Grand Test – SCP-180222

# **RACE**

## **SBI Clerk Preliminary** Grand Test –SCP-180222 HINTS & SOLUTIONS

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

#### **HINTS & SOLUTIONS**

- 1.(1) Refer to 1st paragraph of the passage, "Major efforts are being undertaken to make cotton pest-resistant. Most people would be aware of the spate of suicides by cotton farmers recently."
- 2.(3) Refer to the 2nd paragraph of the passage, "we will still need to depend upon conventional agricultural technologies even while we target biotechnology for future-oriented applications."
- 3.(2) Refer to the last paragraph of the passage option (1) is incorrect as it is not mentioned but indicated that they should.
- 4.(2) 'available' methods mean methods that can be used due to their accessibility, affordability, obtainability etc. and not simply because they 'exist'.
- 5.(2) The author does not say that the talent and resources must be used to their fullest extent throughout the passage hence option (1) is incorrect.
- 6.(4) Refer to the last paragraph where it is mentioned that remote sensing technology is used in predicting crop yields and monitoring them not for enhancing them.

- 7.(1) Conservation means preservation, protection, or restoration of the natural environment, natural ecosystems, vegetation, and wildlife hence preservation is the word most similar in meaning.
- 8.(3) Spate means a large number of similar things or events appearing or occurring in quick succession hence increase in is most similar in meaning.
- 9.(5) Remarkable means worthy of attention; striking hence insignificant is the word most opposite in meaning.
- 10.(4) Extensively means having wide or considerable extent hence rarely is the word most opposite in meaning.
- 11.(2) 'Distinct', meaning marked or clear, is an adjective and 'advantages', a noun. Only these will suit the sentence.
- 12.(1) With the past action denoted by 'turned down', 'had' is correct, but the preposition required is not 'by' but 'with'.
- 13.(5) 'Do' is used to lend emphasis to the principal verb 'vary'.
  14.(2) If the nouns need different prepositions, all the required preposition must be used. After 'faith', 'in' is to be used.
- 15.(1) 'Who' is an interrogative and a relative pronoun meaning 'what person or people'. But 'whom' is the objective case of 'who', used as a direct or indirect object, e.g., whom did you call? As the sentence is declarative, the word order is 'they should' and not 'should they'.

)	17.(1)					
$\geq$	19.(5)	20.(4)				
	The correct sequence is CABEFD.					
) _	22.(4)					
) –	24.(1)	25.(2)				
Lies (feel) in a less of (feels) hereines the subject is alread						

- 26.(1) Use 'feel' in place of 'feels' because the subject is plural.
  27.(3) Place 'should' after 'he' because it is no interrogative construction.
- 28.(2) Use 'get' in place of 'got' because 'To' is always followed by V<sup>1</sup> excluding some exceptions.
- 29.(4) Replace 'so' with 'very' since 'so' is followed by 'that' when used as an adverb.
- 30.(3) Model 'should' is followed by V1. So, 'resorting' should be removed and we should use 'resort'.

31. (3) 
$$\approx \frac{40000}{16} - \sqrt{x} = 4\sqrt{x}$$
$$\approx 5\sqrt{x} = 2500$$
$$\approx \sqrt{x} = 500$$
$$\approx x = 250000$$
32 (3) 
$$\approx 9 + 441 = \frac{25}{x} = 4x$$

16.(3) 18.(5) 21-25 21.(5) 23.(5)

$$852. (3) \qquad \approx 9 + 441 = \frac{1}{5}x = 4x$$
$$\approx 450 = 9x$$
$$\approx x = 50$$

33. (5)  $\approx 28 \times \frac{78}{3} + 1 = x^3$  $\approx 728 + 1$ x = 9

34. (4) 
$$\approx 45 \times 5 \times \frac{6x}{5} = x^2$$
  
 $x = 270$ 

35. (1) 
$$\approx 12 + 29 + 8$$
  
 $\approx x = 49$ 

36. (4) The series is  

$$7 + 11 + 13 + 17 + 19$$
  
 $157 164 175 188 205 224$   
Therefore the wrong number is 203.

