SBI Clerk Preliminary Grand Test –SCP-180217

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (4) The author has mentioned in the 5th paragraph of the passage that government is unpredictable and opaque in its governance hence option (4) is the correct choice for the question.
2. (3) Refer to the 3rd paragraph of the passage, ". Branding is an intangible asset that embodies the qualities, values and experience of the company."
3. (1) The author is doubtful about the success of 10- point programme and he has mentioned in the 2nd paragraph of the passage about the reason for this , refer to the lines '' This is because the current crisis is not just about "poor economics". It is also about the loss of confidence in the government's commitment to upholding the constitutional checks and balance of governance."
4. (3) The author has mentioned that investors may be influenced by the different elements of the country which can be anything but they do not invest due to it which makes other options other than (1), (2) and (4) incorrect.
5. (3) Refer to the 1st paragraph of the passage, "The rupee is hovering close to Rs. 70 to the dollar and the Sensex is gyrating, but in fall. The finance minister has pronounced a 10-point programme to narrow the fiscal deficit, balance the current account, stabilize the currency, contain inflation and bring the economy back onto the growth path."
6. (5) Only option (2) is incorrect while the other options are correct hence option (5) is the correct answer for the given question.
7. (5) Convulsions means a violent social or political upheaval hence cramp is the word most similar in meaning.
8. (3) Generic means characteristic of or relating to a class or group of things; not specific hence general is the word most similar in meaning.
9. (1) Contend means struggle to surmount (a difficulty) hence agree is the word most opposite in meaning.
10. (5) Shoddy means badly made or done hence superior is the word most opposite in meaning.
11. (3) 12. (4)
13. (1) 14. (4) 15. (5)
16-20. The correct sequence is EDACFB.
16. (4) 17. (5)
18. (1) 19. (2) 20. (3)
21. (1) In this sentence 'was' should not be used because 'was' is used with past form of ordinary verb in passive sentences i.e. the proposal was considered by ministry.
22. (3) 'Efforts' should be replaced by 'an effort' because this is singularly related here.
23. (3) Replace 'alike' by equally'.
24. (3) Use 'seems' in place of 'seemed'. Present Indefinite form of verb is required. It is a fact about nature.
25. (1) 'On account of' which means 'because of' is the correct usage.
26. (5) Diminishing means to make or become less.
27. (5) "input, empowering" fits the two fillers correctly.
28. (1) Rigidity means unable to bend or be forced out of shape; not flexible.
Compatibility (of two things) means to able to exist or occur together without problems or conflict.
29. (2) Reduced and required fits the two fillers correctly.
30. (1) Decorum means behaviour in keeping with good taste and propriety.
31. (3) $x = \pm\frac{1}{26}$
$y = \frac{1}{24}$
$\therefore x < y$
32. (5) $x = 3, \frac{-11}{2}$
$y = 3, -2$
$\therefore$ No relationship can be established
33. (1) $x = -6$
$y = -7, -8$
$\therefore x > y$
34. (5) $x = -3.5, 5$
$y = 6, 1$
$\therefore$ No relationship can be established
35. (2) $x = \frac{8}{3}, \frac{5}{4}$
$y = -2, \frac{5}{4}$
$\therefore x \geq y$

36. (5) No. of failed students in civil in GIMT = 605
Total students in civil in GIMT
$= 605 \times \frac{100}{(100-45)} = 1100$
Required difference
$= \frac{(8-3)}{11} \times 1100 = 500$

37. (2) Total number of students in mechanical
$= \frac{(5+2)}{5} \times 400 = 560$
No. of failed student $= \frac{55}{100} \times 560 = 308$

38. (2) No. of students of IT in KITM
$= \frac{(1+1)}{1} \times 250 = 500$
Difference between passed and failed students $= \frac{(55-45)}{100} \times 500 = 50$

