, $? = 14.5 + 1.8 = 16.3$

48. 4; $8\sqrt{8} \times 8^3 + 8^{-\frac{5}{2}} = 2^?$

or, $8^{1 + \frac{1}{2} + 3 + \frac{5}{2}} = 2^?$

or, $8^{\frac{2+1+6+5}{2}} = 2^?$

or, $8^? = 2^?$
or, $2^{3 \cdot ?} = 2^?$

or, $2^? = 2^{2^?}$
∴ $? = 21$

49. 6; ? of $420 + 486 \div 3 = (8)^3$
or, $? \times 420 + 162 = 512$

or, $? = \frac{512 - 162}{420} = \frac{350}{420} = \frac{5}{6}$

50. 5; $\sqrt{?} \div \sqrt{0.16} = 130$

or, $\sqrt{?} = 130 \times 0.4 = 52$

∴ $? = 52 \times 52 = 2704$

51. 3; ?% of $(584.2 - 244.2) = 9^2 + 21$

or, $\frac{? \times 340}{100} = 81 + 21 = 102$

∴ $? = \frac{102 \times 100}{340} = 30$

52. 2; $\sqrt{625} + 5 + ? = 18.9$

or, $25 + 5 + ? = 18.9$

or, $? = 18.9 - 5 = 13.9$

53. 3; $210 - 1380 \div 11.5 = ? \times 45$

or, $210 - 120 = ? \times 45$

or, $? \times 45 = 90$

∴ $? = \frac{90}{45} = 2$

54. 2; $(1.6)^2 \div (0.8)^2 = (2.4)^2 \div (0.4)^2 - ?$

or, $\frac{1.6 \times 1.6}{0.8 \times 0.8} = \frac{2.4 \times 2.4}{0.4 \times 0.4} - ?$

or, $4 = 36 - ?$

or, $? = 36 - 4 = 32$

Method II.

$(1.6)^2 \div (0.8)^2 = (2.4)^2 \div (0.4)^2 - ?$

or, $? = 6^2 - 2^2 = 36 - 4 = 32$

55. 3; 6 Shirts + 5T = 3880 ... (i)

3 Shirts + 2T = 1750 ... (ii)

Solving (i) - (ii) $\times 2$, we get

6 Shirts + 5T - 6 Shirts + 4T = 3880 - 1750 $\times 2 = 3880 - 3500$

∴ T = 380

∴ 3 Trousers cost = $3 \times 380 = ₹1140$

56. 1;	A	B
Present age	x	2x + 4
Now,	$\downarrow + 6$	$\downarrow + 2$
	x + 6	2x + 4 + 2 = 2x + 6

Again, according to the question,

$\frac{x + 6}{2x + 6} = \frac{4}{7}$

or, $8x + 24 = 7x + 42$

or, $x = 42 - 24 = 18$

∴ C's present age = $2x + 4 + 2 = 2 \times 18 + 6 = 42$ years

57. 4; Cost price of luxury pen = $4536 \times \frac{100}{120}$

= $4536 \times \frac{5}{6} = 756 \times 5 = 3780$

∴ Marked price = $3780 \times \frac{100}{70} = 54 \times 100$

= ₹5400

58. 3; Total number of visitors in museum P and Q together on Saturday

= $140 \times \frac{105}{100} + \frac{60}{100} \times 85 = 140 \times \frac{21}{20} + \frac{3}{5} \times 85$
= $147 + 51 = 198$

59. 2; Req'd % decrease

= $\frac{160 - 112}{160} \times 100 = 48 \times \frac{5}{8} = 30\%$

60. 5; Req'd difference = $(P + Q) - (M + N)$

Tuesday = $(145 + 167) - (121 + 115)$
= $312 - 236 = 76$

61. 2; Req'd ratio

$\frac{(N + P) \text{ Tuesday}}{(M + Q) \text{ Wednesday}} = \frac{115 + 125}{85 + 167}$

= $\frac{240}{252} = \frac{120}{126} = \frac{20}{21} = 20 : 21$

62. 2; Req'd average

= $\frac{141 + 128 + 79}{3} = \frac{348}{3} = 116$

63. 3; Let the speed of the current be x kmph.

Then, downstream speed = $12 + x$
Upstream speed = $12 - x$

Now, $\frac{60}{12 + x} + \frac{60}{12 - x} = 11 + \frac{15}{60} = 11\frac{1}{4}$

= $\frac{45}{4}$

or, $\frac{60 \times 12 - 60x + 60 \times 12 + 60x}{144 - x^2} = \frac{45}{4}$

or, $\frac{1440}{144 - x^2} = \frac{45}{4}$

or, $\frac{32}{144 - x^2} = \frac{1}{4}$

or, $128 = 144 - x^2$

or, $x^2 = 144 - 128 = 16$

∴ $x = 4$ kmph

64. 1; Circumference of the circle A = $2\pi r$

And diameter = $2r$

Thus, $2r + 2\pi r = 174$

or, $2r(1 + \pi) = 174$

or, $r(1 + \pi) = 87$

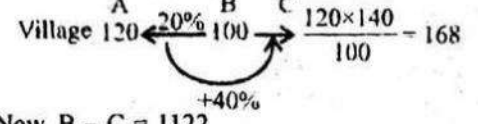
∴ $r = \frac{87}{1 + \frac{22}{7}} = \frac{87 \times 7}{29} = 21$ cm

∴ Radius of the circle B = $21 - 7 = 14$ cm

∴ Circumference of the circle B

= $2 \times \frac{22}{7} \times 14 = 88$ cm

65. 3;



Now, $B - C = 1122$

or, $168 - 100 = 1122$

or, $68 = 1122$

∴ $120 = \frac{1122}{68} \times 120 = 1980$

66. 5; Some plugs are tablets (I) + No tablet is a door (E) = I + E = Some plugs are not doors (O). Hence conclusion I follows. But conclusion II does not follow.