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37. (3)	The series is $(301 + 7) \times 1 = 308$ , $(308 + 6) \times 2 = 628$ , $(628 + 5) \times 3 = 1899$ , $(1899 + 4) \times 4 = 7612$ $(7612 + 3) \times 5 = 38075$ Therefore the wrong number is 7610.	47. (2)	Total number of balls = 7 + 5 = 12 Now, three balls are picked randomly Then, the number of sample space n(s) = ${}^{12}C_3 = \frac{10 \times 11 \times 12}{1 \times 2 \times 3} = 220$
38. (3)	The series is $(21 \times 1) + 5 = 26$ , $(26 \times 2) + 10 = 62$ , $(62 \times 3) + 15 = 201$ , $(201 \times 4) + 20 = 824$ , $(824 \times 5) + 25 = 4145$ , Therefore the wrong number is 842.		The number of events $n(E) = {}^{7}C_{2} \times {}^{5}C_{1} = {}^{6\times7} \times 5 = 21 \times 5 = 105$ a = (E)  105  21
39. (1)	The series is $+2^2$ , $+3^2$ , $+4^2$ + $5^2$ + $6^2$ , ie $63 + 2^2 = 67,67 + 3^2 = 76,76 + 4^2 = 92$ $92 + 5^2 = 117,117 + 6^2 = 153,$	48. (2)	$\therefore P(E) = \frac{n(E)}{n(S)} = \frac{105}{220} = \frac{21}{44}$ Total mixture = 180 litres
40. (2)	The series is $x_{1+1} x_{2+2} x_{3+3} x_{4+4} x_{5+5}$ $x_{1+1} x_{2+5} x_{3+5} x_{3+5}$ $x_{1+1} x_{2+5} x_{3+5} x_{3+5}$ $x_{1+1} x_{2+5} x_{3+5} x_{3+5} x_{3+5}$	40. (Z)	Now, 54 litres mixture is taken out Then the remaining mixture = $180 - 54 = 126$ litres $\therefore$ Quantity of milk in the mixture = $126 \times \frac{13}{18} = 91$ litres Quantity of water in the mixture = $126 \times \frac{5}{18} = 35$ litres
41. (1)	Therefore the wrong number is 15 Total cost of Sugar and Honey = $35 \times 20 + 400 \times 5$ = 700 + 2000 = 2700 Total cost of Rice and Wheat = $50 \times 25 + 30 \times 30$ = 1250 + 900 = 2150	49. (4)	:. When 6 litres of water is replaced new mixture = $126 + 6 = 132$ litres :. In the new mixture quantity of water = $35 + 6 = 41$ litres :. Reqd. % water = $\frac{41}{132} \times 100 \approx 31\%$ Let the sum lent at 7% be Rs x
42. (4)	Required ratio = 270 : 215 = 54 : 43 Required percentage = $\frac{2000 - 2000}{2000} \times 1000 = 0\%$		Then, $\frac{x \times 7 \times 4}{100} + \frac{(1750 - x) \times 11 \times 4}{100} = 706$ $0r, \frac{28x}{100} + \frac{(1750 - x) \times 44}{100} = 706$ $0r, \frac{28x + 1750 \times 44 - 44x}{100} = 706$
43. (3)	New price per kg = $\frac{3}{4} \times 200 = 150$ 200 × 10		$0r, -16x + (1750 \times 44) = 70600$ $0r, \frac{(1750 \times 44) - 70600}{16} = x$
	Now person can buy $\frac{200 \times 10}{150}$ kg for same expenditure = $\frac{40}{3}$ kg	BAN	$\therefore x = \frac{6400}{16} = 400$ $\therefore \text{ Reqd. Ratio} = \frac{\text{Money at 7\%}}{\text{Money at 11\%}} = \frac{400}{(1750 - 400)}$
	$\left(\frac{40}{3}-10\right)$ kg of Tea will be more purchased for same		$=\frac{400}{1350} = \frac{8}{27}$ So, ratio is 8 : 27
	expenditure $=\frac{10}{3}kg$	50. (2)	Cost price of rice per kg $320 \times 17.6 + 160 \times 16.4 = 5632 + 2624$
44. (3)	Required average $=\frac{1}{2}(35 \times 20 + 400 \times 5)$ $-\frac{1}{2}(50 \times 25 + 30 \times 30) = \frac{1}{2}(2700 - 2150) = 275$		$=\frac{320+160}{480} = Rs \ 17.2$
45. (4)	New cost of rice per kg = $\frac{7}{8} \times 50 = 43.75$		Now, he sells the mixture Rs 9.45 above the CP. ∴ Selling price = 17.2 + 9.45 = Rs 26.65
	Decreased quantity $= \frac{6}{5} \times 25 = 30$ kg. 43 75 × 30 - 50 × 25	51. (2)	Required difference = $\left(\frac{25}{100} \times 90,000 - 15,000\right) + \left(\frac{35}{100} \times 1,50,000 - 20,500\right)$
	Required $\% = \frac{43.75 \times 30 - 50 \times 25}{50 \times 25} \times 100$ = $\frac{62.5 \times 4}{50} = 5\%$ more.	52. (1)	- (20,000 + 10,000) = 39500 - 30000 = 9500 Total female who drove in state A
46. (2)	Suppose total work = 60 units	P. I.V	$= \frac{3}{8} \times \frac{60}{100} \times 80,000 + \frac{2}{5} \times 20,000 + \frac{1}{6} \left(\frac{40}{100} \times 80,000 - 20,000\right)$ = 18000 + 8000 + 2000 = 28,000
	(LCM of 10 and 15) $\therefore$ (A + B)'s one day's work = $\frac{60}{10}$ = 6 units	53. (4)	Required $\% = \frac{28}{80} \times 100 = 28 \times \frac{5}{4} = 35\%$ Average of cars in bad conditions from state A, B and D
	And (B + C)'s one day's work $=\frac{60}{15} = 4$ units According to the question, C : A = 60 : 100 Or, C : A = 3 : 5		= $(20,000 + 15,000 + 10,000)\frac{1}{3}$ = 15,000 Average of other types of car from state B, C and E together $\frac{1}{2}(25 + 0.02) + 15000 + 12000 + 15000 + 1500 + 1500 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 150000 + 1500000 + 150000000000$
	$Or, \frac{C}{A} = \frac{3}{5}$ $Or, A = \frac{5C}{3}$		$= \frac{1}{3}(25 \times 900 - 15000 + 20 \times 1200 - 12000 + 35 \times 1500 - 20500)$ $= \frac{51500}{3}$ Required Difference = $\frac{51500}{3} - 15000 = \frac{6500}{3}$
	Again, A + B = 6 units(i) B + C = 4 units(ii) Putting the value of A in equation (i), we get $\frac{5C}{3}$ + B = 6 unit $\frac{B}{3}$ + C = 4 unit $\frac{B}{3}$ - C = 2 unit	54. (1)	Cars in good condition from A and B together = 80 × 600 + 75 × 900 = 48,000 + 67,500 = 1,15,500 Cars in good condition from state D and E together
	$Or, \frac{2C}{3} = 2 \text{ units}$ $C = 3 \text{ units}$ Then $A = \frac{5C}{3} = \frac{5 \times 3}{3} = 5 \text{ units}$		= 75 × 7,00 + 65 × 1,500 = 52,500 + 97,500 = 1,50,000 Required ratio = 231 : 300
	Now, Total work is 60 units Then A alone can do the work in $\left(\frac{60}{5}\right) = 12 \ days$	55. (4)	Required rate = 231.300 Required average = $\frac{1}{5}(48000 + 67500 + 96000 + 52500 + 97500) = 72,300$

