SBI PO PHASE - I - 149 (SOLUTION)

REASONING

(1–5) :

Friends	Day	Show
P	Tuesday	Monologue
Q	Thursday	Play
R	Saturday	Debate
S	Monday	Speech
T	Sunday	Music
U	Wednesday	Dance
V	Friday	Mimicry

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

(6-10) :

6. (5)
   I. $E > D \geq J \Rightarrow E > J$ true
   II. $H \geq D \geq F \Rightarrow H \geq F$ true

7. (2)
   I. $N > A \leq J \Rightarrow J > N$ false
   II. $C \geq J = B \Rightarrow C \geq B$ true

8. (4)
   I. $U \leq Q \geq P \Rightarrow U < P$ False
   II. $P > T \geq R < W \Rightarrow P > W$ false

9. (1)
   I. $V \geq P > T \geq R \Rightarrow V > R$ true
   II. $U \leq Q \geq P > T \geq R < W \Rightarrow U \geq W$ false

10. (2) $P > B = J \geq K \geq Q = M$
    I. $P \geq Q$, false
    II. $B \geq M$, true

(11-15) :

11. (2)

12. (1) **From I :** Suppose the marks obtained is $(10x + y)$ a, two-digit number. {Note that the possibility of getting 100 marks is ruled out because in case of 100 marks interchanges of digits will not decrease 100 by 81.}
    Now, $10x + y – (10y + x) = 81$

    Therefore $x – y = \dfrac{81}{9} = 9$

    Thus, the unit's digit will be 9 less than the digit at ten's place. Hence, the only such digit is 90. Hence, marks obtained by Kishore = 90
    From II: There are several such numbers sum of digits of which and the difference of the digits are same, ie 10, 20, 30, 40, 50, 60, 70, 80 and 90.

13. (3) **From I:** We get 1st day of the next month is Saturday. This implies that last day of the month under consideration is Friday. And thus we get :
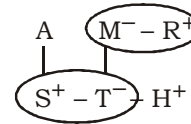
Date	Ist	8th	15th	22nd	29th	31st
Day	Fri	Fri	Fri	Fri	Fri	Sun

Hence, the total number of days in the month = 29.
From II: With the information of the last day of the month and the first day of the month (as mentioned in question part), we can find out the number of days in the month by the same method as discussed above, i.e, 31 days.

14. (3)

15. (4) It is not mentioned that Nidhi is towards left of Ranjan or right of Ranjan.

(16-17) :

16. (2)   17. (2)

(18 – 22) :

Hewitt	– Personnel	– Table Tennis
Suarez	– Administration	– Football
Sreejesh	– Administration	– Hockey
Jordan	– Administration	– Basketball
Richards	– Marketing	– Cricket
Giba	– Personnel	– Volleyball
Sampras	– Marketing	– Lawn Tennis
Lin Dan	– Marketing	– Badminton

18. (3)   19. (2)   20. (5)
21. (1)   22. (4)

(23–27) :

$\$ \rightarrow \geq$ $\delta \rightarrow =$
$@ \rightarrow >$ $© \rightarrow \leq$
$\# \rightarrow <$

23. (2) **Statement :**
    $H > T < F = E \leq V$
    Conclusion :
    I. $V \geq F$; true   II. $E > T$; True
    III. $H > V$; Can't say   IV. $T < V$; True
    Only I, II and IV are true.

24. (5) **Statement :**

D < R $\le$ K > F $\ge$ J

Conclusion :

I. J < R ; Can't say   II. J < K ; True

III. R < F ; Can't say   IV. K > D ; True

25. (5) **Statetment :**

N = B $\ge$ W < H $\le$ M

Conclusion :

I. M > W ; True

II. H > N ; Can't say

III. W = N ; Can't say

IV. W < N ; Can't say

But after camparing, we find that either III or IV and I are true.

26. (1) **Statements :**

R $\le$ D $\ge$ J < M > K

Conclusions:

I. K < J ; Can't say

II. D > M ; Can't say

III. R < M ; Can't say

IV. D > K ; Can't say

None is true.

