SBI PO Preliminary -2021. SBPP-2021-100017

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (1)
2. (4)
3. (3)
4. (5)
5. (1)
6. (2)
7. (4)
8. (1)
9. (2)
10. (3)
11. (4)
12. (1)
13. (2)
14. (3)
15. (1)
16. (3)
17. (5)
18. (4)
19. (3)
20. (1)
21. (4) It should be 'were thoroughly ignorant'. Here, an *adverb* is required.
22. (4) Use of 'been' is superfluous.

23. (3) 'expect' to live better than our parents did' is the correct comparative phrase.
24. (5) The sentence is correct.
25. (4) It should be 'some risks must be'
26. (4) Second sentence of the passage clearly gives us the answer.
27. (5) It can be easily inferred from the first paragraph.
28. (1) Answer is quite clear from the first paragraph itself.
29. (1) Refer to the third last sentence of the first paragraph.
30. (2) The last two sentences of the first paragraph give us the answer.
31. (4)   Series is $\times 1+5, \times 2+10, \times 3+15, \times 4+20$
32. (2)   Series is $1+1^2+1^3, 2+2^2+2^3, 3+3^2+3^3$
33. (3)   Series is $\times 0.5+8, \times 1.0+12, \times 1.5+24$
34. (1)   Series is $+1^2+2, +2^2+3, +3^2+4........$
35. (2)   Series is $1 \to 4, 4+6=10, 10+12=22, 22+24=26$

   Series is $2 \to 7, 7+4=11, 11+8=19, 19+16=35$
36. (1) Committee formed are as follows
   (i) 1 woman and 2 men
   (ii) 1 man and 2 women
   (iii) 3 women
   Required number of committees
   $= {}^5C_1 \times {}^4C_2 + {}^5C_2 \times {}^4C_1 + {}^5C_3$
   $= 5 \times \dfrac{4 \times 3}{1 \times 2} + \dfrac{5 \times 4}{1 \times 2} \times 4 + \dfrac{5 \times 4 \times 3}{1 \times 2 \times 3}$
   = 30 + 40+ 10 = 80
37. (4) Suppose the present age of Amit and his father is 2xyr and 5xyr, respectively. After 4 yr, the ratio of their ages,
   $\dfrac{2x+4}{5x+4} = \dfrac{5}{11}$
   25x + 20 = 2 2 x + 44
   2 5 x - 2 2 x = 4 4 - 2 0
   3x = 24
   x = 8
   Age of his father before 5 yr
    = 5x − 5
   = 5 x 8 - 5   [x= 8]
   = 4 0 - 5 = 35 yr
38. (4) Suppose first and second number is x and y.
   $2 x^2$ = 6y
   x^2 = 3y
   Ratio cannot be determined.
39. (1) Suppose cost price = ₹ x
   90% of 15000 =108% of *x*

$$15000 \times \frac{90}{100} = x \times \frac{108}{100}$$

$$x = \frac{150 \times 90 \times 100}{108} = Rs.\,12500$$

40. (5) Suppose the cost of one pen is Rs. x and the cost of one pencil is Rs. y.

8 x + 4 y = 176 ...(i)

2 x + 2 y = 4 8 ...(ii)

On multiply by 2 in Eq. (ii), we get

4 x + 4 y = 9 6 ...(iii)

On subtract Eq. (iii) from Eq. (i), we get

8 x + 4 y = 176

4x + 4y = 96

4 x = 80

x = 20

So, the cost of one pen = Rs. 20

41. (4)

42. (1)

43. (5)

44. (2) Let wicket taken by him before match = x

$$\therefore \frac{15.4x + 31}{x + 5} = 15.4 - 0.4 = 15 = 15.4x + 31 = 15x + 75$$

= 0.4x = 75 − 31 = 44 ∴ x = 110

∴ Wicket after match = 110 + 5 = 115

45. (4)

Salt	:	Water
15	:	85
or 3	:	17

After evaporating 30kg, water ratio gets = 1 : 4

Since, water evaporates, so quantity of salt remains same:

∴ 3 : 17, 3 : 12, 17 − 12 = 5 unit = 30 kg.

1 unit = 6 kg. ∴ Total solution = 6 × (3 + 17)

6 × 20 = 120 kg.