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Let the speed of boat is v and stream is s. 56. (3)  $\frac{60}{v-s} + \frac{88}{v+s} = 20$ 60a + 88b = 20 .....(i)  $\frac{80}{v-s} + \frac{110}{v+s} = 26$ 80a + 110b = 26 .....(ii)  $a = \frac{1}{5}, b = \frac{1}{11}$ v-s=5v + s = 11 $v = 8 \,\mathrm{km/hr}$ s = 3 km/hr57.(4) Let discount = xSo selling price = 2xMarked price = 2x + x = 3xCost price =  $\frac{80}{100} \times 2x = \frac{8x}{5}$ Required  $\% = \frac{3x - \frac{8x}{5}}{\frac{8x}{5}} \times 100$  $=\frac{7x}{8x} \times 100 = 87.5\%$ 58. (2) The three horses would meet again after L.C.M. of 24, 36, 30 = 360 seconds or 6 minutes 59.(1) Let speed of faster train be xAccording to question +K OF 350 = 10  $\overline{\left(x+\frac{4}{5}x\right)}$ 9x= 35 5  $x = \frac{175}{9} \text{ km/hr}$  $=\frac{4}{5} \times \frac{175}{9} = \frac{140}{9}$  km/hr Speed of slower train = 60.(2) Initial ratio of milk and water = 7:3 Final ratio of milk and water = 1 : 1 Let amount of mixture taken out is x litre then,  $70 - \frac{7x}{10}$ = 50  $\frac{10}{200}$  l x =7 61.(2) ? = 348 ÷ 29 × 10+ 126 - 220  $= 12 \times 10 + 126 - 220$ = 120 + 126 - 220 = 246 - 220 = 26  $(2+2)^{?+4} = (4 \times 4)^3 \div (512 \div 8)^4 \times (32 \times 8)^4 = (4)^{2 \times 3} \div (4)^{3 \times 4} \times (4)^{4 \times 4}$ 62.(2) = 46-12+16 = 410 Or, (4)<sup>?+4</sup> = 4<sup>10</sup> 0r, ? + 4 = 10 $\therefore$  ? = 10 - 4 = 6  $(2\sqrt{392}-21)+(\sqrt{8}-7)^2 = (?)^2$ 63. (3)  $or, (?)^2 = 2\sqrt{49 \times 8} - 21 + 8 + 49 - 14\sqrt{8} = 57 - 21 = 36$  $\therefore ? = \sqrt{6 \times 6} = 6$  $? = (2+5-4-1) + \left(\frac{1}{4} + \frac{1}{6} - \frac{1}{8} - \frac{1}{12}\right)$  $= 2 + \left(\frac{6+4-3-2}{24}\right) = 2 + \frac{5}{24} = 2\frac{5}{24}$ 64. (5)

