SBI PO Preliminary Grand Test –SPP-190331

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (4)   **Range** = a variety of thing of a particular type.
Alternative = a thing that you can choose to do: that can be used instead of something.

2. (1)   **Flack** = severe criticism
Bit = part of something

3. (3)   **Appalled** = feeling disgust at something unpleasant

4. (3)

5. (2)

6. (1)   Refer to the first sentence of the passage: "In Western civilization is in a state of permanent crisis, it is not far-fetched to suggest that there may be something wrong with its education". So, the writer's contention is that the crisis in the Western civilization can be explained by the presence of some flaws in its education. Option (1) is the correct answer.

7. (3)   Refer to the following sentences: "Lord Snow, it will be recalled, talked about 'The Two Cultures'...at the other the scientists". So, according to Lord Snow, the intellectual life of the Western society is split between the scientists and literary intellectuals. Option (3) is the correct answer.

8. (2)   Refer to the first few lines of the paragraph:"If Western civilization is in a state of permanent crisis, it is not far-fetched to suggest that there may be something wrong with its education. No civilization, I am sure, has ever devoted more energy and resources to organised education, and if we believe in nothing else, we certainly believe that education is, or should be, the key to everything. In fact, the belief in education is so strong that we treat it as the residual legatee of all our problems." Here the author criticizes our view when we consider the solution of some problem as more education.

9. (2)   Consider the following sentences: "We often notice the existence of more or less fixed ideas in other people's minds - ideas with which they think without being aware of doing so. We then call them prejudices". So, a prejudice is a fixed idea with which people think without being aware of doing so. Option (2) is the correct answer.

10. (1)   The author quotes Lord Snow in the passage: "and finally to train politicians, administrators, and entire community...". Option (1) is the correct answer.

11. (3)   Refer to the following sentences in the passage: "It is an uncomfortable feeling, because scientists never tire of telling us ...becomes of the neutrality of science". In these sentences, the writer is questioning the scientists' stand on the neutrality of their labours. Option (3) is the correct answer.

12. (1)   Refer to the following sentence: "The essence of education, I suggested, is the transmission of values...". So, according to the author, the main responsibility of education is to transmit ideas of value. Option (1) is the correct answer.

13. (4)   Refer to the following sentences: "These ideas on education, which are by no means unrepresentative of our times, Second Law of Thermodynamics". From these sentences, we can understand that the author is not of the opinion that the gulf between science and literature needs to be bridged. Also, there is nothing in the passage to suggest that the author believes that ideas should be maintained for a holistic view of society and its problems or words are not ideas. Option (4) is the correct answer.

14. (2)   Refer to the following sentences: "The essence of education, I suggested, more than mere formulae or dogmatic assertions...". From these sentences, we understand that according to the author, values are not merely dogmatic assertions". Option (2) is the correct answer.

15. (3)   Refer to the following sentence: "I say, therefore, that we think with or through ideas and that what we call thinking is generally the application of pre-existing ideas to a given situation or set of facts". So, thinking is an

application of pre-existing ideas to a situation. Option (3) is the correct answer.

16. (1) Here, Rural and Urban water problems would have assued critical (Adjective) should be used. It is somewhat conditional.
There was possibility, that did not happen.

17. (2) Here, infinitive i.e., faculty to believe …….should be used. Gerund shows cause.

18. (3) Here, superlative i.e., the best …….should be used.

19. (3) Here, active i.e., she used should be used. Here, doer is active.

20. (2) Here, an article should be used. Hence, us a great gift of …….should be used.

21. (5) **Of late** = recently

22. (2) **Mainly** = importantly

23. (3) **On the top** = in a leading position

24. (1) **Appraisals** = a meeting which employees discuss performance: judgement or performance.

25. (3) **Dedicate =** devote; to give lot of your time and effort to particular activity

26. (1) Here, Present Continuous/ Perfect Continuous i.e. The civic body is/has been working……… should be used.

27. (3) So…….. that is correct form of connective. Hence, which is so dark that… …should be used.

28. (5)

29. (2) Here, five students for allegedly obtaining………. should be used. Adjective (alleged) is used to qualify a Noun.

30. (4) Subject + is/am/are + ving Hence, person is not smiling at all …….should be used here.

