SBI PO Preliminary Grand Test –SPP-180313
HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (5) Hone (Verb) = to develop and improve something, especially a skill, over a period of time; sharpen.
Look at the sentences:
It was a finely honed piece of writing.
She honed her debating skills at college.

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

6. (5) Break into = to be successful when you get involved in something
Tricky = difficult to deal with
Look at the sentence:
The company is having difficulty breaking into new markets.

7. (1)

8. (5) Purely (Adverb) = entirely; only, completely.
Partly (Adverb) = to some ex-tent; not completely.
Look at the sentences:
The charity is run on a purely voluntary basis.
He was only partly responsible for the accident.

9. (5) Honour (Verb) = to do what you have agreed or promised to do.
Settle (Verb) = to pay the money that you owe.
Look at the sentences:

I have every intention of honouring our contract.
The insurance company is refusing to settle her claim.

10. (5) Weighty (Adjective) = important and serious ; heavy.
Slight (Adjective) = very small.

11. (5) Pertain = to be connected with something
Edge off = to make something less strong; less bad.

12. (4) Deploy (Verb) = to move soldiers into a position; to use something effectively.

13. (4) Take note of = to pay attention to something and be sure to remember it

14. (2) Spark concern = to start or develop concern.

15. (1) Initiate = to start

16. (4)   17. (4)   18. (5)
19. (1)   20. (3)

21. (5) No error

22. (3) Here, Adjective (gerund) i.e. and law abiding sectors ... should be sued.

23. (4) Here, Subject (its stated aim) is singular. Hence, curbing inflation has not been achieved should be used.

24. (3) Here general Proposition is evident. Hence present simple should be used here.

25. (4) Here, for/in India's premier educational Institutes should be used.

26. (4) relationship   27. (3)   Rising
28. (4) changes   29. (4)   pace
30. (1) forecast

31. (2) Series is $+11^2, +10^2, +9^2, +8^2, +7^2$

32. (1) Series is +880, +440, +220, +110, +55,

33. (3) Series is $+3^3, +4^3, +5^3, +6^3, +7^3, ...$

34. (4) Series is   13 + 23 =36
36 + 34 = 70
70 + 47 = 117
117 + 62 = 179
179 + 79 = 258
Difference of   23 + 11=34, 34 + 13 = 47,
47 + 15 = 62, 62 + 17 = 79

35. (5) Series is +551, +1102 ,+1653, +2204 ,+2755,

36-40. Total number of girls = $2800 \times \dfrac{4}{7} = 1600$

Total number of boys = 2800 - 1600 = 1200

Number of boys in painting = $1200 \times \dfrac{20}{100} = 240$

Number of girls in cooking = $\dfrac{1}{4} \times 1600 = 400$

Number of boys in cooking = 700 - 400 = 300

Number of boys in singing = $\dfrac{2}{5} \times 1200 = 480$

Number of boys in dancing = 1200 - 240 - 300 - 480 = 180

Number of girls in dancing = $180 \times \dfrac{5}{4} = 225$

Number of girls in singing = 2 × 480 = 960
Number of girls in painting = 1600 - 400 - 225 - 960 = 15

36. (5) Required ratio = 240 : 480 = 1 : 2

37. (1) Required per cent = $\frac{400}{2800} \times 100 = \frac{100}{7} = 14$

38. (3) Required per cent = $\frac{300}{2800} \times 100 = 10.71$

39. (4) Number of children in dancing classes = 180 + 225 = 405

40. (2) Number of girls taking painting classes = 15

41. (2) The no. of adult males in city B

$= \frac{131857}{11} \times 7 = 83909.$

The no. of adult males in city C

$= \frac{116536}{8} \times 5 = 72835$

The difference between the total no. of adult males of city B and C = 83909 – 72835 = 11074

42. (1) The no. of adult males in city A

$= 105623 \times \frac{5}{7} = 75445$

The no. of adult females in city C

$= 100249 \times \frac{11}{17} = 64867$

Total no. of adults in city A
= 75445 + 64867 = 140312.

43. (4) The no. of minor males in city F

$= 180396 \times \frac{5}{18} = 50110$

The no. of minor females in city F

$= 183296 \times \frac{9}{16} = 103104$

The required percentage

$= \frac{50110}{103104} \times 100 = 48.6\%$

44. (5) The no. of adult males in city D

$= 137202 \times \frac{8}{13} = 84432$

The no. of adult females in city E

$= 161896 \times \frac{9}{14} = 104076$

The difference between total no. of males in city D and adult females of city E
= 104076 – 84432 = 19644.

