

SBI PO Preliminary Grand Test –SPP-171203

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (4) The author explains in fourth and fifth paragraphs that the conventional methods that look at land, labour, institutions and human capital is inaccurate method while the methods given in sentences (I) and (II) are more accurate. Hence option (4) is the right option.
2. (5) Referring to sixth paragraph, we can say that all the three options are correct as it has been mentioned that there are risks involved in such methods of growing an economy. Hence all the above sentences are true.
3. (2) As mentioned in the last paragraph, "Nor will a country produce sophisticated goods on a large scale without a robust domestic market for them—something that requires higher median income." Hence sentence (II) is the correct option.
4. (5) Referring to the second paragraph, It has been mentioned that to judge the economic growth the robustness of networks to combine the capabilities of an economy to produce various goods and services "The more diverse these building blocks and the more robust the networks that can be used to combine them, the stronger a country's economy with higher gross domestic product per capita." "The more diverse these building blocks and the more robust the networks that can be used to combine them, the stronger a country's economy with higher gross domestic product per capita." Hence all the sentences are true in context of the passage.
5. (2) "India's potential of leading global growth" is the suitable theme of the passage as the passage revolves around India as fastest growing economy and overtaking from its neighbours as the "economic pole of global growth". Hence option (b) is the right choice.
6. (2) Disparity means a great difference. Hence it has the same meaning as discrepancy.
Repugnant means offensive to the mind.
Pertinent means relevant or applicable to a particular matter.
Congruity means a quality of agreement and appropriateness.
7. (4) Robust means strong and healthy; vigorous. Hence it has opposite meaning as fragile.
Obscure means not clearly understood or expressed.
Ominous means threatening or foreshadowing evil or tragic developments.
Serenity means the absence of mental stress or anxiety.
Sabotage means destroy property or hinder normal operations.
8. (3) Fraught means (of a situation or course of action) filled with (something undesirable). Hence it has opposite meaning as tranquil.
Scurry means move about or proceed hurriedly.
Vigilant means carefully observant or attentive.
Waft means be driven or carried along.
9. (3) Use 'above' in place of 'over' because to tell 'level', 'above' is used. Ex. Inflation is above 6%. Temperatures have been above average.
10. (4) Use 'for reducing' in place of 'for reduce' because the verb coming after preposition 'for' should always be in fourth form of the verb.
11. (4) The use of 'consumption' is superfluous.
12. (3) In place of 'on', 'against' or 'with' will be used as 'fight against/with' is used.
13. (2) Use 'by' before 'telephone'.
14. (4) 'had' will be used in place of 'have' because words like 'declined' and 'did' infer that the sentence is in past.
15. (3) Use 'on' in place 'for' because 'congratulate somebody on something' or 'Be congratulated on something' is used. Ex. I congratulated him on his grand success.
16. (5) The sentence is grammatically correct.
17. (1) In place of 'his', 'him' will be used because pronoun used after verbs like 'hear, watch, behold, see, let, make and bid' is in objective case. Ex. I saw him yesterday.
18. (1) Use 'heard' in place of 'had heard' because 'had+ third form of verb' is used in Past perfect while second form of verb is used in simple past.
- 19-23. The correct sequence of sentences after rearrangement is DAFBEC.
19. (4)
20. (5)
21. (3)
22. (3)
23. (4)

