



1. If the positions of the third and tenth letters of the word 'DOCUMENTATION' are interchanged, and likewise the position of the fourth and seventh letters, the second and sixth letters, is also interchanged, which of the following will be eleventh letter from the right end  
(A) C (B) I (C) T (D) U
2. Sonam starts from a point walks 20 m towards East, turns towards her right and walks 10 m, then turns left walks 5m. Then turns towards her right and walks 5m more. In which direction is she now from the starting point?  
(A) North (B) South-East (C) South (D) West
3. In a row of students, if John, who is 16th from the left, and Johnson, who is 8th from the right, interchange their positions, John becomes 33rd from left. How many students are there in a row?  
(A) 38 (B) 39 (C) 40 (D) 41
4. If Juhi is 12 ahead in rank of Prabha, who ranks 15th from last, then how many students are there in the class if Juhi ranks 4th in order of merit?  
(A) 23 (B) 27 (C) 30 (D) 31
5. P, Q, R and S are playing a game of carom. P, R and S, Q are partners. 'S' is to the right of 'R'. If 'R' is facing West, then 'Q' is facing which direction?  
(A) North (B) South (C) East (D) West
6. In a row of forty students R is fifth from the right end and there are ten students between R and D. What is D's position from the left end of the row?  
(A) 26th (B) 23<sup>rd</sup> (C) 25<sup>th</sup> (D) 24<sup>th</sup>
7. Komal walks 9 kilometres towards North. From there she walks 6 kilometres towards South. Then she walks 3 kilometres towards East. How far and in which direction is she with reference to her starting point ?  
(A)  $3\sqrt{2}$  kms, North – East (B)  $2\sqrt{3}$  kms, North – East  
(C)  $3\sqrt{3}$  kms, South – North (D)  $3\sqrt{2}$  kms, South – West
8. Richard is fifteenth from the front in a column of boys. There were thrice as many behind him as there were in front. How many boys are there between Richard and the seventh boy from the end of the column?  
(A) 33 (B) 34 (C) 35 (D) Data inadequate
9. Which letter in this alphabet series is the eighth letter to the right of the letter which is tenth letter to the left of the last second letter of the alphabet?  
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

**Space for rough work**

(A) X (B) W (C) I (D) V

10. How many such pairs of letters are there in the word CHILDREN which have as many letters between them in the word as in the alphabet ?  
 (A) 5 (B) 2 (C) 3 (D) 4

**Direction (11-12) :** Each problem contains a question and two statements labeled I and II giving certain data. You have to select the correct answer from (A) to (D) depending on the sufficiency of the data given in the statements to answer the question. Mark your answer as

(A) If the question can be answer by using one of the statements alone but can not be answered by using the other statement alone.

(B) If the question can be answered by using either statement alone.

(C) If the question can be answered by using both statements together but cannot be answered by using either statement alone.

(D) If the question cannot be answered even by using both the statements together.

11. How many children are there in the row of children facing north?

Statement :

(i) Vishakha who is fifth from the left and is eight to the left of Ashish who is twelfth from the right end.

(ii) Rohit is fifth to the left of Nisha who is seventh from the right end and eighteenth from the left end

12. How is M related to N

Statement : (i) P, who has only two kids, M and N, is the Mother –in-law of Q, who is sister –in-law of N

(ii) R, The sister in law of M, is the daughter-in-law of S, who has only two kids M and N

13. How many such pairs of letters are there in the word ADEQUATELY which have as many letters between them in the word as in the alphabet ?

(A) 1 (B) 2 (C) 3 (D) 4

14. At what time between 7 and 8 O'clock will the hands of a clock be in the same straight line, but not together ?

(A) 5 minutes past 7 (B)  $5\frac{2}{11}$  minutes past 7 (C)  $5\frac{3}{11}$  minutes past 7 (D)  $5\frac{5}{11}$  minutes past 7

15. At what time between 5.30 and 6'O clock will the hands of a clock be at right angle ?

(A)  $43\frac{3}{11}$  minutes past 5 (B)  $43\frac{7}{11}$  minutes past 5 (C) 40 minutes past 5 (D) 45 minutes past 5

**Space for rough work**

**Directions (16-17):** In each question below is given a statement followed by two assumptions numbered I and II. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

**Give your answer.**

(A) if only assumption I is implicit  
(C) if either I or II is implicit

(B) if only assumption II is implicit  
(D) if both I and II are implicit

16. **Statement:** if you have any problems, bring them to me.

