

SBI PO Preliminary Grand Test –SPP-170335

HINTS & SOLUTIONS

1. (3) Passing (Adjective) = momentary: brief: lasting for a short time.
Permanent (Adjective) = lasting for a long time.
Look at the sentences:
He makes only a passing reference to the theory in his I book.
The accident has not done any permanent damage.
2. (1)
3. (2) Spurt (Noun) = a sudden increase in speed, effort activity or emotion for a short period of time.
Drop (Noun) = decrease: reduction.
Look at the sentence :
Babies get very hungry during growth spurts.
During recession many companies faced sharp drop in profits
4. (5) Fuel (Verb) = to increase something: to encourage; to make something stronger; stimulate.
Look at the sentence :
Higher salaries helped to fuel inflation.
5. (5)
6. (5)
7. (4)
8. (4)
9. (2)
10. (4) Concede (Verb) = to admit that something is true.
Look at the sentence :
He was forced to concede that there might be difficulties.
11. (3)
12. (2)
13. (4) Range = a variety of thing of a particular type.
Alternative = a thing that you can choose to do: that can be used instead of something.
14. (1) Flack = severe criticism
Bit = part of something
15. (3) Appalled = feeling disgust at something unpleasant
16. (2) Here, due to lack of interest in better part of people should be used. The sentence shows cause.
17. (2) Here, a booming (Adjective) business fuelled should be used. An Adjective qualifies a Noun.
18. (1) 'So..... that' is correct form of correlative. Hence, so much is the inflow of travellers that should be used.
19. (3) Here, is leading/leads to a proportionate should be used. The structure of a sentence in Present Progressive : Subject + is I am I are + Verb + ing (V₄)
20. (3) 'Either.....or' is correct form of correlative. Hence, either dried up or are suffering should be used.
21. (5)
22. (4)
23. (1)
24. (4)
25. (2)
26. (5) Of late = recently
27. (2) Mainly = importantly
28. (3) On the top = in a leading position
29. (1) Appraisals = a meeting which employees discuss performance: judgement or performance.
30. (3) Dedicate = devote; to give lot of your time and effort to particular activity
31. (1) I. $2x^2 + 11x + 15 = 0$
 $\Rightarrow 2x^2 + 6x + 5x + 15 = 0$
 $\Rightarrow 2x(x+3) + 5(x+3) = 0$
 $\Rightarrow (x+3)(2x+5) = 0$
 $\Rightarrow x = -3$ or $-\frac{5}{2}$
- II. $5y^2 + 22y + 24 = 0$
 $\Rightarrow 5y^2 + 10y + 12y + 24 = 0$
 $\Rightarrow 5y(y+2) + 12(y+2) = 0$
 $\Rightarrow (y+2)(5y+12) = 0$
 $\Rightarrow y = -2$ or $-\frac{12}{5}$
- Clearly, $x < y$
32. (2) I. $25x^2 + 25x + 4 = 0$
 $\Rightarrow 25x^2 + 20x + 5x + 4 = 0$
 $\Rightarrow 5x(5x+4) + 1(5x+4) = 0$
 $\Rightarrow (5x+4)(5x+1) = 0$
 $\Rightarrow x = -\frac{4}{5}$ or $-\frac{1}{5}$
- II. $5y^2 + 11y + 6 = 0$
 $\Rightarrow 5y^2 + 5y + 6y + 6 = 0$
 $\Rightarrow 5y(y+1) + 6(y+1) = 0$
 $\Rightarrow (y+1)(5y+6) = 0$
 $\Rightarrow y = -1$ or $-\frac{6}{5}$
- Clearly, $x > y$
33. (5) I. $2x^2 + x - 1 = 0$
 $\Rightarrow 2x^2 + 2x - x - 1 = 0$
 $\Rightarrow 2x(x+1) - 1(x+1) = 0$
 $\Rightarrow (2x-1)(x+1) = 0$
 $\Rightarrow x = \frac{1}{2}$ or -1
- II. $2y^2 + y - 6 = 0$
 $\Rightarrow 2y^2 + 4y - 3y - 6 = 0$
 $\Rightarrow 2y(y+2) - 3(y+2) = 0$
 $\Rightarrow (2y-3)(y+2) = 0$
 $Y = \frac{3}{2}$ or -2
34. (3) I. $x^2 - 10x + 21 = 0$
 $\Rightarrow 7x - 3x + 21 = 0$
 $\Rightarrow x(x-7) - 3(x-7) = 0$