27. (4) **Statements :**
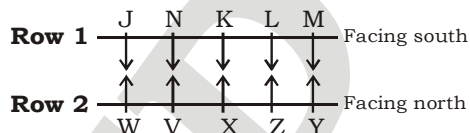
M $\ge$ K > N $\le$ R < W

Conclusions:

I. W > K ; Can't say

II. M $\ge$ R ; Can's say

III. K > W; Can't say

IV. M > N ; True

But after comparing we find that either I or III and IV are true.

(28–32) :

Row 1 — J   N   K   L   M — Facing south

Row 2 — W   V   X   Z   Y — Facing north

28. (3)   29. (4)   30. (1)

31. (3)   32. (3)

(33-35) :

must adapt and change → ki la bx tu

little better than nothing → ex qa fn rm

change a must here → gm tu dr la

here to adapt better → fn bx ms dr

33. (5) better $\Rightarrow$ fin

and $\Rightarrow$ fn

and $\Rightarrow$ ki

The code for 'improved' may be 'yz'.

34. (4) gm $\Rightarrow$ a

35. (1) must bring change → op la tu

Now,

bring $\Rightarrow$ op

here $\Rightarrow$ dr

The code for 'peace' may be 'ov'.

Maths

36. (3) ? $\approx$ 8800 $\div$ 340 $\times$ $\sqrt{49}$

= 25.9 $\times$ 7 = 181.3 $\approx$ 180

37. (2) ?^{2} = $\sqrt[3]{54821}$ $\times$ (303 $\div$ 8)

?^{2} = $\sqrt[3]{54872}$ $\times$ 38

?^{2} = 38 $\times$ 38

$\therefore$? = 38

38. (3) ? = $\dfrac{4011.33 \times 5}{8}$ + $\dfrac{3411.22 \times 7}{10}$

$\approx \dfrac{4000 \times 5}{8}$ + $\dfrac{3400 \times 7}{10}$

= 2500 + 2380 = 4880 $\approx$ 4890

39. (5) ? = $\dfrac{6783 \times 23}{100}$ + $\dfrac{8431 \times 57}{100}$

$\approx \dfrac{6800 \times 23}{100}$ + $\dfrac{8400 \times 57}{100}$

= 1564 + 4788 = 6352 $\approx$ 6360

40. (1) ? $\approx$ 335 $\times$ 245 $\div$ 55 = 1492.27 $\approx$ 1490

(41-45) :

41. (4) The total number of tourists in

Varanasi = 1500 + 2500+ 3500 +1000 +1500 + 2500 = 12500

Gaya = 3000 + 2500 + 500 +1500 +3000 + 5000 = 15500

Agra = 2500 + 3500 + 1000 + 4500 +4000+1500 = 17000

Jaipur = 2000 +4000 + 4500 + 5000 + 3500 + 4000 = 23000

Required answer is Jaipur.

42. (2) The number of tourists who came more than once in the year

2007 = 1500 $\times \dfrac{25}{100}$ + 3000 $\times \dfrac{20}{100}$ + 2500 $\times$

$\dfrac{10}{100}$ + 2000 $\times \dfrac{15}{100}$

= 375 + 600 + 250 + 300 = 1525

2008 = 2500 $\times \dfrac{30}{100}$ + 2500 $\times \dfrac{15}{100}$ + 3500

$\times \dfrac{20}{100}$ + 4000 $\times \dfrac{35}{100}$

= 750 + 375+ 700 + 1400 = 3225

2009 = $3500 \times \dfrac{20}{100} + 500 \times \dfrac{25}{100} + 1000$

$\times \dfrac{30}{100} + 4500 \times \dfrac{35}{100} = 700 + 125 + 300 + 1575 = 2700$

2010 = $1000 \times \dfrac{10}{100} + 1500 \times \dfrac{25}{100} + 4500 \times$

$\dfrac{40}{100} + 5000 \times \dfrac{15}{100} = 100 + 375 + 1800 + 750 = 3025$

Required answer is 2008.