45. (3) The no. of minor females in city A

$= 100249 \times \frac{6}{17} = 35382$

The no. of minor females in city B

$= 115110 \times \frac{4}{15} = 30696$

The required percentage

$= \frac{35382 - 30696}{30696} = 15.2\% \cong 15\%$

46. (4) Required percentage increase = $\frac{9-8}{8} \times 100 = 12.5$

47. (1) Number of students enrolled in district-B over all the years
= 33 thousand
Required difference = (33 - 21) thousand = 12000
thousand

48. (2) Required average = $\frac{34000}{6} = 5666$

49. (3) Total number of students:
Year 2005 $\Rightarrow$ 14 thousand
Year 2006 $\Rightarrow$ 17 thousand
Year 2007 $\Rightarrow$ 22 thousand
Year 2008 $\Rightarrow$ 21 thousand
Year 2009 $\Rightarrow$ 16 thousand
Year 2010 $\Rightarrow$ 18 thousand

50. (1) Required percentage = $\frac{12}{8} \times 100 = 150$

51. (1) Amount = $P\left(1 + \frac{R}{100}\right)^T$

$\Rightarrow$ 5800 + 594.5

$5800\left(1 + \frac{R}{100}\right)^2$

$\Rightarrow \frac{63945}{58000} = \left(1 + \frac{R}{100}\right)^2$

$\Rightarrow \frac{441}{400} = \left(1 + \frac{R}{100}\right)^2 \Rightarrow \left(\frac{21}{20}\right)^2 = \left(1 + \frac{R}{100}\right)^2$

$\Rightarrow 1 + \frac{R}{100} = \frac{21}{20} \Rightarrow R = \frac{1}{20} \times 100 = 55$ per annum

52. (3) Quicker approach

Let the original fraction be $\frac{x}{y}$

$\therefore \frac{x \times 250}{y \times 450} = \frac{25}{51} \Rightarrow \frac{x}{y} = \frac{25}{51} \times \frac{450}{250} = \frac{15}{17}$

53. (4) The word BANKING consists of 7 letters in which 'N' comes twice.

$\therefore$ Number of arrangements = $\frac{7!}{2!}$

$= \frac{7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1}{2 \times 1} = 2520$

54. (2) Quicker approach
Gain per cent

$= \frac{7 \times 6 \times 348000 - 250000}{250000} \times 100 = 39.2\%$

55. (5) Quicker approach
If the number of parrots in the forest be x,
then number of tigers = 858 - x
$\therefore x \times 2 + (858 - x) \times 4 = 1746$
$\Rightarrow 2x = 3432 - 1746 = 1686$
$\Rightarrow x = \frac{1686}{2} = 843$

56. (4) I. $3x^2 + 14x + 15 = 0$
$\Rightarrow 3x^2 + 9x + 5x + 15 = 0$
$\Rightarrow 3x(x + 3) + 5(x + 3) = 0$
$\Rightarrow (x + 3)(3x + 5) = 0$
$\Rightarrow x = -3$ or, $\frac{-5}{3}$

