REASONING & COMPUTER COMPETENCY

Directions (1–5) : Study the following information carefully and answer the given questions :

Eight friends P, Q, R, S, T, V, W and Y are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners face the centre while those who sit in the middle of the sides face outside.

P who faces the centre sits third to the right of V. T, who faces the centre, is not an immediate neighbour of V. Only one person sits between V and, W. S sits second to right of Q. Q faces the centre. R is not an immediate neighbour of P.

1. Who sits second to the left of Q ?
(1) V   (2) P
(3) T   (4) Y
(5) Cannot be determined

2. What is the position of T with respect to V ?
(1) Fourth to the left
(2) Second to the left
(3) Third to the left
(4) Third to the right
(5) Second to the right

3. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?
(1) R   (2) W
(3) V   (4) S
(5) Y

4. Which of the following will come in place of the question mark based upon the given seating arrangement?
WP TR QW RS ?
(1) YT   (2) VY
(3) VQ   (4) PY
(5) QV

5. Which of the following is true regarding R ?
(1) R is an immediate neighbour of V

(2) R faces the centre
(3) R sits exactly between T and S
(4) Q sits third to left of R
(5) None is true

Directions (6–10) : Study the following information to answer the given questions :

In a certain code 'a friend of mine' is written as '4 9 1 6' 'mine lots of metal' is written as ' 3 1 0 9' and 'a piece of metal' is written as '7 1 6 3'.

6. What is the code for 'piece' ?
(1) 3   (2) 6
(3) 1   (4) 7
(5) Cannot be determined

7. What does '9' stand for ?
(1) of   (2) mine
(3) friend   (4) lots
(5) metal

8. Which of the following may represent 'a pleasure of mine' ?
(1) 6309   (2) 5216
(3) 9216   (4) 3694
(5) 5041

9. What does '0' stand for ?
(1) mine   (2) metal
(3) of   (4) lots
(5) a

10. '8 7 3' would mean
(1) a metal piece
(2) metal for friend
(3) piece of advise
(4) friend of mine
(5) large metal piece

Directions (11–16) : Study the following information to answer the given questions :

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row-1, P, Q, R, S, T and V are seated and all of them are facing south. In row-2, A, B, C, D, E and F are seated and all of them are facing north. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.

A sits third to right of D. Neither A nor D sits at extreme ends. T faces

D. V does not face A and V does not sit at any of the extreme ends. V is not an immediate neighbour of T. B sits at one of the extreme ends. Only two people sit between B and E. E does not face V. Two persons sit between R and Q. R is not an immediate neighbour of T. C does not face V. P is not an immediate neighbour of R.

11. Who amongst the following sit at extreme ends of the rows ?
(1) B, E   (2) S, T
(3) P, R   (4) B, F
(5) None of these

12. Who amongst the following faces A ?
(1) R   (2) T
(3) P   (4) Q
(5) S

13. How many persons are seated between T and S ?
(1) One   (2) Two
(3) Three   (4) Four
(5) None

14. P is related to V in the same way as C is related to F. To which of the following is E related to, following the same pattern ?
(1) B   (2) D
(3) C   (4) A
(5) None of these

15. Which of the following is true regarding F ?
(1) F sits second to right of C
(2) F is not an immediate neighbour of A
(3) F sits third to left of D
(4) F sits at one of the extreme ends of the line
(5) F faces V

16. Who amongst the following sits exactly between P and Q ?
(1) R   (2) V
(3) S   (4) T
(5) Cannot be determined

Directions (17–21) : 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 —

17. Who amongst L, M, N, O and P is the shortest.
    I. O is shorter than P but taller than N.
    II. M is not as tall as L.

18. Are all the five friends viz. Leena, Amit, Arun, Ali and Ken who are seated around a circular table facing the centre ?
    I. Leena sits second to left of Amit. Amit faces the centre. Arun sits second to right of Leena.
    II. Ali sits third to the left of Ken. Ken faces the centre. Amit sits to the immediate left of Ali but Ken is not an immediate neighbour of Amit.

19. Is T grandmother of Q ?
    I. P is the mother of Q. Q is the son of R. R is the son of T.
    II. L is father of N and N is daughter of T.

20. Point A is towards which direction from point B ?
    I. If a person walks 4m towards the north from point A, and takes two consecutive right turns, each after walking 4 m, he would reach point C, which is 8m away from point B.
    II. Point D is 2m towards the east of point A and 4m towards the west of point B.

21. How many brothers does Bharat have ?
    I. Shiela, the mother of Bharat has only three children.
    II. Meena, the grandmother of Bharat has only one granddaughter.

22. **Statement :** If parking space is not available in office, park your vehicles in the mall and walk to the office.
    Assumptions
    I. The mall is at a walkable distance from the office.
    II. The office does not allow visitors' vehicles in its premises.

23. **Statement :** Farmers must immediately switch over to organic fertilizers from chemical fertilizers for better yield.
    Assumptions
    I. All the farmers use only chemical fertilizers.
    II. Organic fertilizers are readily available to the farmers.

24. **Statement :** An advertisement by bank X 'Our interest rates for education loans are lower than any other bank'.
    Assumptions :
    I. Some other banks also provide education loans.
    II. Interest rates charged on education loans are different for different banks.

25. **Statement :** For any kind of problem with your mobile phone, contact our help desk immediately.
    Assumptions :
    I. Help desk has a solution to all kinds of problems related to mobile phones or will guide accordingly.
    II. Unless the problem is reported immediately, it cannot be solved.

26. **Statement :** Use our medicine to fight the problem of obesity.
    Assumptions :
    I. Other slimming medicines available in the market do not reduce weight.
    II. Obesity cannot be controlled without medicines.

Directions (27 – 31) : Study the following information carefully and answer the given questions :

One of the seven subjects, viz., Maths, Zoology, Botany, Chemistry, Physics, English and Statistics is taught on one day in a week starting from Monday and ending on Sunday. Chemistry is taught on Thursday. English is taught the day immediately next to the day when Zoology is taught. English is neither taught on Tuesday nor Saturday. Only one lecture is held between Chemistry and Botany. Two lectures are scheduled between Maths and Zoology. Statistics is neither taught on Monday nor Sunday.

27. On which of the following days is Physics taught ?
    (1) Monday   (2) Tuesday
    (3) Wednesday   (4) Thursday
    (5) Friday

28. How many subjects are taught between Botany and Zoology ?
    (1) None   (2) One
    (3) Two   (4) Three
    (5) Four

29. Which of the following subjects is taught on Saturday ? .
    (1) Botany   (2) Statistics
    (3) Zoology   (4) Maths
    (5) Physics

30. On which of the following days is statistics taught ?
    (1) Tuesday   (2) Wednesday
    (3) Thursday   (4) Friday
    (5) Cannot be determined

31. If Statistics is related to Zoology and Physics is related to Botany in a certain way, then to which of the following would Chemistry be related to, following the same pattern ?
    (1) Maths   (2) Statistics
    (3) Physics   (4) English
    (5) Cannot be determined

Directions (32 –34) : The following questions are based upon the alphabetical series given below :
S L U A Y J V E I O N Q G Z B D R H

32. If 'SU' is related to 'HD' and 'UY' is related to 'DZ' in a certain way,

to which of the following is YV related to, following the same pattern ?
(1) ZQ   (2) IN
(3) BG   (4) QO
(5) DZ

33. What will come in place of question (?) mark in the following series ?
LA UJ YI EG ?
(1) ZH   (2) IB
(3) NR   (4) QR
(5) QH

34. If in a certain code 'VERB' is coded as 'YJBG' and 'QUIZ' is coded as 'OSVQ' how will 'JOHN' be coded in the same code language?
(1) EQDG   (2) AEDI
(3) YIRO   (4) VNRQ
(5) EQGD

Directions (35–36) : Read the following information carefully and answer the questions which follow :
If 'A × B' means 'A is son of B'.
If 'A + B' means 'A is daughter of B'.
If 'A ÷ B' means 'A is wife of B'.
If 'A – B' means 'A is father of B'.

35. What will come in the place of the question mark, to establish that Q is mother of N in the expression :
'N + O – P ? Q'
(1) +   (2) ×
(3) –   (4) ÷
(5) Either (1) or (2)

36. Which of the following relations are true based upon the relations given in the equation :
'S ÷ T × V – W ÷ Y' ?
(1) T is brother of Y
(2) S is daughter-in-law of W
(3) S is daughter-in-law of Y
(4) Y is daughter of V
(5) None is true

Directions (37 – 40) : Study the following information to answer the given questions:
In a certain code, **'ze lo ka gi'** is a code for 'must save some money', **'fe ka so ni'** is a code for 'he made good money', **'ni to da so'** is a code for 'he must be good' and **'we so ze da'** is a code for 'be good save grace'.

37. Which of the following is the code of 'must' ?
(1) so   (2) da
(3) lo   (4) ni
(5) Cannot be determined

38. What does the code 'ze' stand for ?
(1) some   (2) must
(3) be   (4) grace
(5) save

39. Which of the following is the code of 'good' ?
(1) so   (2) we
(3) ze   (4) lo
(5) fe

40. 'grace of money', may be coded as
(1) ka da fe   (2) we ka so
(3) ja da we   (4) ka we yo
(5) ja ka ze

Directions (41–45) : Study following information to answer the given questions :
A word and number arrangement machine when given an input line of words rearranges them following a particular rule. The following is an illustration of input and rearrangement.
Input   : age road own wire tire ink pen uni dice eat
Step I   : uni age road own wire tire ink pen eat dice
Step II : uni own age road wire tire ink eat pen dice
Step III : uni own ink age wire tire eat road pen dice
Step IV : uni own ink eat age wire tire road pen dice
And step four is the last step of the rearrangement.
As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.
Input for the questions
Input   : **gem stat ace cast omit fan rate uncut era input**

41. Which of the following would be the final arrangement ?
(1) cast gem fan rate stat uncut omit input era ace
(2) uncut omit input era ace cast fan gem rate stat
(3) uncut omit input era ace stat rate gem fan cast
(4) uncut omit input era ace stat fan gem rate cast
(5) None of these

42. In Step III, which of the following word would be at 6th position from the left ?
(1) rate   (2) ace
(3) stat   (4) gem
(5) None of these

43. Which step number would be the following output ?
uncut omit gem stat ace rate era input fan cast
(1) II   (2) III
(3) V   (4) IV
(5) None of these

44. In step IV of the rearrangement, if omit is related to **era** and **rate** is related to **fan** in a certain way, to which of the following would **ace** be related to, following the same pattern ?
(1) rate   (2) input
(3) stat   (4) gem
(5) None of these

45. Which of the following would be Step VII ?
(1) Uncut omit input era ace stat rate gem fan cast
(2) Uncut omit input era ace rate stat fan gem cast
(3) Uncut omit input era ace cast fan gem rate stat
(4) Uncut omit input era stat ace rate gem fan cast
(5) There will be no such step as the input gets rearranged before step VII

Directions (46–50) : In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions.

Mark answer	If
(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 conclusions I and II follow.

46. **Statement :**
$P \geq Q = R > S > T$
Conclusions :
I. $P \geq T$
II. $T < Q$

47. **Statement :**
$L \leq M < N > O \geq P$
Conclusions :
I. $O < M$
II. $P \leq N$

48. **Statement :**
$A > B, B \geq C = D < E$
Conclusions :
I. $C < A$
II. $D \leq B$

49. Statement :

H > J =K, K ≥ L, L > T, T < V,

Conclusions :

I. K > T

II. L ≤ H

50. Statement :

A ≤ B = C, D > C = E

Conclusions :

I. E ≥ A

II. A < D

Directions (51 – 55) : Study the following arrangement carefully and answer the questions given below :

4 2 6 1 3 8 9 5 8 1 6 5 1 5 8 5
3 9 4 9 2 3 2 1 5 7 2 6 2 4 2 7 4

51. If all the even digits are deleted from the above arrangement, which of the following will be seventh from the right end of the arrangement ?

