

SBI PO Preliminary Grand Test –SPP-180421

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (4) step - burden
 2. (1) emergence - afford
 3. (2) spent - bounds
 4. (5) challenge - choose
 5. (4) stress - including
 6. (2) B
 7. (4) E
 8. (1) A
 9. (3) F
 10. (3) C
 11.(4) Here, to pay its employees should be used because subject (airline) is singular.
 12.(1) The structure of a sentence in Present Perfect Tense is : Subject + has/have + V₃ (Past Participle)
 Hence, we have recently begun should be used here.
 13.(3) Here, Noun not an Adjective should be used.
 Hence, the management's confidence should be used.
 14.(1) Here, In spite of the fact that/Despite the fact that ... should be used.
 15.(4) The structure of a sentence in Present Progressive : Subject + is/am/are + V₄ (V-ing)

Hence, companies are investing in India should be used here.

16. (4) A 'social media-
 17. (2) Only a
 18. (4) Both a and c
 19. (2) Those who go to the websites of newspapers to look for news, many Facebook users aren't actually looking to get news while they are on the network. But they end up getting news.
 20. (4) Google Plus, has even remotely come close to Facebook.
 21. (2) Unavoidable
 22. (2) Lure
 23. (3) Circumstance
 24. (3) Disapproval
 25.(2) Advantage
 26.(4) competing
 27.(5) search
 28.(1) solution
 29.(2) beyond
 30.(1) failure

31. (2) I. $16x^2 + 20x + 6 = 0$
 $\Rightarrow 8x^2 + 10x + 3 = 0$
 $\Rightarrow 8x^2 + 6x + 4x + 3 = 0$
 $\Rightarrow 2x(4x + 3) + 1(4x + 3) = 0$
 $\Rightarrow (2x + 1)(4x + 3) = 0$
 $\therefore x = -\frac{1}{2} \text{ or } -\frac{3}{4}$
 II. $10y^2 + 38y + 24 = 0$
 $\Rightarrow 5y^2 + 19y + 12 = 0$
 $\Rightarrow 5y^2 + 15y + 4y + 12 = 0$
 $\Rightarrow 5y(y + 3) + 4(y + 3) = 0$
 $\Rightarrow (y + 3)(5y + 4) = 0$
 $\therefore y = -3 \text{ or } -\frac{4}{5}$

Clearly, $x > y$

32. (2) I. $18x^2 + 18x + 4 = 0$
 $\Rightarrow 9x^2 + 9x + 2 = 0$
 $\Rightarrow 9x^2 + 6x + 3x + 2 = 0$
 $\Rightarrow 3x(3x + 2) + 1(3x + 2) = 0$
 $\Rightarrow (3x + 1)(3x + 2) = 0$
 $\therefore x = -\frac{1}{3} \text{ or } -\frac{2}{3}$
 II. $12y^2 + 29y + 14 = 0$
 $\Rightarrow 12y^2 + 21y + 8y + 14 = 0$
 $\Rightarrow 3y(4y + 7) + 2(4y + 7) = 0$
 $\Rightarrow (3y + 2)(4y + 7) = 0$
 $\therefore y = -\frac{2}{3} \text{ or } -\frac{7}{4}$
 33.(3) I. $8x^2 + 6x - 5 = 0$
 $\Rightarrow 8x^2 + 10x - 4x - 5 = 0$
 $\Rightarrow 2x(4x + 5) - 1(4x + 5) = 0$
 $\Rightarrow (2x - 1)(4x + 5) = 0$