II. $6y^2 + 17y + 12 = 0$
$\Rightarrow 6y^2 + 9y + 8y + 12 = 0$

$\Rightarrow$ 3y (2y + 3) + 4 (2y + 3) = 0

$\Rightarrow$ (2y + 3) (3y + 4) = 0

$\Rightarrow$ y = $\frac{-3}{2}$ or $-\frac{4}{3}$

Clearly, x < y

57. (1) I. $3x^2$ - 17x + 24 = 0

$\Rightarrow$ $3x^2$ - 9x - 8x + 24 = 0

$\Rightarrow$ 3x (x - 3) - 8 (x - 3) = 0

$\Rightarrow$ (3x - 8) (x - 3) = 0

$\Rightarrow$ x = $\frac{8}{3}$ or, 3

II. $4y^2$ - 15y + 14 = 0

$\Rightarrow$ $4y^2$ - 8y - 7y + 14 = 0

$\Rightarrow$ 4y (y - 2) - 7 (y - 2) = 0

$\Rightarrow$ (4y - 7) (y - 2) = 0 7

$\Rightarrow$ y = $\frac{7}{4}$ or, 2

Clearly, x > y

58. (5) I. $2x^2$ + 11x + 14 = 0

$\Rightarrow$ $2x^2$ + 4x + 7x + 14 = 0

$\Rightarrow$ 2x(x + 2) + 7(x + 2) = 0

$\Rightarrow$ (x + 2) (2x + 7) = 0

$\Rightarrow$ x = -2 or $-\frac{7}{2}$

II. $2y^2$ + 17y + 33 = 0

$\Rightarrow$ $2y^2$ + 6y + 11y + 33 = 0

$\Rightarrow$ 2y(y + 3) + 11(y + 3) = 0

$\Rightarrow$ (2y + 11) (y + 3) = 0

$\Rightarrow$ y = $\frac{-11}{2}$ or, - 3

Clearly relationship cannot be established

59. (2) I. $3x^2$ + 13x + 12 = 0

$\Rightarrow$ $3x^2$ + 9x + 4x + 12 = 0

$\Rightarrow$ 3x(x + 3) + 4(x + 3) = 0

$\Rightarrow$ (3x + 4) (x + 3) = 0

$\Rightarrow$ x = $\frac{-4}{3}$ or, -3

II. $2y^2$ + 15y + 27 = 0

$\Rightarrow$ $2y^2$ + 6y + 9y + 27 = 0

$\Rightarrow$ 2y(y + 3) + 9 (y + 3) = 0

$\Rightarrow$ (y + 3) (2y + 9) = 0

$\Rightarrow$ y = -3 or, $-\frac{9}{2}$

Clearly, x $\geq$ y

60. (2) I. x^2 - 22x + 121 = 0

$\Rightarrow$ $(x - 11)^2$ = 0

$\Rightarrow$ x – 11 = 0

$\Rightarrow$ x = 11

II. y^2 = 121

$\Rightarrow$ y = $\sqrt{121}$ = ±11

Clearly, x $\geq$ y

61. (3) ? = $\frac{394 \times 57}{100} - \frac{996 \times 2.5}{100}$

$\approx \frac{400 \times 57}{100} - \frac{1000 \times 2.5}{100}$

$\approx$ 228 – 25

$\approx$ 203

$\therefore \approx$ Required answer = 200

62. (4) ? = 97 x 10 + 1 = 971

$\therefore$ Required answer = 940

63. (4) ? $\approx \frac{3}{5} \times \frac{1125}{1228} \times 7 = 4$

64. (2) ? $\approx \sqrt{\frac{339 \times 25}{30}} \approx 15$

65. (5) ? = $\frac{638 + 9709 - 216}{26} = 390$

66. (4)   67. (1)   68. (2)

69. (2) Arguments I and III are strong.

70. (5) None of the arguments is strong.

71. (2) Argument I is based on an example. We know that citing example is a bad argumentation. Only Argument II seems to be strong.

72. (5) All the three courses of action are suitable for pursuing. The Courses of action mentioned here are appropriate to tackle the problem.

73. (3) Course of action II seems to be suitable for pursuing. The government should make effort to point out the cause of price rise instead of setting up an expert committee to study the trend of prices. Course of action III negates the importance of essential commodities.

74. (4) All the three courses of action are suitable for pursuing.

75. (4) Large number of branches of many government owned banks in the rural areas are making huge losses every year due to lack of adequate business activities.

76-80.

Floor Number	Person	Cartoon Character
7	O	Flinstone
6	S	Tweety
5	Q	Chipmunk
4	N	Popeye
3	M	Scooby Doo
2	R	Simpson
1	P	Jetson

76. (3) Four persons — Q, N, M and R — live between the floors of S and P.

77. (5) All the statements are true.

78. (1) N lives on the floor immediately above the floor on which M lives.

79. (4) Q lives exactly between the floor

80. (2) P likes cartoon character Jetson

81. (3) A @ F $\Rightarrow$ A is wife of F.

F$M $\Rightarrow$ F is son of M.

M % J, $\Rightarrow$ M is mother of J.

J + T $\Rightarrow$ J is the sister of T.

F is the husband of A. J is the sister of F. So, J is the sister-in-law of A.

82. (4)   J % B $\Rightarrow$ J is the mother of B

B $ K $\Rightarrow$ B is the son of K.

K $ T $\Rightarrow$ K is the son of T.

Therefore, J is daughter-in-law of T.

