SBI PO PHASE-I - 89 (SOLUTION)

REASONING

(1-5) :

Days	Shop	No. of Motors
Monday	P	6
Tuesday	Q	4
Wednesday	S	12
Thursday	O	18
Friday	R	27
Saturday	N	15
Sunday	M	9

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

(6-11) :
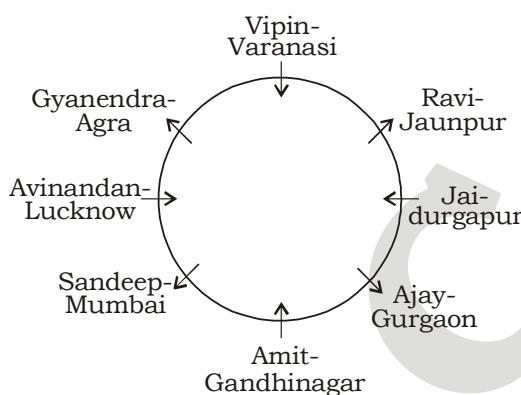
6. (3)　　　7. (3)　　　8. (3)
9. (2)　　　10. (5)　　　11. (3)

(12 - 16) :

Class	Student	Gender	Rank
I	Q	M	1
	V	M	2
	S	F	3
II	X	F	1/3
	P	M	2
	U	F	3/1
III	R	M	1
	W	F	2
	T	M	3

12. (5)　　　13. (5)　　　14. (3)
15. (1)　　　16. (4)

(17-21) :

Floor No	Person
8	O
7	I
6	N
5	B
4	T
3	H
2	E
1	C

17. (3)　　　18. (3)　　　19. (2)
20. (2)　　　21. (4)　　　22. (5)
23. (3)

(24-26) :

$$M^+ === X^- \quad \text{(Market Represenative)} \quad \text{(professor)}$$
$$Z^- === Y^+ \quad \text{(Judge)} \quad \text{(Advocate)}$$
$$Q^+ --- N \quad \text{(Accountant)} \quad \text{(Engineer)}$$

24. (4)　　　25. (4)　　　26. (3)

(27-31) :

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

27. (2) $B > A \geq N \leq K < L > O \geq T > U = S$
　　I. $B \geq O$ → false
　　II. $L > S$ → True
　　III. $N < L$ → True
　　only II and III are true
28. (5) I. $U < O$ → True
　　II. $U = O$ → False
　　III. $L > S$ → True
29. (1) $A > C \geq F > E < B$
　　$C \geq B$
　　I. $A > F$ → True
　　II. $B > C$ → doubt
　　Only I is true
30. (1) $J > Q > U < R \leq T > C$
　　I. $T > U$ → True
　　II. $J > C$ → False
31. (4) $N > O \geq M > P$
　　$Q > D$
　　I. $N \geq D$ → False
　　II. $N > P$ → True
　　Only II is true.

32. (1) From I –

A C B E D
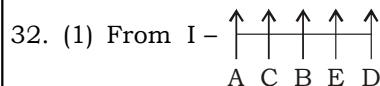
33. (1) From I –
distance b/w A and B in house = (4 × 6) × 3) km = 30 km
From II –
We conclude that it A's speed is x km/hr, then B's speed = $\left(\frac{3}{2}x\right)$ km/hr. But the actual speed of of time of them can not be ascertained.

34. (5)

35. (3) Early morning sun rises in the east and shadow of an object/person at this time fall exactly behind it.
from I, Romesh and puppet are facing each other. The shadow of puppet falls to the right of Romesh and hence to the left of the puppet. thus sun is to the right of puppet. But the sun is in the east so puppet is facing north and thus Romesh is facing south.
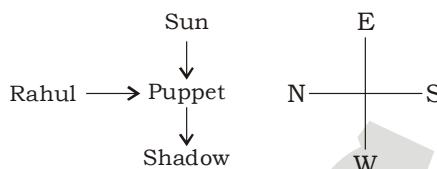
From II, Turn left the shadow falls behind Romesh. This mean Romesh faces the sun (i.e east) on turning left. Thus Rahul facing south.