(1) 3   (2) 5

(3) 1   (4) 9

(5) 7

52. How many such 2s are there in the above arrangement each of which is immediately preceded by an odd digit and also immediately followed by an odd digit ?

(1) None   (2) One

(3) Two   (4) Three

(5) More than three

53. How many such 1s are there in the above arrangement, each of which is immediately preceded by a perfect square ?

(1) None   (2) One

(3) Two   (4) Three

(5) More than three

54. If one is added to each of the even digits and two is added to each of the odd digits given in **BOLD** in the above arrangement, how many digits will appear twice in the new number thus formed ?

(1) None   (2) One

(3) Two   (4) Three

(5) More than three

55. Which of the following is seventh to the right of the nineteenth digit from the right end of the above arrangement ?

(1) 3   (2) 5

(3) 1   (4) 7

(5) None of these

Directions (56 – 57) : Study the following information to answer the given questions :

Point P is 9m towards the East of Point Q. Point R is 5 m towards the South of point P. Point S is 3m towards the West of point R. Point T is 5m towards the North of point S. Point V is 7m towards the South of point S.

56. If a person walks in a straight line for 8m towards west from point R, which of the following points would he cross the first ?

(1) V   (2) Q

(3) T   (4) S

(5) Cannot be determined

57. Which of the following points are in a straight line ?

(1) P, R, V   (2) S, T, Q

(3) P, T, V   (4) V, T, R

(5) S, V, T

Directions (58–60) : Study the following information to answer the given questions :

A building has seven floors numbered one to seven, in such a way that the ground floor is numbered one, the floor above it, number two and so on such that the topmost floor is numbered seven. One out of seven people viz. A, B, C, D, E, F and G lives on each floor. A lives on fourth floor. E lives on the floor immediately below F's floor. F does not live on the second or the seventh floor.

C does not live on an odd numbered floor. B does not live on a floor immediately above or below C's floor. D does not live on the topmost floor. G does not live on any floor below E's floor.

58. Who lives on the topmost floor ?

(1) B

(2) C

(3) E   (4) G

(5) Cannot be determined

59. Who lives immediately above D's floor ?

(1) A   (2) B

(3) C   (4) F

(5) G

60. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?

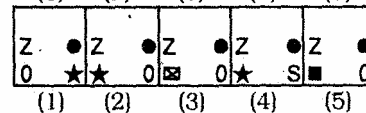(1) F   (2) D

(3) B   (4) G

(5) C
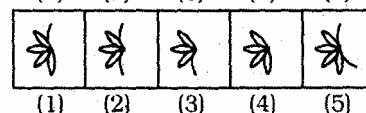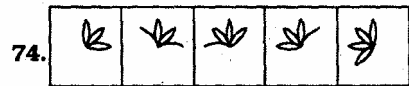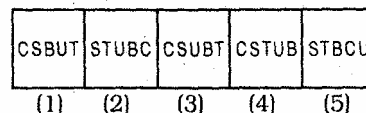
Directions (61 – 75) : In each of the questions given below which one of the five answer figures on the right should come after the problem figures on the left, if the sequence were continued ?

PROBLEM FIGURES   **ANSWER FIGURES**

68. (figures) (1) (2) (3) (4) (5)

69. (figures) (1) (2) (3) (4) (5)

70. (figures) (1) (2) (3) (4) (5)

71. (figures) (1) (2) (3) (4) (5)

72. (figures) (1) (2) (3) (4) (5)

73. | CSTUB | UBCST | STUBC | BCSTU | TUBCS | | CSBUT | STUBC | CSUBT | CSTUB | STBCU |
(1) (2) (3) (4) (5)

74. (figures) (1) (2) (3) (4) (5)

75. (figures) (1) (2) (3) (4) (5)
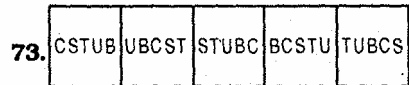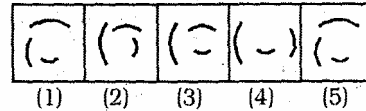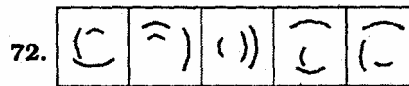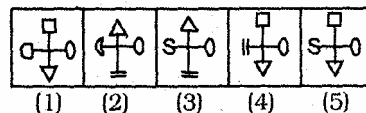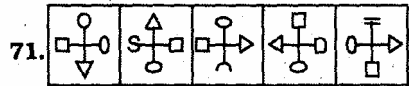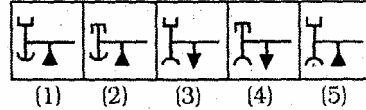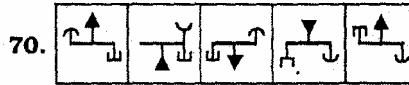
Directions (76 – 80) : In each questions below five figures are given. Four are similar in a certain way and so form a group. The question is which one of the figure **does not** belong to that group ?

76. (figures) (1) (2) (3) (4) (5)

77. (figures) (1) (2) (3) (4) (5)

78. (figures) (1) (2) (3) (4) (5)

79. (figures) (1) (2) (3) (4) (5)

80. (figures) (1) (2) (3) (4) (5)
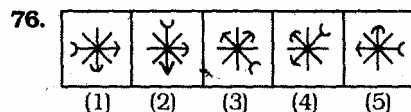
81. To navigate to a new Web page for which you know the URL, type that URL in the browser's .... and press Enter.
(1) Address bar (2) Domain bar
(3) Address button
(4) Name button (5) None of these

82. The CPU, also called the .... when talking about PCs, does the vast majority of the processing for a computer.
(1) macroprocessor
(2) RAM
(3) Memory System
(4) microprocessor
(5) None of these

83. A Computer's type, processor, and operating system define its
(1) brand   (2) size
(3) platform   (4) speed
(5) None of these

84. A kiosk
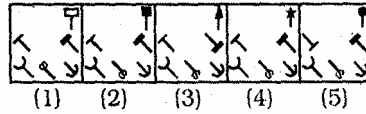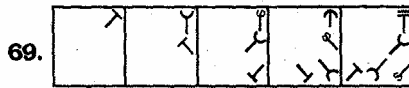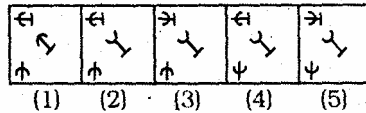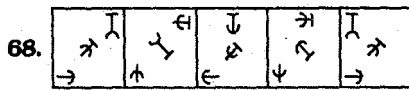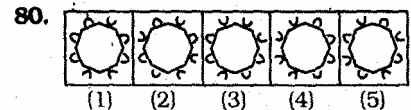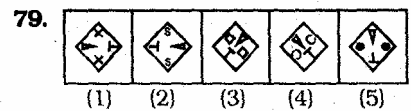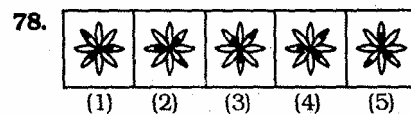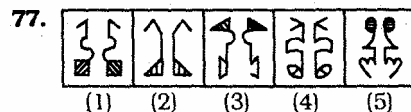(1) is data organised and presented in a manner that has additional value beyond the value of the data itself
(2) combines microscopic electronic components on a single integrated circuit that processes bits according to software instructions
(3) is a computer station that provides the public with specific and useful information and service
(4) describes a computer's type, processor, and, operating system
(5) None of these

85. The part of the CPU that accesses and decodes program instructions, and coordinates the flow of data among various system components is called
(1) ALU   (2) control unit
(3) megahertz   (4) mother board
(5) None of these

86. Computer programs are written in a high-level programming language; however, the human-readable version of a program is called
(1) cache
(2) instruction set
(3) source code
(4) word size
(5) None of these

87. What is the difference between a CD-ROM and a CD-RW ?
(1) They are the same-just two different terms used by different manufacturers
(2) ACD-ROM can be written to and a CD-RW cannot
(3) A CD-RW can be written to, but a CD-ROM can only be read from
(4) A CD-ROM holds, more information than a CD-RW
(5) None of these

88. What is the term for how words will appear on a page ?
(1) text formatting
(2) Character formatting
(3) Point size
(4) Typeface
(5) None of these

89. The process of a computer receiving information from a server on the Internet is known as
(1) pulling   (2) pushing
(3) downloading (4) transferring
(5) None of these

90. When sending an e-mail, the .... line describes the contents of the message.
(1) subject   (2) to
(3) contents   (4) cc
(5) None of these

91. All the deleted files go to
(1) Recycle Bin
(2) Task Bar
(3) Tool Bar
(4) My Computer
(5) None of these

92. You organise files by storing them in
(1) archives (2) folders
(3) indexes (4) lists
(5) None of these

93. A Web site address is a unique name that identifies a specific .... on the Web.
(1) Web browser (2) Web site
(3) PDA (4) link
(5) None of these

94. .... are specially designed computer chips that reside inside other devices, such as your car or your electronic thermostat
(1) Servers
(2) Embedded computers
(3) Robotic computers
(4) Mainframes
(5) None of these

95. Which of the following places the common data elements in order from smallest to largest ?
(1) Character, file, record, field, database
(2) Character, record, field, file, database
(3) Character, field, record, file, database
(4) Bit, byte, character, record, field, file, database
(5) None of these

96. Which of the following statements is false concerning file names ?
(1) Files may share the same name or the same extension but not both
(2) Every file in the same folder must have a unique name
(3) File extension is another name for file type
(4) The file extension comes before the dot (.) followed by the file name
(5) None of these

97. A disk's content that is recorded at the time of manufacture and that cannot be changed or erased by the user is
(1) memory-only (2) write-only
(3) read-only (4) run-only
(5) None of these

98. Distributed processing involves
(1) solving computer component problems from a different computer
(2) solving computing problems by breaking them into smaller parts that are separately processed by different computers
(3) allowing users to share files on a network
(4) allowing users to access network resources away from the office
(5) None of these

99. The operating system determines the manner in which all of the following occurs except
(1) user creation of a document
(2) user interaction with the processor
(3) printer output
(4) data displayed on the monitor
(5) None of these

100. Office LANs that are spread geographically apart on a large scale can be connected using a corporate
(1) CAN (2) LAN
(3) DAN (4) WAN
(5) TAN

QUANTITATIVE APTITUDE

Directions (101–105) : What will come in place of the question mark (?) in the following questions ?

101. $348 \div 29 \times 15 + 156 = (?)^3 + 120$
(1) 12 (2) 6
(3) 36 (4) 9
(5) None of these

102. $(4 \times 4)^3 \div (512 \div 8)^4 \times (32 \times 8)^4 = (2 \times 2)^{?+4}$
(1) 8 (2) 12
(3) 6 (4) 14
(5) None of these

103. $\left(2\sqrt{392} - 21\right) + \left(\sqrt{8} - 7\right)^2 = (?)^2$
(1) 4 (2) –4
(3) 12 (4) 2
(5) 6

104. $1\frac{1}{4} + 1\frac{1}{6} - 1\frac{1}{8} = ? + 1\frac{1}{12}$
(1) $\frac{5}{24}$ (2) $\frac{7}{24}$

(3) $\frac{5}{12}$ (4) $\frac{7}{12}$
(5) None of these

105. 76% of 1285 = 35% of 1256 + ?
(1) 543 (2) 537
(3) 547 (4) 533
(5) None of these

Directions (106 – 110) : What **approximate** value will come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value)

106. $499.99 + 1999 \div 39.99 \times 50.01 = ?$
(1) 3200 (2) 2700
(3) 3000 (4) 2500
(5) 2400

107. $[(7.99)^2 - (13.001)^2 + (4.01)^3]^2 = ?$
(1) –1800 (2) 1450
(3) –1660 (4) 1660
(5) –1450

108. $\frac{601}{49} \times \frac{399}{81} \div \frac{29}{201} = ?$
(1) 520 (2) 360
(3) 460 (4) 500
(5) 420

109. $441.01 - 232.99 + 1649.99 = ? + 1225.92$
(1) 600 (2) 630
(3) 660 (4) 690
(5) 720

110. $(21.5\% \text{ of } 999)^{1/3} + (42\% \text{ of } 601)^{1/2} = ?$
(1) 18 (2) 22
(3) 26 (4) 30
(5) 33

Directions (111 – 115) : What will come in place of the question mark (?) in the following number series ?