83-85.   (i) P # Q $\Rightarrow$ P $\geq$ Q

(ii) P % Q $\Rightarrow$ P $\leq$ Q

(iii) P @ Q $\Rightarrow$ P > Q

(iv) P $ Q $\Rightarrow$ P < Q

(v) P © Q $\Rightarrow$ P = Q

83. (3)   H © W $\Rightarrow$ H = W

W % R $\Rightarrow$ W $\leq$ R

R @ F $\Rightarrow$ R > F

Therefore, H = W $\leq$ R > F

Conclusions

I. R © H $\Rightarrow$ R= H : Not True.

II. R @ H $\Rightarrow$ R > H : Not True

R is either greater than or equal to H.

84. (1)   M $ T $\Rightarrow$ M < T

T @ K $\Rightarrow$ T > K

K © D $\Rightarrow$ K = D

Therefore, M < T > K = D

Conclusions

I. D $ T $\Rightarrow$ D < T : True

II. K $ M $\Rightarrow$ K < M: Not True

85. (2)   R % N $\Rightarrow$ R $\leq$ N

N # F $\Rightarrow$ N $\geq$ F

F @ B $\Rightarrow$ F > B

Therefore, R $\leq$ N $\geq$ F > B

Conclusions

I. F © R $\Rightarrow$ F = R : Not True

II. B $ N $\Rightarrow$ B < N : True

86-90.   After careful analysis of the Input and various steps of rearrangement it is evident that in each step one number or word is rearranged. These two steps are continued alternately till all the words get rearranged in alphabetical order and all the numbers get rearranged in ascending order.

86. (3)   Step II: bend 15 will care 46 53 29 then

Step III: bend 15 care will 46 53 29 then

Step IV: bend 15 care 29 will 46 53 then

Step V: bend 15 care 29 then will 46 53

Step VI: bend 15 care 29 then 46 will 53

87. (5)   Input: land 62 clear over 41 37 again 56

Step I: again land 62 clear over 41 37 56

Step II: again 37 land 62 clear over 41 56

Step III: again 37 clear land 62 over 41 56

Step IV: again 37 clear 41 land 62 over 56

Step V: again 37 clear 41 land 56 62 over

Step VI: again 37 clear 41 land 56 over 62

Step V is the last but one step.

88. (4)   Step II: desk 12 year victor 86 71 store 65

Step III: desk 12 store year victor 86 71 65

Step IV: desk 12 store 65 year victor 86 71

Step V: desk 12 store 65 victor year 86 71

Step VI: desk 12 store 65 victor 71 year 86

89. (1)   Input: earn 39 23 48 station 19 begin day

Step I: begin earn 39 23 48 station 19 day

Step II: begin 19 earn 39 23 48 station day

Step III: begin 19 day earn 39 23 48 station

Step IV: begin 19 day 23 earn 39 48 station

Step V: begin 19 day 23 earn 39 station 48

90. (4)   It is not possible to determine the Input from any given step.

91-95.
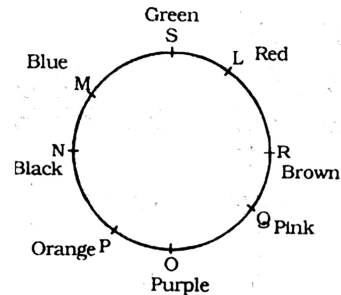
91. (2)   P likes Orange colour. Q is second to the right of P.

92. (3)   S likes Green colour.

93. (1)   L likes Red colour. R is sitting exactly between L and Q.

94. (4)   Q likes Pink colour.

95. (1)   N and S are immediate neighbour of M.

96–100.
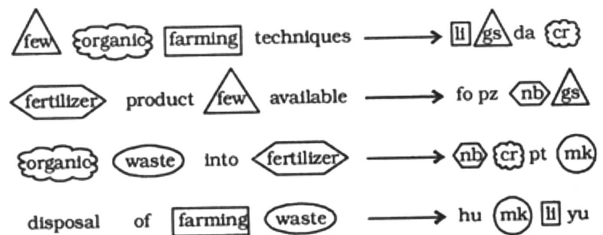
96. (5)   few $\Rightarrow$ gs

waste $\Rightarrow$ mk

97. (2)   organic $\Rightarrow$ cr

98. (3)   yu $\Rightarrow$ disposal/of

99. (4)   waste $\Rightarrow$ mk

techniques $\Rightarrow$ da

The code for Management' may be 'ax'.

Therefore,

farming $\Rightarrow$ li

fertilizer $\Rightarrow$ nb

management $\Rightarrow$ ax

100. (1)   available $\Rightarrow$ fo/pz