MATHS

36. (3) ? ≈ 8800 ÷ 340 × $\sqrt{49}$
= 25.9 × 7 = 181.3 ≈ 180

37. (2) ?² = $\sqrt[3]{54821}$ × (303 ÷ 8)
?² = $\sqrt[3]{54872}$ × 38
?² = 38 × 38
∴ ? = 38

38. (3) ? = $\frac{4011.33 \times 5}{8} + \frac{3411.22 \times 7}{10}$
≈ $\frac{4000 \times 5}{8} + \frac{3400 \times 7}{10}$
= 2500 + 2380 = 4880 ≈ 4890

39. (5) ? = $\frac{6783 \times 23}{100} + \frac{8431 \times 57}{100}$
≈ $\frac{6800 \times 23}{100} + \frac{8400 \times 57}{100}$
= 1564 + 4788 = 6352 ≈ 6360

40. (1) ? ≈ 335 × 245 ÷ 55 = 1492.27 ≈ 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 = $1500 \times \frac{25}{100} + 3000 \times \frac{20}{100} + 2500 \times \frac{10}{100} + 2000 \times \frac{15}{100}$
= 375 + 600 + 250 + 300 = 1525
2008 = $2500 \times \frac{30}{100} + 2500 \times \frac{15}{100} + 3500 \times \frac{20}{100} + 4000 \times \frac{35}{100}$
= 750 + 375+ 700 + 1400 = 3225
2009 = $3500 \times \frac{20}{100} + 500 \times \frac{25}{100} + 1000 \times \frac{30}{100} + 4500 \times \frac{35}{100}$ = 700 + 125 + 300 + 1575 = 2700
2010 = $1000 \times \frac{10}{100} + 1500 \times \frac{25}{100} + 4500 \times \frac{40}{100} + 5000 \times \frac{15}{100}$ = 100 + 375 + 1800 + 750 = 3025
Required answer is 2008.

43. (5) Total no. of tourists who came in Varanasi more than once = $1500 \times \frac{25}{100} + 2500 \times \frac{30}{100} + 3500 \times \frac{20}{100} + 1000 \times \frac{10}{100} + 1500 \times \frac{5}{100} + 2500 \times \frac{15}{100}$ = 375 + 750 + 700 + 100 + 750 + 375 = 3050
Total no. of tourists who came in Agra more than once = $2500 \times \frac{10}{100} + 3500 \times \frac{20}{100} + 1000 \times \frac{30}{100} + 4500 \times \frac{40}{100} + 4000 \times \frac{20}{100} + 1500 \times \frac{30}{100}$
= 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. (2) The pattern of the number series is :
9 × 2 – 3 = 18 – 3 = 15
15 × 2 – 3 = 30 – 3 = 27
27 × 2 – 3 = 54 – 3 = 51
51 × 2 – 3 = 102 – 3 = 99
99 × 2 – 3 = 198 – 3 = **195**

47. (4) The pattern of the number series is :
13 + 8 = 21
21 + 8 + 7 = 21 + 15 = 36
36 + 15 + 7 = 36 + 22 = 58
58 + 22 + 7 = 58 + 29 = 87
87 + 29 + 7 = 87 + 36 = **123**

48. (4) The pattern of the number series is :
7 + (2 + 0) = 9
9 + (2 + 8) = 19
19 + (10 + 16) = 45
45 + (26 + 24) = 95
95 + (50 + 32) = **177**

49. (1) The pattern of the number series is :
$14 + 1^2 = 15$
$15 + 2^3 = 23$
$23 + 3^2 = 32$
$32 + 4^3 = 96$
$96 + 5^2 = 96 + 25 = $ **121**

50. (3) The pattern of the number series is :
20 + 1 × 4 = 20 + 4 = 24
24 + 3 × 4 = 24 + 12 = 36
36 + 5 × 4 = 36 + 20 = 56
56 + 7 × 4 = 56 + 28 = 84
84 + 9 × 4 = 84 + 36 = **120**

51. (3) Total water filled in 1 hour
= 42 + 56 – 48 = 50 litres
Water filled in 16 hours = 16 × 50 = 800 litres
Hence the capacity of tank = 800 litres.

52. (4)

	With stop	:	Without stop
Speed	40	:	50
Time	50	:	40

So, train takes 1 hours extra in every 5 hrs.
So, stop 12 minutes in each hour.

53. (1) Probability of getting sum is four.
Favourable events = (1, 3) (3, 1) (2, 2)

= $\dfrac{Favourable\ events}{Total\ events}$ = $\dfrac{3}{36}$ = $\dfrac{1}{12}$

54. (5) Read ₹ 67 as ₹ 767.

Type A : 614   Type A : 695

$\dfrac{767 \times 100}{118}$ = 650

45   36
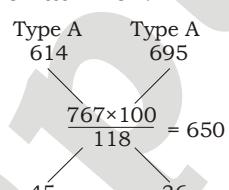
∴ Ratio of A : B = 5 : 4
So, type B sugar will be (7 × 4) = 28 kg

55. (3) Let the total sum be ₹ x.

