SBI Clerk Preliminary Grand Test –SCP-180547

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (2) Change 'on' with 'over'
2. (1) Change 'is' with 'are'.
3. (4) Chase 'chinese' with 'china's'
4. (3) Chase 'task' with 'tasks'
5. (5) No error
6. (4)
7. (2)
8. (5)
9. (1)
10. (2)
11. (3)
12. (4)
13. (2)
14. (2)
15. (3)
16. (3)
17. (4)
18. (3)
19. (1)
20. (1)
21. (3)
22. (1)
23. (5)
24. (3)
25. (5)
26. (1)
27. (3)
28. (2)
29. (5)
30. (4)

31. (3) I. $x(x+7) = 30$
$\Rightarrow x^2 + 7x - 30 = 0$
$\Rightarrow x^2 + 10x - 3x - 30 = 0$
$\Rightarrow x(x+10) - 3(x+10) = 0$
$\Rightarrow x = 3, -10$

II. $y = \left(\frac{100}{9}\right)^{\frac{1}{2}}$
$\Rightarrow y = \frac{10}{3}$
Clearly, $x < y$

32. (1) I. $3x^2 - 16x + 21 = 0$
$\Rightarrow 3x^2 - 9x - 7x + 21 = 0$
$\Rightarrow 3x(x-3) - 7(x-3) = 0$
$\Rightarrow x = 3, \frac{7}{3}$

II. $6y^2 + 25y + 21 = 0$
$\Rightarrow 6y^2 + 18y + 7y + 21 = 0$
$\Rightarrow 6y(y+3) + 7(y+3) = 0$
$\Rightarrow y = -\frac{7}{6}, -3$
Clearly, $x > y$

33. (1) I. $2x^5 (x^{-2}) = 128$
$\Rightarrow 2x^3 = 128$
$\Rightarrow x^3 = 64$
$\Rightarrow x = 4$

II. $\frac{1}{3}y^9 = \frac{1}{24}y^{11}$
$\Rightarrow y^2 = 8$
$\Rightarrow y^2 = 8$
$\Rightarrow y = 2\sqrt{2}$
Clearly, $x > y$

34. (4) I. $20x^2 - 108x + 144 = 0$
$\Rightarrow 5x^2 - 27x + 36 = 0$
$\Rightarrow 5x^2 - 15x - 12x + 36 = 0$
$\Rightarrow 5x(x-3) - 12(x-3) = 0$
$\Rightarrow x = \frac{12}{5}, 3$

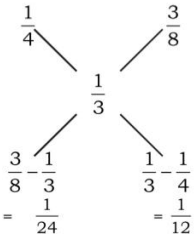
II. $25y^2 - 90y + 72 = 0$
$\Rightarrow 25y^2 - 30y - 60y + 72 = 0$
$\Rightarrow 5y(5y-6) - 12(5y-6) = 0$
$\Rightarrow y = \frac{12}{5}, \frac{6}{5}$
Clearly, $x \geq y$

35. (4) I. $2x^2 + 18x + 36 = O$
$\Rightarrow x^2 + 9x + 18 = 0$
$\Rightarrow x^2 + 6x + 3x + 18 = 0$
$\Rightarrow x(x+6) + 3(x+6) = 0$
$\Rightarrow x = -3, -6$
II. $y^2 - 3y - 18 = 0$
$\Rightarrow y^2 - 6y + 3y - 18 = 0$
$\Rightarrow y(y-6) + 3(y-6) = 0$
$\Rightarrow y = -3, 6$
Clearly, $x \leq y$

36. (4) Let the average age of group of 25 people is x years.
ATQ,
$25 \times x - 80 = 24\,(x-2)$
$\Rightarrow 25x - 80 = 24x - 48$
$\Rightarrow x = 32$ years
$\therefore$ Age of new person
$= 32 - 2 = 30$ years

37. (4) Let the weight of three pieces be x, $3x$ and $5x$.
and total weight $= 9x$
ATQ,
$(9x)^2 = 8100$
$\Rightarrow x^2 = 100$
and total cost after breaking
$= (x)^2 + (3x)^2 + (5x)^2 = 35x^2$
$\therefore$ Loss $= 81x^2 - 35x^2 = 46x^2$
$= 46 \times 100 =$ ₹ 4,600

38. (2) By alligation method,



$\therefore$ Required ratio $= \frac{1}{24} : \frac{1}{12}$
$= 1 : 2.$

39. (2) MP of watch $= \frac{960}{80} \times 100 = ₹1,200$
CP of watch $= ₹\left(\frac{1200}{1400} \times 100\right)$
$\therefore$ S.P of watch to get 54% profit with no discount
$= \frac{1200}{140} \times 100 \times \frac{154}{100} = ₹1,320$

40. (3) Area of square = 196 sq. cm
$\therefore$ Side = 14 cm.
Radius of larger circle = $14 \times 2 = 28$ cm.
Radius of smaller circle $= 28 \times \frac{3}{7} = 12$ cm.
$\therefore$ Circumference of smaller circle $= 2\pi r$
$= 2 \times \pi \times 12 = 24\pi$ cm