$$\therefore x = \frac{1}{2} \text{ or } -\frac{5}{4}$$

$$\text{II. } 12y^2 - 22y + 8 = 0$$

$$\Rightarrow 6y^2 - 11y + 4 = 0$$

$$\Rightarrow 6y^2 - 8y - 3y + 4 = 0$$

$$\Rightarrow 2y(3y - 4) - 1(3y - 4) = 0$$

$$\Rightarrow (3y - 4)(2y - 1) = 0$$

$$\therefore y = \frac{4}{3} \text{ or } \frac{1}{2}$$

Clearly, $x \leq y$

$$34. (1) \text{ I. } 17x^2 + 48x - 9 = 0$$

$$\Rightarrow 17x^2 + 51x - 3x - 9 = 0$$

$$\Rightarrow 17x(x + 3) - 3(x + 3) = 0$$

$$\Rightarrow (x + 3)(17x - 3) = 0$$

$$\therefore x = -3 \text{ or } \frac{3}{17}$$

$$\text{II. } 13y^2 - 32y + 12 = 0$$

$$\Rightarrow 13y^2 - 26y - 6y + 12 = 0$$

$$\Rightarrow 13y(y - 2) - 6(y - 2) = 0$$

$$\Rightarrow (y - 2)(13y - 6) = 0$$

$$\therefore y = 2 \text{ or } \frac{6}{13}$$

Clearly, $x < y$

$$35. (5) \text{ By equation I } \times 2 + \text{ equation II.}$$

$$8x + 14y = 418$$

$$12x - 14y = -38$$

$$\hline 20x = 380$$

$$\therefore x = \frac{380}{20} = 19$$

From equation I,

$$4 \times 19 + 7y = 209$$

$$\Rightarrow 7y = 209 - 76 = 133$$

$$\therefore y = \frac{133}{7} = 19$$

36-40. Number of girls :

$$\text{IT} \rightarrow 1500 \times \frac{18}{100} = 270$$

$$\text{Arts} \rightarrow 1500 \times \frac{38}{100} = 570$$

$$\text{Science} \rightarrow 1500 \times \frac{11}{100} = 165$$

$$\text{Commerce} \rightarrow 1500 \times \frac{21}{100} = 315$$

$$\text{Management} \rightarrow 1500 \times \frac{12}{100} = 180$$

Number of boys:

$$\text{IT} \rightarrow \left(3500 \times \frac{20}{100} - 270 \right) = 700 - 270 = 430$$

$$\text{Arts} \rightarrow \left(3500 \times \frac{30}{100} - 570 \right) = 1050 - 570 = 480$$

$$\text{Science} \rightarrow \left(3500 \times \frac{22}{100} - 165 \right) = 770 - 165 = 605$$

$$\text{Commerce} \rightarrow \left(3500 \times \frac{12}{100} - 315 \right) = 420 - 315 = 105$$

$$\text{Management} \rightarrow \left(3500 \times \frac{16}{100} - 180 \right) = 560 - 180 = 380$$

$$36. (2) \text{ Required number of boys} = 380 + 430 = 810$$

$$37. (3) \text{ Required ratio} = 570 : 605 = 114 : 121$$

$$38. (4) \text{ Required number of girls} = 165 + 315 = 480$$

$$39. (1) \text{ New number of management students altogether}$$

$$= 380 + 180 + 165 \times \frac{20}{100}$$

$$= 380 + 180 + 33 = 593$$

$$40. (5) \text{ Number of girls enrolled in Arts, Science and Commerce}$$

$$= 570 + 165 + 315 = 1050$$

$$\therefore \text{Required percentage} = \frac{1050}{3500} \times 100 = 30$$

41. (1) Books on Economics are to be kept together. Hence, we are to arrange 3 books on management, 4 books on Statistics and one book on Economics.

These can be arranged in 8! ways.

Again, 4 books on Economics can be arranged together in 4! ways.

\therefore Total number of arrangements

$$= 8! \times 4! = 967680$$

$$[n! = 1.2.3.4 \dots (n-1)(n)]$$

If the amount borrowed be Rs. x , then

$$\frac{x \times 4 \times 3}{100} + \frac{x \times 8 \times 2}{100} + \frac{x \times 9 \times 2}{100} = 19550$$

$$\Rightarrow \frac{12x}{100} + \frac{16x}{100} + \frac{18x}{100} = 19550$$

$$\Rightarrow 12x + 16x + 18x = 1955000$$

$$\Rightarrow 46x = 1955000$$

$$\Rightarrow x = \frac{1955000}{46} = \text{Rs. } 42500$$

43. (3) Let the length of the rectangular field = x metre

$$\therefore \text{Its breadth} = \frac{3x}{4} \text{ metre}$$

According to the question,

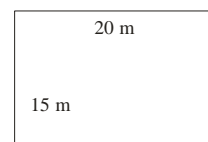
$$= x \times \frac{3x}{4} = 300$$

$$\Rightarrow x^2 = 300 \times \frac{4}{3} = 400$$

$$\Rightarrow x = \sqrt{400} = 20$$

$$\therefore \text{length} = 20 \text{ metre}$$

$$\text{and breadth} = \frac{3}{4} \times 20 = 15 \text{ metre}$$



Length of the field with garden

$$= 20 + 1.5 \times 2 = 23 \text{ metre}$$

Breadth of the field with garden

$$= 15 + 1.5 \times 2 = 18 \text{ metre}$$

$$\therefore \text{Its area} = 23 \times 18 = 414 \text{ square metre}$$

$$\therefore \text{Area of the garden} = 414 - 300 = 114 \text{ square metre}$$

44.(2) $4x + 5y = 83$ (i)