39. (3) Let no. of boys and girls in civil in KITM, $7x$ and $2x$
$(7x - 2x) = 5x = 450, x = 90$
Total students
$= 7x + 2x = 9x = 90 \times 9 = 810$
No. of failed students
$= \frac{(100-40)}{100} \times 810 = 486$

40. (4) Total students in CSc in KITM
$= \frac{(5+8)}{5} \times 150 = 390$
No. of girls = 240
No. of passed girls $= \frac{25}{100} \times 240 = 60$
No. of passed students $= \frac{30}{100} \times 390 = 117$
No. of passed boys $= 117 - 60 = 57$
No. of total boys = 150
Percent boys passed $= \frac{57}{150} \times 100 = 38\%$

41. (5) Number of way 'TRUST' word can be arranged =5!/2=60

42. (1) $S = 5x\ K = 6x$
$\frac{5x+8}{6x+8} = \frac{7}{8}$
$40x + 64 = 42x + 56$
$8 = 2x$
$x = 4$
Difference age $= x = 4$ years

43. (2)
$6 \text{—} C + B - 8$
$4 \text{—} A + B - 12 \Big\rangle 48$
$\frac{3}{13} \text{—} A + C - 16$

Number of days $= \frac{96}{13} = 7\frac{5}{13}$

44. (5) Required probability
$= \frac{2c_2}{12c_2} = \frac{1}{\frac{12 \times 11}{2}} = \frac{1}{66}$

45. (5) $\frac{22}{7} \times r^2 = 616$
$r = 14$
Perimeter $= 2\pi r$
$= 2 \times \frac{22}{7} \times 14$
$= 88$ cm

46. (2) With 120% efficiency pipe M alone will fill the tank in
$= \frac{60}{6} \times 5 = 50$ min.
Part of tank filled in 7 minutes working alternatively
$= \frac{4}{50} + \frac{3}{90}$
$= \frac{4}{50} + \frac{1}{30} = \frac{12+5}{150} = \frac{17}{150}$
Part of tank filled in 1 min on Tuesday
$= \frac{1}{45} + \frac{1}{30} + \frac{1}{90}$
$= \frac{2+3+1}{90}$
$= \frac{1}{15}$
So, remaining part of tank will be filled in
$= 15 \times \left(1 - \frac{17}{150}\right)$
$= 15 \times \frac{133}{150}$
$= \frac{133}{10}$ min
= 13 min 18 sec
Required time = (3 + 13) min 18 sec
= 16 min 18 sec

47. (5) Time taken be fill tank on Wednesday
$= \frac{30 \times 60}{90}$
= 20 min
Part of tank filled in 3 min on Thrusday
$= \frac{1}{45} + \frac{1}{30} + \frac{1}{90}$
$= \frac{2+3+1}{90}$
$= \frac{1}{15}$ min
Total time to fill tank on Wednesday = 15 × 3 = 45 min.
Required difference = 45 – 20 = 25 min.

48. (3) Total time taken on Friday to fill the tank
$= \frac{60 \times 75}{135}$
$= \frac{100}{3}$ min.
Total capacity of tank $= \frac{100}{3} \times 36 = 1200$ litre
Ratio of efficiency of pipe M and Q = 5 : 4
Amount of water filled on Friday by Q
$= \frac{4}{9} \times 1200 = \frac{4800}{9}$ Litre
Ratio of efficiency of pipe M to P = 3 : 2
Amount of water filled on Monday by pipe P
$= \frac{2}{5} \times 1200 = 480$ litre
Required percentage
$= \frac{480}{\frac{4800}{9}} \times 100$
$= 90\%$