$$\Rightarrow (x - 3)(x - 7) = 0$$

$$\Rightarrow x = 3 \text{ or } 7$$

II. $y^2 - 16y + 63 = 0$

$$\Rightarrow y^2 - 9y - 7y + 63 = 0$$

$$\Rightarrow y(y - 9) - 7(y - 9) = 0$$

$$\Rightarrow (y - 7)(y - 9) = 0$$

$$\Rightarrow y = 7 \text{ or } 9$$

Clearly, $x \leq y$

35. (5) I. $6x^2 + 17x + 12 = 0$

$$\Rightarrow 6x^2 + 9x + 8x + 12 = 0$$

$$\Rightarrow 3x(2x + 3) + 4(2x + 3) = 0$$

$$\Rightarrow (2x + 3)(3x + 4) = 0$$

$$\Rightarrow x = -\frac{3}{2} \text{ or } -\frac{4}{3}$$

II. $6y^2 + 21y + 9 = 0$

$$\Rightarrow 2y^2 + 7y + 3 = 0$$

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

$$\Rightarrow 2y(y + 3) + 1(y + 3) = 0$$

$$\Rightarrow (2y + 1)(y + 3) = 0$$

$$\Rightarrow y = -\frac{1}{2} \text{ or } -3$$

36. (4)

37. (2)

38. (1) series is based upon +4, +6, +8, +10, +12,.....
Wrong number = 8 (2+4 = 6)

39. (5) series is based upon, $\times 1/2, \times 3/2, \times 5/2, \times 7/2, \dots$
Wrong number = 65 i.e. ($24 \times 5/2 = 60$)

40. (4) series is based upon $\times 2 - 1, \times 2 - 1, \times 2 - 1, \dots$ And so on
Hence wrong number = 194 ($2 \times 97 - 1 = 193$)

41. (1) From statement I Speed of train

$$= \frac{\text{Length of train}}{\text{Time Taken}}$$

$$= \frac{320}{30} = \frac{32}{3} \text{ m/sec.}$$

Statement II is insufficient.

42. (3) From statement I,

$$\frac{PR}{100} = 8300 \quad \dots\dots(i)$$

$$\text{Difference} = \frac{PR^2}{10000}$$

$$\Rightarrow 1660 = \frac{8300 \times R}{100}$$

$$\Rightarrow R = \frac{1660}{83}$$

= 20% per annum

From statement II,

Principal = Rs. P

S.I. = Rs. P

Time = 5 years

$$\therefore R = \frac{I \times 100}{P \times T}$$

$$= \frac{100}{5} = 20\% \text{ per annum}$$

43. (4) From both statements, Area of triangle

$$= \frac{1}{2} \times 60 \times 70 = 210 \text{ sq. cm.}$$

Breadth of rectangle is unknown.

44. (5) From statements I and II, Rate downstream

$$= \frac{48}{4} = 12 \text{ kmph.}$$

$$\text{Rate upstream} = \frac{48}{8} = 6 \text{ kmph.}$$

$$\therefore \text{Rate in still water} = \frac{1}{2}(12 + 6) = 9 \text{ kmph.}$$

45. (5) From both statements,
Average speed of truck

$$= \left(\frac{1}{3} \times 135 \right) \text{ kmph.} = 45 \text{ kmph.}$$

$$\therefore \text{Average speed of car} = (8 \times 45) \text{ kmph.}$$

$$= 360 \text{ kmph.}$$

46. (1) Total no. of people (Literate) in Maharashtra and Karnataka

$$= \left[\frac{5}{6} \times 11\% + \frac{3}{5} \times 15\% \right] \text{ of } 25 \text{ lakh}$$

$$= \left[\frac{5}{6} \times \frac{11}{100} + \frac{3}{5} \times \frac{15}{100} \right] \text{ of } 25 \text{ lakh}$$

$$= \left[\frac{55}{6} + 9 \right] \times \frac{25}{100} \text{ lakh}$$

$$= \frac{109}{6} \times \frac{25}{100} \approx 4.5 \text{ lakh}$$

47. (5) Required ratio

$$= \frac{2}{5} \times 12\% \text{ of } 25 : \frac{4}{7} \times 8\% \text{ of } 25 = 21 : 20$$