$$\frac{3x}{2y} = \frac{21}{22} \Rightarrow \frac{x}{y} = \frac{21}{22} \times \frac{2}{3} = \frac{7}{11}$$

$$\Rightarrow x = \frac{7}{11}y$$
(ii)

From equation (i),

$$4 \times \frac{7}{11}y + 5y = 83$$

$$\Rightarrow 28y + 55y = 913 \Rightarrow 83y = 913$$

$$\Rightarrow y = \frac{913}{83} = 11$$

From equation (ii), $x = \frac{7}{11} \times 11 = 7$

$$\therefore y - x = 11 - 7 = 4$$

45.(3) Let the speed of boat in still water = x kmph

$$\therefore \text{Speed of current} = \frac{x}{2} \text{ kmph}$$

When boat runs downstream, $\frac{30}{x + \frac{x}{2}} = 2$

$$\Rightarrow \frac{30 \times 2}{3x} = 2 \Rightarrow 6x = 60 \Rightarrow x = \frac{60}{6} = 10 \text{ kmph}$$

46.(4) Number of candidates :

Bangalore $\rightarrow 2000 + 5000 + 50 + 2050 + 750 = 9850$

Delhi $\rightarrow 15000 + 17000 + 160 + 11000 + 750 = 43910$

Mumbai $\rightarrow 17000 + 19500 + 70 + 7000 + 900 = 44470$

Kolkata $\rightarrow 14900 + 17650 + 70 + 1300 + 1200 = 35120$

47.(3) Hyderabad

48.(3) Number of officers = 72760

Number of clerks = 105450

Difference = $105450 - 72760 = 32690$

49.(4) Required percentage = $\frac{1200}{14900} \times 100 = 8$

50.(2) Required percentage = $\frac{2000}{9000} \times 100 = 22$

51.(5) $0 + 5 = 5$

$5 + 13 = 18$

$18 + 25 = 43$

$43 + 41 = 84$

$84 + 61 = 145$

$$\therefore ? = 145 + 85 = \boxed{230}$$

52.(4) $10 \times 1 + 1 \times 7 = 10 + 7 = 17$

$17 \times 2 + 2 \times 7 = 34 + 14 = 48$

$48 \times 3 + 3 \times 7 = 144 + 21 = 165$

$165 \times 4 + 4 \times 7 = 660 + 28 = 688$

$688 \times 5 + 5 \times 7 = 3440 + 35 = 3475$

$$\therefore ? = 3475 \times 6 + 6 \times 7$$

$$= 20850 + 42 = \boxed{20892}$$

53.(3) $1 \times 3 = 3$

$3 \times 8 = 24$

$24 \times 15 = 360$

$360 \times 24 = 8640$

$8640 \times 35 = 302400$

$$\therefore ? = 302400 \times 48 = \boxed{14515200}$$

54.(2) $12 \times 1 + 2 \times 1 = 12 + 2 = 14$

$14 \times 2 + 2 \times 2 = 28 + 4 = 32$

$32 \times 3 + 2 \times 3 = 96 + 6 = 102$

$102 \times 4 + 2 \times 4 = 408 + 8 = 416$

$416 \times 5 + 2 \times 5 = 2080 + 10 = 2090$

$$\therefore ? = 2090 \times 6 + 2 \times 6 = 12540 + 12 = \boxed{12552}$$

55.(1) $10 \times \frac{3}{2} = 15$

$15 \times \frac{4}{4} = 15$

$15 \times \frac{5}{6} = 12.5$

$12.5 \times \frac{6}{8} = 9.375$

$9.375 \times \frac{7}{10} = 6.5625$

$$\therefore ? = 6.5625 \times \frac{8}{12} = \boxed{4.375}$$

56.(4) Number of trees planted ' NGO-A and NGO-B together:

Bihar $\Rightarrow 100 + 60 = 160$

Punjab $\Rightarrow 120 + 80 = 200$

Haryana $\Rightarrow 140 + 80 = 220$

Assam $\Rightarrow 160 + 150 = 310$

Tamil Nadu $\Rightarrow 180 + 140 = 3$

Required difference

= $160 - 80 = 80$

57.(5)

