A pioneering new book, *Gender and Green Governance*, explores a central question: if women had adequate representation in forestry institutions, would it make a difference to them their communities and forests as a national resource? Interview with the author.

Why has access to forests been such a conflict-ridden issue? This is not surprising. Forests constitute not just community and national wealth, but global wealth. But for millions, forests are also critical for livelihoods and their daily lives.

Your first book, *Cold Hearths and Barren Slopes* (1986), was about forests. Is there an evolution of argument here?

Yes indeed. In *Cold Hearths and Barren Slopes*, I had argued that social forestry, with its top-down implementation and focus on commercial species, was neither ‘social’ nor ‘forestry’, and would protect neither forests nor village livelihoods. The answer, I argued, lay in allowing forest communities to manage local forests. Finally, in 1990, India launched the joint forest management programme and Nepal also started community forestry. So, I decided to see for myself how community forestry was actually doing.

Between 1995 and 1999, I travelled extensively across India and Nepal and found a paradox. Forests were indeed becoming greener but women’s problem of firewood shortages persisted and in many cases had become more acute. Also, despite their high stakes in forests, women continued to be largely excluded from forest management. I coined the term ‘participatory exclusions’ to describe this. However, the current book is less about women’s exclusion. I ask: what if women were present in forest governance? What difference would that make?

But has this question not been raised before? Economists researching environmental collective action have paid little attention to gender. Scholars from other disciplines focusing on gender and governance have been concerned mainly with women’s near absence from governance institutions. The presumption is that once women are present all good things will follow. But can we assume this? No, rural women’s relationship with forests is complex. On the one hand, their everyday dependence on forests for firewood, fodder, etc., creates a strong stake in conservation. On the other, the same dependence can compel them to extract heavily from forests. As one landless woman told me: ‘Of course, it hurts me to cut a green branch but what do I do if my children are hungry?’ Taking an agnostic position, I decided to test varied propositions, controlling for other factors.

What did you find?
First, women’s greater presence enhances their effective voice in decision making. And there is a critical mass effect. If forest management groups have 25-33% female members in their executive committees it significantly increases the likelihood of women attending meetings, speaking up and holding office. However, the inclusion of landless women makes a particular difference. When
present in sufficient numbers they are more likely to attend meetings and voice their concerns than landed women. So what matters is not just including more women, but more poor women. Second, and unexpectedly, groups with more women typically make stricter forest use rules. Why is this the case? Mainly because they receive poorer forests from the forest department. To regenerate these, they have to sacrifice their immediate needs. Women from households with some land have some fallback. But remarkably even in groups with more landless women, although extraction is higher, they still balance self-interest with conservation goals, when placed in decision making positions.

Third, groups with more women outperform other groups in improving forest conditions, despite getting poorer forests. Involving women substantially improves protection and conflict resolution, helps the use of their knowledge of local biodiversity and raises children’s awareness about conservation.

1. What was author’s view on ‘Social Forestry Scheme’?
   a) A great success
   b) Beneficial for villagers
   c) Neither good nor bad
   d) Should have been implemented as ‘top down’
   e) None of these

2. Which of the following is one of the reasons of forests being a conflict ridden issue?
   a) Some countries have larger forest cover
   b) There is less awareness about global warming
   c) High dependence of many on forests
   d) Less representation of women
   e) Less representation of local women

3. The author is advocating inclusion of
   a) more landless women
   b) more landed women
   c) more women irrespective of their financial status
   d) local people
   e) younger women in the age group of 25-33 years

4. Which of the following best describes ‘participatory exclusion’ as used in the interview?
   a) Outside support
   b) Overdependence
   c) Benefitting without self interest
   d) Contributing with profits
   e) None of these

5. Author’s current book is more about
   a) barren to greener slopes
   b) local groups with more women
   c) a fine balance between conservation and commercial forestry
   d) top down approach to community forestry
   e) women’s presence in forest governance

6. What percent of female members in the Executive Committee for Forest Management is being recommended by the author?
   a) Less than 25%
   b) More than 50%
   c) 100%
   d) About 75%
   e) None of these
7. Why does author say, ‘Rural women’s relationship with forests is complex’?
   a) Dependence forces them to extract and also have concern for conservation
   b) If they protect forests, their livelihood is severely affected
   c) Poor women have been excluded from forest management
   d) They cannot be asked to restore forests which are critical for them
   e) Greener forests do not meet the requirement of firewood

8. Landless women, when in decision making role
   a) extract much more from forest
   b) improve their own financial status
   c) do not care for forest
   d) are able to meet conservation objectives as well as their own interest
   e) fulfill their own interest at the cost of conservation goals

9. When more women are involved, which of the following also happens?
   a) They get poorer forests
   b) They come to know about conservation needs
   c) Children become more aware about conservation
   d) They are able to devote more time to conservation
   e) They get a more comprehensive understanding of local biodiversity

Directions (Q. 10-13) Choose the word/group of words which is most nearly the same in meaning of
the words printed in bold.