48. (2) Required percentage

$$= \frac{3}{5} \times 9\% \text{ of } 25$$

$$= \frac{5}{2} \times 12\% \text{ of } 25 \times 100 = 112.5\% \approx 110\%$$

49. (4)

50. (4) Total no. of illiterates in Tamil Nadu

$$= (100 - 70 = 30\%) \text{ of females}$$

$$+ (100 - 75 = 25\%) \text{ of males in state}$$

$$= \left(\frac{30}{100} \times \frac{2}{5} + \frac{25}{100} \times \frac{3}{5} \right) \times \frac{12}{100} \times 25 \text{ lakh}$$

$$= \left(\frac{6 \times 2}{100} + \frac{5 \times 3}{100} \right) \times \frac{12}{100} \times 2500000$$

$$= \left(\frac{12}{100} + \frac{15}{100} \right) \times 12 \times 25000$$

$$= \frac{27}{100} \times 12 \times 25000 = 27 \times 12 \times 250 = 81000$$

51. (2) $(9 \times 1049)/23 = 410$ (approx).

52. (2) Total students = $(1049 \times 100)/23 = 4560$ (approx).

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53. (4) 11 % ; From the second pie chart it is clearly seen that the number of students in the arts faculty who are not from US, since there are a total of 1049 students in arts faculty, the % of non US student in arts faculty is the percentage value of $112/1049 = 10.7\% = 11\%$ approx
54. (4) Total medical students = 5% of 4560 = 228 ∴ percentage of given faculty = $34/228 \times 100 = 14.91 \approx 15\%$
55. (4) Total science students = $4560 \times 21\% \approx 958$ ∴ Asian students, who are studying science = $958 \times 6\% \approx 57$

56. (1) Area of the rectangular floor = $\frac{6448}{62} = 104\text{sq. feet}$

Square of square room = $\sqrt{361} = 19\text{feet}$
 ∴ Length of rectangular room = $19 - 6 = 13\text{feet}$

∴ Breadth = $\frac{104}{13} = 8\text{feet}$

57. (5) Raj works twice as fast Salim
 ∴ Time taken by raj to complete the work = 4 days
 When all three work together, their 1 day's work

$$= \frac{1}{8} + \frac{1}{12} + \frac{1}{4} = \frac{3+2+6}{24} = \frac{11}{24}$$

∴ Time taken = $\frac{24}{11} = 2\frac{2}{11}$ days

58. (2) Required average height

$$= \frac{13 \times 144 \frac{8}{13} + 11 \times 169 \frac{5}{11}}{13+11}$$

$$= \frac{13 \times \frac{1880}{13} + 11 \times \frac{1864}{11}}{24}$$

$$= \frac{1880+1864}{24} = \frac{3744}{24} = 156 \text{ cm.}$$

59. (3) Let the first number be x and the second number be y.

$$\therefore y^2 = 8^2 - 15 = 64 - 15 = 49$$

$$\therefore y = 7$$

$$\therefore x^2 + 7^3 = 568$$

$$\Rightarrow x^2 + 343 = 568$$

$$\Rightarrow x^2 = 568 - 343 = 225$$

$$\therefore x = \sqrt{225} = 15$$

$$\therefore 15 \times \frac{3}{5} = 9$$

60. (5) First S.P. $\frac{9600 \times 95}{100} = \text{Rs. } 9120.$

Second S.P. = $\frac{9120 \times 105}{100} = \text{Rs. } 9576$

Loss = $9600 - 9576 = \text{Rs. } 24$

61. (1) $? = 6575 \div 18 \times 42 \div 7$

$$= \frac{6576}{18} \times \frac{42}{7}$$

$$= 365 \times 6 = 2190$$

62. (2) $? = 12 \times 15 - 9 \times 7$

$$= 180 - 63 = 117$$

63. (3) $? = 13 \times 22 \times 18 = 5148$

64. (4) $? = 17 + 27 + 37 - 13 - 9$
 $= 81 - 22 = 59$

65. (1) $? = \frac{18 \times 600}{100} + \frac{28 \times 450}{100}$
 $= 108 + 126 = 234$