**Assumptions:**

I. you have some problems.  
II. I can solve any problem .

17. **Statement:** Detergents should be used to clean clothes.

**Assumptions:**

I. Detergents form more lather.  
II. Detergents help to dislodge grease and dirt.

**Directions (18-19):** In the following questions, one or more statements are given followed by two conclusions (I) and (II). You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements.

**Give answer**

(A) if only conclusion I follows  
(C) if either I or II follows

(B) if only conclusion II follows  
(D) if both I and II follow

18. **Statement:** This world is neither good nor evil; each man manufactures a world for himself.

**Conclusions:**

I. Some people find this world quite good.  
II. Some people find this world quite bad.

19. **Statement:** Double your money in five months – An advertisement.

**Conclusions:**

I. The assurance is not genuine.  
II. People want their money to grow.

20. In a certain code language, 'pick and choose' is written as 'ko ho po' and 'pick up and come' is written as 'to no ko po'. How is 'pick' written in that code language ?

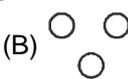
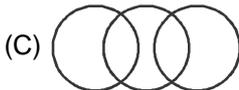
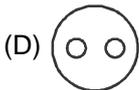
(A) ko

(B) po

(C) Either ko or po

(D) Cannot be determined

**Space for rough work**

21. If in a certain code language 'CLUB' is written as 'XOFY', 'NOT' is written as 'MLG', then how will 'PUNCTUAL' be written in that code language ?  
 (A) KFMGXZFO (B) KFMXGZFO (C) KFMXGFZO (D) KFMXGFOZ
22. If in a certain code language 'SIMILAR' is written as 'IZORNRH', then how will 'NATURAL' be written in that language ?  
 (A) OZIFGZM (B) OZIFGMZ (C) OZIFZMG (D) OZIFMZG
23. Find the HCF of  $\frac{3}{5}$ ,  $\frac{6}{10}$  and  $\frac{9}{20}$ .  
 (A)  $\frac{3}{20}$  (B) 9 (C) 3 (D) None of these
24. Which of the following diagrams indicates the best relation between Travelers, Train and Bus ?  
 (A)  (B)  (C)  (D) 
25. A can do a piece of work in 25 days and B can finish it in 20 days. They work together for 5 days and then A leaves. In how many days will B finish the remaining work ?  
 (A) 7 days (B) 15 days (C) 11 days (D) 17 days

**Directions (26-29) :** Study the following information carefully and answer the given questions: The following is an illustration of input and rearrangement.

**(All the numbers are two digits numbers)**

**Input :** talk 61 26 mold boom 88 81 47 work known ink 36 69 cold

**Step I :** 26 talk 61 mold 88 81 47 work known ink 36 69 cold boom

**Step II :** 36 26 talk 61 mold 88 81 47 work known ink 69 boom cold

**Step III :** 47 36 26 talk 61 mold 88 81 work known 69 boom cold ink

**Step IV :** 61 47 36 26 talk mold 88 81 work 69 boom cold ink known

**Step V :** 69 61 47 36 26 talk 88 81 work boom cold ink known mold

**Step VI :** 81 69 61 47 36 26 88 work boom cold ink known mold talk

**Step VII :** 88 81 69 61 47 36 26 boom cold ink known mold talk work

Step VII is the last step of the above input, as the desired arrangement is obtained.

**Input: 89 who root 19 46 near drink link gold 61 23 under 71 97**

26. Which step number is the following output?  
 46 23 19 89 who root near 61 under 97 71 gold drink link  
 (A) Step V (B) Step VI  
 (C) Step IV (D) There is no such step

