Previous Paper : LIC AAO Prelims

ENGLISH LAGUAGE

Directions (1-6): Each of the following sentences has a blank indicating that something has been omitted. Choose the word for the blank which fits the meaning of the sentence as a whole.

1. The software has helped the company become the world's _____ producer of motor vehicle engines.
   (1) alone   (2) tallest   (3) better   (4) leading (5) shortest

2. The threat of unemployment after the factory's closure has been _____on the horizon.
   (1) edged   (2) looming (3) chasing (4) saw   (5) producing

3. The company plans to improve its marketing program me using ideas _____ by customers.
   (1) prepare   (2) originate (3) given   (4) making (5) emerged

4. Growing _____ to the construction of wind turbines has led researchers to look for other options.
   (1) change   (2) supports (3) limit   (4) shortage (5) resistance

5. The product range is being overhauled to _____ low cost alternatives for the nonperishable products.
   (1) fixing
   (2) reinforced
   (3) includes
   (4) offered
   (5) introduce

6. The managers deliberately ___ the real situation from investigators.
   (1) performed
   (2) obscured
   (3) orchestrate
   (4) hidden

(5) created

Directions (6-12): In each question, a sentence has been divided into four parts denoted by (A), (B), (C), and (D). Read the sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. Select that part as the answer. If there is no error, the answer is 'No error'

7. There are many examples (A)/ from history (B) / that proof fewer working hours (C) / can boost productivity (D).
   (1) (D)   (2) (A)   (3) (B)   (4) No error   (5) (C)

8. The survey found that (A)/ pay was the biggest (B)/ motivator for those seeks (C)/ jobs in financial services (D).
   (1) (C)   (2) (B)   (3) No error (4) (A)   (5) (D)

9. A report of our (A)/ country environment have painted (B)/ a bleak picture of (C)/ catastrophic biodiversity loss (D).
   (1) (D)   (2) (B)   (3) No error (4) (A)   (5) (C)

10. The government is trying (A)/ to restoring public confidence (B)/ in its management (C)/ of the economy (D).
    (1) (A)   (2) (D)   (3) (B)   (4) No error   (5) (C)

11. The company will need to (A)/ ensure that automation (B)/ is an opportunity and (C)/ not a threat for workers (D).
    (1) (D)   (2) No error (3) (B)   (4) (C)   (5) (A)

12. Research shows that a (A)/ lack of diversity (B)/ narrows the talent pool and (C)/ obstructs social mobility (D).
    (1) (A)   (2) (D)   (3) (C)   (4) No error   (5) (B)

Directions (13-21): Read the following passage and answer the given questions. Certain words/phrases are given in **bold** to help you locate these while answering some of the questions.

Radical innovations have previously transformed the way humans live together. The invention of technologies including the telephone and the internet revolutionized how we store and communicate information. As consequential as these innovations were, however, they did not change the fundamental aspects of human behaviour that

comprise what I call the "social suite" a crucial set of capacities we have evolved over hundreds of thousands of years, including love, friendship, cooperation and teaching. But adding artificial intelligence (AI), to our midst could be much more disruptive. In one experiment, small groups of people were directed to work with humanoid robots to lay railroad tracks in a virtual world. The robot was programmed to made occasional errors-and to acknowledge them. "Sorry, guys, I made the mistake this round". As it turned out, this clumsy, confessional robot helped the groups perform better-by improving communication among the humans. They became more relaxed and conversational, consoling group members who stumbled and laughing together more often. Compared with the control groups whose robot made only blend statements, the groups with a confessional robot were better able to collaborate.

But, in another experiment, researchers gave several thousand subjects money to use over multiple rounds of an online game. In each round, subjects were told that they could either keep their money or donate some or all of it to their neighbours. If they made a donation, researchers would match it, doubling the money their neighbours received. Early in the game, two-thirds of players acted altruistically. After all, they realized that being generous to their neighbours in one round might **prompt** their neighbours to be generous to them in the next, establishing a norm of reciprocity. From a selfish and short-term point of view, however, the best outcome would be to keep your **own** money and receive money from your neighbours. In this experiment, researchers found that by adding just a few bots (posing as human players) that behaved in a selfish, free-riding way, they could drive the group to behave similarly. Eventually, the human players ceased cooperating altogether. The bots thus converted a group of generous people into selfish individuals. Cooperation is a key feature of our species, essential for social life. And trust and generosity are crucial in differentiating successful groups from unsuccessful ones. When this behaviour breaks down, however, the very notion of a public good disappears. **Everyone suffers**.