24. (2) "amended" is the correct word that fits into sentence adding meaning to it as it means make minor changes to (a text, piece of legislation, etc.) in order to make it fairer or more accurate, or to reflect changing circumstances. Hence (2) is the correct option.
25. (5) "build roads" makes a proper phrase in context of the meaning of the sentence. Other words make no sense when put into the sentence. Hence (5) is the correct option.
26. (4) "to ply the routes" refers to regularly travel over the routes. Hence only option (4) adds meaning to the sentence.
27. (2) "ability" makes a better choice among the given options as it means possession of the means or skill to do something. Other words though are nearly similar in meaning but they are irrelevant in context of their usage in the particular sentence.
28. (1) "control" is the correct word to fill the gap as it means maintain influence or authority over. Hence (1) is the correct option.
29. (3) "protect" is the correct word in context of adding meaning to the sentence as it means keep safe from harm or injury.
30. (2) "political interests" is the correct phrase that means the main component of political motivation, a variable indicating ability in ideological conceptualization, which is essential for participation in the democratic process. Other words alter the meaning of the sentence. Hence (2) is the correct option.
31. (2) Ratio of profit of A:B:C
 $= 28000 \times 5 + 20000 \times 7 : 24000 \times 7 : 32000 \times 7 = 280 : 168 : 224 = 5 : 3 : 4$
 Given $5x - 3x = 2400$
 Let the total profit be $5x + 3x + 4x = 12x$
 or, $2x = 2400$
 $\therefore x = 1200$
 Now, total annual profit = $12x = 12 \times 1200 = \text{Rs } 14400$
32. (1) Let the cost price be x
 Then, $MP = \frac{xx140}{100} = \frac{7x}{5}$
 According to the question,
 $546 - x = 2(483 - x)$
 Or, $x = 966 - 546 = 420$
 $\therefore MP = \frac{7 \times 420}{5} = \text{Rs } 588$
33. (4) (24×14) women = (14×12) men
 $\therefore 2$ women = 1 man
 Now, work done by 14 men in one day = $\frac{1}{12}$
 1 man's 1 day' = $\frac{1}{12 \times 14} = \frac{1}{168}$
 $\therefore 18$ men's 5 day's work = $\frac{18 \times 5}{168} = \frac{15}{28}$
 \therefore Remaining work = $1 - \frac{15}{28} = \frac{13}{28}$
 Now, $\frac{13}{28}$ work is done by 8 men and 8 women = 12 men
 Applying formula = $\frac{M_1 D_1}{W_1} = \frac{M_2 D_2}{W_2}$
 $= \frac{14 \times 12}{1} = \frac{12 \times D_2}{\frac{13}{28}}$
 $\therefore D_2 = \frac{14 \times 12 \times 13}{12 \times 28} = \frac{13}{2} = 6 \frac{1}{2}$ days
34. (2) Let the cost price of the article be Rs 100.
 Then, marked price = Rs 125
 \therefore Loss = $100 - 125 \times \frac{85}{100} \times \frac{76}{100} = 19.25$
 Now, when there is Rs 19.25 loss, the CP is Rs 100
 \therefore When there is Rs 539 loss, $CP = \frac{539}{19.25} \times 100 = 2800$
 \therefore selling price = $2800 - 539 = \text{Rs } 2261$
35. (3) Tap A's capacity = $\frac{500 \times 60}{6} = 5000$ ml = 5 litres per hour
 Tap B's capacity = $\frac{1 \times 60}{5} = 12$ litres per hour
 \therefore Time = $\frac{5}{5} + \left(\frac{56-5}{12+5}\right) = 1 + 3 = 4$ hours
36. (1) Average score of Mukesh, Kamlesh and Shankar = 72
 Sanjay's score = $72 + 18 = 90$
 Mukesh's score = $90 - 16 = 74$
 Kamlesh's score = $74 - 24 = 50$
 Shankar's score =
 Total score of Mukesh, Kamlesh and Shankar – (Mukesh's score and Kamlesh's score)
 $= 72 \times 3 - (74 + 50) = 216 - 124 = 92$
 \therefore The sum of Mukesh's and Shankar's score = $74 + 92 = 166$
37. (3) Let Mohit's monthly salary be Rs x
 \therefore Manoj's monthly salary = Rs $1.25x$
 Mayank's monthly salary = $x + 1750$
 $x + 1.25x + x + 1750 = \frac{333000}{12}$
 or, $3.25x = 26000$
 $\therefore x = \frac{26000}{3.25} = 8000$
 \therefore Mohit's monthly salary = Rs 8000
 Manoj's monthly salary = $1.25 \times 8000 = \text{Rs } 10000$
 The sum of Manoj's and Mohit's salary = $8000 + 10000 = \text{Rs } 18000$
38. (2) Probability that the first ball will be of white colour
 $= \frac{8}{26} = \frac{4}{13}$
 Probability that the second ball will be of black colour
 $= \frac{13}{25}$
 \therefore Req'd. probability = $\frac{4}{13} \times \frac{13}{25} = \frac{4}{25}$
39. (3) Required area grazed by horse
 $= \frac{1}{4} \times \pi \times 21^2 = \frac{22}{7} \times \frac{21 \times 21}{4} = 346.5 m^2$
40. (2) Let Saurabh should answer $x\%$ of 75 questions.
 Then, 80% of $75 + x\%$ of $75 = 60\%$ of 150
 $80 \times 75 + x \times 75 = 60 \times 150$
 $\Rightarrow 80 + x = 60 \times 2$
 $\Rightarrow 80 + x = 120$
 $\Rightarrow x = 40$
41. (3) $36.01^3 \times 4096^{\frac{1}{2}} \times 37.99^2 \div (9^3 \times 75.98^2) = 4^?$
 or, $4^? = \frac{36^3 \times \sqrt{4096} \times 38^2}{9^3 \times 76^2}$
 $= \frac{4^3 \times 9^3 \times 4^3 \times 38 \times 38}{9^3 \times 76 \times 76} = \frac{4^3 \times 4^3}{2 \times 2}$
 or, $4^? \approx 4^3 \times 4^2 = 4^5$
 $\therefore ? \approx 5$
42. (4) $(4809.01 + 9615.96 + 14425.03) \div 4.98 + 6.02 = (?)^2$
 or, $(?)^2 \approx \frac{4809 + 9616 + 14425}{5} + 6$
 $= \frac{28850}{5} + 6 = 5770 + 6$
 Or, $(?)^2 \approx 5776$
 $\therefore ? \approx \sqrt{5776} = 76$
43. (2) $(35\% \text{ of } 74000) \div ? = (123\% \text{ of } 13.02)^2 \times 2.01$
 or, $\left(\frac{35 \times 74000}{100}\right) \div ? = \left(\frac{123 \times 13}{100}\right)^2 \times 2$
 or, $\frac{25900}{?} \approx (15.99)^2 \times 2$
 or, $\frac{25900}{?} \approx 16 \times 16 \times 2$
 $\therefore ? \approx \frac{25900}{16 \times 16 \times 2} = 50.58 \approx 50$