31. (2) I. $x^2 - 1 = 0$
$\Rightarrow (x + 1)(x - 1) = 0$
$\Rightarrow x = -1$ or 1
II. $y^2 + 4y + 3 = 0$
$y^2 + 3y + y + 3 = 0$
$\Rightarrow y(y + 3) + 1(y + 3) = 0$
$\Rightarrow (y + 1)(y + 3) = 0$
$\Rightarrow y = -1$ or -3
Clearly, $x \geq y$

32. (4) I. $x^2 - 7x + 12 = 0$
$\Rightarrow x^2 - 4x - 3x + 12 = 0$
$\Rightarrow x(x - 4) - 3(x - 4) = 0$
$\Rightarrow x(x - 3)(x - 4) = 0$
$\Rightarrow x = 3$ or 4
II. $y^2 - 12y + 32 = 0$
$\Rightarrow y^2 - 8y - 4y + 32 = 0$
$\Rightarrow y(y - 8) - 4(y - 8) = 0$
$\Rightarrow (y - 4)(y - 8) = 0$
$\Rightarrow y = 4$ or 8
Clearly, $x \leq y$

33. (3) I. $x^3 - 371 = 629$
$\Rightarrow x^3 = 371 + 629 = 1000$
$\Rightarrow x = \sqrt[3]{1000} = 10$
II. $y^3 = 543 + 788 = 1331$
$\Rightarrow y = \sqrt[3]{1331} = 11$
Clearly, $x < y$

34. (1) By equation I x 3 - equation II x 5, we have,
15x + 6y - 15x - 35y = 93 - 180

$\Rightarrow -29y = -87 \Rightarrow y = \dfrac{87}{29} = 3$

From equation I,
5x + 2 x3 = 31
$\Rightarrow 5x = 31 - 6 = 25 \Rightarrow x = 5$
Clearly, x > y

35. (5) I. $2x^2 + 11x + 12 = 0$
$\Rightarrow 2x^2 + 8x + 3x + 12 = 0$
$\Rightarrow 2x(x + 4) + 3(x + 4) = 0$
$\Rightarrow (x + 4)(2x + 3) = 0$
$\Rightarrow x = -4$ or $-\dfrac{3}{2}$

II. $5y^2 + 2'7y + 10 = 0$
$\Rightarrow 5y^2 + 25y + 2y + 10 = 0$
$\Rightarrow 5y(y + 5) + 2(y + 5) = 0$
$\Rightarrow (y + 5)(5y + 2) = 0$
$\Rightarrow y = -5$ or $-\dfrac{2}{5}$

36. (2) Area of the circle = $\dfrac{22}{7} \times (14)^2 = 616 \text{ cm}^2$
Area of the rectangle = $1166 - 616 = 550 \text{ cm}^2$
Breadth of the rectangle $= \dfrac{550}{25} = 22$ cm
So, required sum = $2 \times \dfrac{22}{7} \times 14 + 2(25 + 22) = 182$ cm

37. (1) Let the length of train A and train B be x and 2x, then
Speed of train A = $\dfrac{x}{25}$
Speed of train B = $\dfrac{2x}{75}$
Required ratio = $\dfrac{x}{25} : \dfrac{2x}{75} = 3 : 2$

38. (2) Let the number of days he was absent be x days.
$180(40 - x) - 20x = 5200$
$7200 - 180x - 20x = 5200$
$7200 - 200x = 5200$
$x = 2000/20 = 10$ days

39. (5)
Efficiency		Days	
4	A	16	
5	B	64/5	LCM 64
2	C	32	

(A + B + C_ work together for 4 days
= 4 × (4 + 5 + 2) = 44
C work alone, last 3 days = 3 × 2 = 6
Remaining work done by (B + C)
= (64 − 50) / 7 = 14/7 = 2 days
Total days = 4 + 3 + 2 = 9 days.

40. (3) Let A complete the work in x days and B complete the work in y days.
So, By 1st case,
$\dfrac{2}{x} + \dfrac{9}{y} = 1$ …(1)
And By 2nd case,
$\dfrac{3}{x} + \dfrac{6}{y} = 1$ …(2)
From Eq. (1) and (2), y = 15 days.

41. (1) Average number = 1/6 (2 + 3 + 4 + 5 + 4 + 7) lacs

= 1/6×25=4.1 lakh

42. (2) Required % = [25/(5 + 6 + 5 + 8 + 5 + 9)]x 100
= 2500/38 = 66

43. (3) The total number of candidates who applied for both the banks together is 9 lacs in 2004, 2005 and 2007 separately.