41. (3) Required ratio $= \frac{61.2}{360} \times \frac{7}{15} : \frac{57.6}{360} \times \frac{9}{16}$
$= 28.56 : 32.4 = 119 : 135$

42. (3) Required number of mobiles
$= 45000 \times \frac{43.2}{360} \times \frac{7}{15} \times \frac{65}{100} = 1638.$

43. (4) Number of Samsung mobiles sold in showroom S
$= 45000 \times \frac{28.8}{360} \times \frac{5}{12} = 1500$
$\therefore$ Required cost $= 1500 \times 433 = ₹6,49,500$

44. (5) Required % $= \left(\frac{\frac{61.2}{360} \times \frac{8}{15}}{\frac{57.6}{360} \times \frac{7}{16}} \times 100\right)\%$
$= 129.52\% \approx 130\%$

45. (1) Required number of mobiles
$= \frac{45000}{360} \times \left[79.2 \times \frac{5}{9} + 90 \times \frac{2}{5}\right]$
$= 125 \times [44 + 36]$
$= 125 \times 80 = 10,000$

46. (4) Required ratio = 441 : 693 = 7 : 11

47. (2) Required average
$= \frac{256 + 563 + 347 + 651 + 412 + 321}{6}$
$= \frac{2550}{6} = 425$

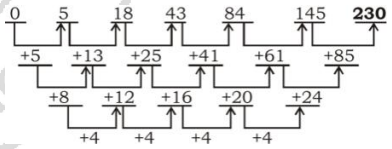
48. (3) Total no. of employees working in all the years together in Company
A = 664 + 569 + 440 + 256 + 717 = 2646
C = 628 + 519 + 503 + 347 + 598 = 2595
E = 638 + 621 + 541 + 412 + 519 = 2731
F = 419 + 537 + 742 + 321 + 693 = 2712
D = 552 + 438 + 527 + 651 + 582 = 2750
Required answer is company D.

49. (5) Required% $= \left(\frac{440}{2750} \times 100\right)\% = 16\%$

50. (3) Total no. of employees working in company E in the year 2001, 2002 and 2004 together
= 638 + 621 + 412 = 1671
$\therefore$ Required difference
= 2595 – 1671 = 924

51. (5) The number series is as follows:
2.5 + 1.5 = 4
4 + 2.5 = **6.5**
6.5 + 3.5 = 10
10 + 4.5 = 14.5
14.5 + 5.5 = 20
20 + 6.5 = 26.5

52. (5) The number series is as follows:



53. (2) The number series is as follows:
$14 \times 3 - 6 = 36$
$36 \times 3 - 6 =$ **102**
$102 \times 3 - 6 = 300$
$300 \times 3 - 6 = 894$
$894 \times 3 - 6 = 2676$
$2676 \times 3 - 6 = 8022$

54. (4) The number series is as follows:
11 + 5 = 16
16 + 15 = 31
31 + 25 = 56
56 + 35 = 91
91 + 45 = 136
136 + 55 = **192**

55. (1) The number series is as follows:
$6 \times 1 + 7 \times 1 = 13$
$13 \times 2 + 6 \times 2 = 38$
$38 \times 3 + 5 \times 3 =$ **129**
$129 \times 4 + 4 \times 4 = 532$
$532 \times 5 + 3 \times 5 = 2675$

56. (4) Let the amount borrowed at 12% per annum is ₹ x
$\therefore$ Amount borrowed at 10% per annum is ₹ (30000 – x).

ATQ,

$36480 - 30000 = \frac{x \times 12 \times 2}{100} + \frac{(30000 - x) \times 10 \times 2}{100}$

$\Rightarrow 6480 = \frac{24x}{100} + \frac{600000 - 20x}{100}$

$\Rightarrow 648000 - 60000 = 4x$

$\Rightarrow 4x = 48000$

$\Rightarrow x = ₹\ 12{,}000$

57. (2) Speed of car = $\frac{720}{9}$ 80 km/hr

Speed of bus = $80 \times \frac{3}{4} = 60$ km/hr

$\therefore$ Speed of train = $\frac{60}{15} \times 27$

= 108 km/hr

$\therefore$ Required distance to cover by train

= 108 × 7 = 756 km

58. (3) Ratio between Sohan's present age and his daugther = 3 : 1

Ratio between Sohan's present age and his mother = 9 : 13

$\therefore$ Ratio between the age of Sohan, his daughter and his mother = 9 : 3 : 13

$\therefore$ Required difference = $\frac{125}{25} \times 10$

= 50 years

59. (5) Diameter of circle = 56 cm

$\therefore$ circumference = πd

$= \frac{22}{7} \times 56 = 176$ cm

$\therefore$ Perimeter of square = 272 – 176

= 96 cm

$\therefore$ Side = $\frac{96}{4} = 24$ cm

Now,

Area of circle $= 28 \times \frac{22}{7} \times 28 = 2464\ cm^2$

Area of square = $24 \times 24 = 576\ cm^2$

Therefore required sum = $2464 + 576 = 3040\ cm^2$

60. (1) S.P of Sweta

$= 46000 \times \frac{88}{100} \times \frac{112}{100} = ₹\ 45{,}337.60$

$\therefore$ Overall loss

= 46000 – 453337.60 = ₹ 662.40

61. (5) $\sqrt{97344} = ?$

$\Rightarrow ? = 312$

62. (4) 15 : 66 :: 185 : ?