111. 15 21 39 77 143 (?)
(1) 243 (2) 240
(3) 253 (4) 245
(5) None of these

112. 33 39 57 87 129 (?)
(1) 183 (2) 177
(3) 189 (4) 199
(5) None of these

113. 15 19 83 119 631 (?)
(1) 731 (2) 693
(3) 712 (4) 683
(5) None of these

114. 19 26 40 68 124 (?)
(1) 246 (2) 238
(3) 236 (4) 256
(5) None of these

115. 43 69 58 84 73 (?)
(1) 62 (2) 98
(3) 109 (4) 63
(5) None of these

Directions (116 – 120) : In the following questions two equations numbered I and II are given. You have to solve both the equations and

Give answer   if
(1) $x > y$
(2) $x \geq y$
(3) $x < y$
(4) $x \leq y$
(5) $x = y$ or the relationship cannot be established

116. I. $x^2 - 11x + 24 = 0$
II. $2y^2 - 9y + 9 = 0$

117. I. $x^3 \times 13 = x^2 \times 247$
II. $y^{1/3} \times 14 = 294 \div y^{2/3}$

118. I. $\dfrac{12 \times 4}{x^{4/7}} - \dfrac{3 \times 4}{x^{4/7}} = x^{10/7}$
II. $y^3 + 783 = 999$

119. I. $\sqrt{500}x + \sqrt{402} = 0$
II. $\sqrt{360}y + (200)^{1/2} = 0$

120. I. $(17)^2 + 144 \div 18 = x$
II. $(26)^2 - 18 \times 21 = y$

121. The respective ratio between the present ages of Ram and Rakesh is 6 : 11. Four years ago the ratio of their ages was 1 : 2 respectively. What will be Rakesh's age after five years ?
(1) 45 years (2) 29 years
(3) 49 years
(4) Cannot be determined
(5) None of these

122. The circumference of two circles is 88 metres and 220 metres respectively. What is the difference between the area of the larger circle and the smaller circle ?
(1) 3422 sq. metre
(2) 3242 sq. metre
(3) 3244 sq. metre
(4) 3424 sq. metre
(5) None of these

123. One of the angles of a triangle is two-third of sum of adjacent angles of parallelogram. Remaining angles of the triangle are in ratio 5 : 7 respectively. What is the value of second largest angle of the triangle ?
(1) 25°
(2) 40°
(3) 35°

(4) Cannot be determined
(5) None of these

124. Pradeep invested 20% more than Mohit. Mohit invested 10% less than Raghu. If the total sum of their investment is ₹ 17,880, how much amount did Raghu invest ?
(1) ₹ 6,000 (2) ₹ 8,000
(3) ₹ 7,000 (4) ₹ 5,000
(5) None of these

125. Average score of Rahul, Manish and Suresh is 63. Rahul's score is 15 less than Ajay and 10 more than Manish. If Ajay scored 30 marks more than the average score of Rahul, Manish and Suresh, what is the sum of Manish's and Suresh's scores ?
(1) 120 (2) 111
(3) 117
(4) Cannot be determined
(5) None of these

126. Fifty three per cent of a number is 358 less than the square of 26. What is the value of three-fourth of 23 per cent of that number ?
(1) 101 (2) 109.5
(3) 113 (4) 103.5
(5) None of these

127. The average speed of a car is $1\frac{4}{5}$ times the average speed of a bus. A tractor covers 575km in 23 hours. How much distance will the car cover in 4 hours if the speed of the bus is twice the speed of the tractor ?

(1) 340 km (2) 480 km
(3) 360 km (4) 450 km
(5) None of these

128. The simple interest accrued on a sum of certain principal is ₹ 2,000 in five years at the rate of 4 p.c.p.a. What would be the compound interest accrued on same principal at same rate in two years ?
(1) ₹ 716 (2) ₹ 724
(3) ₹ 824 (4) ₹ 816
(5) None of these

129. Rehaan purchased a bike for ₹ 54,000. He sold it at a loss of 8 per cent. With that money he again purchased another bike and sold it at a profit of 10 per cent. What is his overall loss/profit ?
(1) Loss of ₹ 657
(2) Profit of ₹ 567
(3) Loss of ₹ 648
(4) Profit of ₹ 648
(5) None of these

130. Two men alone or three women alone can complete a piece of work in 4 days. In how many days can 1 woman and one man together complete the same piece of work ?
(1) 6 days (2) $\dfrac{24}{5}$ days
(3) $\dfrac{12}{1.75}$ days
(4) Cannot be determined
(5) None of these

Directions (131 – 135) : Study the following table carefully to answer the questions that follow :

Number of employees working in four different companies in five different years

Years	Company							
	A		B		C		D	
	Male	Female	Male	Female	Male	Female	Male	Female
2004	200	400	250	450	350	600	400	450
2005	250	150	400	100	550	350	550	600
2006	400	250	850	400	350	500	650	450
2007	650	400	500	150	650	500	700	600
2008	750	300	600	350	400	300	650	400

131. What was the total number of males working in company A in the year 2007, males working in company-B in the year 2005 and females working in company-D in the year 2006 together ?
(1) 1550 (2) 1600
(3) 1450 (4) 1400
(5) None of these

132. What was the average number of female employees working in all the companies together in the year 2004 ?
(1) 475
(2) 385
(3) 450
(4) 300
(5) None of these

133. Total number of male employees working in company-C over all the years together was **approximately** what percentage of total number of employees working in the year 2007 in all the companies together ?
(1) 41   (2) 46
(3) 51   (4) 55
(5) 59

134. If 20 per cent of male and 30 per cent of female employees in company-B in the year 2004 were handicapped, then what was the total number of handicapped candidates in that company in that year ?
(1) 185   (2) 170
(3) 190   (4) 195
(5) None of these

135. What was the respective ratio between the number of males in company-D in the year 2005, number of females in company-A in the year 2006 and the number of males in company-B in the year 2005 ?
(1) 11 : 5 : 8   (2) 11 : 6 : 8
(3) 12 : 5 : 9   (4) 12 : 5 : 7
(5) 11 : 5 : 9

Directions (136–140) : Study the following graph carefully to answer the questions that follow :

Number of students (in hundreds) from two different schools who qualified in an exam in six different years
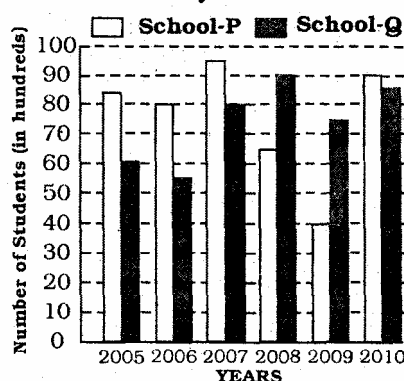
136. What was the **approximate** per cent increase in the number of students who qualified in the exam from school-Q in the year 2007 as compared to the previous year ?
(1) 30   (2) 36
(3) 45   (4) 49
(5) 26

137. What was the respective ratio between the number of students who qualified in the exam from School-P in the year 2005 and the number of students who qualified in the exam from school-Q in the year 2008 ?
(1) 13 : 18   (2) 17 : 18
(3) 17 : 19   (4) 13 : 19
(5) None of these

138. What was the difference between the total number of students who qualified in the exam in the year 2005 from both the schools together and the total number of students from school-Q who qualified in exam over all the years together ?
(1) 30000   (2) 30500
(3) 29000   (4) 29500
(5) None of these

139. Total number of students who qualified in the exam from school-P over all the years together was **approximately** what percentage of total number of students who qualified in the exam from both the schools together in the years 2006 and 2007 together ?
(1) 143   (2) 159
(3) 155   (4) 165
(5) 147

140. If 40 per cent of the total students who qualified in the exam from both the schools together over all the years are females, then what was the total number of males who qualified in the exam over all the years from both the schools together ?
(1) 51000   (2) 54000
(3) 56000   (4) 52000
(5) None of these

Directions (141 – 145) : Study the following Pie-chart carefully to answer these questions.
Total Number of Passengers = 8500
Percentage of Passengers
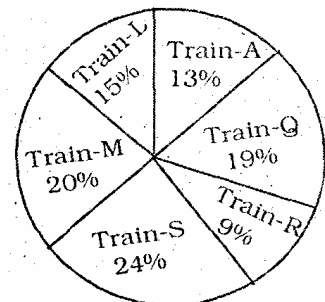
141. What was the **approximate** average number of passengers in train-S, train M and train-L together ?
(1) 1521
(2) 1641
(3) 1651
(4) 1671
(5) 1691

142. If in train-R 34 percent of the passengers are females and 26 percent are children, what is the number of males in that train ?
(1) 306   (2) 316
(3) 308   (4) 318
(5) None of these

143. Number of passengers in the train-Q is approximately what percentage of the total number of passengers in train-A and train-R ?
(1) 90   (2) 70
(3) 75   (4) 80
(5) 86

144. Which train has second highest number of passengers ?
(1) A   (2) Q
(3) S   (4) M
(5) L

145. How much more percent (approximately) number of passengers are there in train-M as compared to the number of passengers in train-L ?
(1) 29   (2) 49
(3) 43   (4) 33
(5) 39

Monthly Rent (in ₹ thousands) at five different places in six different years

Place					
Years	Churchgate	Dadar	Kandivali	Borivali	Virar
2005	5.3	3.8	1.5	2.7	1.1
2006	12.5	8.3	3.4	4.8	2.1
2007	16.7	11.7	5.5	6.6	1.8
2008	20.9	13.6	9.8	12.7	3.6
2009	25.8	14.5	11.5	14.1	5.5
2010	30.3	20.9	15.6	15.9	7.8

146. In which place the monthly rent did not increase consistently from year 2005 to 2010 ?
(1) Churchgate   (2) Dadar
(3) Kandivali   (4) Borivali
(5) Virar

147. In which year at Churchgate, the monthly rent increased more than 100 percent from the previous year?
(1) 2006   (2) 2007
(3) 2008   (4) 2009
(5) 2010

148. What was the difference between the monthly rent at Dadar in the year 2009 and Borivali in the year 2007 ?
(1) ₹ 7,6001   (2) ₹ 7 ,9001
(3) ₹ 8,1001   (4) ₹ 8,6001
(5) None of these

149. Monthly rent at Kandivali in the year 2008 was **approximately** what percent of the total monthly rent at Virar over all the years together ?
(1) 30   (2) 33
(3) 38   (4) 42
(5) 45

150. Which city was most expensive in terms of rent ?
(1) Churchgate   (2) Dadar
(3) Kandivali   (4) Borivali
(5) Virar

GENERAL AWARENESS ON SOCIO ECONOMIC DEVELOPMENT

151. As per the decision taken by the Government of India now the National Rural Employment Guarantee Act is extended to all the districts of India. This means it will now be applicable to about
(1) 200 districts
(2) 300 districts
(3) 400 districts
(4) 500 districts
(5) 600 districts

152. Which of the following is the amount of insurance cover provided to the workers of the unorganised sector under Rashtriya Swasthya Bima Yojana ?
(1) ₹ 10,000   (2) ₹ 20,000
(3) ₹ 30,000   (4) ₹ 40,000
(5) ₹ 50,000

153. Which of the following banks has taken over the Centurion Bank of Punjab ?
(1) ICICI Bank
(2) IDBI Bank
(3) HDFC Bank
(4) AXIS Bank
(5) None of these

