SBI PO Preliminary -2021. SBPP-2021-100014

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (5) No error.
2. (1) replace 'sight' with 'sighted'.
3. (3) add 'the' before 'emerging'.
4. (3) replace 'if' with 'but'.
5. (1) replace 'have' with 'has'.
6. (2)
7. (2)
8. (4)
9. (4)
10. (3)
11. (3)
12. (5)
13. (4)
14. (5)
15. (4)
16. (2)
17. (5)
18. (1)
19. (3)
20. (4)
21. (2) 'rises' fits the blank appropriately.
22. (4) 'necessity' fits the blank appropriately.
23. (1) 'prevents' fits the blank appropriately.
24. (3) 'associated' fits the blank appropriately.

25. (5) contribute' fits the blank appropriately.
26. (3) 'regarded' fits the blank appropriately.
27. (2) 'impacts' fits the blank appropriately.
28. (5) 'raised' fits the blank appropriately.
29. (4) 'working' fits the blank appropriately.
30. (5) 'reluctant' fits the blank appropriately.

31. (2) 9, 11, 15, ?, 39, 71

$9 \times 1 + 2 \Rightarrow 11$

$11 \times 1 + 2^2 \Rightarrow 15$

$15 \times 1 + 2^3 \Rightarrow 15 \times 1 + 8 = \boxed{23}$

$23 \times 1 + 2^4 \Rightarrow 39$

32. (5) 7　　8　　12　　21　　**37**　　62

$+1^2$　$+2^2$　$+3^2$　$+4^2$　$+5^2$

33. (4) 5　　6　　16　　57　　244　　1245

$\times1+1^2$　$\times2+2^2$　$\times3+3^2$　$\times4+4^2$　$\times5+5^2$

34. (3) 3　　19　　97　　391　　**1177**　　2359

$\times6+1$　$\times5+2$　$\times4+3$　$\times3+4$　$\times2+5$

35. (3) $\dfrac{2}{3}\pi r^3 : \pi r^2 h : \dfrac{1}{3}\pi r^2 h,$　　Since $= r = h$

$\therefore 2 : 3 : 1$

36. (2) $\dfrac{1}{3}x - \dfrac{1}{4}x = 8,$　　$= \dfrac{x}{12} = 8$　$\therefore x = 96$ litres

37. (2) $2 \times (4)^2 : 7 \times (3)^2$　　$\therefore 32 : 63$

38. (1) $x - 27 = \dfrac{2}{5}x$　　$\Rightarrow 3x = 27 \times 5$　$\Rightarrow x = 9 \times 5 = 45$

$\therefore \dfrac{x}{3} = 45 \times \dfrac{1}{3} = 15$

39. (2) Let 'x' litres water is added

$\therefore \dfrac{60}{30+x} = \dfrac{6}{4} = \dfrac{3}{2},$　　$\therefore 120 = 90 + 3x$

$\therefore x = \dfrac{30}{3} = 10$ litres.

40. (1) $\dfrac{261}{14} \times 81 - 53 = (?)^2$

$\Rightarrow 729 - 53 = (?)^2$

$\Rightarrow 676 = (?)^2 \Rightarrow ? = 26$

41. (5) $\dfrac{23}{46} \times \dfrac{74}{10} + 729 - 251 = 3.7 + 729 - 251 = 481.7$