44. (1) $\frac{4}{15}$ of 393 + $\frac{7}{12}$ + 473 = ? × (1.99 + 1.01)
 or, ? × 3 ≈ $\frac{4}{15} \times 393 + \frac{7}{12} \times 478$
 or, ? × 3 ≈ $\frac{4}{15} \times 390 + \frac{7}{12} \times 480$
 or, ? × 3 ≈ 104 + 280
 or, ? ≈ $\frac{384}{3}$
 ∴ ? ≈ 128

45. (3) ? ≈ $\sqrt{2809} \div 8 \times (12)^2 + 46$
 or, ? ≈ $\frac{53}{8} \times (12)^2 + 46$
 or, ? ≈ 954 + 46
 ∴ ? ≈ 1000

46. (2) Ratio of profit of Harshit & Neetu
 = 8500 : 7000 = 17 : 14
 Let Neetu made an investment of x
 ∴ $\frac{20400 \times 8}{10x} = \frac{17}{14}$
 or, x = Rs. 13,440

47. (3) Profit earned by Sunny in 2014 = Rs. 9100
 ∴ 9100 + P = P $\left(1 + \frac{20}{100}\right)^3$
 ⇒ 9100 + P = 1.728P
 or, P = Rs. 12500

48. (4) Required ratio = $\frac{\frac{1}{2} \times (9310 + 7250)}{\frac{1}{3} \times (9170 + 5010 + 6520)} = \frac{8280}{6900} = \frac{6}{5}$

49. (5) Required percentage = $\frac{9015 - 6810}{6810} \times 100 \approx 32\%$

50. (2) $\frac{5}{6}$ th of Harshit's profit in 2015 = 8500
 ∴ $\frac{105}{100}$ of 8500 = 8925 which is equal to Rajat's profit in year 2011.