46. (3) $\text{Sale} = 5500000 \times \frac{11.6}{100} \times \frac{61}{100} = 389180$

47. (1) $\text{Sale} = 5500000 \times \frac{13.4}{100} \times \frac{55}{100} = 405350$

$\text{production}_A = 5500000 \times \frac{19.8}{100} = 1089000$

$\therefore \text{Req.\%} = \frac{405350}{1089000} \times 100 = 37.2$

48. (2) $E_{sale} = 5500000 \times \frac{20.7}{100} \times \frac{58}{100} = 660330$

$F_{sale} = 5500000 \times \frac{17}{100} \times \frac{64}{100} = 598400$

Diff. = 660330 − 598400 = 61930

49. (5) $\text{Sale}_B = 5500000 \times \frac{17.5}{100} \times \frac{72}{100} = 693000$

$\therefore \text{Req.\%} = \frac{693000}{5500000} \times 100 = 12.6$

50. (4) $A_{sale} = 5500000 \times \frac{19.8}{100} \times \frac{68}{100} = 740520$

$C_{sale} = 5500000 \times \frac{13.4}{100} \times \frac{55}{100} = 405350$

Total = 740520 + 405350 = 1145870

51. (5) We cannot find the exact amount of profit of Company A and Company B with the given data.

52. (1) In 2005 profit is minimum. So, $\frac{E}{I}$ will be maximum for 2005.

53. (2) Expenditure $= 56 \times \frac{100}{140} = 40$ lakhs

54. (4) Income of $A_{2009} = 20 \times \frac{125}{140} = 25$ lakhs

∴ Profit = 25 − 20 = 5 lakhs

Income of $B_{2009} = 20 \times \frac{140}{140} = 28$ lakhs

∴ Profit = 28 − 20 = 8 lakhs

Required ratio = $\frac{5}{8}$ = 5 : 8

55. (4) Let the expenditure of A be 3x and B be 2x.

∴ Profit of $A_{2010} = \frac{3x}{2}$

Profit of $B_{2010} = \frac{6x}{5}$

∴ Required % $= \frac{6x}{5} \times \frac{2}{3x} \times 100 = 80\%$

56. (5) Series is ×1.5, ×2, ×2.5, ×3, ×3.5

57. (1) Series is $+1^3 + 1, +2^3 - 1, +3^3 + 1, +4^3 - 1$

58. (3) Series is $\times 2 + 1^2, \times 2 + 2^2, \times 2 + 3^2, \times 2 + 4^2$

59. (3)

60. (2) Series is 1×2+1, 2×3+3, 3×4+5, 4×5+7, 5×6+9

61. (1) Req. Area $= \frac{1}{4}\left\{\pi \times (24.5)^2\right\}$

$= \frac{1}{4} \times \frac{22}{7} \times 24.5 \times 24.5 = 471.625\,m^2$

62. (3) Let the length and breadth of fields are 3x and 2x respectively

area = 6x²

Length of field including path =(3x + 6)

Breadth of field including path = (2x + 6)

Area = (3x + 6) (2x + 6) = 6x² + 30x + 36

Area of path = 6x² + 30x + 36 − 6x² = 456

30x = 456 − 36 = 420 x = 14

Length = 3x = 42 m and breadth = 2x = 28 m

Area = 42 × 28 = 1176 m²

63. (2) Area of ABCD = 96 × 4 = 384 m²

Area of A'B'C'D'= 78 × 4= 312 m²

Area of 1234 = 4 × 4 = 16 m²

Area of path = 384 + 312 − 16 = 680 m²

Expenditure = 2.75 × 680 = 1870 rupees

64. (5) Volume of water $= \frac{78400}{1000} = 78.4\,m^2$

Area of base of tank $= 7 \times 2.8 = 19.6\,m^2$

depth of tank $= \frac{78.4}{19.6} = 4\,m^2$

65. (2) Area of four walls $= \frac{510}{0.85} = 600 = 2 \times 6(1 + b)$

l + b = 50

Let the length and breadth of room are 7x & 3x respectively

l + b = 50

7x + 3x = 50   x = 5

Length = 35 m, breadth = 15 m.