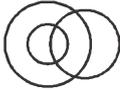
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27. Which word/number would be at 5<sup>th</sup> position from the right in Step V ?  
(A) 19 (B) 97 (C) gold (D) drink
28. How many elements (words or numbers) are there between 'gold' and '46' as they appear in the last step of the output?  
(A) One (B) Three (C) Four (D) Five
29. Which of the following represents the position of 'who' in the fourth step?  
(A) Eighth from the left (B) Fifth from the right  
(C) Sixth from the left (D) Fifth from the left
30. If a train runs at 70 km/hr, it reaches its destination late by 12 minutes. But if it runs at 80 km/hr, it is late by 3 minutes. The correct time to cover the journey is.  
(A) 58 minutes (B) 2 hours (C) 1 hours (D) 59 Minutes
31. By walking at  $\frac{6}{7}$  of his usual speed, a man reaches his office 25 minutes later than his usual time. The usual time taken by him to reach his office is.  
(A) 2 hours 30 minutes (B) 2 hours 10 minutes (C) 2 hours 15 minutes (D) 2 hours 25 minutes
32. A and B together can complete a piece of work in 24 days; B and C together in 30 days; and C and A together in 40 days. How many days will A separately take to complete the same work?  
(A) 60 (B) 40 (C) 50 (D) 45
33. Some staff promised to do a job in 18 days, but 6 of them went on leave. So the remaining men took 20 days to complete the job. How many men were there originally ?  
(A) 60 (B) 50 (C) 40 (D) 45
34. A thief is noticed by a policeman from a distance of 200 m. The thief starts running and the policeman chases him. The thief and the policeman run at the rate of 10 km/hr and 11 km/hr respectively. What is the distance between them after 6 minutes ?  
(A) 100 m (B) 190 m (C) 200 m (D) 150 m

**Directions (35-39) :** Each of the questions below consists of a question and two statements numbered 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 give answer

- (A) if 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;  
(B) if 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  
(C) if the data in both statements I and II together are not necessary to answer the question.  
(D) if the data given in both statements I and II together are necessary to answer the question

**Space for rough work**

35. How is Manick related to Nisha ?  
I. Manick is the only son of Nisha's mother-in-law.  
II. Ritu is Manick's only sister.
36. P, Q, R and S are sitting around a circle facing at the centre. Who is to the immediate right of Q ?  
I. R is between P and S.  
II. S is to the immediate right of R.
37. What is the monthly salary of Prashant ?  
I. Prashant gets 15% more than Sumit while Sumit gets 10% less than Lokesh.  
II. Lokesh's monthly salary is Rs. 2500
38. What does 'ta' mean in a code language ?  
I. 'pa ta ja' means 'over and above' in that code language.  
II. 'ho ka pa' means 'come over here' in that code language.
39. Manoj, Prabhakar, Akash and Kamal are four friends. Who among them is the heaviest ?  
I. Prabhakar is heavier than Manoj and Kamal but lighter than Akash.  
II. Manoj is lighter than Prabhakar and Akash but heavier than Kamal.
40. Two trains, one 160 m and the other 140 m long are running in opposite directions on parallel tracks, the first at 77 km per hour and the other at 67 km per hour. How long will they take to cross each other ?  
(A) 7 seconds                      (B)  $7\frac{1}{2}$  seconds                      (C) 6 seconds                      (D) 10 seconds
41. Which of the following diagrams indicates the best relation between Women, Mothers and Engineers ?  
(A)                       (B)                       (C)                       (D) 

**Space for rough work**

**Directions (42-44) :** In each of the following questions, a set of figures carrying certain numbers/alphabets, is given. Assuming that the numbers/alphabets in each set follow a similar pattern, find the missing numbers/alphabets in each case.

42.

9	36	25
4	16	9
1	9	4
6	13	?

(A) 5

(B) 10

(C) 11

(D) 15

43.

6	11	25
8	6	16
12	5	?

(A) 18

(B) 16

(C) 12

(D) 10

44.

2	4	0
1	2	4
3	1	3
36	?	91

(A) 25

(B) 48

(C) 59

(D) 73

45. Average age of P & Q before 5 years was 25 years. Average age of P, Q & R at present is 25 years. R's age after 5 years will be

(A) 15

(B) 20

(C) 40

(D) 35

46. Average of 20 items is 47. It was known later that one of the items was written as 26 instead of 62. Find the correct average.

(A) 48.8

(B) 47.7

(C) 49.9

(D) 46.6

47. The average monthly salary of all employees in an industry is Rs. 12,000. Among them, the average salary of men employees is Rs. 15,000 & that of for women employees Rs. 8,000. What is the ratio of men & women employees.