10. Controlling
   a) Holding in check
   b) Increasing
   c) Decreasing
   d) Passing
   e) Ignoring

11. Paradox
   a) Similarity
   b) Position
   c) Anomaly
   d) Difference
   e) Excuse

12. Acute
   a) Accurate
   b) Severe
   c) Dull
   d) Focused
   e) Refined

13. Green
   a) Colour
   b) Dried
   c) Old
   d) Live
   e) Big

Directions (Q. 14-18) Which of the phrases (1), (2), (3) and (4) given below each sentence should replace
the word/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, make (5) as the answer.

14. The abduction and return of the local leader within 24 hours on Wednesday has left some lose
    and that have been intriguing investigators probing the case.
    a) left some loosened endings
    b) been leaving some loosening ends
    c) leave some lose ends
    d) left some loose ends
    e) No correction required
15. According to the investigators, the hammer used in the crime **was the one who** is used by security guards to sound the hourly bell on a metal plate while on duty.
   a) are those ones which
   b) was the one that
   c) which one
   d) is ones that
   e) No correction required

16. The fraud comes at a time when the unregulated microfinance industry is facing a crisis **on its way of** high interest rates and low repayment of loans.
   a) because manner of
   b) since ways are
   c) by way of
   d) in the way of
   e) No correction required

17. Preliminary investigation revealed that the woman had committed suicide **on account of** her failed attempt to enter the country.
   a) in place of
   b) being depressed of
   c) in belief of
   d) reason being
   e) No correction required

18. Frustrated families of the missing people **have sought access** to all documents and data concerning the search and the inclusion of international experts in the inquiry.
   a) have sought accessing
   b) in seeking access
   c) are seeking accessed
   d) has sought accesses
   e) No correction required

**Directions (Q. 19-23)** Rearrange the following six sentences A, B, C, D, E and F in the proper sequence to form a meaningful paragraph, then answer the questions given below them.

A. While the reference point for the former is the state, for the latter it’s society.
B. India’s ‘strategic community’ comprises two distinct circles with little overlap.
C. Consequently, mainstream strategists have an external orientation to their discourse, concentrating on high politics; the latter is more internal oriented.
D. Their prescriptions too are understandably poles apart and thus, the state, to which both their commentary is directed, has to play balancer, and ends up being at the receiving end of criticism from both sides.
E. Out of the two, one can be termed the ‘mainstream’ and the other ‘alternate’.
F. To further elaborate on the external and internal concept – while one is enamoured of India’s rise and place in the global order, the other is more sensitive to its vulnerabilities and inadequacies.

19. Which of the following should be 4th sentence after rearrangement?
   a) E  b) D  c) C  
   d) B  e) A

20. Which of the following should be 6th sentence after rearrangement?
   A  b) B  c) C  
   d) D  e) E
21. Which of the following should be 2nd sentence after rearrangement?
   a) E  
   b) D  
   c) C  
   d) B  
   e) A

22. Which of the following should be 1st sentence after rearrangement?
   a) A  
   b) B  
   c) C  
   d) D  
   e) E

23. Which of the following should be 3rd sentence after rearrangement?
   a) A  
   b) B  
   c) C  
   d) D  
   e) F

Directions (Q. 24-30) Read each sentence to find out whether there is only 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)

24. The angry boatman threw (1) / the cracked oar (2) / in the river (3) / and returned home. (4) No error (5)

25. 3rd World countries must adopt (1) / a radically different approach for (2) / the dissemination of scientific information (3) / in view of the nature and magnitude of their problems. (4) No error (5)

26. Yet the writers (1) / have no qualms in (2) / depicting the gory (3) / details of the violence. (4) No error (5)

27. The boy attempted the questions (1) / so well (2) / that his teacher was exceedingly (3) / pleased at him. (4) No error (5)

28. The Trust plans (1) / to set on (2) / a special school for (3) / dumb and deaf children. (4) No error (5)

29. The director prefers (1) / your plan than (2) / that given by (3) / the other members of the committee. (4) No error (5)

30. I always prefer (1) / working in a relaxed atmosphere (2) / than one full of (3) / tension and anxiety. (4) No error (5)

Reasoning Ability

31. If it is possible to make only one meaningful word with 3rd, 4th, 8th and 9th letters of the word ‘CENTURIES’ which would be 2nd letter of the word from left? If more than one such word can be formed, give ‘A’ as the answer. If no such word can be formed, give ‘Z’ as your answer.
   a) A  
   b) N  
   c) T  
   d) E  
   e) Z

32. If in a certain code language ‘ARIIHANT’ is coded as ‘ZIRSZMSG’, ‘BIRD’ is written as ‘YRIW’, then how will ‘PAINTER’ be coded in that language?
   a) KZRMVG1  
   b) KZRMIV  
   c) KZRMGIV  
   d) KZRMGVI  
   e) None of these

33. Rajat correctly remembers that his mother’s birthday is not after 18th of June. His sister correctly remembers that their mother’s birthday is before 20th June but after 17th June. On which day in April was definitely their mother’s birthday?
   a) 17th  
   b) 19th  
   c) 18th  
   d) 17th or 18th  
   e) None of these
34. In a row of children facing North, Ritesh is 12th from the left end. Sudhir, who is 22nd from the right end is 4th to the right of Ritesh. Total how many children are there in the row?
   a) 35  b) 36  c) 37  d) 34  e) None of these

35. If A means ‘−’, B means ‘÷’, C means ‘+’, and D means ‘×’, then 15 B 3 C 24 A 12 D 2 = ?
   a) 3  b) 5  c) 7  d) 9  e) None of these

36. Looking at a woman sitting next to him, Amit said, ‘she is the sister of the husband of my wife’. How is the woman related to Amit?
   a) Niece  b) Daughter  c) Sister  d) Wife  e) None of these

Directions (Q. 37-41) Read the information carefully and answer the following questions.

