SBI Clerk Preliminary Grand Test –SCP-180548

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (4)
2. (1)
3. (1)
4. (3)
5. (3)
6. (4)
7. (3)
8. (2)
9. (4)
10. (4)
11. (5)
12. (2)
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16. (3)
17. (2)
18. (5)
19. (4)
20. (1)
21. (2)
22. (4)
23. (1)
24. (3)
25. (5)
26. (2)
27. (1)
28. (4)
29. (5)
30. (3)

31. (4) The number series is as follows:
949 × 0.2 = 189.8
189.8 × 0.3 = **56.94**
56.94 × 0.4 = 22.776
22.776 × 0.5 = 11.388
11.388 × 0.6 = 6.8328

32. (5) The number series is as follows:
25 × 2 + 3 = 53
53 × 3 + 4 = 163
163 × 4 + 5 = 657
657 × 5 + 6 = 3291
3291 × 6 + 7 = **19753**

33. (5) The number series is as follows:
14 × 3 + 1.5 = 43.5
43.5 × 6 + 3 = 264
264 × 12 + 6 = **3174**
3174 × 24 + 12 = 76188

34. (3) The number series is as follows:
120 ÷ 8 = 15
15 × 7 = 105
105 ÷ 6 = 17.5
17.5 × 5 = 87.5
87.5 ÷ 4 = **21.875**

35. (2) The number series is as follows:
499 + 123 × 1 = 622
622 + 123 × 2 = 868
868 + 123 × 3 = 1237
1237 + 123 × 4 = 1729
1729 + 123 × 5 = 2344
2344 + 123 × 6 = **3082**

36. (5) Required no. of men

$$= 3250 \times \frac{79.2}{360} \times \frac{3}{5} = 429$$

37. (3) Required ratio

$$= 3250 \times \frac{36}{360} \times \frac{13}{25} : 3250 \times \frac{57.6}{360} \times \frac{7}{10}$$

$$= 169 : 364 = 13 : 28$$

38. (5) No. of men in production department

$$= 3250 \times \frac{136.8}{360} \times \frac{4}{5} = 988$$

Total no. of employees in production department

$$= 3250 \times \frac{136.8}{360} = 1235$$

$$\therefore \text{ Required\%} = \left(\frac{988}{1235} \times 100\right)\% = 80\%$$

39. (2) No. of women in the IT department

$$= 3250 \times \frac{57.6}{360} \times \frac{3}{10} = 156$$

$$\therefore \text{ Required\%} = \left(\frac{156}{3250} \times 100\right)\% = 4.8\%$$

40. (5) Required no. of men

$$= \frac{3250}{360} \times \left(\begin{array}{r} 136.8 \times \frac{4}{5} + 36 \times \frac{12}{25} + 57.6 \times \frac{7}{10} \\ + 79.2 \times \frac{3}{5} + 50.4 \times \frac{6}{13} \end{array}\right)$$

$$= \frac{325}{36} \times \left(109.44 + 17.28 + 40.32 + 47.52 + \frac{302.4}{13}\right)$$

= 1937 + 210 = 2147.

41. (3) Original price of cinema tickets $= \frac{1400}{70} \times 100 = ₹2,000$

$\therefore$ Reduced price = 2000 – 1400 = ₹600

$\therefore$ Original price of one ticket $= \frac{600}{15} = ₹40.$

42. (1) $20\% = \frac{1}{5}; 25\% = \frac{1}{4}; 30\% = \frac{3}{10}$

5 4

4 3

10 7

50 21

Discount = 50 – 21 = 29

$\therefore$ Discount% $= \left(\frac{29}{50} \times 100\right)\% = 58\%$

43. (5)

44. (3) $W_1 : W_2 = 5 : 7$

$W_1 : W_3 = 4 : 9$

$W_1 : W_2 : W_3 = 20 : 28 : 45$

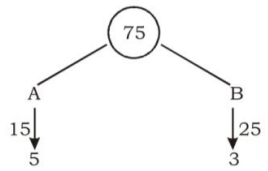
$W_2 : W_3 : = 28 : 45$

45. (2) A can complete $\frac{1}{3}$ of a work in 5 days

A can complete the work in 15 days

= B can complete $\frac{2}{5}$ of the work in 10 days

$\therefore$ B can complete the work in 25 days.