(A) 5 : 2

(B) 3 : 4

(C) 4 : 3

(D) 2 : 5

**Space for rough work**

48. A fires 5 shots to B's 3 but A kills only once in 3 shots while B kills once in 2 shots. When B has missed 27 times, A has killed  
(A) 30 birds (B) 60 birds (C) 72 birds (D) 90 birds
49. If a 1 mm thick paper is folded so that the area is halved at every fold, then what would be the thickness of the pile after 50 folds ?  
(A) 100 km (B) 1000 km (C) 1 million km (D) 1 billion km
50. In a family, a couple has a son and a daughter. The age of the father is three times that of his daughter and the age of the son is half of that of his mother. The wife is 9 years younger to her husband and the brother is seven years older than his sister. What is the age of the mother ?  
(A) 40 years (B) 45 years (C) 50 years (D) 60 years

**Direction (51-53):- Find the missing term in the given series:-**

51. **30, 34, 43, 59, 84, 120, ?**  
(A) 169 (B) 148 (C) 153 (D) 176
52. **40, 54, 82, ?, 180, 250**  
(A) 142 (B) 124 (C) 136 (D) 163
53. **122, 213, 340, 509, 726, ?**  
(A) 942 (B) 997 (C) 919 (D) 950

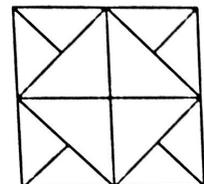
**Direction (54-56): Study the statements given below and answer the questions that follow:**

A, B, C, D, E and F are members of a family. B is the son of C but C is not the mother of B. A and C are a married couple. E is the brother of C. D is the daughter of A. F is the brother of A.

54. Who is the father of B?  
(A) C (B) A (C) D (D) E
55. How is B related to D?  
(A) Husband (B) Father (C) Brother (D) Sister
56. How many female members are there in the family?  
(A) 1 (B) 2 (C) 3 (D) 4
57. If the first half of the alphabet series is written in the reverse order while the second half remains the same, which letter will be exactly at the middle between the 9<sup>th</sup> letter from the left and the 10<sup>th</sup> letter from the right end?  
(A) B (B) A (C) N (D) D

**Space for rough work**

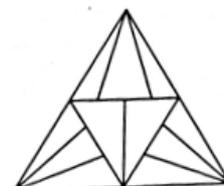
58. What will be the day of the week on 15<sup>th</sup> August, 2010?  
 (A) Sunday (B) Tuesday (C) Monday (D) Friday
59. Which day can be first and last day of a century?  
 (A) Tuesday (B) Friday (C) Wednesday (D) Monday
60. Today is Sunday. After 1428 days, it will be:  
 (A) Monday (B) Saturday (C) Sunday (D) Thursday
61. If 6<sup>th</sup> March, 2005 is Monday, what was the day of the week on 6<sup>th</sup> March, 2004?  
 (A) Sunday (B) Saturday (C) Tuesday (D) Friday
62. On what dates of April, 2001 did Wednesday fall?  
 (A) 1<sup>st</sup>, 8<sup>th</sup>, 15<sup>th</sup>, 22<sup>nd</sup>, 29<sup>th</sup> (B) 2<sup>nd</sup>, 9<sup>th</sup>, 16<sup>th</sup>, 23<sup>rd</sup>, 30<sup>th</sup> (C) 3<sup>rd</sup>, 10<sup>th</sup>, 17<sup>th</sup>, 24<sup>th</sup> (D) 4<sup>th</sup>, 11<sup>th</sup>, 18<sup>th</sup>, 25<sup>th</sup>
63. The calendar for the year 2007 will be the same for the year:  
 (A) 2014 (B) 2015 (C) 2017 (D) 2018
64. It was Sunday on Jan 1, 2006. What was the day of the week Jan 1, 2010?  
 (A) Sunday (B) Saturday (C) Friday (D) Wednesday
65. Five burgers, six pizzas and seven cokes cost is Rs. 178. Six burgers, four pizzas and two cokes cost is Rs. 124. Find the cost of one burger, one pizza and one coke.  
 (A) Rs. 28 (B) Rs. 30 (C) Rs. 32 (D) Rs. 40
66. The reflex angle between the hands of a clock at 10.25 is:  
 (A) 180° (B)  $192\frac{1}{2}^\circ$  (C) 195° (D)  $197\frac{1}{2}^\circ$
67. How much does a watch lose per day, if its hands coincide every 64 minutes?  
 (A)  $32\frac{8}{11}$  min (B)  $32\frac{5}{11}$  min (C) 90 min (D) 96 min
68. How many triangle are there in the following figure ?  
 (A) 16 (B) 20  
 (C) 12 (D) 22



**Space for rough work**

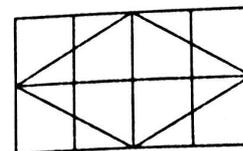
69. Find the number of triangles in the following diagram

- (A) 22 (B) 23  
(C) 19 (D) 20



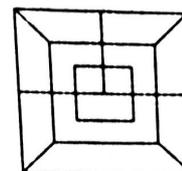
70. How many triangles are there in the following figure ?