13. Which of the following is the opposite of the word RADICAL as used in the passage?
    (1) insignificant
    (2) cutting-edge
    (3) pacifist
    (4) lawful
    (5) revolutionary

14. Which of the following CANREPLACE the word OWN as used in the passage both grammatically and contextually?

(1) None of the given options
(2) inherit
(3) control
(4) hold
(5) confess

15. Which of the following can replace the word PROMPT as used in the passage both grammatically and contextually?
(1) quick
(2) brisk
(3) punctual
(4) efficient
(5) spur

16. According to the passage, which of the following can be said about 'social suite'?
(A) AI can manipulate these
(B) These are crucial for the survival of the human species as a whole.
(C) This is behavior that AI can never replicate and for which humans will always have supremacy.
(1) Only (A) and (B)
(2) All (A), (B) and (C)
(3) Only (C)
(4) Only (A)
(5) None of these

17. Why has the author mentioned two experiments in the passage?
(1) To protest against the unnecessary curbs being put on AI.
(2) To illustrate how AI can both positively and negatively mould our social behaviour.
(3) To point out that much of the information available to the public about AI is fake.
(4) To show how AI can never replace human interaction.
(5) To draw attention to the fact that humans are not embracing technology as much as they should.

18. Which of the following is true in the context of the passage?
(1) Human beings need to deeply contemplate the impact of AI on society.

(2) The author is strongly in favour of AI.

(3) Robots are not good at games of chance (gambling) since they cannot lie.

(4) None of the given options is true

(5) Robots can never replace human beings.

19. Which of the following is/are (a) concern(s) discussed in the passage?

(1) None of those given as options

(2) The internet has had a debilitating impact on society.

(3) CO-operative behaviour can never be programmed.

(4) Human beings by nature are competitive not collaborative and thus cannot be changed.

(5) Human beings are not leveraging the internet adequately.

20. Which of the following best describes the author's view of the internet?

(A) Transformative for society.

(B) Not as unsettling for society as AI.

(C) Changed the way information is stored and trans mitted

(1) Only (C)

(2) Only (A) and (B)

(3) Only (B)

(4) Only (A)

(5) All (A), (B) and (C)

21. Why has the author used the words' 'Everyone suffers'?

(A) To convey that an unwillingness to sacrifice for the common good adversely impacts society as a whole not just those being selfish.

(B) To explain how a lack of foresight on the part of political leaders has resulted in technology not being widely harassed for the good of all.

(C) To indicate the gravity of allowing self-interest to prevail over co-operation.

(1) Only (B) and (C)

(2) None of (A), (B) and (C)

(3) Only (C)

(4) Only (A) and (C)

(5) Only (B)

Directions (22-25): Which of the phrases given below each sentence should replace the word/phrase given in the **bold** in the sentence to make it grammatically correct? If

the sentence is correct as it is given and no correction is required, select 'No correction required' as the answer.

22. The election commission has worked hard to ensure that everyone **got a chances** to vote.
(1) had got chance.
(2) gets a chance
(3) getting chance
(4) gets chances
(5) No correction required

23. Some telecom companies are **banned from** working on critical infrastructure in our country.
(1) No correction required
(2) barred with
(3) forbids to
(4) asked not to
(5) prohibit to

24. The one **additional benefits** of floating solar panels is that the water cools the electric wiring.
(1) No correction required
(2) addition in benefit
(3) adding to
(4) add to benefits
(5) added benefit

