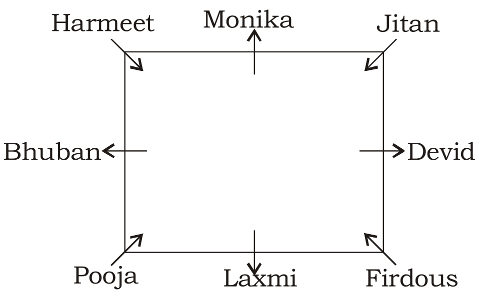
SBI PO PHASE-I - 88 (SOLUTION)

REASONING

(1-6) :



1. (3) 2. (1) 3. (4)
4. (2) 5. (5) 6. (5)

(7-11) :

Floor	Person	Car	Day
7	*S*	*Ford*	*Wednesday*
6	*N*	*Scorpio*	*Monday*
5	*M*	*Mahindra*	*Tuesday*
4	*Q*	*Maruti*	*Friday*
3	*P*	*Swift*	*Sunday*
2	*R*	*Suzuki*	*Saturday*
1	*O*	*Nano*	*Thursday*

7. (4) 8. (1) 9. (3)
10. (1) 11. (5)

12. (2) Vipin's : Javed = 4 : 3
Salaries 4x and 3x
from statement II
3x = ₹4500, x = ₹1500
Vipin's salary = 1500 × 4 = ₹6000
II alone is sufficient while I alone is not sufficient.

13. (3) From statement I
Weight of one Box = 5 × 4 = 20 kg
So weight of 10 Box = 200 kg
from statement II
wt. of 3 boxes – wt. of 2 boxes = 20 kg
1 Box = 20 kg
So wt. of 10 Boxes = 200 kg
either I or II is sufficient.

14. (1) From statement I

$\boxed{\text{Right}}$ or $\boxed{\text{wrong}}$ – nik sa $\boxed{\text{te}}$
He is right – ro da nik
that is wrong – fe $\boxed{\text{te}}$ ro

'or' code ⇒ Sa
From statement II

$\boxed{\text{that}}$ right man – $\boxed{\text{pa}}$ nik la
this or $\boxed{\text{that}}$ – sa ne $\boxed{\text{pa}}$
Tell this there – ne ka re

'or' code → sa
Either I or II sufficient.

15. (5) Both I and II are sufficient to give the answer.

(16-20) :

Room no	Color	Person
1	*Pink*	*Q or O and D*
2	*Blue*	*B or F and E*
3	*Black*	*Q or O and A*
4	*Green*	*B or F and C*
5	*White*	*RP*
6	*Yellow*	*MN*

16. (4) 17. (4) 18. (2)
19. (5) 20. (4)

(21-25) :

@ → $\geq$
\# → $>$
$ → $=$
% → $\leq$
* → $<$

21. (1) $V = Y \geq Z \leq X > T$
I. $T > Z$ → False
II. $X > Z$ → False
III. $Z > Y$ → False
None follow

22. (1) $R \geq J \leq F < E \leq M$
I. $M > J$ → Ture
II. $F \leq M$ → False
III. $M < R$ → False
Only I follow.

23. (1) $H > R \geq L < W \leq F$
I. $H > L$ → True
II. $F > L$ → True
III. $H = F$ → False
Only I and II follow

24. (3) $H > Q \geq F = M > K$
I. $H > K$ → True
II. $Q > K$ → True
III. $Q > M$ → True
All I, II and III follow

25. (1) $D < Q = L > T < H$
I. $D < L$ → True
II. $L \geq H$ → False
III. $H < L$ → False
Only I follow

(26-28) :

$$\begin{array}{ll} Tarun^{+} = Archana^{-} & Rani^{-} = Archana^{-} \\ Harsh^{+} = Komal^{-} \quad Jai^{+} = Deepti^{-} — Sanjana^{-} & \\ Aman^{+} — Prem^{+} \quad Nidhi^{+} & \end{array}$$

26. (1) 27. (2) 28. (3)

(29-33) : In the term of height:
Q < U, R < U, R < S, T < S, T < S, U < T, P < T, U < P
So, R < U < T < S, Q < U, U < P < T
Sequence : Q < R < U < P < T < S or R < Q < U < P < T < S
Weight : P < Q, P < R, Q < S, S < U
So, P < Q < S < U, P < R
Thus the sequence
P < R < Q < S < U
or
P < Q < R < S < U
or
P < Q < S < R < U