154. Unique Identification Authority of India will set up data base for
(1) Identity and biometrics details of Indian residents
(2) Identity and biometrics details of Indian citizens
(3) Identity and biometrics details of person's residents in India or visiting India
(4) All the above
(5) None of these

155. The biggest Public Sector under-taking in the country is
(1) Iron & steel plants
(2) Roadways
(3) Railways
(4) Airways
(5) None of these

156. Which of the following is Horti-culture Crop ?
(1) Paddy   (2) Wheat
(3) Mango   (4) Bajara
(5) None of these

157. Which of the following nation is considered the originator of the concept of Micro Finance?
(1) India   (2) Bangladesh
(3) South Africa (4) USA
(5) None of these

158. Very often we read in news papers about 3G or 3rd Generation technology. This is a set of standards used for which of the following purposes ?
(1) To combat climatic changes
(2) Production of Nuclear Energy
(3) Film Production
(4) Mobile Telecommunications
(5) All of these

159. What is the full form of 'ULIP', the term which was in the news recently ?
(1) Universal Life & Investment Plan
(2) Unit Loan & Insurance Plan
(3) Universal Loan & Investment Plan
(4) Uniformly Loaded Investment Plan
(5) Unit Linked Insurance Plan

160. The main function of I. M. F. is to
(1) Finance investment loans to developing countries
(2) Act as a private sector lending arm of the World Bank
(3) Help to solve balance of payment problems of member countries
(4) Arrange international deposits from banks
(5) None of these

161. The difference between visible exports and visible imports is defined as
(1) Balance of trade
(2) Balance of payment
(3) Balanced terms of trade
(4) Gains from trade
(5) All the above

162. Invisible Export means export
(1) Services
(2) Prohibited goods

(3) Unrecorded goods
(4) Goods through smuggling
(5) All the above

163. Indira Gandhi Canal' which is around 450 km long provide irrigation facility mainly to which of the following states ?
(1) Punjab
(2) Haryana
(3) Madhya Pradesh
(4) Gujarat
(5) Rajasthan

164. The rate of MAT has been increased from the present 15% to 18% with effect from April 2010. What the full form of MAT ?
(1) Maximum Alternate tax
(2) Minimum Alternate Tax
(3) Minimum Affordable Tax
(4) Maximum Affordable Tax
(5) None of these

165. RBI has asked banks to make a plan to provide banking services to all villages having a population upto 2000. This directive issued by the RBI will fall in which of the following categories ?
(1) Plan for Financial Inclusion
(2) Efforts to meet the targets of Priority Sector Lending
(3) Extension of Relief Packages to the Farmers
(4) Plan for opening more rural branches
(5) None of these

166. Which of the following is not a part of the scheduled banking structure in 'India ?
(1) Money Lenders
(2) Public Sector Banks
(3) Private Sector Banks
(4) Regional Rural Banks
(5) State Co-operative Banks

167. The rate of interest on Savings Bank Account is stipulated by
(1) The concerned bank
(2) RBI
(3) Indian Banks Association
(4) Government of India
(5) Banking Codes and Standards Board of India

168. Many times we read a term CBS used in banking operation. What is the full form of the letter 'C' in the term 'CBS' ?
(1) Core
(2) Credit
(3) Continuous
(4) Complete
(5) None of these

169. In the year 2010, Commonwealth Games were organised in which of the following countries ?
(1) China
(2) South Africa
(3) Canada
(4) Brazil
(5) India

170. Which of the following metals is used for generation of nuclear Energy by most of the Nuclear Power Plants ?
(1) Zinc
(2) Platinum
(3) Uranium
(4) Nickel
(5) None of these

171. Many a time we read a term 'PPP' in financial dailies/magazines. What is the full form of the same as used in financial world ?
(1) Public Per Capita Power
(2) Per Capita Potential Purchases
(3) Purchasing Power Parity
(4) Present Purchasing Power
(5) None of these

172. The recent press report indicates that one of the Economies of the world took over another Economy in GDP terms to gain number Two ranking at world level. Which one of the following country is that ?
(1) Japan
(2) China
(3) Germany
(4) Australia
(5) India

173. Which of the following villagers received first lot of UID numbers ?
(1) Vaijapur in Maharashtra
(2) Bedkihal in Karnataka
(3) Tembhli in Maharashtra
(4) Navagam in Gujarat
(5) None of these

174. The highest weight in the revised Whole Sale Price Index, implemented from September 2010 is given to which of the following item ?
(1) Fuel
(2) Food items
(3) Manufactured items
(4) Primary Articles
(5) All of these

175. Which one of the following is a driving force influencing the industrial growth of an economy ?
(1) Economic Factors only
(2) Investment only
(3) Innovation/Market Base only
(4) Only (1) & (2)
(5) All (1), (2) & (3)

176. What do you understand by Community Development programmes ?
(1) Villages participation in the programme
(2) A movement to promote better living for the whole community
(3) A movement to promote better living for the whole community with the assistance of local Government
(4) A movement designed to promote better living for the whole community with the active participation and on the initiative of the community
(5) None of these

177. In which one of the following activities percentage share of co-operative sector is the highest ?
(1) Agricultural Credit disbursement
(2) Sugar production
(3) Wheat procurement
(4) Fertiliser distribution
(5) Handlooms

178. What is a Panchayati Raj ?
(1) It is a community development programme
(2) It is a cooperative movement
(3) It is a scheme of self governance
(4) It is an exercise in decentralisation of administrative authority
(5) It is an out dated system, not followed now

179. Which one of the following is the updated base for Wholesale Price Index (WPI) ?
(1) 2002 - 2003
(2) 2003 - 2004
(3) 2004 - 2005
(4) 2005 - 2006
(5) 2006 - 2007

180. What is a Green Index ?
(1) It measures nation's wealth according to GNP per capita
(2) It measures nation's wealth according to GDP per capita
(3) It measures nations wealth according to provisions of control on Green house gases
(4) It measures nation's wealth in terms of coverage of forest area
(5) None of these

181. In which one of the following city, 2012 Olympics are proposed to be held ?
(1) Frankfurt   (2) London
(3) Tokyo   (4) Washington
(5) Dubai

182. In which one of the following states, Rosa Power Plant is located ?
(1) U.P.   (2) M.P.
(3) Orissa   (4) Haryana
(5) Punjab

183. Which one of the following is present Savings Bank Interest Rate (in percentage terms) ?
(1) 3.0   (2) 3.5
(3) 4.0   (4) 4.5
(5) 5.0

184. For calculation of poverty line in rural area, which one of the following calories consumption per day per person has been stipulated by Planning Commission ?
(1) 2000   (2) 2100
(3) 2400   (4) 2500
(5) None of these

185. Who is Julian Assange ?
(1) Founder, Googles
(2) Founder, Rediffmail
(3) Nominee, Nobel Prize for literature 2010
(4) Founder, Wikileaks
(5) None of these

186. For which one of the following States, interloculators' panel has been appointed by the Centre ?
(1) Manipur
(2) Arunachal Pradesh
(3) Assam
(4) Nagaland
(5) Jammu & Kashmir

187. Expand the term BCBS.
(1) Bank's Committee on Banking Supervision
(2) Basel Committee on Banking Supervision
(3) Bank's Commission on Banking Supervision
(4) Basel Commission on Banking Supervision
(5) None of these

188. By which one of the following years, Government proposes to introduce IFRS norms ?
(1) April 2011   (2) October 2011
(3) April 2012   (4) October 2012
(5) None of these

189. As per World Development Report 2009, if the poverty is measured by the international poverty line standard of below a dollar a day, **approximately** what percent of people will be living in India below poverty line ?
(1) 25.0   (2) 27.5
(3) 34.5   (4) 58.5
(5) 10.5

190. Who is Kaushik Basu ?
(1) Dy. Governor, RBI
(2) Member Planning Commission
(3) Chairman, Prime Ministers' Economic Advisory Council
(4) Chief Economic Advisor
(5) Secretary General FICCI

191. In a Poverty Pyramid index, which one of the following segments of population face highest poverty risk ?
(1) Formal wage employment
(2) Informal Self Employment : Employers
(3) Regular Informal Wage employment
(4) Informal self Employment : own account
(5) Casual Informal Wage Employment and domestic work

192. Which one of the following is a Self Employment Programme for Educated Unemployed Youth ?
(1) Prime Minister's Rozgar Yojana
(2) Swaran Jayanti Sahakari Rozgar Yojana
(3) National Social Assistance Programme
(4) Swaran Jayanti Gram Swarozgar Yojana
(5) None of these

193. In which one of the following States, Sariska Tiger Reserve is located ?
(1) M. P.   (2) Gujarat
(3) Rajasthan   (4) West Bengal
(5) Orissa

194. Who is Mohammed Yunus ?
(1) Finance Minister, Bangladesh
(2) Founder, Grameena Bank
(3) Nobel Laureate for peace
(4) Foreign Minister, Pakistan
(5) Founder Micro Finance Institutions in India

195. Which one of the following is the primary source of energy in India ?
(1) Hydel Power
(2) Natural Gas
(3) Coal
(4) Naptha
(5) Non-conventional energy

196. At which one of the following rate, the Central Bank lends to banks against government securities ?
(1) Repo Rate
(2) Reverse Repo Rate
(3) Bank Rate
(4) SLR
(5) CRR

197. Which one of the following is not a member of BASIC ?
(1) India   (2) China
(3) South Africa
(4) Brazil
(5) Indonesia

198. Which one of the following Corporate Groups has argued in Supreme Court that leaks of Radia Tapes has affected its reputation ?
(1) RIL   (2) Jindal Steels
(3) Bajaj Group (4) Adani Group
(5) Tata Group

199. Yuan currency belongs to which one of the following countries ?
(1) Japan   (2) Thailand
(3) South Korea
(4) China   (5) Vietnam

200. Aung San Sau Kyi, Nobel Peace Prize Winner belongs to which one of the following countries ?
(1) China   (2) North Korea
(3) South Korea
(4) Japan   (5) Myanmar

ENGLISH LANGUAGE

Directions (201 – 205) : Rearrange the following five sentences (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

(A) "What a waste of my tax money", I thought, walking past the people having free Californian Chardonnay.

(B) "Speak to her", he said, "She's into books".

(C) The friend who had brought me there noticed my noticing her.

(D) In late 2003, I was still paying taxes in America, so it horrified me that the US Consulate was hosting a "Gallo drinking appreciation event".

(E) Behind them, a pianist was playing old film tunes, and a slim short woman was dancing around him.

201. Which of the following would be the **FOURTH** sentence ?

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

202. Which of the following would be the **FIRST** sentence ?
(1) A   (2) B
(3) C   (4) D
(5) E

203. Which of the following would be the **FIFTH (LAST)** sentence ?
(1) A   (2) B
(3) C   (4) D
(5) E

204. Which of the following would be the **SECOND** sentence ?
(1) A   (2) B
(3) C   (4) D
(5) E

205. Which of the following would be the **THIRD** sentence ?
(1) A   (2) B
(3) C   (4) D
(5) E

Directions (206 – 215) : In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

The Right of Children to Free and Compulsory Education (RTE) Act, 2009, which came **(206)** effect in April this year, is meant to transform the education sector and take India closer to the goal of universal schooling. But with admissions to the new academic session just **(207)** the corner, it is fast becoming clear that **(208)** well-intentioned ideas into **(209)** will take some doing. For a start, the guidelines for admissions under the RTE prohibit schools from conducting any sort of student profiling. The stress on a random yet justifiable admission process means that schools will have to resort to something as quirky as a lottery system. However, leaving admission to a good school to pure **(210)** will only incentivise manipulations, defeating the very essence of RTE.

The main problem facing the education sector is that of a resource crunch. The provisions for ensuring universal access to education are all very well, **(211)** we have the infrastructure in place first. Brick and mortar schools need to precede open admission and not the **(212)** way around.