49. (2) Time taken to fill the tank by M alone with increased efficiency = 50 min.
Time taken to fill the tank by Q alone with decreased efficiency = 100 min.
Now, Together they can fill the tank in
$= \frac{100 \times 50}{150}$
$= \frac{100}{3}$ min.
Capacity of tank $= \frac{162}{12} \times \frac{100}{3} = 450$ litre
Let M and P can fill tank alone with different efficiency in x min and y min respectively
So, $\frac{8}{x} + \frac{8}{y} = \frac{7}{30}$ ... (i)
and $\frac{8}{x} + \frac{15}{y} = \frac{7}{20}$ ... (ii)
Solving (i) and (ii)
$\frac{7}{y} = \frac{7}{20} - \frac{7}{30}$
$\frac{7}{y} = \frac{21-14}{60}$
$y = 60$ min
So, x = 80 min.
Required ratio = 4 : 3

50. (1) Rate of flow of pipe N = 18 ℓ/min.
Capacity of tank = 18 × 45 = 810 litre
Rate of flow of pipe O
$= \frac{810}{30} = 27$ ℓ/min.
Rate of flow of pipe P
$= \frac{810}{90} = 9$ ℓ/min.
Part of tank filled in one min
$= \frac{1}{45} + \frac{1}{30} + \frac{1}{90} = \frac{1}{15}$
Time taken to fill tank by all = 15 min
Total cost incurred in filling tank
= 15×18×12 + 15×27×15 + 15×9×10
= 15 (216 + 405 + 90)
= 10665 Rs.

51. (4) Probability of a girl being selected from a section $= \frac{\text{Total girls in the section}}{\text{Total students in the section}}$
Let the number of girls, number of boys and total number of students respectively:
For section A: 2x, 3x and 5x.
For section B: 4y, 5y and 9y.
For section C: 5z, 4z and 9z.
According to the question,
Ratio of total number of students in the three sections:
$\Rightarrow$ 5x : 9y : 9z = 10 : 12 : 9
$\Rightarrow$ x : y : z = 6 : 4 : 3
Let the values of x, y and z be 6k, 4k and 3k respectively.
Total number of girls in all the three sections = 2x + 4y + 5z = 12k + 16k + 15k = 43k
Total number of students in all the three sections = 5x + 9y + 9z = 30k + 36k + 27k = 93k
Probability of a girl being selected from the students from all the three sections together
$= \frac{\text{Total girls in all sections}}{\text{Total students in all sections}} = \frac{43k}{93k} = \frac{43}{93}$

52. (3) According to the question,
Number of girls in sections A = Number of boys in section C
$\Rightarrow$ 2x = 4z
$\Rightarrow$ x = 2z
Number of boys in section A : Number of boys in section C = 3x : 4z = 6z : 4z = 3 : 2

53. (2) Probability of a boy being selected from this section B after 20 girls left the section = 5/8
$\Rightarrow \frac{\text{Number of boys in section B}}{\text{Total number of students in section B} - 20} = \frac{5}{8}$
$\Rightarrow \frac{5y}{9y - 20} = \frac{5}{8}$
$\Rightarrow 40y = 45y - 100$
$\Rightarrow y = 20$
Number of boys in section B = 5y = 100

54. (4) Sub-team will have at least 20% of its total employees as male and 20% as females; therefore number of men or women in the sub-team of 6 employees will be 2 or greater.
Two particular women do not want to be part of sub-team. So the sub-team will be chosen from 12 male and 6 female employees.
Number of ways of choosing the sub-team
$= {}^{12}C_2 . {}^{6}C_4 + {}^{12}C_3 . {}^{6}C_3 + {}^{12}C_4 . {}^{6}C_2$
= 66 × 15 + 220 × 20 + 495 × 15
= 990 + 4400 + 7425
= 12815

55. (3) Total incentives for the sub-team of 7 employees cannot be greater than Rs.25000. So, the maximum number of male employees in the team is 4. Minimum number of male or female employees is 2.
Number of ways of choosing the sub-team
$= {}^{12}C_2 . {}^{8}C_5 + {}^{12}C_3 . {}^{8}C_4 + {}^{12}C_4 . {}^{8}C_3$
= 66 × 56 + 220 × 70 + 495 × 56
= 3696 + 15400 + 27720
= 46816