If A + B means A is the father of B.
If A × B means A is the sister of B.
If A $ B means A is the wife of B.
If A % B means A is the mother of B.
If A ÷ B means A is the son of B.

37. What should come in place of the question mark, to establish that J is the brother of T in the expression?
   J ÷ P % H ? T % L
   a) ×  b) ÷  c) $  d) Either + or ×  e) None of these

38. Which among the given expressions indicate that M is the daughter of D?
   a) L % R $ D + T × M
   b) L + R $ D + M × T
   c) L % R % D + T ÷ M
   d) L $ D ÷ R % M ÷ T
   e) None of these

39. Which among the following options is true, if the expression I + T % J × L ÷ K is definitely true?
   a) L is the daughter of T
   b) K is the son-in-law of I
   c) I is the grandmother of L
   d) J is the brother of L
   e) None of these

40. Which among the following expressions is true, if Y is the son of X is definitely true?
   a) W % L × T × Y ÷ X
   b) W + L × T × Y ÷ X
   c) X + L × T × Y ÷ W
   d) W $ X + L + Y + T
   e) W % X + T × Y ÷ L

41. What should come in place of the question mark, to establish that T is the sister-in-law of Q in the expression
   R % T × P ? Q + V
   a) +  b) %  c) ×
42. A bus for Delhi leaves every 30 min from a bus stand. An enquiry clerk, Rambabu told Shyamlal, a passenger that the bus has already left 10 min ago and the next bus will leave at 9:35 am. At what time did the enquiry clerk give this information to Shyamlal?
   a) 9:15 am  
   b) 9:10 am  
   c) 9:20 am  
   d) 9:05 am  
   e) None of these

43. If day before yesterday was Saturday, then what day of the week will it be on day after tomorrow?
   a) Friday  
   b) Thursday  
   c) Wednesday  
   d) Tuesday  
   e) None of these

44. Nikhil walked 30 m towards East took a left turn and walked 20 m. He again took a left turn and walked 30 m. How far and in which direction is he from his starting point?
   a) 20m, North  
   b) 80 m, North  
   c) 20 m, South  
   d) 80 m, South  
   e) Data inadequate

Directions (Q. 45-49) Read the information given below to answer the questions.

A, B, C, D, E, F, G and H want to have a dinner on a round table and they have worked out the following seating arrangements.

I. A will sit beside C.
II. H will sit beside A.
III. C will sit beside E.
IV. F will sit beside H.
V. E will sit beside G.
VI. D will sit beside F.
VII. G will sit beside B.
VIII. B will sit beside D.

45. Which of the following is wrong?
   a) A will be to the immediate right of C  
   b) D will be to the immediate left of B  
   c) E will be to the immediate right of A  
   d) F will be to the immediate left of D  
   e) None of these

46. Which of the following is correct?
   a) B will be to the immediate left of D  
   b) H will be to the immediate right of A  
   c) C will be to the immediate right of F  
   d) B will be to the immediate left of H  
   e) None of these

47. A and F will become neighbours, if
   a) B agrees to change her sitting position  
   b) C agrees to change her sitting position  
   c) G agrees to change her sitting position  
   d) H agrees to change her sitting position  
   e) None of these
48. During sitting
   a) A will be directly facing C
   b) B will be directly facing C
   c) A will be directly facing B
   d) B will be directly facing D
   e) None of these

49. H will be sitting between
   a) C and B
   b) A and F
   c) D and G
   d) E and G
   e) None of these

Directions (Q. 50-54) A marketing firm wants to recruit trainee officers. Following is the criteria for selection.

The candidates must
   (i) Be a graduate in any discipline with at least 55% marks
   (ii) Have completed post-graduate degree/diploma in marketing management with at least 65% marks
   (iii) Have cleared the selection test with at least 50% marks
   (iv) Have cleared the interview with at least 55% marks
   (v) Be willing to sign a bond for 2 years
   (vi) Be not less than 21 years and not more than 26 years of age as on 1st February, 2009

However, if a candidate satisfies all the above criteria except
   (a) At (ii) above but has working experience in the marketing department for at least one year and has a post-graduate degree/diploma with any specialization, the case is to be referred to the Vice-President
   (b) At (v) above but is willing to pay an amount of Rs.1 Lakh in case, if the candidate leaves the case is to be referred to the head of marketing department.

In each of the question below, information of one candidate is given. You have to take one of the following five decisions based on the information provided and the criteria and conditions given above. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 1st February, 2009. You have to indicate your decision by marketing answer to each question as follows.