- (A) 22 (B) 18  
(C) 20 (D) 24



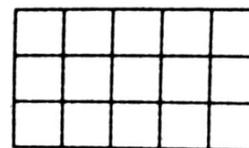
71. How many squares are there in the following figure ?

- (A) 5 (B) 9  
(C) 7 (D) 8



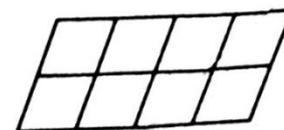
72. How many squares are there in the following figure ?

- (A) 24 (B) 25  
(C) 26 (D) 27



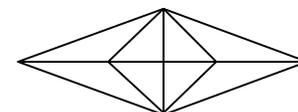
73. How many quadrilaterals are there in the figure given below ?

- (A) 12 (B) 20  
(C) 29 (D) 30



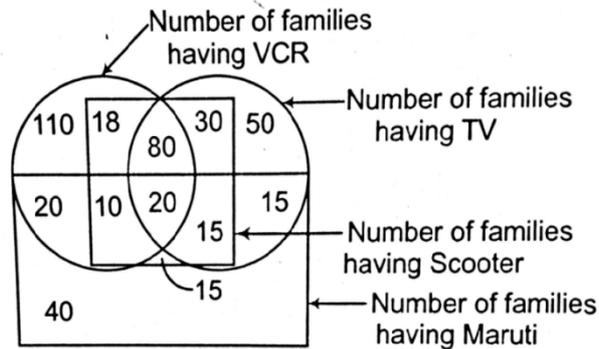
74. How many triangles are there in the following figure ?

- (A) 10 (B) 24  
(C) 22 (D) 20



**Space for rough work**

**Directions (75-79)** Study the diagram given below and answer the questions that follow.



75. Find out the number of families which have all the four things mentioned in the diagram above.  
 (A) 40 (B) 30 (C) 35 (D) 20
76. Find out the number of families which have scooters.  
 (A) 145 (B) 100 (C) 188 (D) 240
77. Find out the number of families which have VCR and TV both.  
 (A) 84 (B) 24 (C) 104 (D) None of these
78. Find out the number of families which have only one thing, i.e., either VCR or TV or scooter or maruti.  
 (A) 160 (B) 184 (C) 200 (D) 254
79. Find out the number of families which have TV and scooter both but have neither VCR nor maruti.  
 (A) 15 (B) 30 (C) 4 (D) 50

**Directions (80-86)** In each of the questions below are given two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and decided which of the given conclusion (s) logically follow(s) from the two given statements, disregarding commonly known facts.

**Give answer**

- (A) if only Conclusion I follows (B) if only Conclusion II follows  
 (C) if either I or II follows (D) if neither I nor II follows

80. **Statements** I. No colour is paint.  
 II. No paint is a brush.  
**Conclusions** I. No colour is a brush.  
 II. All brushes are colours.

*Space for rough work*

81. **Statements** I. No house is an apartment.  
II. Some apartments are bungalows.  
**Conclusions** I. No house is a bungalow.  
II. All bungalows being houses is a possibility.
82. **Statements** I. All pens are ink.  
II. No ink is an eraser.  
**Conclusions** I. No pen is an eraser.  
II. Some erasers are pens.
83. **Statements :** I. Some gears are wheels.  
II. All wheels are brakes.  
**Conclusions :** I. No brake is gear.  
II. Atleast some gears are brakes.
84. **Statement :** I. No flower is mango  
II. No mango is cherry  
**Conclusions :** I. No flower is cherry  
II. Some cherries are mangoes.
85. **Statement :** I. Some pubs are cows.  
II. No kitten are pubs.  
**Conclusions.** I. Some pubs are kitten  
II. Some cows are kitten.
86. **Statement :** I. Some cameras are radios.  
II. Some statues are cameras.  
**Conclusions :** I. Some radios are statues.  
II. No radio is statue.
87. Sum of three numbers is 432. First number is  $\frac{3}{4}$  times the second and the third number is half of the second number. The smallest number is  
(A) 96 (B) 97 (C) 85 (D) 98
88. The middle digit of a number between 100 and 1000 is zero and sum of the digits of the number is 12. If the digits in unit's place and hundred's place are interchanged, the number increases by 396. Find the number.  
(A) 402 (B) 408 (C) 412 (D) 420