44. (1) Required number of disqualified candidates
= (80/100)x9 lacs = 7200/100 lacs = 7.2 lacs

45. (2) Required ratio = (5 + 7)/(5 + 9) = 12/14 = 6 : 7.

46. (5) Let present age of Prem = x years and that of Anand = y years
According to the statement

A. $\dfrac{x-5}{y-5} = \dfrac{3}{4} \Rightarrow 4x - 20 = 3y - 15 \Rightarrow 4x - 3y = 5$

B. $\dfrac{x+5}{y+5} = \dfrac{5}{6} \Rightarrow 6x + 30 = 5y + 25 \Rightarrow 6x - 5y = -5$

C. $\dfrac{x}{y} = \dfrac{2}{3} \Rightarrow 3x = 2y \Rightarrow y = \dfrac{3}{2}x$

Hence we can easily find the difference between the ages of Prem and Anand by considering any two of the three equations.

47. (4) All together are necessary

48. (2) As both the cows have neither been bought for Rs 2450 each nor have been bought at equal cost for Rs 2450 together (ie for Rs 1225 each), so even after combining the three statements we cannot find out his loss or gain percent.

49. (4) $A \Rightarrow P\left(1 + \dfrac{r}{100}\right)^2 = 8988.80$

$B \Rightarrow P + \dfrac{2rp}{100} = 8960$

$C \Rightarrow P = 8000$

By solving any two, the result can be found.

50. (4) Let the length and breadth of a rectangle be x and y respectively.
$A \Rightarrow A(r) : A(c) = 6 : 11$
$B \Rightarrow A(c) = 132$
Therefore, area of rectangle
$= \dfrac{6}{11} \times 132 = 72 \ m^2$ ...(1)

Combining statement (c) and (1)
$= x \times \dfrac{x}{2} = 72 \Rightarrow x^2 = 144 \Rightarrow x = \text{length} = 12$
Breadth = 6

51. (3) $\times 2^0, \times 2^1, \times 2^2, \times 2^3, \times 2^4$

52. (2) +7, +11, +13, +17, +19, +23
+4 +2 +4 +2 +4

53. (4) 10% 20% 40% 70% 110%
10 20 30 40

54. (5) ÷ 2 + 2, ÷ 3 + 3, ÷4 + 4, ÷5 + 5

55. (1) ×0.5, ×1, ×1.5, ×2, ×2.5, ×3

56. (3) Both of the examinations had almost the same difficulty level.

57. (4) Total no. of students in class IX =
(28+23+17+27+14+12+8+13+6+17+9+15+64+55+46+76)
= 430

58. (4) Pass students in at least one of the two examinations for different sections are

For A : $\dfrac{(14 + 6 + 64)}{(28 + 14 + 6 + 64)} \times 100 = 75\%$

For B: $\dfrac{(12 + 17 + 55)}{(23 + 12 + 17 + 55)} \times 100 = 78.5\%$

For C : $\dfrac{(8 + 9 + 46)}{(17 + 8 + 9 + 46)} \times 100 = 78.75\%$

For D : $\dfrac{(13 + 15 + 76)}{(27 + 13 + 15 + 76)} \times 100 = 79.39\%$

59. (1) Section A has the maximum success rate in annual examination.
For $A = \dfrac{14 + 64}{28 + 14 + 6 + 64} \times 100 = 69.64$, , B = 62.61, C = 67.5, D = 67.9. So answer is (1).

60. (4) Section D has the minimum failure rate in help yearly examination.
$A = \dfrac{28 + 14}{28 + 14 + 6 + 64} = 37.5$; B = 33.7, C = 31.25, D = 30.53. So answer is (4).

61. (1) $4434 - 2212 - 1133 + 3377 = 4466$

62. (4) $260 \times \frac{30}{100} + 510 \times \frac{60}{100} - 104$
$= 78 + 306 - 104$
$= 280$

63. (1) $\frac{1300}{20} \times 25 + 400$
$= 1625 + 400$
$= 2025$

64. (4) $\frac{8600}{420} \times 15$
$\approx 20 \times 15$
$= 300$

65. (5) $405 \times \frac{39}{100} + 610 \times \frac{62}{100} - 184$
$= 158 + 378 - 184$
≈ 350

66-70. @ → ≥
$ → ≤
% → >
# → <
© → =

66. (4) Statement : A ≥ B < C ≤ D
Conclusions :
I. D > A   II. C > A

67. (2) Statement: M ≤ N ≥ P > Q
Conclusions
I. P = M   II. Q < N

68. (4) Statement: E > F < G ≥ H
Conclusions
I. H < F   II. E > G

69. (3) Statement: J = K ≤ L > M
Conclusions
I. L = J   II. L > J

70. (1) Statement: W < X > Y = Z
Conclusions
I. Z < X   II. Y < W

71. (4) If the data given in both the statements I and II together are not sufficient to answer the question.