Give answer
   (a) If the case is to be referred to Vice-President
   (b) If the case is to be referred to head of marketing department
   (c) If the data provided is inadequate to take a decision
   (d) If the candidate is to be selected
   (e) If the candidate is not to be selected

50. Meenal Soni is a graduate passed with 58% marks. She has done MBA HR with 64% marks in August 2004 and is working in the marketing department of a bank since January 2005. She has completed 24 years of age in November 2008. She is willing to sign the bond for 2 years. She has cleared the selection test with 58% marks and interview with 56% marks.

51. Avinash Chavan is a post-graduate in management with specialization in marketing, passed with 67% marks. He is working as a junior officer in the marketing department of a private company. He is not willing to sign the bond but is willing to pay Rs.1 Lakh in case, if he leaves. He has cleared the selection test with 52% marks and interview with 59% marks. His date of birth is 17th July 1983.

52. Sujay has passed BE with 67% marks and MBA Marketing with 69% marks. He has scored 56% in selection test and 63% marks in interview. He has recently celebrated his 25th birthday.
on 17th September, 2008. He does not want to sign a bond but is willing to pay Rs.1 Lakh, if he leaves.

53. Rohan Bhalla is 24 years old Science graduate passed with 58% marks and MBA in Marketing with 68% marks. He has secured 53% marks in selection test as well as in interview. He is willing to sign the bond for 2 years.

54. Nandita Sharma B.Com graduate passed in first class diploma in marketing management with 62% marks and has passed post-graduate with 72% marks. She has cleared selection test and interview with 56% and 58% marks, respectively. His date of birth is 21st December, 1985. She is willing to sign the bond for 2 years.

Directions (Q. 55-59) Study the following information carefully and then answer the question given below it. A word and number arrangement machine when given on input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input: past back 32 47 19 own fear 25
Step I: 19 past back 32 47 own fear 25
Step II: 19 past 25 back 32 47 own fear
Step III: 19 past 25 own back 32 47 fear
Step IV: 19 past 25 own 32 back 47 fear
Step V: 19 past 25 own 32 fear back 47
Step VI: 19 past 25 own 32 fear 47 back
And step VI is the last step.

As per rules followed in the above steps, find out in each of the following questions, the appropriate step for the given input.

55. Which of the following will be step VI?
   a) 21 win 39 tyre 46 file case 51
   b) 21 win 39 tyre 46 file 51 case
   c) 21 win 39 tyre file 46 51 case
   d) 21 win 39 tyre 46 case file 51
   e) There will be no such step

56. Input  83 42 bench lower 13 upper floor 37
Which of the following will be step III?
   a) 13 upper 37 83 42 bench lower floor
   b) 13 upper 37 lower 83 42 bench floor
   c) 13 83 42 bench lower upper floor 37
   d) 13 upper 83 42 bench lower floor 37
   e) None of these

57. Step II of an input is 27 ultra open case 45 35 now 12.
Which of the following is definitely the input?
   a) ultra open 27 case 45 35 now 12
   b) open case ultra 27 45 35 now 12
   c) open case 27 45 35 now 12 ultra
   d) Can’t be determined
   e) None of these

58. Input  Case over 12 36 49 long ago 42. Which of the following steps will be the last but one?
   a) V
   b) VI
   c) VII
   d) VIII
   e) None of these

59. Input  Judge retire home 62 53 41 34 task. How many steps will be required to complete the arrangement?
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60. Step IV of an input is 24 step 27 pick 94 85 76 bring down. How many more steps will be required to complete the rearrangement?
   a) 2  
   b) 3  
   c) 4  
   d) 5  
   e) None of these

61. Step III of an input is 17 vice 22 85 and car oil 42. How many more steps will be required to complete the rearrangement?
   a) 3  
   b) 4  
   c) 5  
   d) 6  
   e) None of these

Directions (Q. 62-65) Study the following information carefully to answer the given questions.

I. In a family of six persons, there are two couples.
II. The lawyer is the head of the family and has only two sons Mukesh and Rakesh both teachers.
III. Mrs. Reena and her mother-in-law both are lawyers.
IV. Mukesh’s wife is a doctor and they have a son, Ajay.

62. Which of the following is definitely a couple?
   a) Lawyer-Teacher  
   b) Doctor-Lawyer  
   c) Teacher-Teacher  
   d) Can’t be determined  
   e) None of these

63. What is the profession of Rakesh’s wife?
   a) Teacher  
   b) Doctor  
   c) Lawyer  
   d) Can’t be determined  
   e) None of these

64. How many male members are there in the family?
   a) Two  
   b) Three  
   c) Four  
   d) Can’t be determined  
   e) None of these

65. What is/was Ajay’s grandfather’s occupation?
   a) Teacher  
   b) Lawyer  
   c) Doctor  
   d) Can’t be determined  
   e) None of these

Quantitative Aptitude

66. The total area of a circle and a square is equal to 5450 sq. cm. The diameter of the circle is 70 cms. What is the sum of the circumference of the circle and the perimeter of the square?
   a) 360 cm  
   b) 380 cm  
   c) 270 cm  
   d) Can’t be determined  
   e) None of these