43. (5) Total no. of tourists who came in

Varanasi more than once = $1500 \times \dfrac{25}{100} +$

$2500 \times \dfrac{30}{100} + 3500 \times \dfrac{20}{100} + 1000 \times \dfrac{10}{100} +$

$1500 \times \dfrac{5}{100} + 2500 \times \dfrac{15}{100} = 375 + 750 +$

$700 + 100 + 750 + 375 = 3050$

Total no. of tourists who came in Agra

more than once = $2500 \times \dfrac{10}{100} + 3500$

$\times \dfrac{20}{100} + 1000 \times \dfrac{30}{100} + 4500 \times \dfrac{40}{100} + 4000$

$\times \dfrac{20}{100} + 1500 \times \dfrac{30}{100}$

$= 250 + 700 + 300 + 1800 + 800 + 450$

$= 4300$

∴ Required difference = $4300 - 3050 = 1250$

44. (2) No. of tourists who came in Gaya more

than once in the year 2011 = $3000 \times \dfrac{10}{100}$

$= 300$

No. of tourists who came in Jaipur more

than one in the 2012 = $4000 \times \dfrac{35}{100} = 1400$

∴ Required ratio = $300 : 1400 = 3 : 14$

45. (1) Total no. of tourists came in the year 2009
= $4500 + 3500 + 1000 + 500 = 9500$

Total no. of tourists came in year 2012
= $5000 + 4000 + 2500 + 1500 = 13000$

∴ Required % = $\left[\dfrac{(13000 - 9500)}{9500} \times 100 \right]$ %

$= \left(\dfrac{3500}{9500} \times 100 \right)$ % = 36.84% ≈ 37%

(46-50) :

46. (4) The pattern of the number series is :
$3601 \div 1 + 1 = 3602$
$3602 \div 2 + 2 = 1801 + 2 = 1803$

$1803 \div 3 + 3 = 601 + 3 = 604$
$604 \div 4 + 4 = 151 + 4 = 155 \neq$ **154**
$155 \div 5 + 5 = 31 + 5 = 36$
$36 \div 6 + 6 = 6 + 6 = 12$

47. (2) The pattern of the number series is :
$4 \times 2 + 2^2 = 8 + 4 = 12$
$12 \times 3 + 3^2 = 36 + 9 = 45 \neq$ **42**
$45 \times 4 + 4^2 = 180 + 16 = 196$
$196 \times 5 + 5^2 = 980 + 25 = 1005$
$1005 \times 6 + 6^2 = 6030 + 36 = 6066$

48. (1) The pattern of the number series is :
$2 + 4 = 6 \neq$ **8**
$6 + 6 = 12$
$12 + 8 = 20$
$20 + 10 = 30$
$30 + 12 = 42$

49. (5) The pattern of the number series is :

$32 \times \dfrac{1}{2} = 16$

$16 \times \dfrac{3}{2} = 24$

$24 \times \dfrac{5}{2} = 60 \neq$ **65**

$60 \times \dfrac{7}{2} = 210$

$210 \times \dfrac{9}{2} = 945$

$945 \times \dfrac{11}{2} = 5197.5$

50. (4) The pattern of the number series is :
$7 \times 2 - 1 = 14 - 1 = 13$
$13 \times 2 - 1 = 26 - 1 = 25$
$25 \times 2 - 1 = 50 - 1 = 49$
$49 \times 2 - 1 = 98 - 1 = 97$
$97 \times 2 - 1 = 194 - 1 = 193 \neq$ **194**
$193 \times 2 - 1 = 386 - 1 = 385$

51. (4) Let the cost price of a pen and book are
₹ x and ₹ y respectively.