29. (3)
30. (1) Decending order of height
S > T > P > U > Q > R
or
S > T > P > U > R > Q
31. (4) 32. (5) 33. (3)
34. (2) Clearly, Amit's brother's birthday is on day common to both above the group i.e. 17th february.
35. (2)

MATHS

36. (1) $? \approx \frac{4\times3}{12}\times 952 - 129$
$= 952 - 129 = 823$
37. (2) $? \approx \frac{8450\times105}{100} - 5006 \times \frac{3}{700} + 10$
$= 8872.5 - 21.5 + 10 = 8861 \approx 8860$
38. (2) $10^3 \times 100^3 + 10^9 \approx 10^? + 10^?$
$\Rightarrow 10^9 + 10^9 = 10^? + 10^?$
$\Rightarrow ? = 9, 9$
39. (4) $? \approx 21 + 3.7 \times 3$
$= 21 + 11.1 = 32.1 \approx 32$
40. (1) $23 + 9 - ? = 23 \Rightarrow ? = 9$
41. (5) Total investment by Lucky and Bipin in organisation S = ₹30,000
R = 16%
T = 1 year
When interest compound half-yearly
R = 8% and T = 2 half-yearly
$C.I = \left[30000\times\frac{108}{100}\times\frac{108}{100} - 30000\right]$
= ₹ 4992
42. (1) Investment by lucky in organisation R
$= 16000 \times \frac{40}{100} =$ ₹ 6400
= C.I after 2 years
$= \left[6400\times\frac{112}{100}\times\frac{112}{100} - 6400\right]$
= ₹ 1628.16
Investment by Bipin in organisation R = 16000 – 6400 = ₹ 9600
$\therefore$ C.I after 2 years
$= \left[9600\times\frac{112}{100}\times\frac{112}{100} - 9600\right]$
= ₹ 2442.24
$\therefore$ Required difference
= 2442.24 – 1628.16 = ₹814.08
43. (*) Required average
$= \frac{1}{6} = [42000 \times \frac{54}{100} + 36000 \times \frac{60}{100} + 16000 \times \frac{40}{100} + 30000 \times \frac{30}{100} + 32000 \times \frac{42}{100} + 48000 \times \frac{64}{100}]$
$= \frac{1}{6}$ [22680 + 21600 + 6400 + 9000 + 13440 + 30720]
$= \frac{103840}{6} =$ ₹ 17306.66 ≈ 17307
44. (2) Investment of Bipin in organisation U
$= 48000 \times \frac{36}{100} =$ ₹ 17280
Simple interest earned after first two years $= \frac{17280\times7\times2}{100} =$ ₹2419.20
Compound interest earned after third and fourth year
$= \left[17280\times\frac{110}{100}\times\frac{110}{100} - 17280\right]$
= ₹3628.80
$\therefore$ Total interest earned
= 2419.20 + 3628.80 = ₹6,048
45. (1) Amount invested by Lucky in organisation Q $= 36000 \times \frac{60}{100}$
= ₹ 21600
$C.I - S.I = P\left(\frac{R}{100}\right)^2$
$\Rightarrow 699.84$

$= \frac{21600}{10000} \times R^2$

$\Rightarrow \frac{69984}{216} = R^2$

$\Rightarrow R^2 = 324\%$

$\Rightarrow R = 18\%$

46. (1) The pattern is :

5531 – 5506 = 25 = 5^2
5555 – 5506 = 49 = 7^2
5506 – 5425 = 81 = 9^2
5425 – 5304 = 121 = 11^2
5304 – 5135 = 169 = 13^2
5135 – 4910 = 225 = 15^2
4910 – 4621 = 289 = 17^2

Clearly, 5531 is wrong which should be substituted by 5555.

47. (2) The pattern is :

6 + 1 = 7
7 + 2 = 9
9 + 4 = 13
13 + 8 = 21 $\neq$ **26**
21 + 16 = 37
37 + 32 = 69

48. (4) The pattern is :

1 × 1 + 2 = 3
3 × 2 + 4 = 10
10 × 3 + 6 = 36
36 × 4 + 8 = 152
152 × 5 + 10 = 770 $\neq$ **760**
770 × 6 + 12 = 4632

49. (3) The pattern is :

4 + 1^3 = 5
5 + 2^3 = 13
13 + 3^3 = 40
40 + 4^3 = 104 $\neq$ **105**
104 + 5^3 = 229
229 + 6^3 = 445

50. (1) The pattern is :

157.5 ÷ 3.5 = 45
45 ÷ 3 = 15
15 ÷ 2.5 = 6
6 ÷ 2 = 3
3 ÷ 1.5 = 2
2 ÷ 1 = 2 $\neq$ 1

51. (3) As CI is half yearly,
R = 4%, T = 2 half yearly

∴ First Amount

$= 1500 \times \left(1 + \frac{4}{100}\right)^2 = 1500 \times \left(\frac{26}{25}\right)^2$

= ₹ 1622.40

Second Amount = $1500 \times \left(1 + \frac{4}{100}\right)$

$= 1500 \times \frac{26}{25}$ = ₹ 1560

∴ Total Amount = First Amount + Second Amount = ₹3182.40

52. (5) Let P's Imcome be ₹ x.