$\Rightarrow \frac{15}{66} = \frac{185}{?}$

$\Rightarrow ? = \frac{185 \times 66}{15} = 814$

63. (5) $64^{12} \div 4^{18} = 64^{?}$

$\Rightarrow (4)^{3 \times 12} \div (4)^{18} = (4)^{3 \times ?}$

$\Rightarrow (4)^{36} \times (4)^{18} = (4)^{3 \times ?}$

$\Rightarrow 3 \times ? = 36 - 18$

$\Rightarrow ? = \frac{18}{3} = 6$

64. (3) $3\frac{6}{7} - 6\frac{1}{4} + 5\frac{1}{3} = ?$

$\Rightarrow ? = (3 - 6 + 5) + \left(\frac{6}{7} - \frac{1}{4} + \frac{1}{3}\right)$

$= 2 + \left(\frac{72 - 21 + 28}{84}\right) = 2 + \frac{79}{84} = 2\frac{79}{84}$

65. (2) $14\% \text{ of } 80 + ?\% \text{ of } 90 = 31.9$

$\Rightarrow 80 \times \frac{14}{100} + \frac{?}{100} \times 90 = 31.9$

$\Rightarrow 11.2 + 0.9 \times ? = 31.9$

$\Rightarrow 0.9 \times ? = 31.9 - 11.2$

$\Rightarrow ? = \frac{20.7}{0.9} = 23$

66. (1) $Q \geq P < N = R \leq W$

I. W > P $\rightarrow$ True

II. Q ≥ R $\rightarrow$ False

Only conclusion I is true

67. (5) $K \geq G = C \geq T = S < V$

I. K ≥ S $\rightarrow$ True

II. T < V $\rightarrow$ True

Both conclusions I and II are true

68. (2) $D \geq W \leq R = T \leq S$

I. D ≤ T $\rightarrow$ False

II. S ≥ W $\rightarrow$ True

Only conclusion II is true

69. (4) B > U ≤ X < Z

B ≥ C = A

I. B ≥ Z $\rightarrow$ False

II. A ≤ U $\rightarrow$ False

Neither conclusion I nor II is true

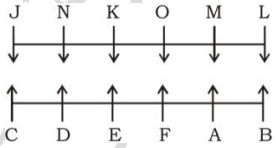
70. (4) B = R ≥ Q < U = P ≥ S

I. B < U $\rightarrow$ False

II. Q ≥ S $\rightarrow$ False

Neither conclusion I nor II is true

71-75.



71. (2) 72. (3) 73. (1) 74. (4) 75. (2)

76-80.

Floor	Person	Company
7	Aman	Nike
6	Ehshan	Spark
5	Bharat	Puma
4	Fazal	Reebok
3	Chetan	Woodland
2	Gaurav	Fila
1	Dayal	Adidas

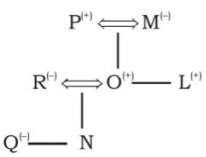
76. (4) 77. (2) 78. (4) 79. (1) 80. (3)

81-85.

P > M > L > O > R > N > Q

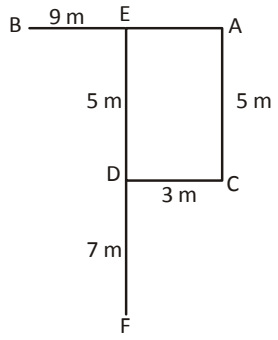
68 50 18

Family Tree



81. (5) 82. (2) 83. (3) 84. (1) 85. (5)

86-88.

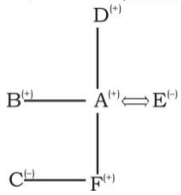


86. (4) 87. (5)

88. (5) $BC = \sqrt{9^2 + 5^2}$

$= \sqrt{81+25} = \sqrt{106}$ m

89-90.



89. (4) 90. (1)

91-95.

3 to 5 Lakh	6 to 8 Lakh	10 to 13 Lakh
D – 5 Lakh Marketing	E–8 Lakh Computer	F–12 Lakh Maths
C–3 Lakh Reasoning	A– 7 Lakh English	B–11 Lakh General Knowledge
—	–	G–10 Lakh General Awareness

91. (1) 92. (5)

93. (3) 94. (2) 95. (1)

96-100.

support the other group — ja pe la no

the mission gains support — ke ja zi la

gains other than money — fu no ho zi

more support and money — re qi fu ja

support – ja **gains – zi**
money – fu **the – la**
other – no

96. (2) 97. (5)

98. (1) 99. (3) 100. (1)