67. The ratio between the speed of a train and a car is 16:15 respectively. Also, a bus covered a distance of 480 km in 8 h. The speed of the bus is three-fourth the speed of the train. How much distance will the car cover in 6 h?
   a) 450 km  
   b) 480 km  
   c) 360 km  
   d) Can’t be determined  
   e) None of these
68. Ram’s present age is three times his son’s present age and two-fifth of his father’s present age. The average of the present ages of all of them is 46 years. What is the difference between the Ram’s son’s present age and Ram’s father’s present age?
   a) 68 years    b) 88 years    c) 58 years
   d) Can’t be determined  e) None of these

69. 20% of Anuj’s annual salary is equal to 75% of Raj’s annual salary. Raj’s monthly salary is 60% of Ravi’s monthly salary. If Ravi’s annual salary is Rs.1.44 Lakh. What is Anuj’s monthly salary?
   a) Rs.270000     b) Rs.27000     c) Rs.324000
   d) Rs.5400      e) None of these

70. The largest and the second largest angles of a triangle are in the ratio of 3:2 respectively. The smallest angle is 20% of the sum of the largest and the second largest angles. What is the sum of the smallest and the second largest angles?
   a) 80˚   b) 60˚   c) 100˚
   d) 90˚   e) None of these

Directions (Q. 71-75) Study the information carefully to answer the questions that follow.

In a school there are 1200 students who have visited five different cities viz. Delhi, Kolkata, Varanasi, Mumbai and Jodhpur. 45% of the total students are boys. 30% of the total girls visited Mumbai. 2/5th of the total girls visited Delhi. Number of girls who visited Jodhpur is half of the girls visited Delhi. 2/3rd of the remaining girls visited Kolkata. Total number of students who visited Mumbai is 300. 20% of the total boys visited Delhi. 40% of the total boys visited Jodhpur. Equal number of boys visited Kolkata and Varanasi.

71. What is the total number of students who visited Varanasi?
   a) 78    b) 69    c) 102
   d) 103   e) None of these

72. What is the respective ratio between the number of girls visited Kolkata and number of boys visited Mumbai?
   a) 22:51    b) 23:51    c) 21:55
   d) 51:22   e) None of these

73. Total number of students who visited Jodhpur is approximately what percent of number of girls who visited Delhi?
   a) 111    b) 91    c) 132
   d) 32    e) 72

74. What is the average number of boys who visited Kolkata, Varanasi and Jodhpur together?
   a) 110    b) 122    c) 101
   d) 104    e) None of these

75. What is the total number of girls who visited Delhi, Mumbai and Varanasi together?
   a) 464    b) 484    c) 536
   d) 556    e) None of these

Directions (Q. 76-80) Study the following graph carefully to answer the questions that follow.

Number of students (in thousands) in three schools over the year
76. What was the average number of students in all the schools together in the year 2006?
   a) 30000   b) 9000   c) 3000
   d) 6000   e) None of these

77. How many times the total number of students in all the three schools A, B and C together was exactly equal among the given years?
   a) 2   b) 5   c) 4
   d) 3   e) None of these

78. Total number of students in School B and School C together in the year 2004 was approximately what percentage of the total number of students in School B and School C together in the year 2007?
   a) 85   b) 80   c) 75
   d) 184   e) 131

79. What was the difference between the total number of students in all the schools together in the year 2003 and number of students in School B in the year 2005?
   a) 2000   b) 3000   c) 3500
   d) 2500   e) None of these

80. What was the approximate average number of students in School A over all the years together?
   a) 1990   b) 2090   c) 2300
   d) 1800   e) 2700

Directions (Q. 81-85) Study the following graph carefully and answer the questions that follow.

Three different products (in thousands) produced by a company in five different years
81. What was the average number of Pen drives produced by the company over all the years together?
   a) 1700  
   b) 1.7 Lakh  
   c) 17000  
   d) 85000  
   e) None of these

82. What was the total number of all the products produced by the company in the year 2006 and 2008 together?
   a) 10750  
   b) 107.5 Lakh  
   c) 105700  
   d) 10570  
   e) None of these

83. What was the respective ratio between the number of CDs produced by the company in the year 2009 and the number of keyboards produced by the company in the year 2005?
   a) 9:10  
   b) 11:10  
   c) 10:9  
   d) 10:11  
   e) None of these

84. What is the difference between the total number of Pen drives and CDs produced by the company together in the year 2008 and the number of keyboards produced by the company in the year 2006?
   a) 40000  
   b) 4000  
   c) 35000  
   d) 3500  
   e) None of these

85. What was the respective ratio between the number of keyboards produced by the company in the year 2006, 2007 and 2009?
   a) 1:2:3  
   b) 1:2:2  
   c) 2:1:3  
   d) 1:2:1  
   e) None of these

86. A man crosses a stationary train in 12 min. The same train crosses a man in 54 s. What was the respective ratio between the speed of the train and the man?
   a) 40:7  
   b) 400:3  
   c) 40:3  
   d) Can’t be determined  
   e) None of these

87. If a number is subtracted by $2/3^{rd}$ of 75% of 600, the value so obtained is 320. What is the number?
   a) 300  
   b) 620  
   c) 720
88. The ratio between the angles of a quadrilateral is 7:2:5:6 respectively. What is the sum of double the smallest angle and half the largest angle to the quadrilateral?
   a) 162°   b) 198°   c) 99°
   d) 135°   e) None of these