In that sense, legislators' assessment of ground realities is **(213)** target when they endorse the closure of tens of thousands of low-cost private schools for not meeting the minimum standards of land plot, building specifications and playground area as laid out in the RTE Act. Instead of bearing down **(214)** on private schools for failing to conform to abstract bureaucratic criteria, efforts to bring about universal education should focus on upgrading and expanding the existing government school infrastructure to accommodate all . Only then can we ensure the much-needed supply-demand **(215)** in the education sector.

206. (1) with   (2) for
     (3) on   (4) into
     (5) in

207. (1) around   (2) near
     (3) into   (4) about
     (5) reaching

208. (1) forming   (2) translating
     (3) having   (4) taking
     (5) framing

209. (1) affect   (2) ideas
     (3) practice   (4) concept
     (5) procedure

210. (1) benefit   (2) merit
     (3) chance   (4) basis
     (5) method

211. (1) Unless   (2) until
     (3) executed   (4) provided
     (5) exercised

212. (1) other   (2) any
     (3) two   (4) differ
     (5) after

213. (1) on   (2) of
     (3) often   (4) taken
     (5) off

214. (1) soft   (2) more
     (3) less   (4) only
     (5) hard

215. (1) need   (2) equilibrium
     (3) expectation   (4) attempt
     (5) aspects

Direction (216 – 225) : Read each sentence to find out whether there is any grammatical error or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is (5). (Ignore errors of punctuation, if any).

216. The President has denied (1)/ that the economy is in recession (2)/ or was go into one (3)/ despite a spate of downcast reports. (4)/ No error (5).

217. The angry at being (1)/ left out of the bonanza (2)/ is palpable among (3)/ employees of the organisation. (4)/ No error (5).

218. His comments came after (1)/ the research group said that its (2)/ consumer confidence index were (3)/ slumped to its lowest level. (4)/ No error (5).

219. If all goes well, (1)/ the examination scheduled for next month (2)/ is all set to be completely free (3)/ from annoying power cuts and disruptions. (4)/ No error (5).

220. There are just too few trains (1)/ for the ever-grow (2)/ number of passengers (3)/ in the city. (4)/ No error (5).

221. The buzz at the party was (1)/ that a famous (2)/ filmstar and politician, (3)/ would probable drop by for a while. (4)/ No error (5).

222. The Opposition disrupted proceedings (1)/ in both Houses of Parliament (2)/ for the second consecutive day (3)/ above the plight of farmers in the country. (4)/ No error (5).

223. In response to the growing crisis, (1)/ the agency is urgently asking for (2)/ more contributions, to make up for (3)/ its sharp decline in purchasing power. (4)/ No error (5).

224. The tennis player easy through (1)/ the opening set before her opponent, (2)/ rallied to take the final two sets (3)/ for the biggest victory of her young career. (4)/ No error (5).

225. Aggression in some teenage boys (1)/ may be linkage to overly (2)/ large glands in their brains, (3)/ a new study has found. (4)/ No error (5).

Directions (226 – 240) : Read the following passage carefully and answer the questions given below it. Certain words/phrases have been printed in **bold** to help you locate them while answering some of the questions.

A new analysis has determined that the threat of global warming can still be greatly **diminished** if nations cut emissions of heat-trapping greenhouse gases by 70% this century. The analysis was done by scientists at the National Center for Atmospheric Re-

search (NCAR). While global temperatures would rise, the most dangerous potential aspects of climate change, including **massive** losses of Arctic sea ice and permafrost and **significant** sea-level rise, could be partially avoided.

"This research indicates that we can no longer avoid significant warming during this century," said NCAR scientist Warren Washington, the study paper's lead author. "But, if the world were to implement this level of emission cuts, we could stabilize the threat of climate change", he added.

Average global temperatures have warmed by close to 1 degree Celsius since the pre-industrial era. Much of the warming is due to human-produced emissions of greenhouse gases, **predominantly** carbon dioxide. This heat-trapping gas has increased from a pre-industrial level of about 284 parts per million (ppm) in the atmosphere to more than 380 ppm today. With research showing that additional warming of about 1 degree C may be the threshold for dangerous-climate change, the European Union has called for **dramatic** cuts in emissions of carbon dioxide and other greenhouse gases.

To examine the impact of such cuts on the world's climate, Washington and his colleagues ran a series of global studies with the NCAR-based Community Climate System Model (CCSM). They assumed that carbon dioxide levels could be held to 450 ppm at the end of this century. In contrast, emissions are now on track to reach about 750 ppm by 2100 if unchecked. The team's results showed that if carbon dioxide were held to 450 ppm, global temperatures would increase by 0.6 degrees Celsius above current readings by the end of the century. In contrast, the study showed that temperatures would rise by almost four times that amount to 2.2 degrees Celsius above current readings, if emissions were allowed to continue on their present course. Holding carbon dioxide levels to 450 ppm would have other impacts, according to the climate modeling study.

Sea-level rise due to thermal expansion as water temperatures warmed would be 14 centimetres (about 5.5 inches) instead of 22 centimetres (8.7 inches). Also, Arctic ice in the summertime would **shrink** by about a quarter in volume and stabilize by 2100, as **opposed** to shrinking at least

three-quarters and continuing to melt, and Arctic warming would be reduced by almost half.

226. Why has the European Union called for dramatic cuts in carbon dioxide and greenhouse gas emissions ?
    (1) As global warming is not an issue of concern
    (2) As the temperatures may rise almost by an additional one degree and this may lead to severe climate change.
    (3) As the NCAR has forced the European Union to announce the cuts.
    (4) As all the nations have decided to cut emissions of carbon dioxide.
    (5) None of these

227. What would **NOT** be one of the impacts of cutting greenhouse gas emissions ?
    (1) Temperatures will stop soaring
    (2) Ice in the Arctic sea would melt at a slower pace
    (3) The rise in sea level would be lesser
    (4) All of the above would be the impact
    (5) None of these

228. What would be the impact of unchecked greenhouse gas and carbon dioxide emissions ?
    (1) The temperature would rise from the current temperature by 2.2 degrees Celsius
    (2) The sea-level would rise by about 5.5 inches
    (3) The arctic ice would stabilize by 2100
    (4) The arctic ice would reduce by one-fourth
    (5) None of these

229. What can be the most appropriate title of the above passage ?
    (1) A study of the rise in water level
    (2) A study of rise in temperatures
    (3) A study of the effects of greenhouse gas emissions
    (4) A study of the Arctic region
    (5) A study of change in seasons

230. Which of the following statements is true in context of the passage?
    (1) At present the carbon dioxide emission is about 284 ppm.

    (2) The carbon dioxide emissions will be about 450 ppm at the end of this century if unchecked.
    (3) The carbon dioxide emission was about 380 ppm during the pre-industrial era.
    (4) The carbon dioxide emissions will be about 750 ppm at the end of this century if unchecked.
    (5) None of these

231. What does the scientist Warren Washington mean when he says "we could stabilize the threat of climate change" ?
    (1) Climate change can be stopped completely.
    (2) Climate change can be regularized.
    (3) Climate change and its effects can be studied extensively.
    (4) The ill-effects of the change in climate can be minimized.
    (5) None of these

232. Why did Washington and his colleagues conduct a series of studies ?
    (1) Because they realized that the temperature increase was almost about 1 degree
    (2) So that they could stabilize the climate change
    (3) So that they could help the European Union in cutting the carbon dioxide emissions
    (4) Because they found out that the greenhouse gas emissions could be cut by 70%
    (5) To examine the impacts of emission cuts on climate

233. What would be the impact of holding the carbon dioxide level at 450 ppm at the end of this century ?
    (A) Global temperatures would increase by 0.6 degrees Celcius.
    (B) Arctic warming would be reduced by half.
    (C) Thermal expansion will stop completely.
    (1) Only (A)
    (2) Only (A) and (B)
    (3) Only (B) and (C)
    (4) All the three (A), (B) and (C)
    (5) None of these

    Directions (234 – 237) : Choose the word which is **most similar** in meaning to the word printed in **bold** as used in the passage.

234. DRAMATIC
(1) unprecedented
(2) thrilling   (3) spectacular
(4) effective   (5) feeble

235. SHRINK
(1) contract   (2) physician
(3) wither   (4) shrivel
(5) reduce

236. PREDOMINANTLY
(1) clearly   (2) aggressively
(3) mainly   (4) firstly
(5) faintly

237. MASSIVE
(1) tall   (2) tough
(3) total   (4) little
(5) severe

Directions (238–240) : Choose the word which is **most opposite** in meaning to the word printed in **bold** as used in the passage.

238. SIGNIFICANT
(1) substantial
(2) miniscule
(3) incoherent
(4) unimportant
(5) irrelevant

239. OPPOSED
(1) resistant   (2) against
(3) favouring   (4) similar
(5) agree

240. DIMINISHED
(1) created   (2) rose
(3) increased   (4) lessen
(5) finished

Directions (241 – 245) : Which of the phrases (1), (2), (3) and (4) given below each sentence should replace the phrase printed in **bold** in the sentence to make it grammatically correct? If the sentence is correct as it is given and no correction is required, mark (5) as the answer.

241. Although scared of heights, she **gather all her courage** and stood atop the 24-storey building to participate in the activities.
(1) gathered all her courage
(2) gathered all courageous
(3) gather all courageous
(4) is gathered all courage
(5) No correction required

242. Naturally, with everything **gone so well** for them, it was time for celebration.
(1) go so well
(2) going so well
(3) gone as well
(4) going as well
(5) No correction required

243. The ban was imposed by the state's commercial taxes department last Friday after protests by a certain community, which **had threat to burn** cinema halls screening the controversial movie
(1) had threats of burning
(2) had threated to burn
(3) had threatened to burn
(4) had threatened to burning
(5) No correction required

244. Rakesh, an avid football player who captained his team in school and college, **will inaugurate** the match tomorrow in Pune.
(1) will be inaugurate
(2) is inauguration
(3) will inaugurating
(4) is inaugurate
(5) No correction required

245. At a musical night organised for them, the artistic side of the doctors **came as forward**, as they sang beautifully and made the evening truly memorable.
(1) come forward
(2) come to the fore
(3) came to the forth
(4) came to the fore
(5) No correction required

Directions (246–250) : Each question below has two blanks, each blank indicating that something has been omitted. Choose the set of words for each blank which best fits the meaning of the sentence as a whole.