56. (3) Distances upstream:
Monday = 18/100 * 150 = 27 km, Tuesday = 12/100 * 150 = 18 km. Wednesday = 39 km, Thursday = 45 km, Friday = 21 km
Similarly Distances downstream:
Monday = 27 km, Tuesday = 45 km. Wednesday = 18 km, Thursday = 36 km, Friday = 54 km
Let speed of boat in still water on Friday in upstream = (x-3) km/h, then on Thursday speed of boat in downstream will be = (10-x+2.5)km/h
Now
21/(x-3) = 36/[(10-x)+2.5)]
Solve, x = 6.5
So required ratio is 3.5 : 6.5 = 7 : 13

57. (2) Let speeds – 4x and 5x
So on Monday
27/(4x-3) + 27/(5x+3) = 9/2
Solve, x = 3
So downstream speed = 5x = 15 km/hr

58. (2) 8x and 3x, Also 8x – 3x = 5
So x = 1, speeds are 8 and 3 km/hr
So for Tuesday
18/(3-b) + 45/(8+b) = 14
Solve, b = 1 km/hr

59. (4) On Wednesday
39/(4x-2) – 18/(5x+2) = 5
Solving, x = 2 km/hr
So required time:
39/(8-2) + 18/(10+2) = 8 hours

60. (4) Let speed of boat in still water in upstream on Thursday = xkm/h, then speed of boat in still water in downstream on Friday = (11-x)km/h
Now
45/(x-2.5) – 54/[(11-x)+3)] = 12
15/(x-2.5) – 18/(14-x) = 4
on solving
x = 5km/h
So required ratio is 5 : 6

61. (4) $84 + 144 = \frac{1140}{?}$
$? = \frac{1140}{228} = 5$

62. (5) $\frac{13}{7} \times \frac{11}{6} \times \frac{9}{5} \times \frac{70}{429} = \frac{1}{5} \times ?$
$? = 5$

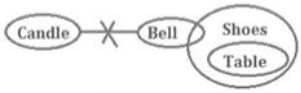
63. (3) $3^{0.2} + (3)^{0.6\times2} \times (3)^{3\times0.2} = 5 + ?$
$(3)^2 = 5 + ?$
$? = 9 - 5 = 4$

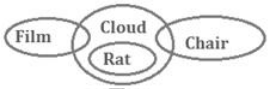
64. (4) $(4^?)^2 = 65536$
$4^? = 256$
$4^? = (4)^4$
$? = 4$

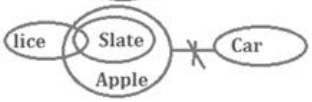
65. (2) $\sqrt{270 + 150 + 21} = ?^2$
$?^2 = 21$
$? = \sqrt{21}$

66. (5) 

67. (1) 

68. (5) 

69. (5) 

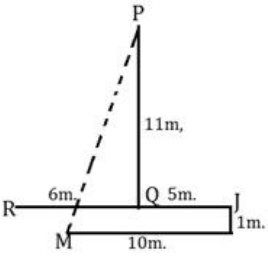
70. (4) 

71. (4) We are not getting proper information from both the statements.

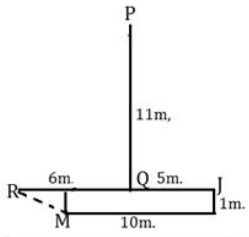
72. (4) We cannot determine which book is costliest from both the statements.

73. (2) From II statement we can find that C is on the immediate right of B.

74. (2) 12^2+5^2
$114+25=169$
$=13m.$



75. (1) $\sqrt{1^2+1^2}=\sqrt{2m}.$

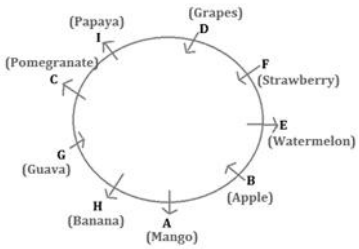


76-80.

