SBI PO Preliminary Grand Test –SPP-180539

HINTS & SOLUTIONS

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

6. (2)   B
7. (1)   E
8. (4)   D
9. (3)   C
10. (1)
11. (2)
12. (3)
13. (4)
14. (2)
15. (5)
16. (2)   Here, subject (**profitability** of fleet operators) is singular. Hence, has improved due to a decline .... should be used.
17. (4)   Here, subject (true history) is singular. Hence, true history interests us a lot .... should be used.
18. (3)   Here, cooperation, restricting (Gerund) itself to .... should be used. It is not proper to use 'for' here.
19. (2)   Here, it is **Preposition/Adverb** related error. Hence, absolutely (Adverb) no shortage of ..... should be used.
20. (4)   **Raise** = to increase the level or amount of something.
Rise = to reach a higher level ; move upwards
Hence, rising vegetable prices kept (V_2) ……. should be used here. Past time is evident.
21. (1)
22. (1)   **Adjust (Verb)** = to change something slightly to make it more suitable;
to make it more better; adapt.
Look at the sentence :
This button is for adjusting the volume.
23. (2)
24. (5)   **Edge (Verb)** = to move or to move something slowly and carefully
in a particular direction; to increase or decrease slightly.
25. (3)
26. (5)
27. (1)
28. (4)   **Outright (Adjective)** = complete and total; absolute; open and direct.
Partial (Adjective) = not complete or whole.
Look at the sentences :
No one party is expected to gain an outright majority.
It was only a partial solution to the problem.
29. (1)
30. (2)   **Rosy (Adjective)** = bright; likely to be good or successful; hopeful;
encouraging. Unpromising (Adjective) = not likely to be successful or
show good results.
Look at the sentence :
The future is looking very rosy for our company.
31. (1)   I. $2x^2 + 23x + 63 = 0$
$\Rightarrow 2x^2 + 14x + 9x + 63 = 0$
$\Rightarrow 2x(x + 7) + 9(x + 7) = 0$
$\Rightarrow (2x + 9)(x + 7) = 0$

1. (3)   'intentions, seize' is the correct use.
Intention means a thing intended; an aim or plan.
Seize means take hold of suddenly and forcibly.
2. (3)   Significant - sufficiently great or important to be worthy of attention;noteworthy,
Relationship - the way in which two or more people or things are connected, or the state of being connected.
3. (1)   Portend - a sign or warning that a momentous or calamitous event is likely to happen, interpret - explain the meaning of (information or actions).
4. (1)   'viewed, agenda' is the correct use.
Agenda means a list of items to be discussed at a formal meeting.
5. (5)   'paradigm, benefit' is the correct use.
Paradigm means a typical example or pattern of something.
Benefit means an advantage or profit gained from something.

$\Rightarrow x = \dfrac{-9}{2}$ or, -7

II. $4y^2 + 19y + 21 = 0$

$\Rightarrow 4y^2 + 12y + 7y + 21 = 0$

$\Rightarrow 4y(y+3) + 7(y+3) = 0$

$\Rightarrow (4y+7)(y+3) = 0$

$\Rightarrow y = \dfrac{-7}{4}$ or, -3

Clearly, x < y

32. (5) I. $3x^2 + 29x + 56 = 0$

$\Rightarrow 3x^2 + 21x + 8x + 56 = 0$

$\Rightarrow 3x(x+7) + 8(x+7) = 0$

$\Rightarrow (3x+8)(x+7) = 0$

$\Rightarrow x = \dfrac{-8}{3}$ or, -7

II. $2y^2 + 15y + 25 = 0$

$\Rightarrow 2y^2 + 10y + 5y + 25 = 0$

$\Rightarrow 2y(y+5) + 5(y+5) = 0$

$\Rightarrow (2y+5)(y+5) = 0$

$\Rightarrow y = \dfrac{-5}{2}$ or, -5

Therefore relationship can't be determined.