89. 3 men can complete a piece of work in 6 days. 5 women can complete the same work in 18 days. In how many days will 4 men and 10 women together complete the same work?
   a) 3 days   b) 5 days   c) 2 days
   d) 4 days   e) None of these

90. The sum of five consecutive numbers is 270. What is the sum of the second and the fifth number?
   a) 108   b) 107   c) 110
   d) Can’t be determined   e) None of these

91. Rohit invested some amount at the rate of 6 pcpa and at the end of 3 years he got Rs.8730 simple interest. How much compound interest he will get on same amount and same rate of interest after 2 years?
   a) Rs.5820   b) Rs.5949.60   c) Rs.5900
   d) Rs.5994.60   e) None of these

92. Car A runs at the speed of 65 km/h and reaches its destination in 8 h. What is the respective ratio of distances covered by Car A and Car B?
   a) 11:7   b) 7:13   c) 13:7
   d) 7:11   e) None of these

93. The ratio of students in school A, B and C is 5:4:7 respectively. If number of students in schools are increased by 20%, 25% and 20% respectively then what will be the ratio of students in school A, B and C respectively?
   a) 5:5:7   b) 30:25:42   c) 30:20:49
   d) Can’t be determined   e) None of these

94. In a class, the average height of 35 girls was measured 160 cm. Later on, it was discovered that the height of one of the girl was misread as 144 cm, while her actual height was 104 cm. What was the actual average height of girls in the class? (rounded off to two digits after decimal)
   a) 159.86 cm   b) 158.54 cm   c) 159.56 cm
   d) 158.74 cm   e) None of these

Directions (Q. 95-99) Read the following information carefully to answer the questions that follow.

There are 2500 people in a village. 1375 people of this village speak only local language. 200 people of the village speak English along with local language. Number of people speaking Hindi along with local language is 625. 300 people of the village speak three languages, i.e., English, Hindi and local language.

95. Number of people speaking English as one language is what percent of the total number of people of the village?
   a) 12   b) 8   c) 20
   d) 18   e) None of these

96. Number of people speaking only local language is what percent of the total number of people of the village?
97. Number of people speaking Hindi as one language is approximately what percent of the number of people speaking only local language?
   a) 67  
   b) 70  
   c) 61  
   d) 59  
   e) None of these

98. What is the respective ratio of the number of people speaking all the three languages to the number of people speaking both Hindi and local language?
   a) 12:55  
   b) 10:25  
   c) 14:55  
   d) 12:25  
   e) None of these

99. If 25 more people speaking all the three languages and 45 more people speaking both Hindi and local languages start living in the village then what will be the difference between the number of people speaking all the three languages and the number of people speaking both Hindi and local languages?
   a) 325  
   b) 330  
   c) 340  
   d) 355  
   e) None of these

100. Aman’s expense is 30% more than Vimal’s expense and Vimal’s expense is 10% less than Raman’s expense. If the sum of their expenses is Rs.6447, then what would be the Aman’s expense?
    a) Rs.2200  
    b) Rs.2457  
    c) Rs.1890  
    d) Rs.2100  
    e) None of these

Answers:

1. Option E
2. Option C
3. Option A
4. Option E
5. Option E
6. Option E
7. Option A
8. Option D
9. Option C
10. Option A
11. Option C
12. Option B
13. Option D
14. Option D
15. Option B
16. Option C
17. Option E
18. Option C
19. Option C
20. Option D
21. Option A
22. Option B
23. Option A
24. Option C
25. Option B
26. Option B
27. Option D
28. Option B
29. Option B
30. Option C
31. Option A

C E N T U R I E S
Words formed = Nest, Nets, Sent, Tens

32. Option D
33. Option C
- Days by Rajat, June 18 or earlier
- Days by his sister, June 18 or June 19
- Clearly, June 18 is the required day

34. Option C
- Sudhir’s position from left = 12 + 4 = 16\textsuperscript{th} from left
- Clearly, there are three students between Ritesh and Sudhir.
- Total number of children = 12 + 3 + 22 = 37

35. Option B
- ? = 15 ÷ 3 + 24 – 12 × 2
- = 5 + 24 – 24 = 5

36. Option C
37. Option A
38. Option B
39. Option B
40. Option D
41. Option D
42. Option A
- As next bus leaves at 9:35 am
- Previous bus left at 9:35 – 0:30 = 9:05 am
- The time when enquiry clerk gave this information = 9:05 + 0:10 = 9:15 am

43. Option C
- Day before yesterday = Saturday
- Yesterday = Saturday + 1 = Sunday
- Today = Sunday + 1 = Monday
- Tomorrow = Monday + 1 = Tuesday
- Day after tomorrow = Tuesday + 1 = Wednesday