∴ Selling price of both = 125% of y + 120% of x = ₹ 540

$\Rightarrow \dfrac{5}{4} y + \dfrac{6}{5} x = 540$

$25y + 24x = 540 \times 20$ ....(i)

∴ Selling price in the second case = 120% of y + 125% of x = ₹ 538

$\Rightarrow \dfrac{6}{5} y + \dfrac{5}{4} x = 538$

$\Rightarrow 24y + 25x = 538 \times 20$ ....(ii)

equation (i) × 25 –(ii) × 24, we get

∴ $49 y = 11760$

∴ $y = $ ₹ 240

Now put the value of y in equation (i), we get
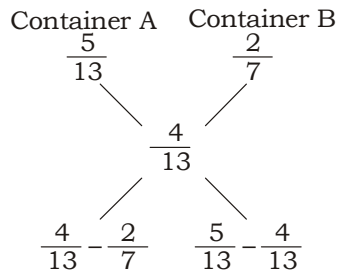
$24x = 540 \times 20 - 25 \times 240 = 4800$

$\therefore x = ₹\,200$

$\therefore$ Cost of a book is ₹ 240 and that of a pen ₹ 200.

$\therefore$ Cost of one pen and two book = 200 + (2 × 240) = ₹680

52. (2) Quantity of water in new mixture

$$= \frac{400}{13 \times 100} = \frac{4}{13}$$

Container A   Container B

$$\frac{5}{13} \qquad\qquad \frac{2}{7}$$

$$\frac{4}{13}$$

$$\frac{4}{13} - \frac{2}{7} \qquad \frac{5}{13} - \frac{4}{13}$$

$$= \frac{2}{91} : \frac{1}{13} = 2 : 7$$

53. (1) Let the principle be ₹ x.

$$x\left[\frac{6}{100} + \frac{6.5}{100} + \frac{7}{100} + \frac{7.5}{100}\right] = 3375$$

$$\Rightarrow \frac{x}{100} \times 27 = 3375 \quad \Rightarrow x = \frac{3375 \times 100}{27}$$

$\therefore x = ₹12{,}500$

54. (2) Let the sum be ₹ x and ₹ y

A/Q, $\dfrac{x}{4} = \dfrac{y}{5}$

$\Rightarrow x : y = 4 : 5$

$\Rightarrow x = 4a$

$\therefore \dfrac{4a \times 6 \times 2}{100} \times \dfrac{5a \times 7 \times 2}{100} = 354$

$\Rightarrow 48a + 70a = 354 \times 100$

$\therefore a = \dfrac{354 \times 100}{118} = 300$

Total sum = $4a + 5a = 9a$
= 9 × 300 = ₹ 2700

55. (1) Total possible outcomes = 28_{C_2} = 14 × 27

Favorable outcomes = $20_{C_1} \times 8_{C_1} + 8_{C_2}$
= 188

Required probability = $\dfrac{188}{14 \times 27} = \dfrac{94}{189}$

(56-60) :

56. (1) Total no. of qualified candidates from insitutes P, Q and R together

$$= 8000 \times \left(\frac{16 + 20 + 16}{100}\right)$$

$$= 8000 \times \frac{52}{100} = 4160$$

Total no. of appeared candidates from insititures S, T and U together

$$= 36000 \times \left(\frac{15 + 10 + 25}{100}\right)$$

$$= 36000 \times \frac{50}{100} = 18000$$

$\therefore$ Required ratio = 4160 : 18000 = 52 : 225

57. (5) No. of qualified candidates from institute

$T = 8000 \times \dfrac{12}{100} = 960$

No. of appeared candidates from insititute

$T = 36000 \times \dfrac{10}{100} = 3600$

$\therefore$ Required% = $\left(\dfrac{960}{3600} \times 100\right)\%$

= 26.66%

58. (2) Total of qualified candidates from institutes Q and R together = 8000 × $\left(\dfrac{20 + 16}{100}\right)$

$$= 8000 \times \frac{36}{100} = 2880$$

Total no. of appeared candidates from institutes Q and R together

$$= 36000 \times \left(\frac{18 + 20}{100}\right)$$

$$= 36000 \times \frac{38}{100} = 13680$$

$\therefore$ Required % = $\left(\dfrac{2880}{13680} \times 100\right)\%$

= 21.05% ≈ 21%

59. (1)