$\therefore$ Both complete the work in $\frac{75}{8}$ days

$= 9\frac{3}{8}$ days

46. (3) Total CP of product A = 900 + 300 = ₹1200.

$\therefore$ SP = $1200 \times \frac{105}{100} = ₹1,260$

47. (2) SP of product C = 2000 + 500 + 250 = ₹2,750

CP of product B = 800 + 300 = ₹1,100

$\therefore$ Required % $= \left(\frac{2750}{1100} \times 100\right)\% = 250\%$

48. (2) Loss on product D $= ₹\left(\frac{5000}{95} \times 5\right)$

Loss on product B = ₹300

$\therefore$ Required ratio $= \frac{5000 \times 5}{95} : 300 = 50 : 57.$

49. (1) Total CP of product E = 6000 + 400 = ₹6,400

$\therefore SP = 6400 \times \frac{107}{100} = ₹6,848$

SP of product C = 2000 + 500 + 250 = ₹2,750

$\therefore$ Required difference = 6848 – 2750 = ₹4,098

50. (4) Total CP of product A = 900 + 300 = ₹1,200

$\therefore$ SP of product A = $1200 \times \frac{90}{100}$ = ₹1,080

SP of product E = ₹ 6,848

$\therefore$ Required less%

$= \left[\frac{6848 - 1080}{6848} \times 100\right]\% = 84.22\% \approx 84\%.$

51. (5) I. $2x^2 - 29x - 126 = 0$

$\Rightarrow 2y^2 - 36x + 7x - 126 = 0$

$\Rightarrow 2x(x - 18) + 7(x - 18) = 0$

$\Rightarrow x = \frac{-7}{2}, 18$

II. $y^2 + 19y - 120 = 0$

$\Rightarrow y^2 + 24y - 5y - 120 = 0$

$\Rightarrow y(y + 24) - 5(y + 24) = 0$

$\Rightarrow y = 5, -24$

52. (2) I. $x^2 + 8x - 308 = 0$

$\Rightarrow x^2 + 22x - 14x - 308 = 0$

$\Rightarrow x(x + 22) - 14(x + 22) = 0$

$\Rightarrow x = 14, -22$

II. $y^2 + 47y + 550 = 0$

$\Rightarrow y^2 + 22y + 25y + 550 = 0$

$\Rightarrow y(y + 22) + 25(y + 22) = 0$

$\Rightarrow y = -22, -25$

Clearly, $x \geq y$

53. (4) I. $x^2 + 8x - 384 = 0$

$\Rightarrow x^2 + 24x - 16x - 384 = 0$

$\Rightarrow x(x + 24) - 16(x + 24) = 0$

$\Rightarrow x = 16, -24$

II. $y^2 - 43y + 432 = 0$

$\Rightarrow y^2 - 27y - 16y + 432 = 0$

$\Rightarrow y(y - 27) - 16(y - 27) = 0$

$\Rightarrow y = 16, 27$

Clearly, $x \leq y$.

54. (1) I. $14x - 25 = 59 - 7x$

$\Rightarrow 14x + 7x = 59 + 25$

$\Rightarrow 21x = 84$

$\Rightarrow x = 4$

II. $13y^2 + 12^2 = 14^2$

$\Rightarrow 13y^2 = 196 - 144$

$\Rightarrow 13y^2 = 52$

$\Rightarrow y^2 = 4$

$\Rightarrow y = +2, -2$

Clearly, $x > y$

55. (5) I. $3x^2 + 7x = 6$

$\Rightarrow 3x^2 + 7x - 6 = 0$

$\Rightarrow 3x^2 + 9x - 2x - 6 = 0$

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

$\Rightarrow x = \frac{2}{3}, -3$

II. $10y^2 - 7y + 1 = 0$

$\Rightarrow 10y^2 - 5y - 2y + 1 = 0$

$\Rightarrow 5y(2y - 1) - 1(2y - 1) = 0$

$\Rightarrow y = \frac{1}{2}, \frac{1}{2}$

56. (2) Let the new averae of runs be x.