66 – 70.   519   328   746   495   837

66. (2) $519 - \dfrac{746}{2} = 146$

67. (4) 915   823   647   594   738

Smallest number = 594

and 2nd digit = 9

68. (5) 951   832   674   549 7   83

Second largest number = 832

and their first digit =8

69. (3) Second highest number = 746

7-4=3

70. (1)

71. (4) Option D suggest that the RBI is taking such steps to control the money laundering in UCBs.

72. (2) Cancelling the licenses of the Banks involved in the money laundering is considerable action.

73. (1) The option (I) is the valid reason as leather shoes production involves chemicals and leather from animals.

74. (4) Due to encouragement students will be more concerned towards the eco – friendly options.

75 – 80. Neeraj → Taj – Medanta – Paesiatric.

Pankaj → Oberoi – Fortis – Orthopaedics

Rajeev → Oberoi – Apollo – Radiologist

Mohit → Taj – Max – Neurologist

Puran → Radisson – Batra – Panthology/Oncologist

Rinki → Radisson – Colimbia Asia – Panthology Oncologist

75. (3)

76. (4)

77. (5)

78. (1)

79. (1)

80. (5)

81 – 85. The rearrangement takes place in such a way that numbers are arranged from left side with the largest composite numbers and the smallest prime numbers place din alternative steps while words are arranged from right side with reverse alphabetic order forward alphabetical order placed in alternative steps.

Input : fat 80 almost that 19 07 boost come 29 38 gun 49 hut 68.

Step I : 80 fat almost 19 07 boost come 29 38 gun 49 hut 68 that.

Step II : 80 07 fat 19 boost come 29 38 gun 49 hut 68 that almost.

Step III : 80 07 68 fat 19 boost come 29 38 gun 49 that almost hut.

Step IV : 80 07 68 19 fat come 29 38 gun 49 that almost hut boost.

Step V : 80 07 68 19 49 fat come 29 38 that almost hut boost gun.

Step VI : 80 07 68 19 49 29 fat 38 that almost hut boost gun come.

Step VII : 80 07 68 19 49 29 38 that almost hut boost gun come fat.

81. (3)

82. (2)

83. (4)

84. (1)

85. (1)

86 – 90.

Red	Green	Black	Orange		Tennis	Racing	Shooting	Riding
				A				
				B				
				C				
				D				
				E				
				F				

86. (4)

87. (3)

88. (3)

89. (4)

90. (1)

91. (1) No paper is a flower (E) + All flowers are fruits (A) = E + A = O* → some fruits are not papers. Hence, conclusions II does not follow. Now, All plants are papers are papers (A) + No paper is a flower (E) = A + E = E → No plant is a flower + All flower are fruits (A) = E + A = O* Some fruits are not plants. Thus, possibility of I exists

92. (2) Some schools are buses (I) + All buses are students (A) = I + A = I → Some schools are students. Thus, conclusion II follows. Again, Some books are schools + Some schools are buses = I + I = No conclusion. Therefore I does not follow.

93. (1) No concept is a method (E) + Some method are techniques = E + I O* → Some techniques are not concept. Hence, I follows. But we can't proceed further. Hence conclusion II does not follow.

94. (5) Some trees are roses conversion Some roses are trees. Now, Some roses are trees + All trees are plastics = I + A → I → Some roses are plastics. Hence, conclusion I follows. Again, All fruits are roses implication Some fruits are roses. Hence, conclusion II follows.

95. (1) Some seconds are minutes (I) + No minute is a triangle (E) → I + E → O → Some seconds are not triangle. Hence, I follows. Again No date is a second (E) + Some second are minute = E + I = O* → Some minutes are not dates. Hence, conclusion II does not follow.

96-100. Government passed strong lokpal – do mi su ro ...(1)

Weak lokpal corrupt system – chi tic do ra ...(2)

Good system strong country – tac mi ra zo ...(3)

Country change corrupt Government – zo pos u tic ...(4)

From eq. (1) & (4) Government – su ...(5)

From eq. (1) & (3) Strong – mi ...(6)

From eq. (1) passed – ro

From eq. (2) and (3) system – ra

From eq. (2) and (4) corrupt – tic

From eq. (2) weak – chi

From eq. (3) and (4) country – zo

From eq. (3) Good – tac

From eq. (4) change – po

96. (4)

97. (4)

98. (2)

99. (4)

100. (3)