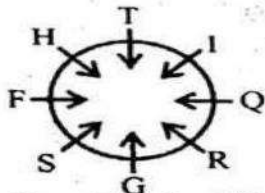
67. 4; Some flowers are leaves (I) → conversion → Some leaves are flowers (I) + All flowers are thorns (A) = I + A = I = Some leaves are thorns (I) → conversion → Some thorns are leaves (I). Hence conclusion II follows. But conclusion I does not follow.

68. 3; No dog is a cat (E) + All cats are mats (A) = E + A = O* = Some mats are not dogs (O*). Hence conclusion II and conclusion I do not follow.

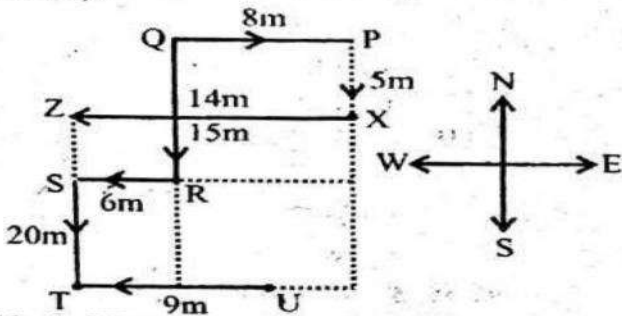
69. 1; All keys are balls (A) + All balls are pencils (A) = A + A = A = All keys are pencils (A) → conversion → Some pencils are keys (I). Hence conclusion I follows. But conclusion II does not follow from first statement.

70. 1; Some candles are matches (I) + Some matches are rockets (I) = I + I = No conclusion. But conclusion I and II make a complementary pair (I-E). Hence either conclusion I or II follows.

(71-75):



71. 2 72. 2 73. 1 74. 2 75. 2
(76-77):

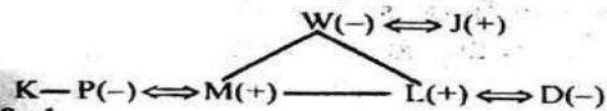


76. 4; ZT = (15 + 20 - 5) = 30m

77. 3

(78-80):

Family tree



78. 1

79. 4

80. 4

81. 2; Statement: $C < X \leq B > E < L < I$
Thus, we can't compare X and L. Hence conclusion I ($X > L$) is not true. Again, $C < B$ or $B > C$ is true. Hence conclusion II is true.

82. 1; Given statement:

$C < X \leq B > E < L < I$

Thus, $E < I$ or $I > E$ is true. Again, we can't compare C and I. Hence II ($C < I$) is not true. So, only conclusion I is true.

83. 5; Given statement:

$F \geq I \geq S \geq H \geq Y$

Thus, $F \geq H$ or $H \leq F$ is true.

Again, $I \geq Y$ or $Y \leq I$ is true.

So, both conclusion I and II are true.

84. 3; Given statement:

$G \leq L \geq O \geq W \geq I < N$

Thus, $L \geq I$ or $I \leq L$ is true.

It means either $I < L$ or $L = I$ is true.

Thus, Conclusion I and II make a complementary pair.

Hence either conclusion I or II is true.

85. 4; Given statement:

$G \leq L \geq O \geq W \geq I < N$

Thus, we can't compare G and O or W and N. Hence neither conclusion I ($O > G$) nor II ($W < N$) is true.

(86-90):

Day	Person
Monday	Harleen
Tuesday	Joel
Wednesday	Serena
Thursday	Ashok
Friday	Bharat
Saturday	Kamal
Sunday	Ali

86. 2

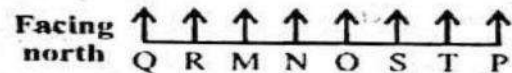
87. 1

88. 3

89. 2

90. 2

(91-95):



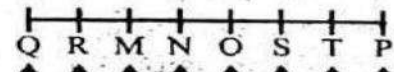
91. 3

92. 4

93. 2

94. 5; Alphabetical order from right to left becomes new arrangement.

Original position

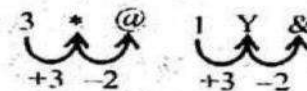
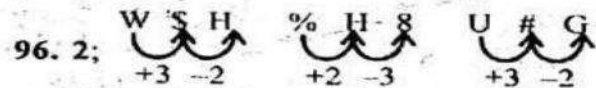


After changing



95. 4

(96-100):



97. 3; Eighth from the right is 2.

Seventh from the left is ©.

Hence there are eight letters between 2 and ©, viz E, K, S, R, W, H, U and G.

98. 5; Nine to the right of the sixteenth from the right = (16 - 9) = 7th from the right end, ie N.

99. 3; 10th element from the left = S

10th element from the right = #

Now, the number between S and # are 8, 7, 5 and 4.

Their sum = 8 + 7 + 5 + 4 = 24

100. 5; New arrangement becomes

9Ω1&©8%7\$54#623@*

Fifth element to the right of '4' is @ and fourth element to the left of '%' is 1. So @, 1.