Q's income = ₹ (x + 15000

R's income

= x + 15000 + 17000 = ₹ (x + 32000)

∴ Total investment = $3x$ + 47000 = 200000

∴ x = ₹ 51000

Ratio of P : Q : R

= 51000 : 66000 : 83000 = 51 : 66 : 83

Share of R in profit

$= \frac{83}{200} \times 80800$ = ₹ 33532

53. (1) Area covered by blue tiles

= (20 + 20) × 2 + 2 × (6 + 6) = 80 + 24

104 sq. metre

Area of the floor = 20 × 10 = 200 sq. metre

∴ Remaining area = 200 – 104 = 96 sq. metre

Area covered by black tiles

$= \frac{1}{3} \times 96$ = 32 sq. metre

∴ Area covered by white tiles = 96 – 32

= 64 sq. metre

∴ The number of required white tiles

$= \frac{64}{2 \times 2} = 16$

54. (5) Required no of ways

$= {}^8C_5 \times {}^8C_3 + {}^8C_4 \times {}^8C_4 + {}^8C_3 \times {}^8C_5$

= 56 × 56 + 70 × 70 + 56 × 56

= 3136 + 4900 + 3136 = 11172

55. (2) Speed of first man is 3 kmph

$= 3 \times \frac{5}{18} = \frac{5}{6}$ m/s

And second man is 6 kmph

$= 6 \times \frac{5}{18} = \frac{5}{3}$ m/s

Let the speed of the train be x m/s.

Then, the relative speed are $\left(x - \frac{5}{6}\right)$ m/s

and $\left(x - \frac{5}{6}\right)$ m/s

Now, length of the train = relative speed × time taken to pass a man

So, $\left(x - \frac{5}{6}\right) \times 6 = \left(x - \frac{5}{3}\right) \times 9$

or, $6x - 5 = 9x - 15$

or, $3x = 10$

$\therefore x = \frac{10}{3}$ m/s

$\therefore$ Speed of the train = $\frac{10}{3} \times \frac{18}{5}$ = 12 kmph

And length of the train = $\left(\frac{10}{3} - \frac{5}{6}\right) \times 6$ = 15m

(56-60) :

56. (1) No of boys play Kabaddi = $18000 \times \frac{12}{100} \times \frac{85}{100}$ = 1836

No of girls play Carrom = $18000 \times \frac{5}{100} \times \frac{2}{100}$ = 18

$\therefore$ Required ratio = 1836 : 18 = 102 : 1

57. (2) No of boys play in

Carrom = $18000 \times \frac{5}{100} \times \frac{98}{100}$ = 882

Tennis = $18000 \times \frac{15}{100} \times \frac{90}{100}$ = 2430

Cricket = $18000 \times \frac{13}{100} \times \frac{80}{100}$ = 1872

Football = $18000 \times \frac{20}{100} \times \frac{70}{100}$ = 2520

Chess = $18000 \times \frac{35}{100} \times \frac{70}{100}$ = 4410

$\therefore$ Required answer is Carrom.

58. (5) Total no. of boys play Cricket and Carrom together = 882 + 1872 = 2754

Total no of girls play Chess and Tennis together = $18000 \times \frac{35}{100} \times \frac{30}{100} + 18000 \times \frac{15}{100} \times \frac{10}{100}$

= 1890 + 270 = 2160

$\therefore$ Required % = $\left(\frac{2754}{2160} \times 100\right)\%$ = 127.5%

59. (2) Total no. of players play Chess

= $18000 \times \frac{35}{100}$ = 6300

No. of girls play Chess = 1890

$\therefore$ Required % = $\left[\frac{6300 - 1890}{1890} \times 100\right]\%$

= $\left(\frac{4410}{1890} \times 100\right)\%$ = 233.33 % ≈ 233% more

60. (5) No. of boys play Football in the year 2017

= $18000 \times \frac{20}{100} \times \frac{70}{100} \times \frac{120}{100}$

= 3024

and no. of girls play Kabaddi in the year 2017

= $18000 \times \frac{12}{100} \times \frac{15}{100} \times \frac{125}{100}$ = 405