60. (3) Total no. of appeared candidates from institutes P, Q and U together

$$= 36000 \times \left(\frac{127 + 18 + 25}{100}\right)$$

$$= 36000 \times \frac{55}{100} = 19800$$

$\therefore$ Required average = $\dfrac{19800}{3} = 6600$

(61-65) : No. of female = $2500 \times \dfrac{40}{100}$ = 1000

No. of male = 2500 – 1000 = 1500

State	Male (1500)	Female (1000)
Bihar	$\dfrac{1500 \times 35}{100} = 525$	240
Punjab	$1500 \times \dfrac{15}{100} = 225$	$\dfrac{18 \times 1000}{100} = 180$
Delhi	345	$\dfrac{25 \times 1000}{100} = 250$
UP	$1500 \times \dfrac{17}{100} = 225$	$\dfrac{33 \times 1000}{100} = 330$
HP	$1500 \times \dfrac{10}{100} = 150$	0

61. (2) Reqd ratio = $\dfrac{525 \times \dfrac{40}{100}}{250 \times \dfrac{50}{100}} = \dfrac{210}{125}$

= 42 : 25

62. (2) Reqd difference
= [UP + Delhi] – [Bihar + Punjab]
= [330 + 250] – [240 + 180]
= 580 – 420 = 160

63. (4) Reqd ratio = $\dfrac{225 \times 25}{250 \times \dfrac{20}{100}} = 9 : 8$

64. (1) Total number of employees in Bihar = 525 + 240 = 765

65. (3) Required percentage = $\dfrac{765}{2500} \times 100$

= 30.6%

(66-70) :

66. (5) I. $8x^2 – 3y = 38$
$\Rightarrow 8x^2 – 3y – 38 = 0$
$\Rightarrow 8x^2 + 16x – 19x – 38 = 0$
$\Rightarrow 8x(x + 2) – 19(x + 2) = 0$
$\Rightarrow (8x – 19)(x + 2) = 0$
$\Rightarrow x = \dfrac{19}{8}, – 2$

II. $6y^2 + 34 = 29y$
$\Rightarrow 6y^2 – 29y + 34 = 0$
$\Rightarrow 6y^2 – 12y – 17y + 34 = 0$
$\Rightarrow 6y(y – 2) – 17(y – 2) = 0$
$\Rightarrow (6y – 17)(y – 2) = 0$
$\Rightarrow y = \dfrac{17}{6}, 2$

67. (3) I. $7x^2 + 15x – 18 = 0$
$\Rightarrow 7x^2 + 21x – 6x – 18 = 0$
$\Rightarrow 7x(x + 3) – 6(x + 3) = 0$

$\Rightarrow (7x – 6)(x + 3) = 0$

$\Rightarrow x = \dfrac{6}{7}, – 3$

II. $2y^2 – 13y + 21 = 0$
$\Rightarrow 2y^2 – 6y – 7y + 21 = 0$
$\Rightarrow 2y(y – 3) – 7(y – 3) = 0$
$\Rightarrow (2y – 7)(y – 3) = 0$

$\Rightarrow y = \dfrac{7}{2}, 3$

Clearly , $x < y$

68. (1) I. $3x^2 – 15x + 18 = 0$
$\Rightarrow x^2 – 5x + 6 = 0$
$\Rightarrow x^2 – 2x – 3x + 6 = 0$
$\Rightarrow x(x – 2) – 3(x – 2) = 0$
$\Rightarrow (x – 3)(x – 2) = 0$
$\Rightarrow x = 3, 2$
II. $y^2 + 13y = – 42$
$\Rightarrow y^2 + 13y + 42 = 0$
$\Rightarrow y^2 + 7y + 6y + 42 = 0$
$\Rightarrow y(y + 7) + 6(y + 7) = 0$
$\Rightarrow (y + 6)(y + 7) = 0$
$\Rightarrow y = – 6, –7$
Clearly , $x > y$