51. (1) The series is
 1527 - 19² = 1166,
 1166 - 15² = 941
 941 - 11² = 820
 820 - 7² = 771
 771 - 3² = 762

∴ It should be 941 in place of 877
 The series is 110 × 1 - 4 = 106,
 106 × 2 - 8 = 204
 204 × 3 - 12 = 600
 600 × 4 - 16 = 2384
 2384 × 5 - 20 = 11900

∴ There should be 600 in place of 608

53. (1) The series is 71 + 19 = 90
 90 + 38 = 128
 128 + 57 = 185
 185 + 76 = 261
 261 + 95 = 356
 Hence there should be 356 in place of 365

54. (3) The series is 8 × 2 - 2 = 14
 14 × 3 + 3 = 45
 45 × 2 - 2 = 88
 88 × 3 + 3 = 267
 267 × 2 - 2 = 532
 ∴ Hence there should be 88 in place of 92

55. (1) The series is × 2, × 4, × 6, × 8, × 10
 Hence there should be 69120 in place of 691020

56. (3) I. $56x^2 - 81x + 28 = 0$
 or, $56x^2 - 32x - 49x + 28 = 0$
 or, $8x(7x - 4) - 7(7x - 4) = 0$
 or, $(7x - 4)(8x - 7) = 0$
 ∴ $x = \frac{4}{7}, \frac{7}{8}$

II. $4y^2 - 37y + 63 = 0$
 or, $4y^2 - 28y - 9y + 63 = 0$
 or, $4y(y - 7) - 9(y - 7) = 0$
 or, $(y - 7)(4y - 9) = 0$
 ∴ $y = 7, \frac{9}{4}$

Hence $x < y$

57. (5) I. $3x^2 - 29x + 70 = 0$
 Or, $3x^2 - 15x - 14x + 70 = 0$
 Or, $3x(x - 5) - 14(x - 5) = 0$
 Or, $(x - 5)(3x - 14) = 0$
 ∴ $x = 5, \frac{14}{3}$

II. $3y^2 - 23y + 40 = 0$
 Or, $3y^2 - 15y - 8y + 40 = 0$
 Or, $3y(y - 5) - 8(y - 5) = 0$
 ∴ $y = 5, \frac{8}{3}$

Hence no relationship can be established

$x + y = \pm 28$

and $y = 16$

∴ $x = 12$ or -44

$x < y$

59. (2) I. $8x^2 + 3x - 38 = 0$
 $8x^2 + 19x - 16x - 38 = 0$
 $8x(x - 2) + 19(x - 2) = 0$
 $x = 2, -\frac{19}{8}$

II. $6y^2 - 29y + 34 = 0$
 $6y^2 - 17y - 12y + 34 = 0$
 $6y(y - 2) - 17(y - 2) = 0$
 $y = 2, \frac{17}{6}$

So, $x \leq y$

60. (1) On $(II \times 4) - (I \times 13)$
 $x = 9.5, y = 6.5$

So, $x > y$

61. (3) In 2016,

Boys in Class V = $\frac{115}{100} \times \frac{7}{13} \times \frac{52}{360} \times 1800 = 161$

Girls in Class V = $\frac{95}{100} \times \frac{6}{13} \times \frac{52}{360} \times 1800 = 114$

∴ Total students = 161 + 114 = 275

62. (2) Required ratio = $\frac{\frac{13}{5} \times \frac{58}{360} \times 1800}{\frac{29}{8} \times \frac{72}{360} \times 1800} = \frac{26}{45}$

63. (4) Girls in class VI = $\frac{3}{5} \times \frac{55}{360} \times 1800 = 165$

Total students except class IV = $\frac{360 - 72}{360} \times 1800 = 1440$

∴ Required Contribution = $\frac{165}{1440} \times 100 \approx 11.5\%$

64. (3) Difference in number of boys & girls of class V
 = $\frac{1}{13} \times \frac{52}{360} \times 1800 = 20$

Difference in number of boys & girls of class III
 = $\frac{2}{4} \times \frac{68}{360} \times 1800 = 170$

∴ Required number = 170 - 20 = 150

65. (1) Boys in class VI = $\frac{2}{5} \times \frac{55}{360} \times 1800 = 110$

Girls in class I = $\frac{16}{29} \times \frac{58}{360} \times 1800 = 160$

∴ Required percentage = $\frac{50}{160} \times 100 = 31.25\%$

Grand Test – SPP-171203



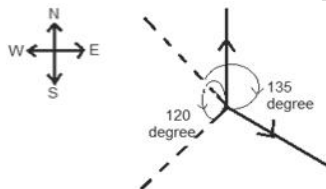
- 66–70. (i) A lives on odd numbered floor but not on top floor and is from Japan. C lives on odd numbered floor below A and likes pink, A lives either 5th or 3rd floor. There are 3 floors gap between the one who belongs to Japan and the one who likes white.
 (ii) The one who likes red is from India and lives on odd numbered floor. G is from Myanmar lives on even numbered floor above A but not on 4th floor. 2 possible cases will be there.