25. Almost two-third of our country's rare ecosystems **are threatening** of collapse.
(1) are a threat
(2) No correction required
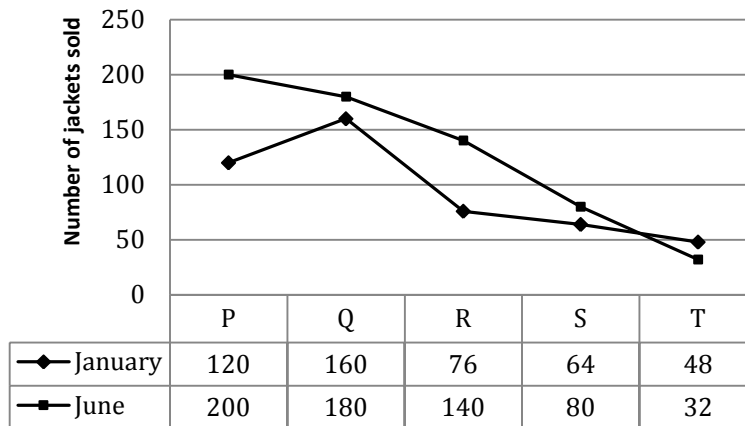(3) are under threat
(4) threats of
(5) threatening to

Directions (26-30): 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) But despite this, many people do not acquire the right travel insurance, because they are simply clicking on a product, and buy it without understanding what they are buying.

(B) These horror stories are the result of the price of travel insurance being so cheap that it makes people put less time into researching what they are buying. Moreover the low cost has resulted in travel insurance not often being sold through brokers.

(C) They are the ultimate customer influencer the ultimate customer business they reinvent themselves to make sure they stay relevant, and then continue to reinvent.

(D) When it comes to travel insurance, it's never been easier to be a customer as one can simply click and buy insurance when purchasing the flight ticket.

(E) Because of this, horror stories emerge in the news from people on holiday who thought they had the right cover but then ended up stuck in a foreign country or with huge medical bills, because they didn't understand the fine print.

(F) However, according to the experts, brokers will always be relevant and should be consulted because they know more about customers' needs and aligning these with the right policy than anyone else.

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

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

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

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

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

QUANTITATIVE APTITUDE

Directions (31-35): Refer to the graph and answer the given questions.

The following graph refers to the number of jackets sold by various shops (P, Q, R, S and T) in two different months (January and June)

	P	Q	R	S	T
January	120	160	76	64	48
June	200	180	140	80	32

31. What is the respective ratio between the number of jackets sold by shop P in January and that sold by shop R in June?
    (1) 4 : 9   (2) 5 : 9   (3) 6 : 7   (4) 4 : 7   (5) 5 : 8

32. Total number of jackets sold by shops S and T. together in June, is what per cent of the number of Jackets sold by shop P in January?
    (1) 50   (2) 72   (3) 48   (4) 56   (5) 93

33. What is the difference between the total number of jackets sold by shop P in January and June together and the total number of Jackets sold by shop Q in the same months together?
    (1) 40   (2) 20   (3) 50   (4) 80   (5) 60

34. The number of jackets sold by shop Q in August was 25% less than that sold in June and that sold in December was 80% more than that sold by the same shop in August, what was the number of jackets sold by shop Q in December?
    (1) 208   (2) 243   (3) 232   (4) 216   (5) 218

35. What is the average number of jackets sold by shops Q, R and S in January?
    (1) 128   (2) 142   (3) 132   (4) 100   (5) 148

36. The difference between the downstream speed and the upstream speed, of a boat is 10 kmph. If the boat can cover 70km downstream in 3 hours 30 minutes, what in the speed of the boat in still water? (in kmph)
(1) 15   (2) 20   (3) 25   (4) 10   (5) 18

37. The respective ratio between Jia's age 7 years hence and her father's age 4 years hence, will be 3 : 8. The sum of Jia's age 3 years ago and her father's age at that time was 38 years. What is jia's present age?
(1) 16 years
(2) 8 years
(3) 12 years
(4) 13 years
(5) 19 years

Directions (38-41): Each question consists of a question and two statements I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and choose the appropriate option.

(1) The data in statement I alone are sufficient to answer the question while the data in statement II alone are not sufficient to answer the question.
(2) The data in statement II alone are sufficient to answer the question while the data in statement I alone are not sufficient to answer the question.
(3) The data either in statement I alone or in statement II alone are sufficient to answer the question.
(4) The data in both the statements I and II together are not sufficient to answer the question.
(5) The data in both the statements I and II together are necessary to answer the question.

38. What is the cost price of the table which is marked at Rs. X?
I. On giving a discount of Rs. 1200, a profit of 20% is earned.
II. Had there been no discount on the table, a profit of Rs. 1500 would have been earned.