66. (4) $P \leq A < R = K$

$$A > S$$

$$U \leq K$$

$$S < A < R = K \geq U$$

$$P \leq A > S$$

Conclusions

I. $A > U$: Not True

II. $P < S$: Not True

67. (2) $B = C < D \leq N > O \geq P$

$$Q \leq D$$

$$Y > B$$

$$Q \leq D \leq N$$

$$Y > B = C < D$$

Conclusions

I. $Y > D$: Not True

II. $N \geq O$: True

68. (3) $B > L \geq A = M < E$

$$L \leq O = S$$

$$S = O \geq L \geq A = M$$

Conclusions

I. $S > M$: Not True

II. $M = S$: Not True

S is either greater than or equal to M. Therefore, either

Conclusion I or Conclusion II is true.

69. (5) $G \geq R = E \leq A \leq T$

$$E \leq G$$
 : True

$$T \geq R$$
 : True

70. (1) $P < N > H \geq B = R \leq K$

$$N > R$$
 : True

$$P < H$$
 : Not True

$$R > P$$
 : Not True

$$B = K$$
 : Not True

$$H > K$$
 : Not True

71. (2) (i) All credits are interests → Universal Affirmative (A-type).

(ii) Some loans are payments → Particular Affirmative (I-type).

(iii) No payment is an interest → Universal Negative (E-type).

(iv) Some payments are not interests → Particular Negative (O-type)

Some loans are payments.

No payment is an interest.

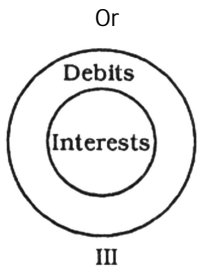
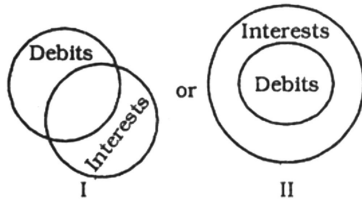
$I + E \Rightarrow$ O-type of Conclusion "Some loans are not interests."

All credits are interests.

No interest is a payment.

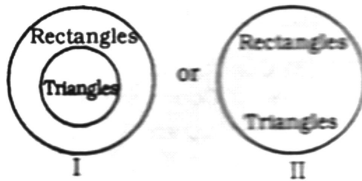
$A + E \Rightarrow$ E-type of Conclusion "No credit is a payment."
Some debits are credits.

All credits are interests.
 $I + A \Rightarrow$ I - type of Conclusion
"Some debits are interests."
" Venn diagrams of "Some debits are interests" :

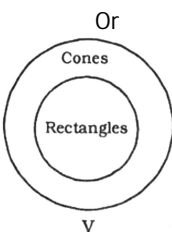
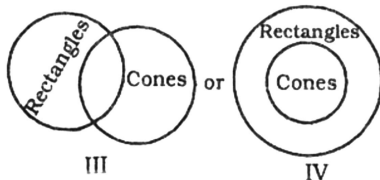


Venn diagram III supports the option (2)
(72 – 73):
Some rectangles are cones

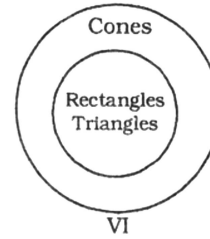
All cones are squares.
 $I + A \Rightarrow$ I - type of Conclusion.
"Some rectangles are squares: (P)
Venn diagrams of All triangles are rectangles" :



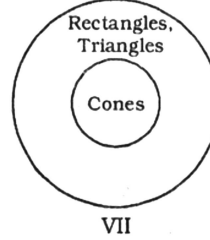
Venn diagrams of "Some rectangles are cones":



After combining venn diagrams II and V, we get



After combining venn diagrams II and IV, we get



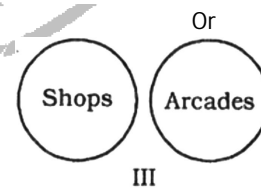
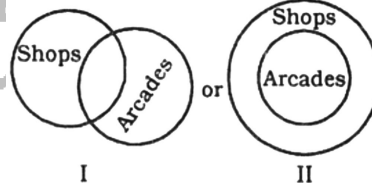
72. (3) Conclusion I is the Converse of Conclusion (P).