72. (5) If the data in both the statements I and II together are necessary to answer the question.

73. (4) If the data in both the statements I and II together are not sufficient to answer the question.

74. (3) If the data given in either statement I or II are sufficient to answer the question.

75. (3) If the data either in statement I alone or in statement II alone are sufficient to answer the question.
76. (3)
77. (2)
78. (1)
79. (5)
80. (4)

81-85. After careful analysis of the given input and various steps of rearrangement it is evident that in each step two elements (one word and one number) are rearranged. In the first step the word which contains maximum number of letters is placed at the extreme left position while the lowest number is placed at the extreme right position after reversing its digits. In the second step the word which contains the second highest number of letters is placed at the extreme left position and the second lowest number is placed at the extreme right position after reversing its digits. The same procedure is continued till all the words and numbers get rearranged.

Input: micro 63 make 19 morales 72 25 my map 48 margin 56

Step I: morales micro 63 make 72 25 my map 48 margin 56 91

**Step II**: margin morales micro 63 make 72 my map 48 56 91 52

Step III: micro margin morales 63 make 72 my map 56 91 52 84

**Step IV**: make micro margin morales 63 72 my map 91 52 84 65

Step V: map make micro margin morales 72 my 91 52 84 65 36

Step VI: my map make micro margin morales 91 52 84 65 36 27

81. (3) The elements 'morales 63 72 my map 91' are found in the same order in the Fourth step.
82. (1) The element '72' is at the seventh position from the right end in the Fifth Step.
83. (2) 10th from the right end of the Third Step $\Rightarrow$ morales
5th to the right of 'morales' $\Rightarrow$ map
84. (4) Option (4) is the Third Step.
85. (5) The elements '63 make' are exactly between 'micro' and '72' in the Second Step.
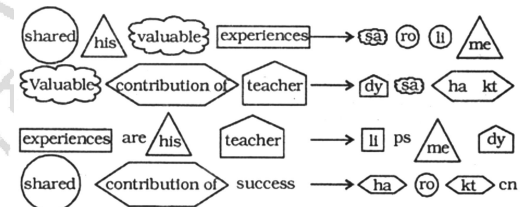
86. (2)

87. (4)

88. (5)

89. (5)

90. (4)
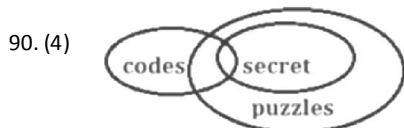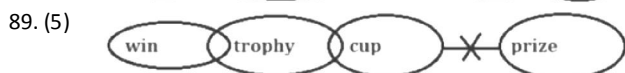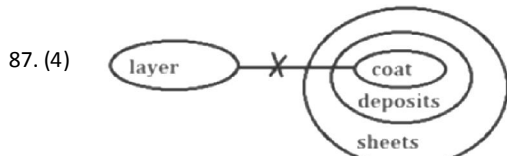
91-95.
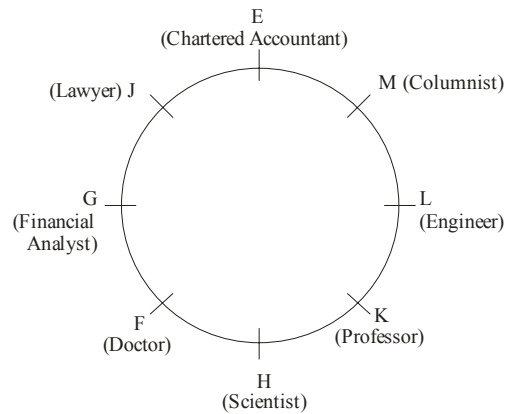
91. (2) G
92. (4) K
93. (3) J - Engineer
94. (2) Second to the right
95. (1) The Lawyer is second to the left of the Doctor

96-99.

96. (3) dy $\Rightarrow$ teacher
97. (1) contribution $\Rightarrow$ ha/kt
98. (4) sa $\Rightarrow$ valuable
99. (2) his $\Rightarrow$ me
experiences $\Rightarrow$ li
The code for 'working' may be 'kj'.

100. (2)