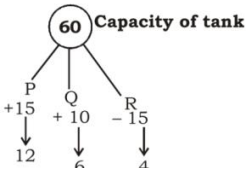
ATQ

$34(x + 2) = 35x$

$\Rightarrow 34x + 68 = 35x$

$\Rightarrow x = 68$

57. (1) 60 = Capacity of tank



Total quantities of water in tank in 1 minute

= 12 + 6 – 4 = 14 litres

$\therefore$ Required time $= \frac{60}{14}$ minutes

$= \frac{30}{7}$ minutes $= 4\frac{2}{7}$ minutes

58. (1) Let the length of first train be 2x m.
∴ Length of second train be x m.

ATQ.

$$\frac{x+2x}{(93+51)\times\frac{5}{18}}=24\Rightarrow\frac{3x}{40}=24$$

$$\Rightarrow x=\frac{40\times24}{3}=320\text{ m}$$

∴ Length of first train = 320 × 2 = 640 m
Total distance covered in 66 seconds by first train

$$=66\times93\times\frac{5}{18}=1705\text{ m}$$

∴ Length of plateform
= 1705 – 640 = 1,065 m

59. (3) Ratio of profit among P, Q and R
= (42000 × 4 + 30000 × 6) : (30000 × 4 + 24000 × 6) : 28000 × 4 + 20000 × 6)
= 348000 : (264000 : 232000
= 87 : 66 : 58
Profit share of R in the profit

$$=\frac{31650}{211}\times66=₹9,900$$

60. (5)

61. (1) $\sqrt{454+985}-?^2\div18.752=18.9001$

$\Rightarrow \sqrt{1439}-?^2\div19\approx18$

$\Rightarrow 38-?^2\times\frac{1}{19}=18$

$\Rightarrow ?^2=20\times19$

$\Rightarrow ?^2=380$

$\Rightarrow ?=19.49\approx19$

62. (3) $1127\times1373\div16.5=?$

$?\approx1127\times83$

$=93541\approx93780$

63. (1) 3.001 of 299.87 = ?% of 6271.98 – 2236.004

$$\Rightarrow 3\times300\approx\frac{?}{100}\times6300-2236$$

$$\Rightarrow 63\times?=2236+900$$

$$\Rightarrow ?=\frac{3136}{63}=49.77\approx50.$$

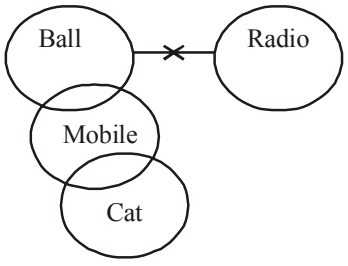
64. (3) $\sqrt{824}\times(12.248)^3\div\sqrt[3]{1345}=?$

$\Rightarrow ?\approx29\times1728\div11=29\times157.09=4555.63\approx4500$

65. (2) $788.475+\sqrt[3]{45876}\div4.5245=?$

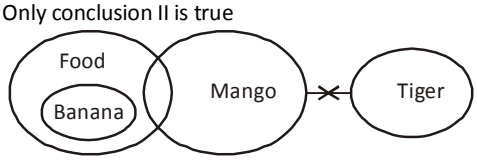
$\Rightarrow ?\approx788+36\div5\approx788+7=795\approx800$

66. (1)



I. True II. False
Only conclusion II is true

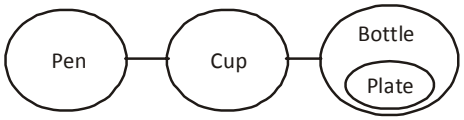
67-68.