Venn diagram VI supports Conclusion II

73. (4) Venn diagram VII supports Conclusion I.
Conclusion II does not follow.

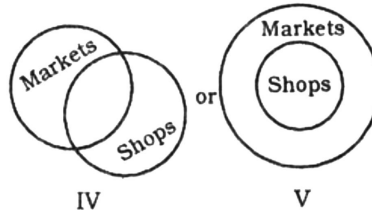
(74 – 75):
Some shops are bazaars

No bazaar is an arcade
 $I + E \Rightarrow$ O - type of Conclusion
"Some shops are not arcades. " (P)
74. (2) Venn diagrams of " Some shops are not arcades":



It is clear from the above venn diagram that Conclusion I does not follow.

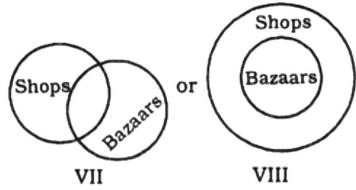
Venn diagrams of " Some markets are shops" :



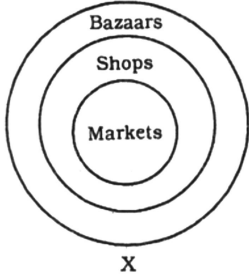
Or



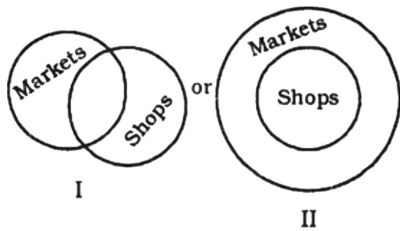
Venn diagrams of "Some shops are bazaars" :



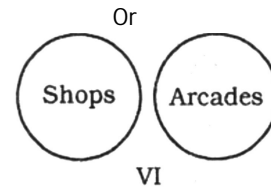
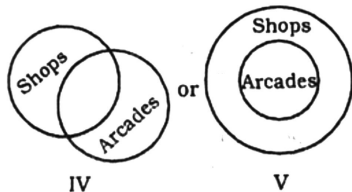
After combining venn diagrams VI and IX, we get:



75. (5) Venn diagram X contradicts the Conclusion II. Venn diagrams of "Some markets are shops":



Venn diagrams of "Some shops are not arcades":



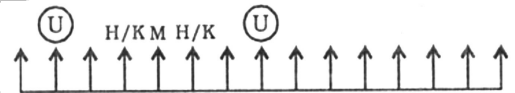
After combining venn diagrams II and V, we get :



Venn diagram VII supports the Conclusion II.

76. (2)

From statement I



From statement II



Thus, three persons are standing between H and U.

77. (2)

From statement I

K is the daughter of N and T.
B is the sister of N.
K is the granddaughter of S.

S is either father or mother of N or T.

Therefore, B is either daughter of S or sister of son-in-law or daughter-in-law of S.

From statement II

N is the wife of T.
B and N are daughters of S.

78. (2)

From statement I

$\square, \square, \square > C > \square, \square$
 $B > A > F$

D is not the heaviest.

From statement II

$\square, \square > F > \square, \square, \square$
 $F > C > D$

$B > A > \square, \square, \square, \square$
 $B > A > F > C > D$

E is the second heaviest.

79. (1)

From statement I

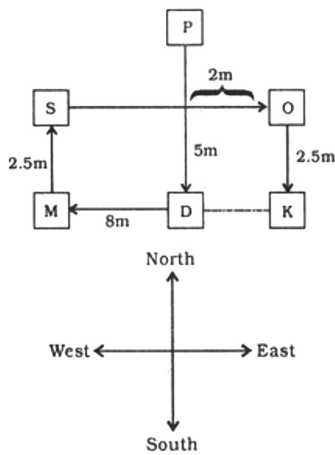
P U W I T

Thus, these are six persons in the line.