Required average = $\frac{168+140+80}{3} = \frac{388}{3} = 129$

59.(5)

Required percentage

$$= \frac{(100 + 60)}{(80 + 80)} \times 100 = \frac{160}{168} \times 100 = 95$$

$(100 + 60) \times 100 = 160 \times 100 = 95 - (88 + 80) = 168$

Required ratio = $180 : 120 : 150 = 6 : 4 : 5$

60.(3)

61.(2)

63.(4)

65.(2)

66.(4)

44707

300

62.(1)

64.(2)

273583

First and third Premises are Universal Affirmative (A-type).

Second Premise is Particular Affirmative (I-type).

Some cycles are wheels.

All wheels are mirrors.

I + A \Rightarrow I-type Conclusion.

Conclusion : Some cycles are mirrors.

This is Conclusion I.

Conclusion III is converse of this Conclusion.

Therefore, Conclusions I and III follow.

67.(4)

First and second Premises are Particular Affirmative (I-type).

Third Premise is Universal Affirmative (A-type).

Some hammers are beads.

All beads are rings.

I + A \Rightarrow I-type Conclusion

Conclusion : Some hammers are rings.

Conclusion I is converse of this Conclusion.

Conclusion II is Converse of the first Premise.

68. (3) First Premise is Universal Affirmative (A-type).
 Second Premise is Universal Negative (E-type).
 Third Premise is Particular Affirmative (I-type).
 All jackets are trousers.

No trouser is shirt.
 $A + E \Rightarrow$ E-type
 Conclusion : No jacket is shirt.
 No trouser is shirt.

Some shirts are caps.
 $E + I \Rightarrow$ O₁- type Conclusion.
 Conclusion : Some caps are not trousers.
 Conclusion III is converse of the first Premise.

69-70. (i) A \$ B means $A \leq B$
 Therefore, $A \geq B$
 (ii) A # B means $A \neq B$
 Therefore, $A \leq B$
 (iii) A @ B means $A \neq B$ and $A \neq B$
 Therefore, $A > B$
 (iv) A © B means $A \neq B$ and $A \neq B$
 Therefore, $A = B$
 (v) A % B means $A \neq B$ and $A \neq B$
 Therefore, $A < B$

69.(3) $H \% J \Rightarrow H < J$
 $J © N \Rightarrow J = N$
 $N @ R \Rightarrow N > R$
 Therefore, $H < J = N > R$
 Conclusions :
 I. $R \% J \Rightarrow R < J$: True
 II. $H @ J \Rightarrow H > J$: Not true
 III. $N @ J \Rightarrow N > J$: Not true

70.(5) $M @ G \Rightarrow M > J$
 $J \$ T \Rightarrow J \geq T$
 $T © N \Rightarrow T = N$
 Therefore, $M > J \geq T = N$
 Conclusions :
 I. $N \# J \Rightarrow N \leq J$: True
 II. $T \% M \Rightarrow T < M$: True
 III. $M @ N \Rightarrow M > N$: True

71-75.

Mothers	Children	Place	Ice-Cream
A	P/Q	Shopping Mall	Kasta
D	Q/P	Shopping Mall	Chocobar
E	T	Garden	Black Current
B	S	Clinic	Vanilla
F	R	Parlour	Chocobar
C	U	Shop	Vanilla

71.(2)
 73.(3)

72.(1)
 74.(5)

75.(5)

76.(1) The company has been making huge losses for the past five years and is unable to pay salary to its employees in time.

77.(1) Consider the following line of the passage :
 "Mounting subventions for subsidies means diversion of savings by the government from investment to consumption, raising the coast of Capital in the process."

78.(4) Consider the following lines of the passage :
 "The government must cut expenditure on subsidies to create more fiscal space for investments in both physical and social infrastructure."

79.(3) Process of poverty measurement needs to take into account various factors to tackle its dynamic nature.

80.(1) It may not be possible to have an accurate poverty measurement in India.

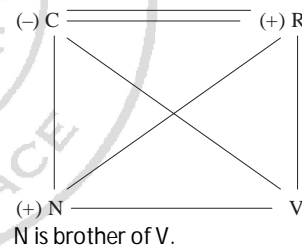
81-82. In the above arrangement, numbers are finally arranged in descending order and words are arranged according to increasing number of letters in them. (In case of the number of letters is the same, the alphabetical order is followed.) In step I, the smallest number comes at the first place and the smallest word comes at the last place and the process is repeated thereafter.