67. (2) I. False II. True
Only conclusion II is true

68. (2) I. False II. True
Only conclusion II is true

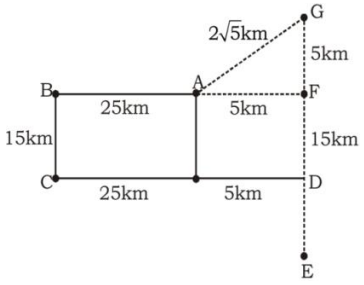
69-70.



69. (4) I. False II. False
Neither conclusion I nor II is true

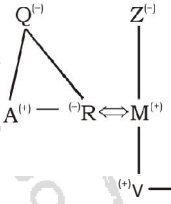
70. (5) I. True II. True
Both conclusions I and II are true

71-72.



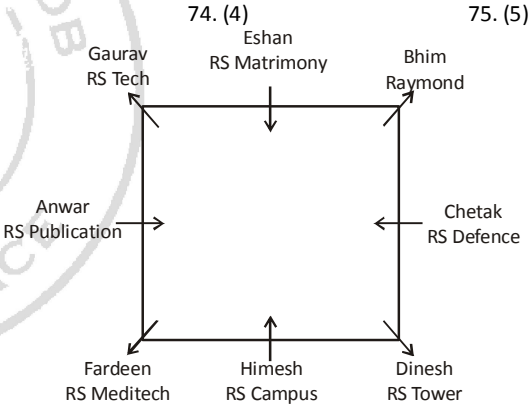
71. (3) 72. (4)

73-75.



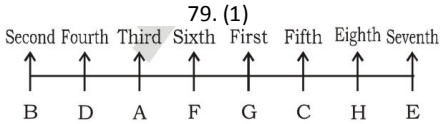
73. (2) 74. (4) 75. (5)

76-80.



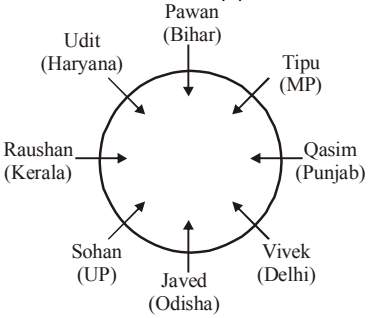
76. (2) 77. (5)
78. (4) 79. (1) 80 (4)

81-85.



81. (3) 82. (2)
83. (3) 84. (2) 85. (2)

86-90.



86. (4) 87. (2)
88. (1) 89. (3) 90. (2)

91. (2) $B \geq D = F < C = H$
I. $H = D \rightarrow$ False
II. $H > D \rightarrow$ True
Only conclusion II is true

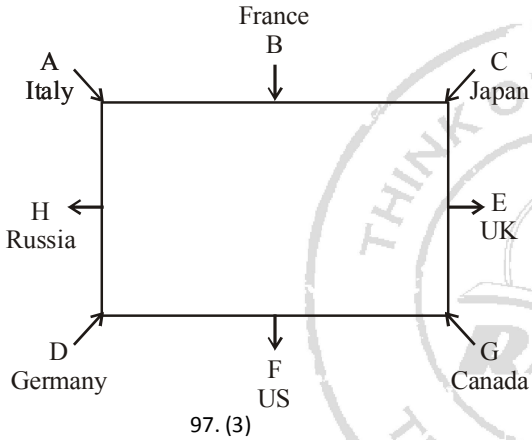
92. (2) $P \leq R = Q > V$
I. $V = P \rightarrow$ False
$V < Q < T$
II. $T > V \rightarrow$ True
Only conclusion II is true

93. (4) $P \leq R = Q > U$
I. $U \geq P \rightarrow$ False
$P \leq R = Q > V$
II. $R < V \rightarrow$ False
Neither conclusion I nor II is true

94. (1) $E > I = J \leq L = M > O \leq S$
I. $M \geq I \rightarrow$ True
II. $S < E \rightarrow$ False
Only conclusion I is true

95. (5) I. $L > O \rightarrow$ True
II. $E > J \rightarrow$ True
Both conclusions I and II are true.

96-100.



96. (5) 97. (3)
98. (5) 99. (5) 100. (1)