Case-1				Case-2			
Floor	Person	Color	Country	Floor	Person	Color	Country
7		Red	India	7		White	
6	G		Myanmar	6	G		Myanmar
5	A		Japan	5		Red	India
4				4			
3	C	Pink		3	A		Japan
2				2			
1		White		1	C	Pink	

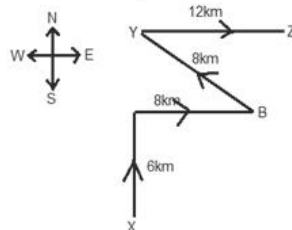
- (iii) E lives just above B and not from India, from this condition; case-2 will be eliminated.
 (iv) F doesn't belong to Australia and Uganda but likes sky blue. B is not from France but the one who is from France lives on odd numbered floor. F is from China because only one country is remaining for F.
 (v) The one who likes sea green lives below but not immediately below the one who likes yellow, who doesn't live on even numbered floor. There are more than 3 floors gap between the one who likes green and the one who is from Australia, so B is from Australia.

Floor	Person	Color	Country
7	D	Red	India
6	G	Green	Myanmar
5	A	Yellow	Japan
4	F	Sky Blue	China
3	C	Pink	France
2	E	Sea Green	Uganda
1	B	White	Australia

66. (3)
 68. (5)
 71. (3)



72. (2)



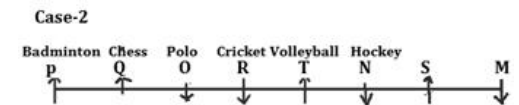
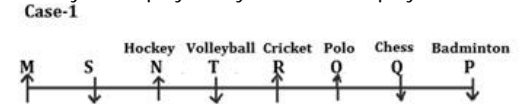
Distance $XB^2 = 6^2 + 8^2 = 100$
 $XB = 10\text{km}$

73. (1) I. $K \leq T$ (True) II. $Q < J$ (False)
 74. (5) I. $G > B$ (True) II. $Q > B$ (True)
 75. (2) I. $R > S$ (False) II. $K > R$ (True)
 76. (5) I. $Y > R$ (True) II. $U > R$ (True)
 77. (4) I. $C > G$ (False) II. $B \geq Q$ (False)

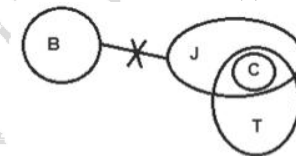
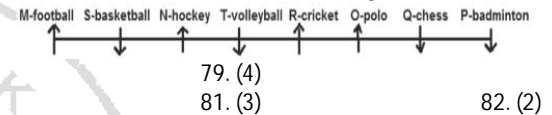
78-82. (i) P sits at extreme end of the row and plays badminton. No 2 successive friends according to alphabetical series sit together except P and Q. T sits 3rd to the right of Q who doesn't play football and basketball, Q faces either north or south. M sits 3rd right of T. S in not an immediate neighbor of Q and doesn't sit at extreme end, S can't sit

with T so only 1 place for S which is shown below in 2 cases.

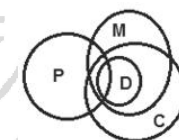
- (ii) R plays cricket, R's position will be fixed. M sits 3rd right of T, T will face north and south in case-2 and case-1 respectively. N is not an immediate neighbor of R and plays hockey. The one who plays polo sits 3rd right of N, hence N will face north and south in case-1 and case-2 respectively.
 (iii) S and P face opposite direction of N. The one who plays volleyball sits immediate right of the one who plays hockey, T will play volleyball, so Q will play chess.



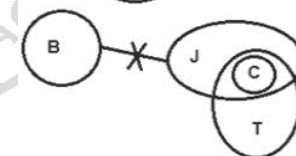
(iv) The one who plays basketball doesn't face north and doesn't sit at extreme end of the row, from this condition case-2 will be eliminated and we will get final answer.