44. Option A
45. Option C  
46. Option B  
47. Option D  
48. Option C  
49. Option B  
50. Option A  
51. Option C  
52. Option B  
53. Option E  
54. Option D  
55. Option E  
    Step II  21 win tyre 46 39 case file 51  
    Step III  21 win 39 tyre 46 case file 51  
    Step IV  21 win 39 tyre 46 file case 51  
    Step V  21 win 39 tyre 46 file 51 case  
    This is the last step. Hence, there will be no VI step  
56. Option A  
    Input  83 42 bench lower 13 upper floor 37  
    Step I  13 83 42 bench lower upper floor 37  
    Step II  13 upper 83 42 bench lower floor 37  
    Step III  13 upper 37 83 42 bench lower floor  
57. Option D  
58. Option E  
    Input  case over 12 36 49 long ago 42  
    Step I  2 case over 36 49 long ago 42  
    Step II  12 over case 36 49 long ago 42  
    Step III  12 over 36 case 49 long ago 42  
    Step IV  12 over 36 long case 49 ago 42  
    Step V  12 over 36 long 42 case 49 ago  
    Thus, Vth step is the last step.  
    Last but one step is IV.  
59. Option A  
    Input  judge retire home 62 53 41 34 task  
    Step I  34 judge retire home 62 53 41 task  
    Step II  34 task judge retire home 62 53 41  
    Step III  34 task 41 judge retire home 62 53  
    Step IV  34 task 41 retire judge home 62 53  
    Step V  34 task 41 retire 53 judge home 62
Step VI 34 task 41 retire 53 judge 62 home
Hence, VI steps are required.

60. Option C
Step IV 24 stop 24 pick 94 85 76 bring down
Step V 24 stop 27 pick 76 94 85 bring down
Step VI 24 stop 27 pick 76 down 94 85 bring
Step VII 24 stop 27 pick 76 down 85 94 bring
Step VIII 24 stop 27 pick 76 down 85 bring 94
This is the last step. Hence, four more steps will be required to complete the rearrangement.

61. Option A
Step II 17 vice 22 85 and car oil 42
Step IV 17 vice 22 oil 85 and car 42
Step V 17 vice 22 oil 42 85 and car
Step VI 17 vice 22 oil 42 car 85 and
This is the last step. Hence, three more steps will be required to complete the rearrangement.

62. Option A
63. Option C
64. Option B
65. Option D
66. Option B
D = 70 cm
R = \frac{70}{2} = 35 cm
Area of a square + Area of a circle = 5450
a^2 + \frac{22}{7} \times 35 \times 35 = 5450
a^2 = 5450 - 3850 = 1600
a = \sqrt{1600} = 40
2 \times \frac{22}{7} \times 35 + 4 \times 40 = 220 + 160 = 380 cm

67. Option A
Speed of bus = \frac{\frac{480}{10}}{\frac{60}{3}} = 60 \text{ km/h}
Speed of train = \frac{60 \times 4}{3} = 80 \text{ km/h}
Speed of train : speed of car = 16 : 15
Speed of car = \frac{80}{16} \times 15 = 75 \text{ km/h}
Distance covered by car in 6 h = 75 \times 6 = 450 km

68. Option E
Suppose age of Ram = R
His son’s age = S
And his father’s age = F
S = \frac{R}{3} and R = F \times \frac{2}{5}
F = \frac{5R}{2}
\frac{R + S + F}{3} = 46
R + S + F = 46 \times 3
R + \frac{R}{3} + \frac{5R}{2} = 138
R = 36
S = \frac{36}{3} = 12
F = \frac{5 \times 36}{2} = 90
Difference = 90 - 12 = 78 years

69. Option B
Ravi’s annual salary = 1.44 lacs
Monthly salary = \frac{1.44 \times 10000}{12} = 12000
Monthly salary of Raj = 12000 \times \frac{60}{100} = 7200
Suppose annual salary of Anuj = x
Then x \times \frac{20}{100} = 7200 \times \frac{75}{100}
x = 324000
Anuj's monthly salary = 324000 \div 12 = 27000

70. Option D
Largest angle : second largest angle = 3:2
Smallest angle = 3x + 2x \times \frac{20}{100} = x
Sum of three angles = 180°
3x + 2x + x = 180°
x = 30°
Smallest + second largest angle x + 2x = 3x = 3 \times 30° = 90°

<table>
<thead>
<tr>
<th>City</th>
<th>Total = 1200 students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys = 1200 \times 45% = 540</td>
</tr>
<tr>
<td>Delhi</td>
<td>540 \times 20% = 108</td>
</tr>
<tr>
<td>Kolkata</td>
<td>x - 22 = 46</td>
</tr>
<tr>
<td>Varanasi</td>
<td>x = 68</td>
</tr>
<tr>
<td>Mumbai</td>
<td>300 - 198 = 102</td>
</tr>
<tr>
<td>Jodhpur</td>
<td>540 \times 40% = 216</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