Then, $\dfrac{2}{3} x \times \dfrac{12 \times 6}{100} + \dfrac{1}{3} x\left(1 + \dfrac{10}{100}\right)^2 - \dfrac{x}{3}$

= ₹1650

or, $\dfrac{48x}{100} + \dfrac{21x}{300}$ = 1650

or, $\dfrac{144x + 21x}{300}$ = 1650

∴ x = $\dfrac{1650 \times 300}{165}$ = ₹ 3000

(56 – 60):

56. (1) Required no. of unsold Speakers in the year 2016 = $480 \times \dfrac{35}{100}$ = 168

57. (3) Number of computer manufactured in the year2017 = $190 \times \dfrac{110}{100}$ = 209

Percentage of computer sold in 2017

= $90 \times \dfrac{80}{100}$ = 72%

∴ No. of unsold computer in 2017

= $209 \times \dfrac{28}{100}$ = 58.52 ≈ 59

58. (4) Required average

= $\dfrac{980 \times \dfrac{68}{100} + 1280 \times \dfrac{22}{100} + 880 \times \dfrac{54}{100} + 440 \times \dfrac{18}{100}}{4}$

= $\dfrac{666.40 + 281.60 + 475.20 + 79.20}{4}$

= $\dfrac{1502.40}{4}$ = 375.60 ≈ 376

59. (1) Total no. of unsold Speakers in 2015 and sold Laptops in the year 2014

$$= 520 \times \frac{25}{100} + 300 \times \frac{45}{100}$$

$$= 130 + 135 = 265$$

No. of unsold Mobiles in the year 2013

$$= 980 \times \frac{68}{100} = 666.40$$

∴ Required % $= \left(\frac{265}{666.40} \times 100 \right) \%$

$$= 39.76\% \approx 40\%$$

60. (5) Total no. of sold products in the year 2013

$$= 200 \times \frac{70}{100} + 240 \times \frac{75}{100} + 780 \times \frac{96}{100} + 980$$

$$\times \frac{32}{100} = 140 + 180 + 748.80 + 313.60$$

$$= 1382.40$$

Total no. of unsold products in the year 2015

$$= 170 \times \frac{35}{100} + 340 \times \frac{42}{100} + 520 \times \frac{25}{100} + 880$$

$$\times \frac{54}{100} = 59.50 + 142.80 + 130 + 475.20$$

$$= 807.50$$

∴ Required difference = 1382.40 − 807.50

$$= 574.90 \approx 575$$

(61-65) :

61. (2) From statement P,

$x − y = 0$.

From statement Q,

$x + y = 18$

It is possible only when $x = y = 9$.

62. (4) Data are inadequate.

63. (5) From both statements,

Speed of boat in still water

$$= \frac{1}{2} (4 + 6) = 5 \text{ kmph}$$

64. (1) From statement P

Priti's marks in Chemistry = 2 × 42 = 84

65. (3) From statement P,

$$\text{Rate} = \frac{S.I \times 100}{\text{Time} \times \text{Principal}}$$

$$= \frac{1736 \times 100}{6200 \times 2} = 14\% \text{ Per annum}$$

By using C.I.

$$= P \left[\left(1 + \frac{R}{100} \right)^T - 1 \right]$$

we get the required rate of interest.

(66-70) :