$\therefore$ Required total = 3024 + 405 = 3429

61. (3) Work done by L in first three days = $\frac{3}{15}$

= $\frac{1}{5}$ of the work

Work done by N and P in 7 days

= $7 \times \left[\frac{1}{25} + \frac{1}{35}\right] = \frac{12}{25}$ of the work

Total work completed in first 10 days

= $\frac{1}{5} + \frac{12}{25} = \frac{17}{25}$ of the work

The remaing work = $1 - \frac{17}{25} = \frac{8}{25}$

The work that is to be completed by M

= $\frac{1}{2} \times \frac{8}{25} = \frac{4}{25}$

Time taken by M to complete $\frac{4}{25}$ of the work = $\frac{\frac{4}{25}}{\frac{1}{20}} = \frac{80}{25} = 3\frac{1}{5}$ days

The work that is to be completed by D

= $\frac{\frac{4}{25}}{\frac{1}{30}} = \frac{24}{5} = 4\frac{4}{5}$ days

Hence, the total time taken to complete the work = $3 + 7 + 3\frac{1}{5} + 4\frac{4}{5}$ = 18 days

62. (1) let t hrs after starting of the first train they will meet

So $750 = 60t + 90(t-2)$

$t = \frac{930}{150}$ = 6hr 12 min

So they will meet at = 7hr + 6 hr 12 min = 13 hr 12 min i.e. 1.12 PM

63. (4) Let E = the event of getting the sum 7.
and,
F = the event of getting at least one 2.

Then, E = $\{(1,6)(2,5)(3,4)(4,3)(5,2)(6,1)\}$

and,

F = $\{(1,2),(2,2),(3,2),(4,2),(5,2),(6,2),$
$(2,1),(2,3),(2,4),(2,5),(2,6)\}$

Then, $E \cap F = \{(2,5),(5,2)\}$

Now, we have to find P(F/E)

$P(F/E) = \frac{P(E \cap F)}{P(S)} = \frac{2}{6} = \frac{1}{3}$

64. (4) After selling at ₹ 15/ kg, Sunil earns a profit of 66.66%
Hence, cost price of sweets is ₹ 9/kg.
Now, ratio of flour and sugar is 5 : 3.
Hence,

1 kg of sweet is made up of $\frac{5}{8}$ kg of flour and

$\frac{3}{8}$ kg of sugar.

Let price of 1 kg of flour = $3k$
Hence, profit of 1 kg of sugar = $7k$
Hence price of 1 kg of sweets is

$= \left\{\left[\left(\frac{3}{8}\right) \times 7k\right] + \left[\left(\frac{5}{8}\right) \times 3k\right]\right\} = 9$

Hence, $k = 2$
Hence, cost price of sugar = $7k = 7 \times 2$ = ₹14/kg

65. (4) The price of the item is ₹ P.
And SP = ₹ Q
Given, Q = ₹ 1.2P
If the cost price of the item is 15% less
Then, CP = 8.08 × P = ₹ 0.85 P
According to the question,

$0.85\text{ P} \times \frac{130}{100} = 1.2\text{ P} - 76$

or, 11.05 P = 12 P – 76
or, 0.95 P = 760

$\therefore$ P = $\frac{760}{0.95}$ = ₹ 800

$\therefore$ Cost price of the item ₹ 800.

(66-70) :

66. (5) $63x^2 - 194x + 143 = 0$
$\Rightarrow 63x^2 - 117x - 77x + 143 = 0$
$\Rightarrow 9x(7x - 13) - 11(7x - 13) = 0$
$\Rightarrow (9x - 11)(17x - 13) = 0$
$\Rightarrow x = \frac{11}{9}, \frac{13}{7}$

II. $99y^2 - 255y + 150 = 0$
$\Rightarrow 99y^2 - 90y - 165y + 150 = 0$
$\Rightarrow 9y(11y - 10) - 15(11y - 10) = 0$
$\Rightarrow (9y - 15)(11y - 10) = 0$
$\Rightarrow y = \frac{15}{9}, \frac{10}{11}$