33. (3) I. $3x^2 + 23x + 44 = 0$

$\Rightarrow 3x^2 + 12x + 11x + 44 = 0$

$\Rightarrow 3x(x+4) + 11(x+4) = 0$

$\Rightarrow (3x+11)(x+4) = 0$

$\Rightarrow x = \dfrac{-11}{3}$ or, -4

II. $3y^2 + 20y + 33 = 0$

$\Rightarrow 3y^2 + 9y + 11y + 33 = 0$

$\Rightarrow 3y(y+3) + 11(y+3) = 0$

$\Rightarrow (3y+11)(y+3) = 0$

$\Rightarrow y = \dfrac{-11}{3}$ or, -3

Clearly, x ≤ y

34. (5) I. $4x^2 - 29x + 45 = 0$

$\Rightarrow 4x^2 - 20x - 9x + 45 = 0$

$\Rightarrow 4x(x-5) - 9(x-5) = 0$

$\Rightarrow (4x-9)(x-5) = 0$

$\Rightarrow x = \dfrac{9}{4}$ or, 5

II. $3y^2 - 19y + 28 = 0$

$\Rightarrow 3y^2 - 12y - 7y + 28 = 0$

$\Rightarrow 3y(y-4) - 7(y-4) = 0$

$\Rightarrow (3y-7)(y-4) = 0$

$\Rightarrow y = \dfrac{7}{3}$ or, 4

35. (4) I. $2x^2 - 13x + 21 = 0$

$\Rightarrow 2x^2 - 6x - 7x + 21 = 0$

$\Rightarrow 2x(x-3) - 7(x-3) = 0$

$\Rightarrow (2x-7)(x-3) = 0$

$\Rightarrow x = \dfrac{7}{2}$ or, 3

II. $5y^2 - 22y + 21 = 0$

$\Rightarrow 5y^2 - 15y - 7y + 21 = 0$

$\Rightarrow 5y(y-3) - 7(y-3) = 0$

$\Rightarrow (5y-7)(y-3) = 0$

$\Rightarrow y = \dfrac{7}{5}$ or, 3

Clearly, x ≥ y

36. (2) in 2001 capacity decrease by , $\dfrac{8-7}{8} * 10 = 12.5\%$

37. (2) 7.6%

38. (3) Percentage of Ganga soaps = 421/1928 x100 = 21.84 ≈ 22%

39. (2) 2 : 5

40. (4) 3.75%

41. (3) $D = P\left(\dfrac{r}{100}\right)^2$

Principal = Difference $\left(\dfrac{100}{r}\right)^2$

$= \dfrac{400 \times 100 \times 100}{10 \times 10} = 40000$

Now, interest is compounded half yearly

T = 4, r = $\dfrac{10}{2} = 5\%$, P = 40000

$A = 40000\left(1 + \dfrac{5}{100}\right)^4 = 48620.25$

C.I. = A − P = 8620.25

S.I. $= \dfrac{40000 \times 10 \times 2}{100} = 8000$

Difference = 620.25.

42. (3) $P(E) = \dfrac{{}^3C_3 + {}^4C_3 + {}^5C_3}{{}^{12}C_3}$

$= \dfrac{1 + 4 + 10}{\dfrac{12 \times 11 \times 10}{3 \times 2}} = \dfrac{15}{220} = \dfrac{3}{44}$

43. (4) Let the distance is D

$\dfrac{D}{8-6} - \dfrac{D}{8+6} = 30 \Rightarrow \dfrac{D}{2} - \dfrac{D}{14} = 30$

$\Rightarrow \dfrac{7D - D}{14} = 30 \Rightarrow D = 70$

44. (3) Quantity of water in original mixture $= 120 \times \dfrac{25}{100} = 30\,L$

And quantity of milk in original mixture = 120 − 30 = 90 L
Now, Milkman sold 20L of mixture.
So, Remaining mixture = 120 − 20 = 100 L
Therefore quantity of water in 100L mixture

$= 100 \times \dfrac{25}{100} = 25L$

And quantity of milk in 100 L mixture = 100 − 25 = 75 L
Now, milkman made new mixture.
Therefore Quantity of milk in new mixture

= 75 + 16.2 = 91.2 L

And quantity of water in new mixture = 28.8L

Required % $= \frac{28.8}{91.2 + 28.8} \times 100\% = \frac{2880}{120}\% = 24\%$

45. (5) Required No. of ways $= \frac{6!}{2!2!} \times \frac{5!}{3!} = 3600$

46. (1) Number of students not qualified from institute B in the year 2004

= 1654 - 1566 = 88

Number of students not qualified from institute B in the year 2006 = 1440 - 1165 = 275

∴ Required difference = 275 - 88 = 187

47. (3) Average number of candidates appeared from institute E over the years

$= \frac{1530+1886+1806+1478+1654}{5}$

$= \frac{8354}{5} = 1671$

48. (2) Percentage of candidates qualified from institute D.

Year 2003 → $\frac{1567}{1765} \times 100 = 89$

Year 2004 → $\frac{1024}{1574} \times 100 = 65$

Year 2005 → $\frac{1210}{1754} \times 100 = 69$

Year 2006 → $\frac{1145}{1364} \times 100 = 84$

Year 2007 → $\frac{1214}{1510} \times 100 = 80$

Note: It will be time saving exercise if it is solved by minute observation of table.

49. (4) Number of candidates appeared in 2005 from all institutes

= 1684 + 1550 + 1754 + 1806 + 1666 = 8460

Number of candidates qualified in 2005

= 1500 + 1278 + 1210 + 1586 + 1498 = 7072

∴ Required percentage $= \frac{7072}{8460} \times 100 = 83.59$

50. (5) Number of candidates appeared in 2007 from all institutes

= 1564 + 1575 + 1510 + 1654 + 1690 = 7993

Number of candidates qualified in the same year

= 1462 + 1388 + 1214 + 1296 + 1480 = 6840

∴ Required percentage $= \frac{6840}{7993} \times 100 = 86$

51. (4)
52. (2)
53. (4)
54. (3)
55. (3)
56. (5) Consumption of different types of vegetable: A = 52, B = 60, C = 49, D = 60, E = 65

57. (2) Mohan spent minimum amount on Saturday.