66. (5) I. $x^2 + 14x − 1887 = 0$

$\Rightarrow x^2 + 51x − 37x − 1887 = 0$

$\Rightarrow x (x + 51) − 37(x + 51) = 0$

$\Rightarrow (x − 37)(x + 51) = 0$

$\Rightarrow x = 37, − 51$

II. $y^2 − 49y + 444 = 0$

$\Rightarrow y^2 − 37y − 12y + 444 = 0$

$\Rightarrow y(y − 37) − 12(y − 37) = 0$

$\Rightarrow (y − 12) (y − 37) = 0$

$\Rightarrow y = 12, 37$

67. (5) I. $2x^4 − 36x^2 + 162 = 0$

$\Rightarrow x^4 − 18x^2 + 81 = 0$

$\Rightarrow x^4 − 9x^2 − 9x^2 + 81 = 0$

$\Rightarrow x^2(x^2 − 9) − 9(x^2 − 9) = 0$

$\Rightarrow (x^2 − 9) (x^2 − 9) = 0$

$\Rightarrow x = +3, −3$

II. $3y^4 − 75y^2 + 432 = 0$

$\Rightarrow y^4 − 25y^2 + 144 = 0$

$\Rightarrow y^4 − 16y^2 − 9y^2 + 144 = 0$

$\Rightarrow y^2 (y^2 − 16) − 9(y^2 − 16) = 0$

$\Rightarrow (y^2 − 9)(y^2 − 16) = 0$

$\Rightarrow y = +3, −3, +4, −4$

68. (4) I. $x^2 − 19x + 84 = 0$

$\Rightarrow x^2 − 12x − 7x + 84 = 0$

$\Rightarrow x(x − 12) − 7(x − 12) = 0$

$\Rightarrow (x − 7) (x − 12) = 0$

$\Rightarrow x = 7, 12$

II. $y^2 − 25y + 156 = 0$

$\Rightarrow y^2 − 13y − 12y + 156 = 0$

$\Rightarrow y(y − 13) − 12(y − 13) = 0$

$\Rightarrow (y − 12) (y − 13) = 0$

$\Rightarrow y = 12, 13$

Clearly, $x \le y$

69. (2) I. $72 − 30x = −2x^2$

$\Rightarrow 2x^2 − 30x + 72 = 0$

$\Rightarrow x^2 − 15x + 36 = 0$

$\Rightarrow x^2 − 12x − 3x + 36 = 0$

$\Rightarrow x(x − 12) − 3(x − 12) = 0$

$\Rightarrow (x − 3) (x − 12) = 0$

$\Rightarrow x = 3, 12$

II. $y^2 − \frac{40}{6} = \frac{7}{3}$

$\Rightarrow y^2 − \frac{20}{3} = \frac{7}{3}$

$\Rightarrow y^2 = \frac{7}{3} + \frac{20}{3}$

$\Rightarrow y^2 = \frac{27}{3} = 9$

$\Rightarrow y = +3, − 3$

clearly, $x \ge y$

70. (3) I. $10x^2 + 42x + 44 = 0$

$\Rightarrow 5x^2 + 21x + 22 = 0$

$\Rightarrow 5x^2 + 10x + 11x + 22 = 0$

$\Rightarrow 5x(x + 2) + 11(x + 2) = 0$

$\Rightarrow (5x + 11)(x + 2) = 0$

$\Rightarrow x = -\dfrac{11}{5}, -2$

II. $6y^2 - 16y + 8 = 0$

$\Rightarrow 3y^2 - 8y + 4 = 0$

$\Rightarrow 3y^2 - 6y - 2y + 4 = 0$

$\Rightarrow 3y(y - 2) - 2(y - 2) = 0$

$\Rightarrow (3x - 2)(y - 2) = 0$

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

Clearly, $x < y$

ENGLISH LANGUAGE

91. (2) 'were' Replace with 'was'.

92. (3) 'were' Replace with 'are'.

93. (1) 'Put on' Replace with 'put up'.

94. (1) 'falling in' Replace with 'fall in'.

95. (2) 'Licenses for' Replace with 'Licenses to'.

96. (5) No error.

97. (2) 'in' Replace with 'to'.

98. (2) 'Persist' Replace with 'Persisted'.

99. (1) 'Not only' come after 'the judge'.

100. (3) 'in' Replace with 'of'.

VOCABULARIES

Words	Meaning in English	Meaning in Hindi
Depressing	make fell uttely dejected	निराशाजनक/उदास
Variegated	especially as irregular patches	विभिन्न/विविधतापूर्ण
Inroads	a hostile attack	अक्रमण/दखलंदाजी
Solely	Without any others being involved	अकेले
Proliferate	increase rapidly in number	संख्या मे बढ़ना
Beverage	a drink, especially one other than water	पेय पदार्थ/मादक पेय
Authenticity	the quality of being real	वास्तविकता/सत्यता
Outpace	Surpass in speed	से तेजी से बढ़ना/आगे बढ़ना
Squeezed	firmly press (something soft)	निचोड़ा हुआ
'A handful of'	a quantity that fills the hand	मुठ्ठी भर
falsify	prove to be false	गलत साबित करना
Immolates	kill or offer as a sacrifice (especially by burning)	बलिदान देना
Revealing	make known to others	खुलासा करना
Countermand	cancel officialy	रद्द करना
Obstruction	the action of interrupt	रूकावट/बाधा
Acquitted	declared not guilty	विमुक्त/अपराधमुक्त

SBI PO PHASE-I - 89 (ANSWER KEY)

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

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