39. What is the interest (in % p. a.) offered by scheme A (offering simple interest p.a.)?

I. Interest (in Rs.) earned on scheme A on Rs. P after 2 years, is equal to the interest earned on Rs. 4000 when invested for 2 years in scheme B (offering 10% p.a. compound interest-compounded annually).

II. Difference between the interests earned when Rs. P is invested in scheme A for 1 year and for 3 years is Rs. 840.

40. What is the value of 'D'?

I. To cover a distance of D km, travelling at 90 kmph, the car would have taken 2 hours 30 minutes less than the time it took travelling at 60 kmph.

II. Travelling at 45 kmph, the car can cover (D-90) km in 8 hours.

41. Total population (male + female) in village A is 2500. What per cent of total population in village A are literate?

I. 75% of male and 80% of females in village A are literate. Number of males in the village are 50% more than that of females.

II. Number of female literates are 325 less than that of male literates. Number of males in the village are 500 more than the number of females.

42. Rumi invested a certain sum for 2 years in scheme X at 20% p.a. compound interest (compounded annually). He also invested an equal sum in scheme Y at 15% p.a. simple interest for 2 years. If the difference between the interests earned from in schemes X and Y, is Rs. 350, what was the sum?
   (1) Rs. 2000
   (2) Rs. 1200
   (3) Rs. 2500
   (4) Rs. 4000
   (5) Rs. 3000

43. The per cent profit earned by selling an article at Rs. 5400 is equal to the per cent loss incurred on selling the same article at Rs. 3600. What will be the per cent profit if the article is sold at Rs. 5000?

   (1) $13\frac{1}{9}$ (2) 7   (3) 15   (4) $9\frac{1}{6}$ (5) $11\frac{1}{9}$

44. A jar contains X litres of of mixture of liquids- A and B, in the respective ratio of 2 : 3. Six lites each of the liquids- A and B, was added to the mixture in the jar, as a result of which the quantity of liquid A was 18 litre less than that of liquid B. What is the value of X?

(1) 100 (2) 75 (3) 90 (4) 80 (5) 60

45. In an exam, Anu scored 26%. In the same exam Binni scored 60% and received 51 marks more than Anu. What was the total marks in the exam?
(1) None of those given as options
(2) 180
(3) cannot be determined
(4) 150
(5) 200

46. Ms. Desh kept aside 40% of her annual savings for a trip. Out of the remaining she gave 30% to her son, 20% to her mother and invested 15% in a scheme. At the end she is left with Rs. 42000, besides the amount kept aside for the trip. What was her annual savings?
(1) Rs. 240000
(2) Rs. 180000
(3) Rs. 120000
(4) Rs. 200000
(5) None of those given as options

Directions (47-51): What **approximate** value will come in place of question mark (?) in the given questions? (you are not expected to calculate the exact value)

47. 61% of 744.79 – 54.02 = $?^2$
(1) 10 (2) 20 (3) 15 (4) 12 (5) 16

48. $8.01^2 + 5.95 \times ? = 82.13$
(1) 3 (2) 1 (3) 6 (4) 4 (5) 5

49. (4320.02 – 419.96) ÷ 12.99 = ?
(1) 350 (2) 250 (3) 300 (4) 100 (5) 200

50. 80.11 × ? + 124.95 = 2125
(1) 225 (2) 25 (3) 100 (4) 16 (5) 9

51. $780 + 11 \times \sqrt{44.01} + 59.75 = ?$
(1) 910 (2) 500 (3) 972 (4) 650 (5) 750

52. The breadth of a rectangular plot is $\frac{1}{5}$th of the length of the plot. Inside the plot, a garden with an area of 15m² is constructed occupying $\frac{1}{3}$rd of the area of the plot. What is the perimeter of the rectangular plot?
(1) 42 metre
(2) 72 metre
(3) 48 metre
(4) 36 metre
(5) 24 metre

53. A and B start a business with Rs. 3000 and Rs. P respectively. After six months from the start of the business, B leaves the business and C joins the business with a certain amount. The respective ratio of their profit shares, at the end of the year, was 5 : 4 : 3. How much money did C invest in the business?
(1) Rs. 3600
(2) Rs. 4800
(3) Rs. 4200
(4) Rs. 3000
(5) Rs. 4500

Directions (54-59): Study the given table and answer the following questions.