42. (2) $5 + 9 - 6\sqrt{5} = ? - 4\sqrt{5} - 2\sqrt{5}$

$\Rightarrow 5 + 9 - 6\sqrt{5} = ? - 6\sqrt{5} \Rightarrow ? = 14$

43. (4) $\dfrac{(4^2 \times 4)^3}{4^5} \times (4^2)^2 = (4)^?$

$\Rightarrow \dfrac{4^9 \times 4^7}{4^5} = (4)^? \Rightarrow ? = 8$

44. (1) If the expenditure of the Company A in 2007 is x lakh, then

$x + x \times \dfrac{50}{100} = 630000$

x = ` 420000

45. (3) If expenditure is Rs. x lakh, then

$35 = \dfrac{3185}{x} \times 100$

$35x = 3185 => \times = \dfrac{3185}{35} = 91 lakh$

46. (5) Average per cent profit of Company A over all the years together

$= \dfrac{45 + 40 + 35 + 50 + 45 + 35}{6} = \dfrac{250}{6} = 41.66 = 42$

47. (2) For Company A,

$45 = \dfrac{I - E_1}{E_1} \times 100$

$=> \dfrac{45}{100} E_1 + E_1 = I$

$=> \dfrac{145 E_1}{100} = I$

$=> \dfrac{29 E_1}{20} = I \ ......(i)$

For Company B,

$35 = \dfrac{I - E_2}{E_2} \times 100$

$=> \dfrac{35}{100} E_2 + E_2 = I$

$=> \dfrac{135 E_2}{100} = I$

$=> \dfrac{27 E_2}{20} = I \ ......(ii)$

From Eqs. (i) and (ii), we get

$\dfrac{29 E_1}{20} = \dfrac{29 E_2}{20}$

$=> \dfrac{E_1}{E_2} = \dfrac{27}{29}$

48. (4) ? = 712 + 92 × 0.50 - 83
= 712 + 46 - 83 = 675

49. (2) ? = 416x 38× 0.4 = 6323.2

50. (3) Number of females in HR departments
= 3250 - 1750 = 1500

$\therefore$ Required percentage = $\dfrac{1500}{3250} \times 100$
= 46.15 = 46%

51. (1) Total number of employees from all the departments together
= 3250 + 3500 + 4750 + 4500 + 3250 = 19250

52. (2) Ratio of the number of females or the number of males from the Marketing department

= (3250 - 1500): 1500
= 1750:1500
=7 :6

53. (5) Number of females in IT department = 4500-2500=2000

54. (3) Total number of cards = 52
n(S) = $^{52}C_2$ = 1326
There are four King cards. So, number of ways of drawing two cards from it = n(E) = $^4C_2$ = 6

$\therefore P(E) = \dfrac{6}{1326} = \dfrac{1}{221}$

55. (2) LCMof 6, 8, 9, 12 and 18 is 72
In an hour, they will ring together 3600/72 = 50 times

56. (3) Let initial price of one kg sugar be Rs. 100
Now, increased price of one kg sugar Rs. 160
Rs. 160 → 1 kg

$\mathrm{Rs.100 -> } \dfrac{1}{160} \times 100 = \dfrac{5}{8} \mathrm{kg}$

$\mathrm{Reduction} = 1 - \dfrac{5}{8} = \dfrac{3}{8} \mathrm{kg}$

In one kg, reduction is 3/8kg

$\therefore$ In 100 kg reduction $= \dfrac{3}{8} \times 100 = \dfrac{300}{8} = 37.5\%$

Other Approach : $\dfrac{60}{100 + 60} \times 100 = \dfrac{75}{2} = 37.5\%$

57. (5)

58. (4)

59. (4)

60. (2) $\dfrac{1}{2} \left(\mathrm{Sum \ of \ parallel \ lines} \right) \times \mathrm{h} = \mathrm{Area}$

$\dfrac{1}{2} \times (13 + 9) \times \mathrm{h} = 231$

$\dfrac{1}{2} \times 22 \times \mathrm{h} = 231 \qquad \therefore \ \mathrm{h} = 21 \ \mathrm{metre}$

61. (1) $\therefore$ In 2 minutes = (10 − 2) = 8 metre
$\therefore$ 12 minutes = 48 metres $\therefore$ rest = 56 − 48 = 8 m.

$\therefore \ \dfrac{8}{10} \times 60 = 48$ sec.

$\therefore$ Total time = 12 minutes, 48 sec.

62. (1) $\dfrac{5555}{50} = 111.1 \square 110$

63. (1) $(18)^3$ = 5832 $\cong$ 5830

64. (3) 23 × 19 × 8 $\cong$ 3500

65. (4) $9999 \times \dfrac{1}{99} \times \dfrac{1}{9} = 11.2 \cong 11$

66. (1) Only I follows. II does not follow.

67. (1)

68. (5) So neither I nor II follows.

69. (5) I follows but II does not.

70. (4) According to the above possible Venn-diagrams, both I and II follow.

71. (1) 1. The passage gives only one reason that in coming days the economy will be growing and for that modernization of airport is an important.
2. Can't be a reason because other countries are seeing India's as a important source of markets in the aviation sector.