Input: 37 way all 76 this new 15 alone 66 55 is 90
 Step – I: 15 37 way all 76 this new alone 66 55 90 is
 Step – II: 37 15 way 76 this new alone 66 55 90 is all
 Step – III: 55 37 15 way 76 this alone 66 90 is all new
 Step – IV: 66 55 37 15 76 this alone 90 is all new way
 Step – V: 76 66 55 37 15 alone 90 is all new way this
 Step – VI: 90 76 66 55 37 15 is all new way this alone

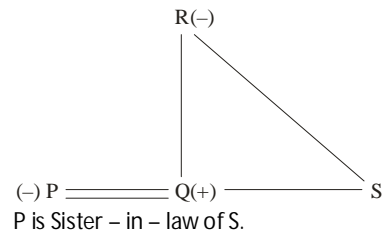
81.(3)
 84.(2)

82.(2)

83.(4)



85.(2)



86-90.

Person	Profession	Colour	Hobby	Beverages
P	Doctor	Red	Painting	Cola
Q	Engineer	Blue	Reading	Cola
R	Artist	Green	Gardening	Cola
S	Musician	White	Net Surfing	Cola
T	Architect	Yellow	Dancing	Lemonade

86.(2)
 88.(3)

87.(1)
 89.(1)

90.(5)

Grand Test – SPP-180421



\$ ⇒ ≥	@ ⇒ >	# ⇒ <
δ ⇒ =	* ⇒ ≤	

91-95.
 91.(2) $H@T ⇒ H>T$
 $T#F ⇒ T<F$
 $FδE ⇒ F=E$
 $E * V ⇒ E ≤ V$
 Therefore, $H>T < F = E ≤ V$
 Conclusions
 I. $V $ F ⇒ V ≥ F$: True
 II. $E @ T ⇒ E > T$: True
 III. $H @ V ⇒ H > V$: Not True
 IV. $T # V ⇒ T < V$: True

92.(5) $D#R ⇒ D < R$
 $R * K ⇒ R < K$
 $K @ F ⇒ K > F$
 $F $ J ⇒ F ≥ J$
 Therefore, $D < R ≤ K > F ≥ J$
 Conclusions
 I. $J # R ⇒ J < R$: Not True
 II. $J # K ⇒ J < K$: True
 III. $R # F ⇒ R < F$: Not True
 IV. $K @ D ⇒ K > D$: True

93.(5) $NδB ⇒ N = B$
 $B $ W ⇒ B ≥ W$
 $W # H ⇒ W < H$
 $H * M ⇒ H ≤ M$
 Therefore, $N = B ≥ W < H ≤ M$
 Conclusions
 I. $M Q W ⇒ M > W$: True
 II. $H @ N ⇒ H > N$: Not True
 III. $W δ N ⇒ W = N$: Not True
 IV. $W # N ⇒ W < N$: Not True
 W is either smaller than or equal to N. Therefore either III or IV is true.

94. (1) $R * D ⇒ R ≤ D$
 $D $ J ⇒ D ≥ J$
 $J # M ⇒ J < M$
 $M @ K ⇒ M > K$
 Therefore, $R ≤ D ≥ J < M > K$
 Conclusions
 I. $K # J ⇒ K < J$: Not True
 II. $D @ M ⇒ D > M$: Not True
 III. $R # M ⇒ R < M$: Not True
 IV. $D @ K ⇒ D > K$: Not True

95.(5) $M $ K ⇒ M > K$
 $K @ N ⇒ K > N$
 $N * R ⇒ N ≤ R$
 $R # W ⇒ R < W$
 Therefore, $M ≥ K > N ≤ R < W$
 Conclusions
 I. $W @ K ⇒ W > K$: Not True
 II. $M $ R ⇒ M ≥ R$: Not True
 III. $K @ W ⇒ K > W$: Not True
 IV. $M @ N ⇒ M > N$

96-100. Enhance → co
 Knowledge → Po
 The → Yo
 newspaper → no
 good → ro
 new → jo
 version → so
 book → do
 brand → qo
 is/necessary → bo/to
 96.(1) 97.(2)
 98.(3) 99.(4)

100.(1)