67. (1) I. $12x^2 - 32x - 240 = 0$
$\Rightarrow 12x^2 - 72x + 40x - 240 = 0$
$\Rightarrow 12x(x - 6) + 40(x - 6) = 0$
$\Rightarrow (12x + 40)(x - 6) = 0$
$\Rightarrow x = \frac{-40}{12}, 6 \text{ or } -\frac{10}{3}, 6$

II. $15y^2 - 216y + 777 = 0$
$\Rightarrow 15y^2 - 105y - 111y + 777 = 0$
$\Rightarrow 15y(y - 7) - 111(y - 7) = 0$
$\Rightarrow (15y - 111)(y - 7) = 0$
$\Rightarrow y = \frac{115}{15}, 7$

clearly, $x > y$

68. (5) I. $x^2 - 13x + 36 = 0$
$\Rightarrow x^2 - 9x - 4x + 36 = 0$
$\Rightarrow x(x - 9) - 4(x - 9) = 0$
$\Rightarrow (x - 4)(x - 9) = 0$
$\Rightarrow x = 4, 9$

II. $y^2 - 30y + 24 = 0$
$\Rightarrow y^2 - 7y - 23y + 161 = 0$
$\Rightarrow y(y - 7) - 23(y - 7) = 0$
$\Rightarrow (y - 23)(y - 7) = 0$
$\Rightarrow y = 23, 7$

69. (3) $11x^2 - 38x - 24 = 0$
$\Rightarrow 11x^2 - 44x + 6x - 24 = 0$
$\Rightarrow 11x(x - 4) + 6(x - 4) = 0$
$\Rightarrow (11x + 6)(x - 4) = 0$
$\Rightarrow x = \frac{-6}{11}, 4$

II. $y^2 - y - 30 = 0$
$\Rightarrow y^2 - 6y + 5y - 30 = 0$
$\Rightarrow y(y - 6) + 5(y - 6) = 0$
$\Rightarrow (y + 5)(y - 6) = 0$
$\Rightarrow y = -5, 6$

70. (1) I. $15x - 9y = 20$ ....(i)
II. $24x + 12y = 48$ ....(ii)
Equation (i) × 4 + equation (ii) × 3

$60x - 36y + 72x + 36y = 80 - 144$

$\Rightarrow \quad 132x = -64$

$\Rightarrow \quad x = \frac{-64}{132} = \frac{-16}{33}$

Put the value of x in equation (i),

$15 \times \frac{-16}{33} - 9y = 20$

$\Rightarrow \quad 9y = \frac{-80}{11} - 20$

$\Rightarrow \quad 9y = \frac{-300}{11}$

$\Rightarrow \quad y = \frac{-300}{11 \times 9} = \frac{-100}{33}$

Clearly, $x > y$

ENGLISH LANGUAGE

81. (2) 'not only' will come after 'with'.
82. (1) 'other' will use after 'No'.
83. (3) 'for' replace with 'on'.
84. (5) No error.
85. (4) 'have' replace with 'has'.
86. (1) Remove 'about'.
87. (4) 'for' replace with 'to'.
88. (4) 'Look for' (search) replace with 'look after'.
89. (5) No error.
90. (3) 'rather than' replace with 'to'.

VOCABULARIES

Words	Meaning in English	Meaning in Hindi
Alive (to)	conscious of	सचेत, जागरूप
Brisk	fast	तीव्र
Burgeon	To grow or develop	तेजी से बढ़ना
Carve a niehe	To find suitable place	सही मुकाम हासिल करना
Cutting edge	Most Advance stage in the development of something	उच्च विकसित स्थिति
Endowment	property, gift in he form of money	धन/उपहार
Give Lie to the them	To show that the claim in not true	किसी दावे को गलत साबित करना
Incursion (into)	Brief but intense attack, Intrruption	संक्षिप्त परंतु तीव्र आक्रमण, बाधा
Gratifying	Satisfying	संतोषजनक
Lee way	Freedom	कार्य करने की स्वतंत्रता
Pagged at	Fixed at	निर्धारित
Heartening	Encouraging	प्रोत्साहित करने वाला
Indiscriminate	without making any difference	बिना सोचे-समझे
Downtrodden	Poor	गरीब, बेसहारा
Shed blood	To injure or kill	खून-खराबा करना
Harsh	Strict	कठोर
Negate	To deny, to cancel the effect of something	नकारना, किसी प्रभाव को समाप्त कर देना
Pay no heed	Not to pay attention	ध्यान नहीं देता

KD Campus

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

SBI PO PHASE-I - 88 (ANSWER KEY)

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

Note:- If you face any problem regarding result or marks scored, please contact 9313111777

Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003