246. Behaving in a ____ and serious way, even in a ___ situation, makes people respect you.
(1) calm, difficult
(2) steady, angry
(3) flamboyant, tricky
(4) cool, astounding
(5) silly, sound

247. Along with a sharp rise in ____, a recession would eventually result in more men, women and children living in _____.
(1) crime, apathy
(2) fatalities, poor
(3) deaths, slums
(4) unemployment, poverty
(5) migrations, streets

248. The government has _____ to provide financial aid to the ones _____ by severe floods in the city.
(1) desired, troubled
(2) promised, havoc
(3) failed, affected
(4) wanted, struck
(5) decided, ill

249. An airplane with _____ passengers on board made an unscheduled _____ as the airport to which it was heading was covered with thick fog.
(1) irritable, slip
(2) faulty, stop
(3) variety, halt
(4) tons, wait
(5) numerous, landing

250. Deemed universities ____ huge fees, but have not been successful in providing ____ education to our students.
(1) collect, maintaining
(2) pay, better
(3) ask, good
(4) charge, quality
(5) demand, quantitative

ANSWERS

1.(3)	2.(4)	3.(4)	4.(2)
5.(5)	6.(4)	7.(2)	8.(3)
9.(4)	10.(5)	11.(3)	12.(5)
13.(2)	14.(1)	15.(5)	16.(4)
17.(4)	18.(3)	19.(4)	20.(2)
21.(5)	22.(1)	23.(2)	24.(5)
25.(5)	26.(4)	27.(1)	28.(4)
29.(3)	30.(4)	31.(2)	32.(1)
33.(5)	34.(2)	35.(2)	36.(3)
37.(3)	38.(5)	39.(1)	40.(4)
41.(3)	42.(1)	43.(1)	44.(4)
45.(5)	46.(2)	47.(4)	48.(5)
49.(1)	50.(5)	51.(4)	52.(3)
53.(1)	54.(3)	55.(1)	56.(4)
57.(5)	58.(4)	59.(3)	60.(5)
61.(2)	62.(3)	63.(5)	64.(3)
65.(4)	66.(3)	67.(1)	68.(2)
69.(4)	70.(5)	71.(1)	72.(3)
73.(4)	74.(2)	75.(3)	76.(2)
77.(3)	78.(4)	79.(5)	80.(1)
81.(1)	82.(4)	83.(3)	84.(3)
85.(1)	86.(3)	87.(3)	88.(1)
89.(3)	90.(1)	91.(1)	92.(2)
93.(2)	94.(2)	95.(3)	96.(4)
97.(3)	98.(2)	99.(1)	100.(2)
101.(2)	102.(3)	103.(5)	104.(1)
105.(2)	106.(3)	107.(4)	108.(5)
109.(2)	110.(2)	111.(4)	112.(1)
113.(1)	114.(3)	115.(5)	116.(2)
117.(3)	118.(5)	119.(3)	120.(3)
121.(3)	122.(5)	123.(3)	124.(1)

125.(2)	126.(4)	127.(3)	128.(4)
129.(4)	130.(2)	131.(5)	132.(1)
133.(4)	134.(1)	135.(1)	136.(3)
137.(2)	138.(1)	139.(5)	140.(2)
141.(4)	142.(1)	143.(5)	144.(4)
145.(4)	146.(5)	147.(1)	148.(2)
149.(5)	150.(1)	151.(5)	152.(3)
153.(1)	154.(2)	155.(3)	156.(3)
157.(2)	158.(4)	159.(5)	160.(3)
161.(1)	162.(1)	163.(5)	164.(2)
165.(1)	166.(1)	167.(2)	168.(1)
169.(5)	170.(3)	171.(3)	172.(2)
173.(3)	174.(2)	175.(5)	176.(3)
177.(2)	178.(3)	179.(3)	180.(3)
181.(2)	182.(1)	183.(2)	184.(3)
185.(4)	186.(5)	187.(2)	188.(1)
189.(3)	190.(4)	191.(5)	192.(1)
193.(3)	194.(3)	195.(3)	196.(1)
197.(5)	198.(5)	199.(4)	200.(5)
201.(3)	202.(4)	203.(2)	204.(1)
205.(5)	206.(4)	207.(1)	208.(2)
209.(3)	210.(3)	211.(4)	212.(1)
213.(5)	214.(5)	215.(2)	216.(3)
217.(1)	218.(3)	219.(5)	220.(2)
221.(4)	222.(4)	223.(1)	224.(2)
225.(2)	226.(2)	227.(5)	228.(1)
229.(3)	230.(4)	231.(4)	232.(5)
233.(2)	234.(3)	235.(1)	236.(3)
237.(5)	238.(4)	239.(3)	240.(3)
241.(1)	242.(2)	243.(3)	244.(5)
245.(4)	246.(1)	247.(4)	248.(3)
249.(5)	250.(4)		

≡ EXPLANATIONS ≡

(1-5) :
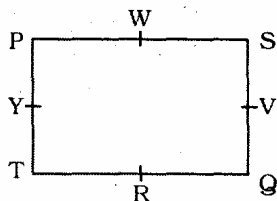
1. (3) T sits second to the left of Q.
2. (4) T is third to the right of V.
3. (4) R, W, V and Y are sitting in the middle of the sides of the table. S is sitting at the corner.
4. (2) WP and TR represent neighbours. There are two persons between Q and W as well as R and S. Now, we have to choose such pair in which there would be three persons between the two.
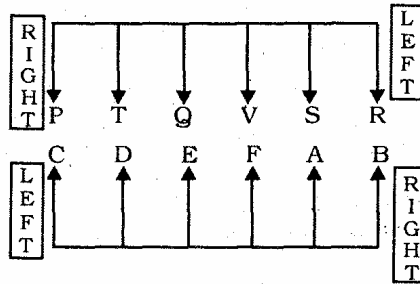5. (5) None of the statements is true.

(6 – 10) :

6. (4) The code for 'piece' is '7'.
7. (2) '9' stands for 'mine'.
8. (3) $a \Rightarrow 6$; of $\Rightarrow 1$; mine $\Rightarrow 9$.
   The code for 'pleasure' may be '2'.
9. (4) '0' stands for 'lots'.
10. (5) $7 \Rightarrow$ piece; $3 \Rightarrow$ metal.
   '8' may represent 'Large'.

(11 – 16) :

11. (3) R and P sit at extreme ends of the rows.
12. (5) S faces A.
13. (2) Two persons – Q and V – are seated between T and S
14. (1) There are two persons between P and V.
15. (5) F faces V.
16. (4) T sits exactly between P and Q.
17. (4) From both the statements
    $P > O > N$
    $L > M$
18. (3) From statement I

Leena

Amit
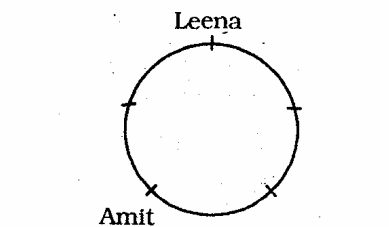
Arun sits second to the right of Leena. If Leena faces the centre then Arun cannot be second to the right of Leena. It means Leena faces outward.
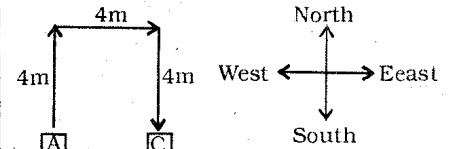
From statement II

Ali

Amit

Ken
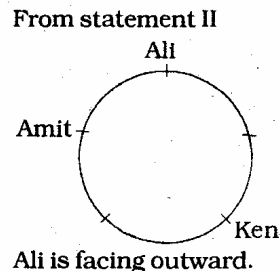
Ali is facing outward.

19. (4) From statement I
    Q is the grandson of T.
    But the gender of T is not given.
20. (2) From statement I

    The position of B cannot be ascertained.
    From statement II

    A is towards west of B.
21. (5) From both the statements Bharat has one brother and one sister.
22. (1) Only assumption I is implicit in the statement. Vehicle is parked at a distance which is not far away from the destination.
23. (2) Only assumption II is implicit in the statement. The use of term 'all' in the assumption I makes it invalid.
24. (5) Clearly both the assumptions are implicit in the statement.
25. (5) It is mentioned in the statement that for any kind of problem, contact help desk. It implies that help desk suggests solutions to all kinds of problems related to mobile phones. Therefore, both the assumptions are implicit in the statement.
26. (4) None of the assumptions is implicit in the statement.

(27 – 31) :

Days	Subject
Monday	Physics
Tuesday	Botany
Wednesday	Maths
Thursday	Chemistry
Friday	Statistics
Saturday	Zoology
Sunday	English

27. (1) Physics is taught on Monday.
28. (4) Three subjects are taught between Botany and Zoology.
29. (3) Zoology is taught on Saturday.
30. (4) Statistics is taught on Friday.
31. (2) Zoology is taught on the next day on Statistics. Statistics is taught on the next day of Chemistry.
32. (1) S L U A Y J V E I (From left)
    H R D B Z G Q N O (From Right)
    Therefore, YV is related to ZQ.

33. (5)

$$L \xrightarrow{+1} U \xrightarrow{+2} Y \xrightarrow{+3} E \xrightarrow{+4} Q$$
$$A \xrightarrow{+2} J \xrightarrow{+3} I \xrightarrow{+4} G \xrightarrow{+5} H$$

34. (2)

V E R B $\longrightarrow$ Y J B G
with –2 steps

Q U I Z $\longrightarrow$ O S V Q
with –2 steps

Therefore,

J O H N $\longrightarrow$ A E D I
with –2 steps

35. (2) N + O → N is daughter of O.
O ÷ P → O is father of P.
P × Q → P is son of Q.
Thus, Q is mother of N.

36. (3) S ÷ T → S is wife of T.
T × V → T is son of V.
V – W → V is father of W.
W + Y → W is daughter of Y.
T is son of Y.
S is sister-in-law of W.
S is daughter-in-law of Y.
Y is wife of V.

(37 – 40) :

ze lo ka gi → must save some money

fe ka so ni → he made good money

ni lo da so → he must be good

we so ze da → be good save grace

37. (3) The code for 'must' is 'lo'.
38. (5) Code 'Ze' stands for 'save'.
39. (1) The code for 'good' is 'so'.
40. (4) grace ⇒ we ; money ⇒ ka
The code for 'of' may be 'yo'.

(41-45) : After careful analysis of the given input and various steps of rearrangement, it is evident that two words are rearrange in each step. The words starting with Vowels are arranged from the left in the reverse alphabetical order and words starting with consonants are arranged from the right in alphabetical order.

Input : gem stat ace cast omit fan rate uncut era input
Step I : uncut gem stat ace omit fan rate era input cast
Step II : uncut omit gem stat ace rate era input fan cast
Step III : uncut omit input stat ace rate era gem fan cast
Step IV : uncut omit input era stat ace rate gem fan cast
Step V : uncut omit input era ace stat rate gem fan stat

41. (3) Option (3) is the final arrangement.
42. (1) The word 'rate' is at sixth place from the left in the Step III.
43. (1) It is Step II.
44. (4) There is one word between 'omit' and 'era'. Therefore, 'ace' would be related to 'gem'.
45. (5) Step V is the last step.
46. (2) P ≥ Q = R > S > T
Conclusions
I. P ≥ T : Not True
II. T < Q : True
47. (4) L ≤ M < N > O ≥ P
Conclusions
I. O < M : Not Ture
II. P ≤ N : Not True
48. (5) A > B ≥ C = D > E
Conclusions
I. C > A : True
II. D ≤ B : True
49. (1) H > J = K ≥ L > T < V
Conclusions
I. K > T : True
II. L ≤ H : Not True
50. (5) A ≤ B = C = E < D
Conclusions
I. E ≥ A : True
II. A < D : True
51. (4) According to the question, the new sequence would be :

1 3 9 5 1 5 1 5 5 3 [9] 9 3 1 5 7 7
↑
7th from the right end

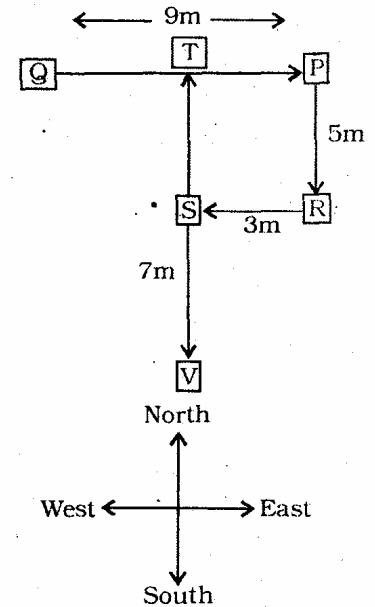**52.** (3) | Odd digit | 2 | Odd digit |
Such combinations are :

| 923 | ; | 321 |

53. (1) | Perfect Square | 1 |
There is no such combination.

54. (3)
4 2 6 1 3 8
+1 +1 +1 +2 +2 +1
↓ ↓ ↓ ↓ ↓ ↓
5 3 7 3 5 9

55. (1) 7th to the right of the 19th digit from the right end means 12th from the right end, i.e., 3.

(56 – 57) :

56. (4) He would cross Point S.
57. (5) Points S, V and T are in a straight line.

(58 – 60) :

7th	G
6th	C
5th	D
4th	A
3rd	F
2nd	E
1st	B

58. (4) G lives on the topmost floor.
59. (3) C lives immediately above D's floor.
60. (5) F, D, B and G live on odd numbered floor. C lives on even numbered floor.
61. (2) In each subsequent figure one line segment is added in a set order.
62. (3) In each subsequent figure two vertical and two horizontal line segments are added.
63. (5) In each subsequent figure one dot is added and the main design moves to the other side after being inverted.
64. (3) In each subsequent figure the four designs moves one step in clockwise direction and the design at the upper right corner is replaced with a new design. The central design becomes shaded and white alternately.