84. (5)



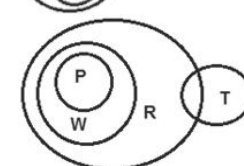
85. (2)



86. (1)



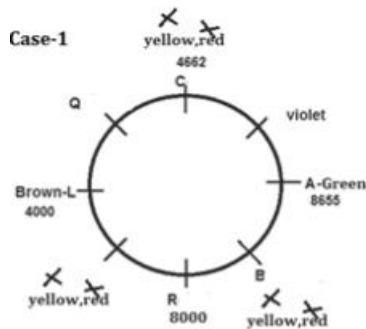
87. (2)



88-92.

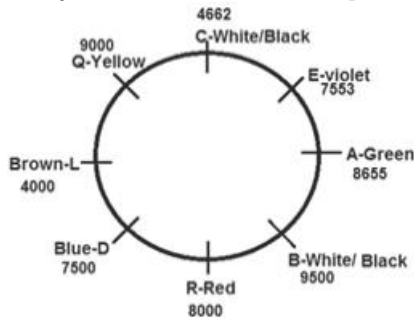
- (i) L likes brown color and sits 2nd place away from R, L can be either 2nd left or 2nd right of R. Q sits between L and C, whose salary is an even number which is not multiple of 100 (4662). R, whose salary is a perfect cube (8000). A, whose salary is an odd number as well as divisible by 3 (8655) sits opposite to L.
 (ii) A likes green color and E's salary is an odd number (7553). The one, who likes violet sits 3rd left of L whose salary is 8th highest salary (4000). B sits 2nd to the left of the one who likes violet. The ones who like red and yellow

don't sit opposite to R and also they are not immediate neighbors of R.



(iii) The one who likes red color sits 3rd to the left of E, from this condition case-2 will be eliminated because there is no place for E in case-2. Case-1 will be continued with rest conditions.

(iv) R will like red and E will like violet. D's position will be fixed. The one who likes blue color sits 2nd right of the one who likes yellow color, Q will like yellow this is the only possibility. Either C or B likes Black or White. D's salary is 500 less than R's salary, so D's salary is 7500. B's salary is 500 more than Q's salary, so B's salary is 9500 and Q's salary is 9000.



Case-1

Person	Subject	State
A	Management	
B		
D	Science	Uttarakhand
F		Chandigarh
P	Software	Punjab
R	Networking	Chandigarh
S	Testing	Chandigarh
T	Sports	Uttarakhand

Case-2

Person	Subject	State
A	Management	
B		
D	Maths	Uttarakhand
F		Chandigarh
P	Software	Punjab
R	Networking	Chandigarh
S	Testing	Chandigarh
T	Sports	Uttarakhand

(iii) Both the persons of Uttarakhand are not teachers of testing, management and maths. From this condition case-2 will be eliminated, because in case-2 D is a teacher of maths and he will belong to Uttarakhand.

(iv) Rest A and B will belong to Punjab. Maths teacher belongs to Punjab; hence B will be a teacher of maths. F will be the teacher of Designing. We will get the final answer.

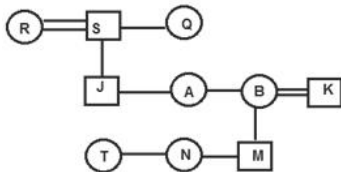
Person	Subject	State
A	Management	Punjab
B	Maths	Punjab
D	Science	Uttarakhand
F	Designing	Chandigarh
P	Software	Punjab
R	Networking	Chandigarh
S	Testing	Chandigarh
T	Sports	Uttarakhand

96. (4)
98. (4)

97. (3)
99. (2)

100. (3)

88. (3)
90. (3)
93-94.



89. (1)
91. (1)

92. (3)

93. (3)
95. (3)

Girls and Boys ratio = 2:1
 $2x + x = 60$
 $x = 40$, So girls= 40 and boys = 20
 Number of students behind Sumit = $60 - 14 = 46$
 Number of girls behind Sumit = $40 - 10 = 30$
 Number of boys behind Sumit = $46 - 30 = 16$

96-100.

(i) S, A and R are teachers of testing, management and networking respectively. D is a teacher of either science or maths so 2 possible cases will be there case-1 and case-2. P belongs to Punjab and F belongs to Chandigarh.
 (ii) P is teacher of software. Networking teacher belongs to Chandigarh. R and S belong to same state. T is a teacher of sports and doesn't belong to Punjab, so T will belong to Uttarakhand. D and T belong to same state, so D will belong to Uttarakhand.