**Space for rough work**

89. A watch, which gains uniformly, is 3 min slow at 12 noon on Sunday and is 5 min 36 seconds fast at 4 pm on the next Sunday. At what time is was correct ?  
 (A) 12 am on same day (B) 12 pm on Monday  
 (C) 12 am on Tuesday (D) 12 am on Wednesday
90. If each of the twelve digits on a watch is replaced by English vowels a, e, i, o, u in sequence (1 by a, 2 by e, and so on), the hour hand will be between which pair of vowels at 9 : 30 am ?  
 (A) ae (B) ei (C) io (D) ou
91. If the time in a clock is 20 min past 2, then find the angle between the hands of the clock.  
 (A)  $45^\circ$  (B)  $50^\circ$  (C)  $60^\circ$  (D)  $120^\circ$
92. The cost of four pens, eight sharpeners and nine erasers is Rs. 136, the cost of three pens, six sharpeners and seven erasers together is Rs. 104. Find the cost of an eraser.  
 (A) Rs. 7 (B) Rs. 8 (C) Rs. 4 (D) Rs. 5
93. A person climbs up a pole of 88 mt high, in every minute he climbs 12 mt but slips down 8 mt. So how much time he will take to reach at the top?  
 (A) 20 (B) 29 (C) 28 (D) 22
94. A father is now three times as old his son. Five years back, he was four times as old as his son. The present age of the son (in years) is  
 (A) 12 (B) 15 (C) 18 (D) 20

**Direction (95-97):** A word an number arrangement mechanic when given an input line of words and numbers rearranges then following a particular rule in each step. The following is an illustration of input and rearrangement

**Input : 56 slow and 61 steady 73 27 wins 32 run race 44**

**Step I : 73 56 slow and 61 steady 27 32 run race 44 wins**

**Step II : 61 73 56 slow and 27 32 run race 44 wins steady**

**Step III : 56 61 73 and 27 32 run race 44 wins steady slow**

**Step IV : 44 56 61 73 and 27 32 race wins steady slow run**

**Step V : 32 44 56 61 73 and 27 wins steady slow run race**

**Step VI : 27 32 44 56 61 73 wins steady slow run race and**

Step VI is the last step of arrangement for the above input

As per the followed in the above steps find out in each the following questions

**Input : Situation 91 is 78 tense 14 32 but 63 under 81 control**

**Space for rough work**

95. Which of the following would be steps III ?  
(A) 81 91 situation is 78 14 32 but 63 control under tense  
(B) 78 81 91 is 14 32 but 63 control under tense situation  
(C) 63 78 81 91 14 32 but control under situation is tense  
(D) 32 63 78 81 91 14 but under tense situation is control
96. Which word/ number would be at the eighth position from the right in steps V  
(A) 14 (B) 81 (C) 91 (D) 63
97. Which steps numbers would be the following output "63 78 91 14 81 but control 32 under is tense situation"  
(A) There will be no such steps (B) III  
(C) IV (D) V

**Direction (98–100) :** In each question below is given a statement followed by two conclusions numbered I and II you have to assume everything in the statement to be true, then consider the two conclusion together and decide, of them logically follows beyond a reasonable doubt from the information given in the statement

- (A) If only conclusion I follows (B) If only conclusions II  
(C) Both I and II follow (D) Neither I nor II follows
98. Statement : morning walks are good for health  
Conclusions : (i) All healthy people go for morning walk  
(ii) Evening walks are harmful
99. Statement: If all players play to their full potential we will win the match. We have won the match  
Conclusions : (i) All players played to their full potential  
(ii) Some players did not play to their full potential
100. Statement : Vegetable price are soaring in the market  
Conclusions : (i) Vegetable are becoming a rare commodity  
(ii) People cannot eat vegetables

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**Space for rough work**