65. (4) This problem is based on the rule (1) = (5) and hence (2) = (6).

66. (3) From Problem Figure (1) to (2) all the designs move on step in anticlockwise direction and a new design appears at the lower right position. Similar changes occur from Problem Figure (3) to (4) and from Problem Figure (5) to Answer Figure.

67. (1) In each subsequent figure the pre-existing line segments move two sectors of a line in clockwise direction and one line segment is added in front of or behind the pre-existing designs alternately.

68. (2) From Problem Figure (1) to (2) all the three designs rotate through 90° clockwise, the curves of the upper and the lower design are inverted and move one-half step and the curves of middle design moves one-half step. Similar changes occur from Problem Figure (3) to (4) and from Problem figure (5) to Answer Figure.

69. (4) In each subsequent figure one new design appears at the upper right corner and the designs move one-half step in clockwise direction. The odd numbered designs rotate 90° anticlockwise and the even numbered designs rotate through 90° clockwise in each subsequent figure.

70. (5) The middle design moves to the opposite side of the line segment and the attached design is inverted, the other two designs move one step and the attached design is inverted. The designs move after every two figures while the attached designs are inverted in each subsequent figure.

71. (1) In each subsequent figure two smaller designs move to the opposite sides and the other two designs move in clockwise direct and a new design appears in anticlockwise direction starting with the design at the left side.

72. (3) The smallest curve rotates through 90° anticlockwise after every two figures while the largest curve moves one step in the anticlockwise direction and the third curve moves in the clockwise direction.

73. (4) In each subsequent figure the fourth and the fifth designs from the left become the first and the second designs.

74. (2) From problem Figure (1) to (2) half leaflet is deleted from one side and half leaflet is added to the other side. Similar changes occur from Problem Figure (3) to (4) and from Problem Figure (5) to Answer Figure.

75. (3) In the subsequent figures the designs descend or ascend, two diagonally opposite designs interchange positions and one to these two designs is replaced with a new design.

76. (2) Except in figure (2), in all others the order of the three designs is the same.

77. (3) In figure (3), the upper part does not form mirror image. In all others the two designs are mirror image of each other.

78. (4) Figure (4) is different from the other four.

79. (5) Except in figure (5), in all others, the design (T) faces inward.

80. (1) Except in figure (1), in all others four curves faces outward and another four curves faces inward.

81. (1) Address bar

82. (4) microprocessor

83. (3) platform

84. (3) is a computer station that provides the public with specific and useful information and service

85. (1) ALU

86. (3) source code

87. (3) A CD-RW can be written to, but a CD-ROM can only be read from

88. (1) text formatting

89. (3) downloading **90.** (1) subject

91. (1) Recycle Bin **92.** (2) folders

93. (2) Web site

94. (2) Embedded computers

95. (3) Character, field, record, file, database

96. (4) The file extension comes before the dot (.) followed by the file name

97. (3) read-only

98. (2) solving computing problems by breaking them into smaller parts that are separately processed by different computers

99. (1) user creation of a document

100. (2) LAN

101. (2) $\dfrac{348}{29} \times 15 + 156 = ?^3 + 120$

$\Rightarrow 180 + 156 - 120 = ?^3$

$\Rightarrow 216 = ?^3 \Rightarrow ? = \sqrt[3]{216} = 6$

102. (3) $\left(4^2\right)^3 \div \left(\dfrac{512}{8}\right)^4$

$\times (4 \times 4 \times 2 \times 2 \times 4)^4 = (4)^{?+4}$

$\Rightarrow 4^6 \div (4^3)^4 \times (4^4)^4 = 4^{?+4}$

$[a^m \times a^n = a^{m+n}; \ a^m \div a^n = a^{m-n}]$

$\Rightarrow 4^6 \div 4^{12} \times 4^{16} = 4^{?+4}$

$\Rightarrow 4^{6-12+16} = 4^{?+4}$

$\Rightarrow 4^{10} = 4^{?+4} \Rightarrow ? + 4 = 10 \Rightarrow ? = 10 - 4 = 6$

103. (5) $(?)^2 = (2\sqrt{392} - 21) + \left(\sqrt{8} - 7\right)^2$

$= \left(2\sqrt{7 \times 7 \times 2 \times 2 \times 2} - 21\right)$

$+ \left(8 + 49 - 2 \times 7\sqrt{8}\right)$

$= 28\sqrt{2} - 21 + 57 - 28\sqrt{2} = 36$

$\therefore ? = \sqrt{36} = 6$

104. (1)

$1 + \dfrac{1}{4} + 1 + \dfrac{1}{6} - 1 - \dfrac{1}{8} = ? + 1 + \dfrac{1}{12}$

$\Rightarrow ? = 1 + \dfrac{1}{4} + 1 + \dfrac{1}{6} - 1 - \dfrac{1}{8} - 1 - \dfrac{1}{12}$

$= \dfrac{1}{4} + \dfrac{1}{6} - \dfrac{1}{8} - \dfrac{1}{12}$

$= \dfrac{6 + 4 - 3 - 2}{24} = \dfrac{5}{24}$

105. (2) $\dfrac{1285 \times 76}{100} = \dfrac{1256 \times 35}{100} + ?$

$\Rightarrow 976.6 = 439.6 + ?$

$\therefore ? = 976.6 - 439.6 = 537$

106. (3) $? \approx 500 + 2000 \div 40 \times 50$

$\approx 500 + \dfrac{2000}{40} \times 50$

$\approx 500 + 2500 \approx 3000$

107. (4) $? \approx [8^2 - (13)^2 + 4^3]^2$

$\approx [64 - 169 + 64]^2$

$\approx (-41)^2 \approx 1681$

$\therefore$ Required answer $= 1660$

108. (5) $? \approx \dfrac{600}{50} \times \dfrac{400}{80} \div \dfrac{30}{200}$

$\approx \dfrac{600}{50} \times \dfrac{400}{80} \times \dfrac{200}{30}$

≈ 400

$\therefore$ Required answer $= 420$

109. (2) $441 - 233 + 1650 \approx ? + 1226$

$\Rightarrow 1858 \approx ? + 1226$

$\Rightarrow ? \approx 1858 - 1226 \approx 632$

$\therefore$ Required answer $= 630$

110. (2)

$? \approx \left(\dfrac{1000 \times 21.5}{100}\right)^{\frac{1}{3}} + \left(\dfrac{600 \times 43}{100}\right)^{\frac{1}{2}}$

$$\approx (215)^{\frac{1}{3}} + (258)^{\frac{1}{2}}$$

$$\approx 6 + 16 \approx 22$$

111. (4) The pattern of the number series is :

$$15 + 6 = 21$$
$$21 + 18 \ (= 6 + 12) = 39$$
$$39 + 38 \ (= 18 + 20) = 77$$
$$77 + 66 \ (= 38 + 28) = 143$$
$$143 + 102 \ (= 66 + 36) = \boxed{245}$$

112. (1) The pattern of the number series is :

$$33 + 6 = 39$$
$$39 + 18 \ (= 6 + 12) = 57$$
$$57 + 30 \ (= 18 + 12) = 87$$
$$87 + 42 \ (= 30 + 12) = 129$$
$$129 + 54 \ (= 42 + 12) = \boxed{183}$$

113. (1) The pattern of the number series is :

$$19 - 15 = 4 = 2^2$$
$$83 - 19 = 64 = 4^3$$
$$119 - 83 = 36 = 6^2$$
$$631 - 119 = 512 = 8^3$$
$$\therefore \ ? = 631 + 10^2 = 631 + 100 = \boxed{731}$$

114. (3) The pattern of the number series is :

$$19 + 1 \times 7 = 19 + 7 = 26$$
$$26 + 2 \times 7 = 26 + 14 = 40$$
$$40 + 4 \times 7 = 40 + 28 = 68$$
$$68 + 8 \times 7 = 68 + 56 = 124$$
$$124 + 16 \times 7 = 124 + 112$$
$$= \boxed{236}$$

115. (5) The pattern of the number series is :

$$69 - 43 = 26$$
$$58 - 69 = -11$$
$$84 - 58 = 26$$
$$73 - 84 = -11$$
$$\therefore \ ? = 73 + 26 = \boxed{99}$$

116. (2) I. $x^2 - 11x + 24 = 0$
$$\Rightarrow x^2 - 8x - 3x + 24 = 0$$
$$\Rightarrow x \ (x - 8) - 3 \ (x - 8) = 0$$
$$\Rightarrow (x - 3) \ (x - 8) = 0$$
$$\therefore \ x = 3 \text{ or } 8$$
II. $2y^2 - 9y + 9 = 0$
$$\Rightarrow 2y^2 - 3y - 6y + 9 = 0$$
$$\Rightarrow y \ (2y - 3) - 3 \ (2y - 3) = 0$$
$$\Rightarrow (2y - 3) \ (y - 3) = 0$$
$$\therefore \ y = \frac{3}{2} \text{ or } 3$$
Clearly, $x \geq y$

117. (3) I. $x^3 \times 13 = x^2 \times 247$
$$\Rightarrow \frac{x^3}{x^2} = \frac{247}{13} \Rightarrow x = 19$$

II. $y^{\frac{1}{3}} \times 14 = \dfrac{294}{y^{\frac{2}{3}}}$

$$\Rightarrow y^{\frac{1}{3}} \times y^{\frac{2}{3}} = \frac{294}{14}$$

$$\Rightarrow y^{\frac{1}{3} + \frac{2}{3}} = 21$$

$$\Rightarrow y = 21$$
Clearly, $x < y$

118. (5) I.
$$\frac{48}{x^{4/7}} \ \frac{48}{x^{4/7}} - \frac{12}{x^{4/7}} = x^{10/7}$$

$$\Rightarrow \frac{48 - 12}{x^{\frac{4}{7}}} = x^{\frac{10}{7}}$$

$$\Rightarrow 36 = x^{\frac{10}{7} + \frac{4}{7}}$$

$$\Rightarrow 36 = x^2 \quad \Rightarrow x = \sqrt{36} = \pm 6$$

II. $y^3 = 999 - 783 = 216$
$$\therefore \ y = \sqrt[3]{216} = 6$$

119. (3) I. $\sqrt{500}x = -\sqrt{402}$

$$\Rightarrow x = -\sqrt{\frac{402}{500}} \approx -\sqrt{\frac{400}{500}} \approx -0.9$$

II. $\sqrt{360} \ y = -\sqrt{200}$

$$y = -\sqrt{\frac{200}{360}} = -0.74$$

120. (3) I. $x = 17^2 + 144 \times \dfrac{1}{18}$
$$= 289 + 8 = 297$$
II. $y = 26^2 - 18 \times 21$
$$= 676 - 378 = 298$$
Clearly, $x < y$

121. (3) Let Ram's present age be $6x$ years and that of Rakesh be $11x$ years.
Four years ago,
$$\frac{6x - 4}{11x - 4} = \frac{1}{2}$$
$$\Rightarrow 12x - 8 = 11x - 4$$
$$\Rightarrow x = 8 - 4 = 4$$
$\therefore$ Rakesh's age after five years
$$= 11x + 5$$
$$= 11 \times 4 + 5 = 49 \text{ years}$$