3. Can't be a reason because India's is a big market for foreign countries.

4. Can't be a reason because it talks about passenger carrying capacity.

72. (4) The passage gives only two reasons :
I. Lot of political interference and
II. Disagreement on the share of revenue other points are not a constraints in the modernization of the airports.

73. (4) All the three points highlights in speeding up the modernization of airports.

74. (3) Check for (1) :

$$\underline{P \geq K \geq S} < \underline{R \leq M < L}$$
Combining

$$P \geq S < R < L$$

So, this expression is true.
Check for (2) :

$$P \geq \underline{K - S} \leq \underline{R - M} < L$$
Combining

$$P \geq S \leq R < L$$

So, this expression is also true.
Checking for (3) :

$$P < K \geq \underset{\text{No relation}}{S-} \underset{\text{Combining}}{R \leq M \leq L}$$

$$S - R \leq L$$

Thus this expression does not fit.
Check for (4) :

$$P \geq \underline{K \geq S - R < M < L}$$
Combining

$$P \geq S - R < L$$

So, this expression is true for the given conditions.

75. (1) Check for (1) :

$$P > T > \underset{\text{Combining}}{S-} \underset{\text{Combining}}{R < N \leq M}$$

$$P > S - R < M$$

So, the given statements are is true in this expression.
Check for (2) :

$$P > \underset{\substack{\text{Comparison} \\ \text{is not possible}}}{T < S-} \underset{\substack{\text{Combining} \\ R < M}}{R \leq N < M}$$

But can't say, $P \neq S$
Because, if T – 6 and P – 8, S – 8
then also P > T < S.
8 > 6 < 8 holds true.
Thus can't say exactly $P \neq S$
Therefore conditions not satisfied.
Check for (3) :

$$\underline{P - T} < S > R > N \leq M$$

$$P < S > R > N \leq M$$

Thus R < M does not hold true here.
Check for (4) :

$$P < T > S < R \leq N \geq M$$

Therefore, following the same reason, as for (2), this expression also does not hold good for the given conditions.

76. (1)

77. (1)

78. (2)

79. (3)

80. (2)

81. (3)

82. (4)

83. (5) From I → T, D < M, But there is no information regarding, Q and S.
So, I alone is not sufficient. From II – S > R; S < T, Q
But no information regarding P so, II alone is not sufficient. From I and II – R is youngest.

84. (3) From I – Anil's rank → 29th from bottom.
Anil – 6 rank below Sanjay.
So, Sanjay rank = 29 + 6 = 35 from bottom.
Sanjay's rank from top = (50 – 35) + 1 = 16th
So, I is sufficient.
From II – Pankaj's rank from bottom = 35th
Pankaj – 4th ranks above Sanjay.
So, Sanjay rank from bottom = 35 – 4 = 31st
Sanjay's rank from top = (50 – 31) + 1 = 20. So, II alone is sufficient.

85. (1) From I –
So, second to the right of P – O
From II –
So, second to the right of P → either R or O.
Hence, O is second to the right of P.

86. (2)

87. (4)

88. (1)

89. (3)

90. (1)

91. (3)

92. (4)

93. (5) Ravi id Radha's nephew.

94. (1) li ko jee → paper is tough   ....(1)
si pee jee → competition is high   ....(2)
da li → good paper   ....(3)
pa si → no competition   ....(4)
From (1) and (2)
si → competition
So, jee → is
From (2) and (4)
pa → no
From (1) and (3)
        li → paper
So,   da → good
Hence, jee pa da → no is good

95. (2)

96-100. He likes vanilla flavor → kit da lee ra ...(1)
nobody likes too sweet flavor → ra fi lee pi zo ....(2)
vanilla is my favourite→ chi da ye vo ...(3)
Sweet is best → chi pi koo ...(4)
likes favourite → ra ye .... (5)
From (1) and (5),
likes →ra
from (5),
favourite → ye
From (2) and (4),
sweet → pi
From (3) and (4),
is → chi
And from (4),
best → koo
from (1) and (3)
vanilla → da
From (1) and (2),
Flavour → lee
From (1),

he → s Kit
From (2),
nobody too → zo fi

96. (1)
97. (3)
98. (4)   nobody →
    Either zo or fi nobody likes vanilla → zo or fi, ra da

99. (2)

he	is	her	favourite
↓	↓	↓	↓
kit	chi	mi	ye

100. (4)