71. Option E
68 + 22 = 90

72. Option A
\frac{44}{102} + \frac{22}{51} = 22.51

73. Option C
\frac{21\text{c}+132}{264} \times 100 = 131.8 = 132%

74. Option A
\frac{46+60+21\text{c}}{3} = 110

75. Option B
264 + 198 + 22 = 484
76. Option C
\[ \frac{25+3+3.5 \times 1000}{3} = 3000 \]

77. Option D
Total number in 2002 = 0.5 + 1 + 1.5 = 3 × 1000 = 3000
Total number in 2003 = 1 + 2 + 2.5 = 5.5 × 1000 = 5500
Total number in 2004 = 1.5 + 2.5 + 3 = 7 × 1000 = 7000
Total number in 2005 = 2.5 + 3 + 3.5 = 9 × 1000 = 9000
Total number in 2006 = 2.5 + 3 + 3.5 = 9 × 1000 = 9000
Total number in 2007 = 2.5 + 3 + 3.5 = 9 × 1000 = 9000

78. Option A
In 2004 B + C = 2.5 + 3 = 5.5 \times 1000 = 5500
In 2007 B + C = 3.5 + 3 = 6.5 \times 1000 = 6500
Required percentage = \frac{\text{5500}}{\text{6500}} \times 100 = 84.61\% = 85\%

79. Option D
\((1 + 2 + 2.5) - 3 = 2.5 \times 1000 = 2500\)

80. Option B
\[ \frac{1 + 2 + 1.5 + 2.5 + 3 + 2.5 \times 1000}{6} = 2083 = 2090 \]

81. Option C
\[ \frac{15 + 7.5 + 15 + 30 + 17.5 \times 1000}{5} = 17000 \]

82. Option E
2006 = 10 + 7.5 + 15 = 32.5 \times 1000 = 32500
2008 = 25 + 30 + 20 = 75 \times 1000 = 75000
Total production = 32500 + 75000 = 107500

83. Option A
\[ \frac{22.5}{25} = \frac{9}{10} = 9:10 \]

84. Option A
\((25 + 30) - 15 = 40 \times 1000 = 40000\)

85. Option D
15 : 30 : 15 = 1 : 2 : 1

86. Option C
Speed of man in m/s = \frac{\text{Length of the train}}{12 \times 60}
Speed of the train in m/s = \frac{\text{Length of the train}}{54}
Ratio = \frac{\frac{12}{2}}{\frac{15}{2}} = \frac{720}{54} = 40 : 3

87. Option B
\[ x - 600 \times \frac{75}{100} \times \frac{2}{3} = 320 \]
\[ x = 320 + \frac{600 \times 75 \times 2}{100 \times 3} = 620 \]
88. Option D
\[7x + 2x + 5x + 6x = 360^\circ\]
\[x = 18^\circ\]
\[2x \times 2 + \frac{7x}{2} = 7.5x = 7.5 \times 18 = 135^\circ\]

89. Option A
3 men complete the work in 6 days
1 man completes the work = \(6 \times 3 = 18\) days
5 women can complete the same work in 18 days
1 woman, completes the same work = \(18 \times 5 = 90\) days
\[\text{Ratio} = \frac{90}{18} = 5:1\] i.e. 1 man = 5 women
4 men + 5 women = \(4 \times 5 + 10 = 30\) women
\[\text{Days} = \frac{90}{30} = 3\]

90. Option E
\[x + x + 1 + x + 2 + x + 3 + x + 4 = 270\]
\[5x = 270 - 10 = 260\]
\[x = \frac{260}{5} = 52\]
\[x + 1 + x + 4 = 2x + 5 = 2 \times 52 + 5 = 109\]

91. Option D
92. Option C
Distance travelled by Car A = \(65 \times 8 = 520\) km
Distance travelled by Car B = \(70 \times 4 = 280\) km
\[\text{Ratio} = \frac{520}{280} = 13:7\]

93. Option B
\[\text{A:B:C} = 5:4:7\]
After increasing ratio = \(5 \times \frac{120}{100} : 4 \times \frac{125}{100} : 7 \times \frac{120}{100}\)
\[= 600:500:840\]
\[= 30:25:42\]

94. Option E
\[\frac{35 \times 160}{144+104} = \frac{5600}{35} - \frac{35}{144+104}\]
\[= \frac{556}{35} = 158.85\text{ cm}\]

Only local language speakers = 1375
Local language and English both = 200
Local language and Hindi both = 625
All local language, English and Hindi = 300
95. Option C
   People speaking English = 200 + 300 = 500
   Required percentage = \( \frac{500}{2500} \times 100 = 20\% \)

96. Option B
   \( \frac{1375}{2500} \times 100 = 55\% \)

97. Option A
   People speaking Hindi = 625 + 300 = 925
   Required % = \( \frac{925}{1375} \times 100 = 67.27\% = 67\% \)

98. Option E
   Ratio = \( \frac{300}{1375+625+300} = \frac{300}{2300} = 3:23 \)

99. Option E
   Difference = (1375 + 625 + 300 + 45) – (300 + 25)
   = 2345 – 325 = 2020

100. Option B
   Expense of Vimal = Rs.100
   Expense of Aman = Rs.130
   Expense of Raman = \( \frac{100}{90} \times 100 = \text{Rs.} \frac{1000}{9} \)
   Ratio of the expense of Vimal, Aman and Raman = 100:130:\( \frac{1000}{9} \)
   = 90:117:100
   Expense of Aman = \( \frac{117}{90+117+100} \times 6447 \)
   = \( \frac{117}{307} \times 6447 \) = Rs.2457