$$\begin{array}{c} (24) & 24 & 2\\ 65. (4) & \begin{array}{c} ?=76\% \, of \, 1285 - 35\% \, of \, 1256 \\ \hline & \begin{array}{c} 76 \times 1285 \\ \hline & 100 \\ = 976.6 - 439.6 = 537 \end{array}$$

 66-70.
 Logic: 

 (i) Opposite of last letter of the word.

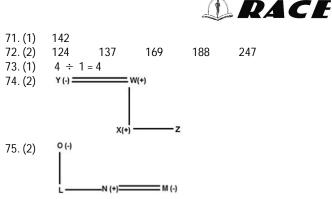
 (ii) Square of total number of letter in the word minus 2.

 (iii) Opposite of 1\* vowel in the word according to alphabetical series.

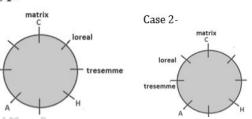
 Eg. Square= V+34+Z=V34Z

 66. (2)
 67. (1)

 68. (4)
 69. (1)
 70. (5)

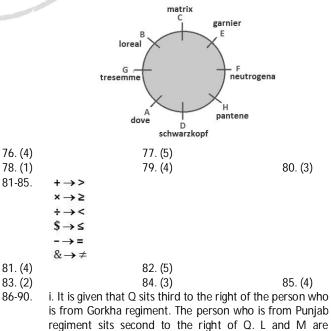


76-80. i. It is given that A sits third to right of the person who uses Matrix shampoo. Only two people sit between the person who uses Matrix shampoo and H. The persons who use the Tresemme and the Loreal shampoo are immediate neighbours of each other. Neither A nor H uses Tresemme or Loreal shampoo. The one who uses Tresemme is not an immediate neighbour of the person who uses Matrix shampoo. C likes matrix shampoo. so there can be two possibilities-Case 1-



ii. The person who uses Pantene shampoo sits second to left of E. E is not an immediate neighbour of H. The person who uses Pantene shampoo is an immediate neighbour of both the persons who use Neutrogena and Schwarzkopf shampoo so case 1 will be eliminated.

iii. The person who uses Schwarzkopf shampoo sits third to right of B. A does not uses Garnier shampoo. F is not an immediate neighbour of A. G is not an immediate neighbour of the person who uses Pantene shampoo so the final arrangement is-



BAA