Data regarding total student strength (Boys and girls) of schools –A, B and C in different years (2010 and 2015)

Year	2010		2015	
School	% of boys out of total strength	Number of girls out of total strength	% of boys out of total strength	Number of girls out of total strength
A	75	200	70	480
B	60	220	45	660
C	80	400	75	300

54. Out of the total number of boys in school A, B and C together in the year 2010, only 80% passed the annual exam. Out of the total number of boys in schools A, B and C together in the year 2015, only 75% passed the annual exam. What is the difference between the number of boys who passed from all the schools together in 2010 and those who passed in the year 2015?
(1) 108   (2) 104   (3) 112   (4) 120   (5) 106

55. What is the different between average number of girls in schools B and C together in the year 2010 and the average number of girls in same schools together in the year 2015?

(1) 145   (2) 180   (3) 160   (4) 170   (5) 135

56. The number of boys in school B in year 2010 is what per cent of that in school A in the same year?

(1) 55   (2) 52   (3) 65   (4) 54   (5) $64\frac{1}{4}$

57. What is the respective ratio between the number of boys in school B in year 2010 and the number of boys in the same school in the year 2015?

(1) 11 : 18   (2) 11 : 19   (3) 7 : 18   (4) 11 : 16   (5) 13 : 18

58. What was the total student strength in school A and B together in the year 2015?

(1) 2600   (2) 2400   (3) 2800   (4) 2000   (5) 1800

59. In the year 2010, total student strength of school C was what per cent more than that of the same school in the year 2015?

(1) $63\frac{1}{3}$ (2) $60\frac{1}{6}$ (3) $66\frac{2}{3}$ (4) 60   (5) $66\frac{1}{3}$

Directions (60-65): Find the wrong number in each of the following number series.

60. 5 6 15 41 105 230 446

(1) 41   (2) 105   (3) 6   (4) 230   (5) 15

61. 3 5 10 20 39 63 100

(1) 10   (2) 63   (3) 5   (4) 20   (5) 39

62. 12 21 16 25 20 30 24

(1) 30   (2) 25   (3) 21   (4) 20   (5) 16

63. 2 3 7 22 89 448 2677

(1) 7   (2) 22   (3) 448   (4) 89   (5) 3

64. 2 5 10 18 30 48 70

(1) 10   (2) 5   (3) 48   (4) 18   (5) 30

65. The circumference of the base of a right circular cylinder is 88 cm. if the height of the cylinder is 21 cm, what is the volume (in cm³) of a right circular cone whose height and radius are equal to that of the cylinder?
(1) 4312   (2) 3402   (3) 3436   (4) 4364   (5) 4228

REASONING

Directions (66-70): Study the following information carefully and answer the questions given below:

Fourteen people are sitting in two parallel rows containing seven people each with equal distance between each other.

In row 1- A, B, C, D, E, F and G are sitting ,not necessarily in the same order, and all of them are facing northward but. In row 2- J, K, L, M, N, O and P are sitting and all of them are facing south but not necessarily in the same order. Thus in the given arrangement each person is sitting in a row faces another person of the other row.

C sits at one of the extreme ends of the row. P is an immediate neighbour of the one who faces C. Only one person sits between P and N. The one who faces N sits to the immediate right of G. Only two people sit between G and F. Only two people sit between the one who faces F and M, K sits second to the right of M. The one who faces K is an immediate neighbour of D. More than three people sit between D and E. The one who faces E sits to the immediate left of O. The one who faces O is an immediate neighbour of A, J sits at one of the positions to the left of L.

66. Who amongst the following faces B?
(1) K   (2) M   (3) J   (4) L   (5) N

67. Which of the following statements is TRUE based on the given sitting arrangement?
(1) N faces the one who sits second to the right of A.
(2) Only two people sit between N and J.
(3) As many people sit between B and D as between L and P
(4) J is an immediate neighbour of L.
(5) All of the given statements are true.

68. M is related two K the same way as G is related to A following a certain pattern based on the given arrangement. Following the same pattern who is related to D?
(1) C   (2) G   (3) B   (4) E   (5) F

69. As per the given arrangement, four of the following five are alike in a certain way based on their positions and thus they form a group. Indentify the one which does not belong to the group?
(1) J   (2) A   (3) L   (4) P   (5) D

70. Who amongst the following sits to the immediate right of K?
(1) J   (2) N   (3) L   (4) No one   (5) P

Directions (71-75): In each of the following questions, three/four statements followed by two Conclusions **I** and **II** have been given. You have to take the given statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given conclusion(s) logically follow(s) from the given statements.