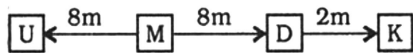
From statement II

80. (3)

S | U----- W T |

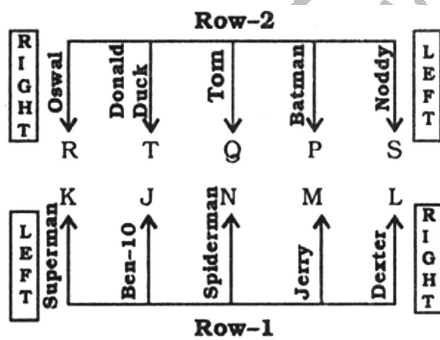


Point M is 10 metre away from point K.
From statement II



Point M is 10 metre away from point K

(81 – 85):



- 81. (5) R and L are sitting at the extreme ends of the two lines.
- 82. (4) T likes Donald Duck.
- 83. (1) N likes Spiderman. J and M are immediate neighbours of N. M likes Jerry.
- 84. (2) Q likes Tom.
- 85. (3) L faces S. Q likes Tom.
Q is an immediate neighbour of both P and T.
K likes Superman. K is an immediate neighbour of both J and R.
L likes Dexter. L faces S.

(86 – 90):

Person	Company	Fruit
P	ITC	Guava
Q	Wipro	Banana
R	Wipro	Orange
S	ITC	Kiwi
T	Samsung	Mango
U	Samsung	Strawberry
V	Samsung	Apple

- 86. (4) Q and R work in Wipro company.
- 87. (3) P likes Guava.
- 88. (1) V works in the Samsung company and likes Apple.

- 89. (5) T - Mango is correct.
- 90. (2) R works in Wipro with Q.
U works with T who likes Mango.
S works in ITC.
Q likes Banana.

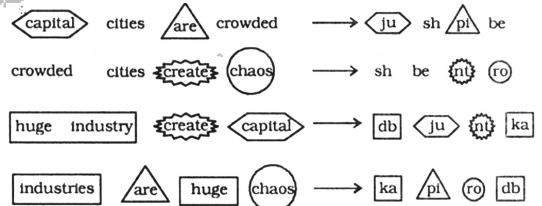
(91 – 95):

After careful analysis of the given input and various steps of rearrangement it is evident that in each step two elements (one word and one number) are rearranged. In the first step the word which contains maximum number of letters is placed at the extreme left position while the lowest number is placed at the extreme right position after reversing its digits. In the second step the word which contains the second highest number of letters is placed at the extreme left position and the second lowest number is placed at the extreme right position after reversing its digits. The same procedure is continued till all the words and numbers get rearranged.
Input: micro 63 make 19 morales 72 25 my map 48 margin 56

- Step I: morales micro 63 make 72 25 my map 48 margin 56 91
- Step II: margin morales micro 63 make 72 my map 48 56 91 52
- Step III: micro margin morales 63 make 72 my map 56 91 52 84
- Step IV: make micro margin morales 63 72 my map 91 52 84 65
- Step V: map make micro margin morales 72 my 91 52 84 65 36
- Step VI: my map make micro margin morales 91 52 84 65 36 27

- 91. (3) The elements 'morales 63 72 my map 91' are found in the same order in the Fourth step.
- 92. (1) The element '72' is at the seventh position from the right end in the Fifth Step.
- 93. (2) 10th from the right end of the Third Step ⇒ morales 5th to the right of 'morales' ⇒ map
- 94. (4) Option (4) is the Third Step.
- 95. (5) The elements '63 make' are exactly between 'micro' and '72' in the Second Step.

(96 – 100):



- 96. (3) crowded cities ⇒ sh be
huge industry ⇒ db ka
'ck' may be the code for 'have'.
- 97. (1) chaos ⇒ ro
- 98. (5) huge ⇒ 'ka' or 'db'
cities ⇒ 'sh' or 'be'
create ⇒ nt
chaos ⇒ ro
- 99. (2) capitals ⇒ .Ju
are ⇒ pi
chaos ⇒ ro
- 100. (4) huge industry ⇒ ka db