122. (5) $2\pi, r_1 = 88$
$$\Rightarrow 2 \times \frac{22}{7} \times r_1 = 88$$
$$\Rightarrow r_1 = \frac{88 \times 7}{2 \times 22} = 14 \text{ metre}$$
$2\pi r_2 = 220$

$$\Rightarrow 2 \times \frac{22}{7} \times r_2 = 220$$

$$\Rightarrow r_2 = \frac{220 \times 7}{2 \times 22} = 35 \text{ metre}$$

Required difference

$$= \pi (r_2^2 - r_1^2) = \frac{22}{7} (r_2 + r_1)(r_2 - r_1)$$

$$= \frac{22}{7} (35 + 14)(35 - 14)$$

$$= \frac{22}{7} \times 49 \times 21 = 3234 \text{ sq. metre}$$

123. (3) Sum of adjacent angles of a parallelogram = 180°
$\therefore$ One of the angles of triangle
$$= \frac{2}{3} \times 180° = 120°$$
Sum of three angles of a triangle
$= 180°$
$\therefore \ 5x + 7x = 180 - 120$
$$\Rightarrow 12x = 60 \Rightarrow x = 5$$
Second angle of triangle
$= 5 \times 5 = 25°$
Third angle of triangle
$= 7 \times 5 = 35°$
$\therefore$ The second largest angle of triangle = 35°

124. (1) Let Raghu's investment
$= ₹ 100$
$\therefore$ Mohit's investment $= ₹ 90$
Pradeep's investment
$$= \frac{90 \times 120}{100} = ₹ 108$$
$\therefore$ Ratio of the investments of Pradeep, Mohit and Raghu respectively
$= 108 : 90 : 100 = 54 : 45 : 50$
Sum of ratios
$= 54 + 45 + 50 = 149$
$\therefore$ Raghu's investment
$$= \frac{50}{149} \times 17880 = ₹ 6000$$

125. (2) Ajay's score $= 63 + 30 = 93$
$\therefore$ Rahul's score $= 93 - 15 = 78$
$\therefore$ Sum of Manish's and Suresh's scores
$= 3 \times 63 - 78 = 189 - 78 = 111$

126. (4) Let the number be x.
$$\therefore 26^2 - \frac{x \times 53}{100} = 358$$
$$\Rightarrow 676 - \frac{x \times 53}{100} = 358$$

$$\Rightarrow \frac{x \times 53}{100} = 676 - 358 = 318$$

$$\Rightarrow x = \frac{318 \times 100}{53} = 600$$

$$\therefore 600 \times \frac{23}{100} \times \frac{3}{4} = 103.5$$

127. (3) Speed of tractor = $\dfrac{\text{Distance}}{\text{Time}}$

$$= \frac{575}{23} = 25 \text{ kmph}$$

$\therefore$ Speed of bus = 50 kmph

$\therefore$ Speed of car

$$= \frac{9}{5} \times 50 = 90 \text{ kmph}$$

$\therefore$ Distance covered by car in 4 hours

= 4 × 90 = 360 km

128. (4) Principal

$$= \frac{SI \times 100}{Time \times Rate} = \frac{2000 \times 100}{5 \times 4}$$
$$= ₹ 10000$$

$$\therefore \quad C.I. = P\left[\left(1 + \frac{R}{100}\right)^T - 1\right]$$

$$= 10000\left[\left(1 + \frac{4}{100}\right)^2 - 1\right]$$

$$= 10000\left[\left(\frac{26}{25}\right)^2 - 1\right]$$

$$= 10000\left(\frac{676}{625} - 1\right)$$

$$= \frac{10000 \times 51}{625} = ₹ 816$$

129. (4) First S.P.

$$= \frac{54000 \times 92}{100} = ₹ 49680$$

Second SP = $49680 \times \dfrac{110}{100}$

= ₹ 54648

$\therefore$ Profit = 54648 – 54000

= ₹ 648

130. (2) 2 men = 3 women

1 man + 1 woman

$$= \left(\frac{3}{2} + 1\right) \text{ women} = \frac{5}{2} \text{ women}$$

$$\therefore M_1 D_1 = M_2 D_2$$

$$\Rightarrow 3 \times 4 = \frac{5}{2} \times D_2$$

$$\Rightarrow D_2 = \frac{3 \times 4 \times 2}{5} = \frac{24}{5} \text{ days}$$

131. (5) Required answer
= 650 + 400 + 450 = 1500

132. (1) Average number of female employees in the year 2004

$$= \frac{400 + 450 + 600 + 450}{4}$$

$$= \frac{1900}{4} = 475$$

133. (4) Total number of employees in the year 2007
= 1050 + 650 + 1150 + 1300
= 4150

Total number of male employees in company C over the years
= 350 + 550 + 350 + 650 + 400
= 2300

$\therefore$ Required percentage

$$= \frac{2300}{4150} \times 100 \approx 55$$

134. (1) Total number of handicapped candidates in company B in the year 2004

$$= \frac{250 \times 20}{100} + \frac{450 \times 30}{100}$$
= 50 + 135 = 185

135. (1) Required ratio
= 550 : 250 : 400 = 11 : 5 : 8

136. (3) Percentage increase

$$= \frac{80 - 55}{55} \times 100 = \frac{25}{55} \times 100 \approx 45$$

137. (2) Required ratio = 85 : 90
= 17 : 18

138. (1) Total number of students from school Q who qualified over the years
= (60 + 55 + 80 + 90 + 75 + 85) × 100
= 44500
Required difference
= 44500 – (85 + 60) ×100
= 44500 – 14500 = 30000

139. (5) Total number of students from school P who qualified over the years
= (85 + 80 + 95 + 65 + 40 + 90) × 100 = 45500
Total number of students who qualified from both schools in 2006 and 2007 = (80 + 55 + 95 + 80) × 100 = 31000
Required percent

$$= \frac{45500}{31000} \times 100 = 147$$

140. (2) Total number of males who qualified over the years from both the schools together
= 60% of (45500 +44500)

$$= \frac{90000 \times 60}{100} = 54000$$

141. (4) Average number of passengers in trains–S, M and L

$$= \frac{1}{3}(24 + 20 + 15)\% \text{ of } 8500$$

$$= \frac{1}{3} \times \frac{8500 \times 59}{100} \approx 1671$$

142. (1) Number of passengers in train-R

$$= \frac{8500 \times 9}{100} = 765$$

$\therefore$ Number of males
= (100 – 34 – 26)% of 765

$$= \frac{765 \times 40}{100} = 306$$

143. (5) Required per cent

$$= \frac{19}{(13 + 9)} \times 100 = 86$$

144. (4) It is obvious from the pie-chart.
145. (4) Required per cent

$$= \frac{20 - 15}{15} \times 100 \approx 33$$

146. (5) It is obvious from the table.
147. (1) Percentage increase in 2006

$$= \frac{12.5 - 5.3}{5.3} \times 100 \approx 136$$

148. (2) Required difference
= (14.5 – 6.6) × 1000
= ₹ 7900

149. (5) Total monthly rent at Virar over the years
= (1.1 + 2.1 + 1.8 + 3.6 + 5.5 + 7.8) × 1000
= Rs. 21900

$\therefore$ Required percentage

$$= \frac{9800}{21900} \times 100 \approx 45$$

150. (1) It is obvious from the table.
151. (5) 600 districts
152. (3) ₹ 30,000 **153.** (1) ICICI Bank
154. (2) Identity and biometrics details of Indian citizens
155. (3) Railways **156.** (3) Mango
157. (2) Bangladesh
158. (4) Mobile Telecommunications
159. (5) Unit Linked Insurance Plan
160. (3) Help to solve balance of payment problems of member countries

161. (1) Balance of trade
162. (1) Services   163. (5) Rajasthan
164. (2) Minimum Alternate Tax
165. (1) Plan for Financial Inclusion
166. (1) Money Lenders
167. (2) RBI   168. (1) Core
169. (5) India   170. (3) Uranium
171. (3) Purchasing Power Parity
172. (2) China
173. (3) Tembhli in Maharashtra
174. (2) Food items
175. (5) All (1), (2) & (3)
176. (3) A movement to promote better living for the whole community with the assistance of local Government
177. (2) Sugar production
178. (3) It is a scheme of self governance
179. (3) 2004 - 2005
180. (3) It measures nations wealth according to provisions of control on Green house gases
181. (2) London   182. (1) U.P.
183. (2) 3,5   184. (3) 2400
185. (4) Founder, Wikileaks
186. (5) Jammu & Kashmir
187. (2) Basel Committee on Banking Supervision
188. (1) April 2011
189. (3) 34.5
190. (4) Chief Economic Advisor
191. (5) Casual Informal Wage Employment and domestic work
192. (1) Prime Minister's Rozgar Yojana
193. (3) Rajasthan
194. (3) Nobel Laureate for peace
195. (3) Coal   196. (1) Repo Rate
197. (5) Indonesia
198. (5) Tata Group
199. (4) China   200. (5) Myanmar
201. (3) C   202. (4) D
203. (2) B   204. (1) A
205. (5) E   206. (4) into
207. (1) around   208. (2) translating
209. (3) practice   210. (3) chance
211. (4) provided   212. (1) other
213. (5) off   214. (5) hard
215. (2) equilibrium
216. (3) Here, the sense of the sentences expresses future time. Hence, Future Simple i.e., **or will go into one** should be used.
217. (1) Here, Noun i.e. The anger at being .... should be used.
Look at the sentences :
He was filled with anger. (Noun)
Hundreds of angry demonstrators filled the square. (Adjective)

218. (3) Here, Past Perfect should be used. Hence, consumer confidence index had .... will be a correct usage. Moreover, index is singulare and it will not agree with **were**.
219. (5) No error
220. (2) Here, for the ever growing (Adjective) .... should be used.
Look at the sentence :
A growing number of people are returning to full time education
221. (4) We use an Adverb to modify a Verb. Hence, probably drop by for a while .... should be used.
222. (4) Here, over .... on the plight of farmers in the country .... should be used.
223. (1) Here, owing to the growing crisis .... should be used.
In response to means : a written or spoken answer; a reaction to something that has happened.
224. (2) Here, the opening set against her opponent .... should be used.
Look at the sentence :
We are playing against Mumbai XI next week.
225. (2) Here, V_3 Past Participle i.e. may be linked to overly..... should be used. The sentence is in passive.
226. (2) As the temperatures may rise almost by an additional one degree and this may lead to severe climate change.
227. (5) None of these
228. (1) The temperature would rise from the current temperature by 2.2 degrees Celsius
229. (3) A study of the effects of greenhouse gas emissions
230. (4) The carbon dioxide emissions will be about 750 ppm at the end of this century if unchecked.
231. (4) The ill-effects of the change in climate can be minimized
232. (5) To examine the impacts of emission cuts on climate
233. (2) Only (A) and (B)
234. (3) The meaning of the word **Dramatic (Adjective)** as used in the passage is : sudden, very great and often surprising; exciting and impressive; spectacular.
Look at the sentence :
The announcement had a dramatic effect on house prices.

235. (1) The meaning of the wor **Shrink (Verb)** as used in the pas sage is : to become smaller; cor tract.
Look at the sentence :
The market for their products shrinking.
236. (3) The meaning of the word **Pr dominantly (Adverb)** as used : the passage is : mainly; mostl\
Look at the sentence :
He works in a predominantly $\uparrow$ male environment.
237. (5) The meaning of the word **Ma sive (Adverb)** as used in the pa sage is : extremely large or ser ous; severe.
Look at the sentence :
He suffered a massive heart a tack.
238. (4) The meaning of the word **Si nificant (Adjective)** as used the passage is : large or impo tant enough to have an effect to be noticed.
Its antonym should be **unimpo tant.**
239. (3) The antonym of the word o **posed (Adjective)** should favouring.
240. (3) The word **Diminish (Ver** means : to become or to ma something become smaller, wea \' er etc; decrease.
Look at the sentence :
The world's resources are dim ishing
The antonym of **diminish** should be increased.
241. (1) Here, Past Simple i.e. **gat ered all her courage** should used.
242. (2) Here, Gerund i.e. **going** **well** should be used.
243. (3) Here, V_3 i.e. **had threaten** **(V_3) to burn** should be used
244. (5) No correction required
245. (4) Idiom **come to the fo** means : to be very important r noticed by people; to play an i portant part.
246. (1) calm, difficult
247. (4) unemployment, poverty
248. (3) failed, affected
249. (5) numerous landing
250. (4) charge, quality   ⊤