Give answer (1) if only Conclusion **I** follows

Give answer (2) if only Conclusion **II** follows

Give answer (3) if either Conclusion **I** or Conclusion **II** follows

Give answer (4) if neither Conclusion **I** nor Conclusion **II** follows

Give answer (5) if both Conclusion **I** and Conclusion **II** follow

(71-72) : Statements :

All dresses are coats.
Only a few coats are jackets.
All jackets are ties.
No tie is a shoe.
71. Conclusions :
I. At least some coats are ties.
II. No shoe is a jacket.

72. Conclusions :
I. Some dresses are definitely not shoes.
II. All dresses being ties is a possibility.

73. Statements :
Only a few storms are tornados.
Only a few tornados are floods.

All floods are rains.
Conclusions :
I. Some rains being storms is a possibility.
II. Atleast some storms are floods.

(74-75) Statements :

No page is a book.
All books are novels.
Only a few novels are scripts.
No script is a theory.

74. Conclusions :
I. At least some pages are scripts.
II. No script is a page.

75. Conclusions :
I. All books can never be theories.
II. All novels being theories is a possibility.

Directions (76-78): Study the following information carefully and answer the questions given below:

Six people P, Q, R, S, T and U are all of a different weight. Only two people are heavier than P. Q is lighter than P but heavier than T. R is lighter than T. S is not the heaviest. The weight of the third heaviest person is 85 kg.

(Note: All weight are in whole numbers only)

76. If the weight of R is 65 kg then which of the following may be the possible weight of T?
(1) 84 kg.   (2) 87 kg.   (3) 63 kg.   (4) 70 kg.   (5) 55 kg.

77. How many people are lighter than U?
(1) None
(2) Three
(3) More than three
(4) Two
(5) One

78. If the of weights of P and S is 175 kg and the sum of weights of P and Q is 160 kg then what is the sum of weights of S and Q?
(1) 165 kg.   (2) 135 kg.   (3) 185 kg.   (4) 145 kg.   (5) 155 kg.

Directions (79-81): Study the following information carefully and answer the questions given below:

Sohan starts moving from Point T towards east. He walks for a distance of 60 metre and reaches Point Z. From point Z he takes a right turn and walks for a distance of 54 metre to reach Point R. From Point R he takes a left turn, walks for a distance 50 metre and stops at Point Q.

Vipin is standing at Point P. He walks towards west for a distance of 30 metre and reaches Point J, he then takes a left turn and walks for 54 metre and reaches Point Q.

79. In which direction is Point R with respect to Point P?
   (1) South
   (2) North-West
   (3) East
   (4) South-West
   (5) North-East

80. What is the total distance between point P and Point T?
   (1) 80 metre
   (2) 140 metre
   (3) 90 metre
   (4) 110 metre
   (5) 114 metre

81. Four of the following five are alike in a certain way based on the directions and thus they form a group. Which one of the following does not belong to that group?
   (1) TJ   (2) ZP   (3) RQ   (4) ZJ   (5) QT

Directions (82-85): In each of the following questions, 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

Give answer (2) if only conclusion **II** is true

Give answer (3) if either conclusion **I** or conclusion **II** is true

Give answer (4) if neither conclusion **I** nor conclusion **II** is true

Give answer (5) if both the conclusion **I** and conclusion **II** are true

82. Statements:

$H < A = L \le P; B = A \ge K = Y$

Conclusions:

I. $Y > H$

II. $K \le P$

83. Statements:

$G \le U = Y; F \ge C \ge T = Y$

Conclusions:

I. $F = G$

II. $G < F$

84. Statements:

$U \ge H \le L < E; M \le H \ge A = N$

Conclusions:

I. $N \le U$

II. $E < M$

85. Statements:

$J \le O \ge U > E; G \ge O \le A = H$

Conclusions:

I. $J \le H$

II. $G > E$

Directions (86-90): Study the following information carefully and answer the questions given below:

A certain number of people are standing in a queue outside a ticket counter, one behind the another (all facing the same direction). Each one of them has to buy a different number of tickets.