58. (3)

$\frac{(10 \times 15.5)}{(7 \times 21)} \times 100 = 105 (approx)$

59. (4) Expense on B type of vegetables on Saturday = 10×15.5=155 = Expense on D type of vegetables on Thursday.

60. (3) 21 : 1

61. (1) $\frac{750 \times 52}{100} + \frac{420 \times 45}{100} - ? = 225$

⇒ 390 + 189 - ? = 225

⇒ 579 - ? = 225

? = 579 - 225 = 354

62. (2) $350 \times 20 + ?^2 \times 180 = 11500$

⇒ $7000 + ?^2 \times 180 = 11500$

⇒ $?^2 \times 180 = 11500 - 7000 = 4500$

⇒ $?^2 = \frac{4500}{180} = 25$

⇒ $? = \sqrt{25} = 5$

63. (3) $\frac{1800}{\sqrt{?}} \times \frac{30}{15} = 144$

⇒ $\frac{3600}{\sqrt{?}} = 144$

⇒ $144 \times \sqrt{?} = 3600$

⇒ $\sqrt{?} = \frac{3600}{144} = 25$

⇒ $? = 25 \times 25 = 625$

64. (1) $(52^2 - 34^2) \div 18 \times \sqrt{?} = 1720$

⇒ $\frac{(52+34)(52-34)}{18} \times \sqrt{?} = 1720$

⇒ $\frac{86 \times 18}{18} \times \sqrt{?} = 1720$

⇒ $\sqrt{?} = 1720 \div 86 = 20$

∴ $? = 20 \times 20 = 400$

65. (2) ? = (340 × 10) ÷ 6.4 + 1245 = 531 + 1245 = 1776

66. (4)
67. (2)
68. (5)
69. (4)
70. (2)
71. (2) Either only II or only I and III are sufficient.

72. (3) From I. Sahil's rank from the bottom →25th

So, Shivani's rank from the bottom = (25+10) = 35th

From II. Rahul is 40th from the top and Nisha is 14th from the bottom.

From III. Shivani is exactly in the middle of Rahul and Nisha.

From II and III. Nisha's rank from the top = 55 − 14 + 1 = 41 + 1 = 42nd

Rahul is 40th from the top

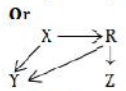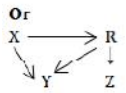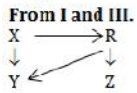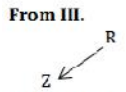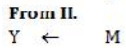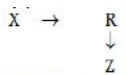∴ Shivan is 41st from top.

Shivani's rank from bottom = 55 − 41 + 1 = 14 + 1 = 15th
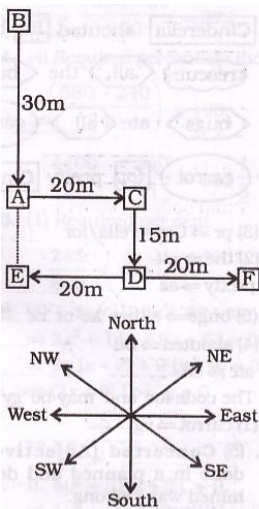
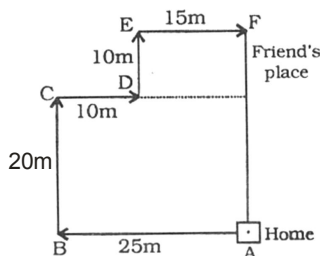So, Either only I or only II and III are sufficient.

73. (5)

From I.

From II.
Y ← M

From III.

From I and III.

Or

Or

All together are not sufficient

74. (4) Both I and II together are not sufficient
75. (2)
76. (4)
77. (2)
78. (3)
79. (2)
80. (1)

BE = (30 + 15) metres = 45 metres
Point E is to the south Point B

81. (2)

AF = (20 + 10) metres = 30 metres
Point F is to the north of Point A.

82. (4) None of the courses of action is suitable for pursuing.
83. (2) Only course of action II is suitable for pursuing.
84. (4) None of the courses of action is suitable for pursuing.
85. (5) Both courses of action are suitable for pursuing

86. (4)
87. (3)
88. (2)
89. (1)
90. (1)
91. (2)
92. (3)
93. (2)
94. (1)
95. (4)
(96 – 98)
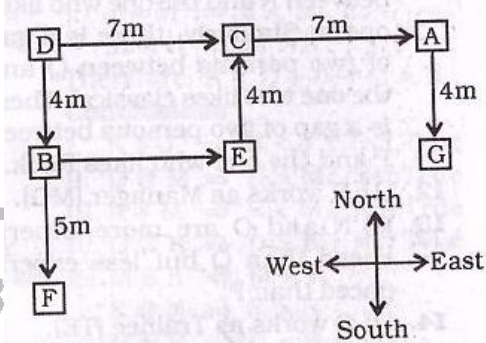
96. (4) Points B, E and G are in a straight line.
97. (1) A is towards East of C.
98. (3) If a person walks 5 metres towards North from Point F and then takes a right turn, he would reach Point E first.
99. (1) (a) Hence, D is the niece of A.
(b) Hence, D is the aunt of A.
(c) Equation (c) is wrong. Here C is shown as a female and a male both.
100. (2) (ii) only