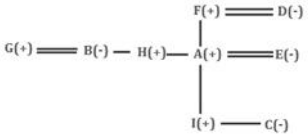
Day	Person	Country
Monday	Aman	Britain
Tuesday	Divyaraj	Russia
Wednesday	Gaurav	China
Thursday	Arun	Russia
Friday	Shailesh	Britain
Saturday	Sameer	China
Sunday	Abhishek	Britain

76. (3) 77. (1)
78. (5) 79. (4) 80. (3)

81-85.



Tree Form (Blood-Relation)-



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

86. (3) I. W # D (False)
II. W @ D (False)
III. D # T (True)

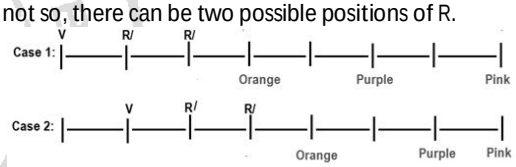
87. (4) I. D # R (True)
II. D # F (True)
III. M @ F (True)

88. (4) I. F # M (True)
II. B @ V (True)
III. F # V (True)

89. (5) I. F $ D (True)
II. N # F (False)
III. N * F (False)

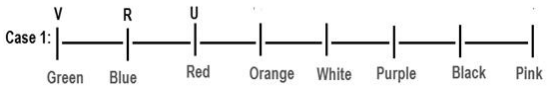
90. (3) I. R $ M (False)
II. T # M (True)
III. R $ K (False)

91-95. V sits third to the left of the one who sits on the Orange chair. Pink chair is at extreme right end. Purple chair is second to the right of Orange chair. So, there are two possible cases. Two persons sit between R and the one who sits on Purple chair. As there is a vacant chair exist or not so, there can be two possible positions of R.



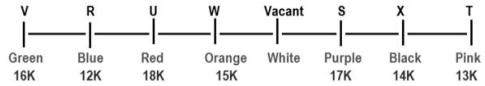
U sits on the Red chair and sits fourth to the left of the one who sits on the Black chair. So, from this case-2 will be eliminated. Now with case-1:

Both persons who sits on Green and Blue chair are immediate neighbour of each other and the one who sits on Green chair is not an immediate neighbour of the one who sits on Red chair.

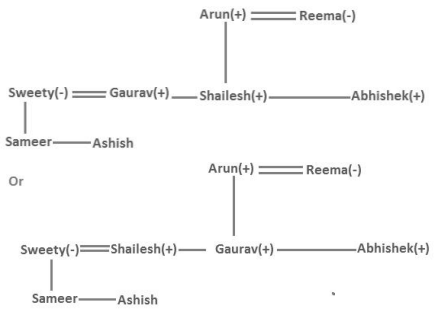


The one who sits on Black chair has salary multiple of seven whereas the one who sits on the Orange chair has salary multiple of five. So, the one who sits on Black chair has salary 14K and the one who sits on Orange chair has salary 15K. The one who sits on Red chair has salary 3/2 of the salary of the one who sits on Blue chair. So, there is only possible salaries of the who sits on Red and Blue chair will be 18K and 12K respectively. As per the given information it is clear that Only either Pink or White chair can be vacant. But it is given that only one person sits between both the persons whose salaries are prime number. So, it can be-------

Now, it is clear that Only White chair is vacant. X sits to the immediate left of the one whose salary is a prime number which is less than the salary of the one who sits on the Orange chair. W sits to the left of S and T is to the right of S. So, the final diagram is-



91. (3) 92. (5)
93. (4) 94. (4) 95. (3)
96. (3) Brother of person's wife → brother-in-law of the person. Hence, the son of lady's brother is brother-in-law of the person.
Therefore, the brother of the lady is the father-in-law of the person. Hence, the lady is the sister of the person's father-in-law.
97. (1) F3M → F is the wife of M
M5K → M is the father of K
Therefore, F is the mother of K
98. (1)
99. (3)
100. (3)



K OF BANK JOB
RACE
THINK OF RACE