69. (3) $2x + 3y = 13$ .... (i)
$4x + y = 6$ .... (ii)
Now, equation (i) × 2 – equation (ii),
$\Rightarrow 4x + 6y – 4x – y = 26 – 6$
$\Rightarrow 5y = 20 \qquad \Rightarrow y = 4$
Put the value of y in equation (ii),
$4x + 4 = 6$
$\Rightarrow 4x = 2$

$\Rightarrow x = \dfrac{1}{2}$

Clearly , $x < y$

70. (5) I. $x^2 = 529$
$\Rightarrow x = +23, –23$
II. $y^2 + 241 = 770$
$\Rightarrow y^2 = 770 – 241$
$\Rightarrow y^2 = 529$
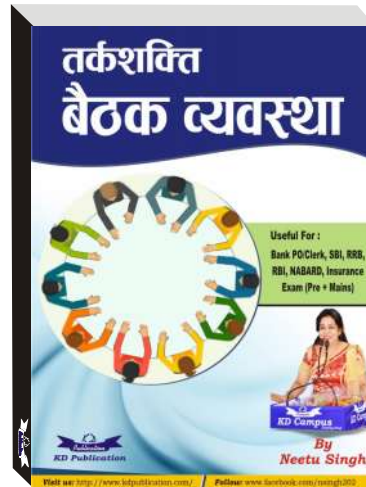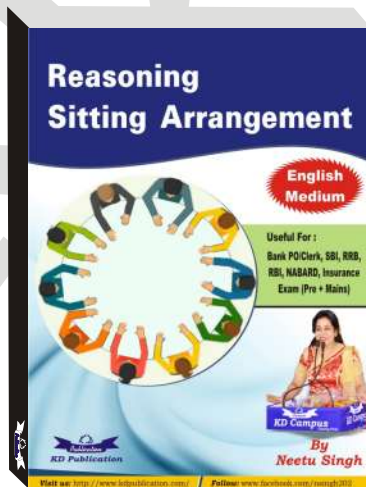$\Rightarrow y = + 23, – 23$

ENGLISH LANGUAGE

(91–100):

91. (1) 'witness' repalce with 'witnessed'.
92. (3) 'added' replace with 'add'.
93. (1) 'had' replace with 'has'.
94. (1) 'protest' replace with 'pratests'.
95. (5) No error.
96. (1) 'Being that' Replace with 'since'.
97. (5) No error.
98. (5) No error.
99. (1) 'are trying' replace with 'have been trying'.
100. (3) 'are' replace with 'have been'.

VOCABULARIES

Words	Meaning in English	Meaning in Hindi
Clandestine	Keep secret	गुप्त
Defunct	no large existing/obsolete	मृतप्राय/अक्रियाशील
Dump	To store at an unwanted place something that is not	अवांछित चीजों को किसी फालतू जगह पर एकत्रित करना
Lethary	a lack of energy and enthusiasm	सुस्ती
Reconnasissance	Investigation, surveillance	निगरानी
Regime	Especially an authoritarian one/system	प्रणाली
Indigenous	Native	देशी
Pile up	An accumulation of a specified thing	ढेर लगाना
Deploy	To post/move (Troops) into position for miltary action	तैनात करना
Proliferation	rapid increase in number	संख्या में वृद्धि
Doctrine	Ideology	सिद्धांत
Ally	To make a group with	सहयोग करना
Curtail	Reduce in extent or quantity	कटौती करना
Explotation	Toment/The action of treating someone unfairly in order to benefit from their work	शोषण करना
Devastation	Great destruction or damage	विनाश/तबाही
Aggression	hostile/voilent behaviour	उग्र व्यवहार
Assertion	Strong statement	जोरदार कथन
Ignorance	Lack of knowledge	अज्ञानता

6

SBI PO PHASE - I - 149 (ANSWER KEY)

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

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

Note:- Whatapp with Mock Test No. and Question No. at 7053606571 for any of te doubts. Join the group and you may also share your suggestions and experience of sunday Mock Test.

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