B is standing immediately behind G. Only three people are standing between G and K. The one who has to buy 12 tickets is standing immediately behind K. Only three persons are standing between M and the one who has to buy 12 tickets. The one who has to buy 15 tickets is standing at one of the positions front of M. Only one person is standing between M and the one who has to buy 15 tickets. Only two people are standing between the one who has to buy 15 tickets and the one who has to buy 8 tickets. The one who has to buy 8 tickets is standing third from one of the extreme ends of the queue. Only eight people are standing between P and the one who has to buy 8 tickets. No one stands between V and P. The difference between the number of tickets that V and P have to buy is 3. Only four people are standing between X and V. X is standing at an extreme end of the queue. The number of people standing between X and K is same as that standing between K and the one who has to buy 20 tickets. X does not have to buy 20 tickets.

86. What is the position of M from the beginning of the queue?
  (1) Fifth
  (2) Thirteenth
  (3) Eighth
  (4) Tenth
  (5) Sixth

87. If M has to buy 8 more tickets than V, then how many tickets does M have to buy?
  (1) Cannot be determined
  (2) 23   (3) 16   (4) 17   (5) 18

88. How many people are standing in the queue?
  (1) 24   (2) 14   (3) 21   (4) 16   (5) 18

89. How many people are standing between the one who has to buy 20 tickets and the one who has to buy 12 tickets?
  (1) Four
  (2) Twelve
  (3) None
  (4) Seven
  (5) Nine

90. If C is standing sixth form one of the extreme ends of the queue, then how many tickets do C and P together have to buy?

(1) Cannot be determined

(2) 27   (3) 28   (4) 24   (5) 20

Directions (91-95): Study the following information carefully and answer the questions given below:

Nine people viz., L, M, N, O, P, Q, R, S and T work in any of the three cities viz., Mumbai, Delhi and Pune. At least two and not more than four people work in each city.

(**Note:** If it is said that a works with b, then a and b work in the same city)

O works in Delhi with only S. Q neither works with S nor M. Neither T nor L works in Mumbai. N does not work in the same city in which L works. R neither works with M nor N. More than two people work in Mumbai.

91. Four of the following five are alike in a certain way as per the given arrangement and thus they form a group. Which one of the following does not belong to that group?
(1) N-P   (2) Q-L   (3) M-N   (4) S-M   (5) R-T

92. Who amongst the following work in Pune?
(1) R, Q, T and L
(2) Q, T and P
(3) R and P
(4) L and M
(5) M, P and N

93. Who amongst the following works with P?
(1) Only N
(2) Both Q and N
(3) Both M and N
(4) Both M and L
(5) Only R

94. Which of the following statements is the true as per the given arrangement?
A. L works in Mumbai
B. P and T work in different cities
C. R works with both T and S.
(1) Only A

(2) Only B
(3) All A, B and C
(4) Only A and C
(5) Only B and C

95. In the given arrangement, if O and R interchange their city of work and so do P and S, then who amongst the following will work with O?
(1) S   (2) M   (3) P   (4) N   (5) Q

Directions (96-100): Study the following information carefully and answer the questions given below:

Eight boxes – A, B, C, D, P, Q, R and S—are kept one above the other in a stack. Only five boxes are kept between box A and box P. Box B is kept immediately below box P. Only one box is kept between box B and box R. Box R is kept at one of the positions above box P. Only three boxes are kept between box R and box D. Only two boxes are kept between box D and box S. Box C is kept at one of the positions above box Q.

96. Which of the following statements is true based on the given arrangement?
(1) Only two boxes are kept above box S.
(2) As many boxes are kept below box R as above box C.
(3) No box is kept between box Q and box D.
(4) None of the given statements is true
(5) Box A is kept at the bottom of the stack.

97. As pre the given arrangement, how many boxes are kept between box A and box Q?
(1) Two   (2) None   (3) One   (4) Three   (5) More than three

98. As per the given arrangement, as many boxes are kept above box D as below box _____.
(1) S   (2) A   (3) P   (4) Q   (5) R

99. Four of the following five are alike in a certain way based on their positions in the given arrangement and thus they form a group. Indentify the one which does not belong to the group.
(1) S-C   (2) C-P   (3) P-S   (4) A-C   (5) R-B

100. As per the given arrangement which box is kept immediately below box S?
(1) D   (2) A   (3) P   (4) R   (5) C