

SBI PO Preliminary Grand Test –SPP-171202

HINTS & SOLUTIONS

ANSWER KEY

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

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1. (3) Refer to the first paragraph "If Asia's developing countries can grow using less coal and more clean energy, it gives hope not only to the global climate, but could herald a new era of development in the region at the heart of the global economy." Hence sentence (3) is the correct option.
2. (2) Refer the second paragraph "the global coal trade doubled, with the four largest Asian economies – Japan, South Korea, China, and India – accounting for the majority of imports". Hence sentence (III) is the correct answer.
3. (4) Refer to the second paragraph "In India you're seeing almost weekly news about coal projects being canceled...", "Now, plants are being closed and construction is being idled across the nation..." Hence sentences (b) and (c) are correct.
4. (4) Refer to the third paragraph "In Indonesia, over 35 megawatts of coal power was planned when President Joko Widodo took over, partly in response to the global slowdown", "The only reason that coal is still being planned, according to Myllyvirta, is because of pro-coal policies from governments, and plentiful funding from Japan". Hence both the sentences (I) and (III) are true.
5. (4) Refer the first paragraph ".....in China coal use is declining, the solar market is booming." Hence sentence (d) is wrong in context of the passage.
6. (3) The title "Asia and the fall of coal" is an appropriate title in context of the passage as the author has given the description about the decline in the imports of coal in Asian countries like India and China.
7. (4) Turmoil means disturbance. Hence it has similar meaning to mayhem.
Obdurate means stubbornly persistent in wrongdoing.
Exacerbate means make worse.
Enervate means weaken mentally or morally.
Dogmatic means pertaining to a code of beliefs accepted as authoritative.
8. (5) Booming means having a period of great prosperity or rapid economic growth. Hence it has similar meaning to lucrative.
Portent means a sign of something about to happen.
Staid means characterized by dignity and propriety.
Rescind means characterized by dignity and propriety.
Rife means excessively abundant.
9. (2) Apparent means clearly visible or understood; obvious. Hence it has an opposite meaning to obscure.
Abscond means run away, often taking something or somebody along.
Abstruse means difficult to penetrate.
Exigent means demanding immediate attention.
Instigate means provoke or stir up.
10. (1) Herald means something that supports. Hence it has opposite meaning to belittle.
Accede means yield to another's wish or opinion.
Accost means speak to someone.
Mawkish means effusively or insincerely emotional.
Munificent means very generous.
11. (2) The verb used in second half of the sentence 'was' is in past tense and 'already over' is also used in this sentence, which means that the incident occurred in the past. Hence phrase (b) is the correct phrase.
12. (2) In Present perfect continuous/ present perfect tense, instead of 'from', 'for' will be used before any 'period of time'. Ex. He has been living with me for the last one year.
13. (5) The sentence is grammatically correct.
14. (2) 'hard up' is an idiom that means 'short of money'. Ex. He is hard up these days.
15. (4) The sentence is in past tense 'used to work'. Hence in place of 'are', 'were' will be used.
16. (1) 'too much + noun' is used, whereas 'much too +adjective/adverb' is used. In the sentence in place of 'too much', 'much too' will be used.
17. (2) 'close to' somebody/something is used.
18. (3) The sentence is in a comparative degree. Hence in place of 'simplest solution', 'A simpler solution' is used.

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19. (4) As verb is in the conditional perfect which requires an auxiliary, therefore, the past participle (taken) is necessary.
20. (2) 'which' is used for non-defining clauses, additional information whereas 'that' is used for defining clauses.
21. (3) "proposes" is the correct word as it means put forward (a plan or suggestion) for consideration by others.
22. (5) "resources" is the correct word in context of its meaning to the sentence. Hence it doesn't require any correction.
23. (1) "worsening" is the correct word replacement as it means making or becoming worse.
24. (4) "funds" is the correct word replacement as it means financial resources.
25. (2) "capability" is the correct word replacement as it means the power or ability to do something.
26. (3) "evolving needs" is the correct phrase in context of its meaning to the sentence. The word evolving means developing gradually.
27. (1) "adopting" fits the sentence perfectly as it means choose to take up or follow (an idea, method, or course of action).
28. (5) "delegated" is the correct word as it means entrust (a task or responsibility) to another person, typically one who is less senior than oneself. Hence it doesn't require any correction.
29. (4) "wisdom" is the correct word replacement as it means the fact of being based on sensible or wise thinking.
30. (3) "have" is the correct grammar usage than "had".
31. (1) Total ways = ${}^{13}C_2$
 Number of ways of selecting men only = 8C_2
 \therefore Probability of selecting no woman = $\frac{{}^8C_2}{{}^{13}C_2} = \frac{14}{39}$
 \therefore Probability of selecting at least one woman = $1 - \frac{14}{39} = \frac{25}{39}$
32. (4) Cost after 2 years =
 $\text{Rs. } \left[20 \times \left(1 + \frac{8}{100} \right)^2 \right] = \text{Rs. } \left(20 \times \frac{27}{25} \times \frac{27}{25} \right) = \text{Rs. } 23.33.$
33. (4) Let the work got completed in T hours
 Also A's 2 hours work + B's T hours work + C's T hours work equals the total work.
 $\Rightarrow \left(\frac{2}{10} + \frac{T}{12} + \frac{T}{15} \right) = 1 \Rightarrow T = \frac{16}{3} = 5\frac{1}{3}$
 Hence the work will get completed an $5\frac{1}{3}$ hours
- After 9 a.m i.e. at 2.20 p.m
34. (2) Required ratio = $\frac{\frac{25}{100} \times 2 + \frac{75}{100} \times 3}{\frac{75}{100} \times 2 + \frac{25}{100} \times 3}$
 $= \frac{\frac{2}{4} + \frac{9}{4}}{\frac{6}{4} + \frac{3}{4}}$
 $= \frac{11}{9}$
35. (2) Total selling price = $7200 \times 10 = 72000$
 Total no. of pens manufactured = $7200 \times \frac{10}{9} = 8000$
 Total cost price of pens = $72000 \times \frac{100}{125} = 57600$
 Cost of each pen = $\frac{57600}{8000} = 7.2$
36. (3) Ratio of work done by 20 men, 30 women and 36 children
 $= 20 \times 3 : 30 \times 2 : 1 \times 36$
 $= 5 : 5 : 3$
 Wage of 20 men = $\frac{5}{13} \times 780 = 300$
 Wage of 1 man = $\frac{300}{20} = 15$
 Similarly, wage of 1 woman = 10
 And wage of 1 child = 5

37. (3)

Total wages of 15 men, 21 women and 30 children for 2 weeks
 $= 2 \times (15 \times 15 + 21 \times 10 + 30 \times 5) = 2(225 + 210 + 150) = 2 \times 585 = 1170$
 Initial ratio of milk and water = 64 : 16
 $= 4 : 1$

Let x l mixture is taken out and sold

So, ratio of milk and water in final mixture = $\frac{64 - \frac{4}{5}x}{16 - \frac{1}{5}x + x} = \frac{1}{1}$

On solving $x = 30$ l

Let the CP of 1 Ltr. milk = Rs.10

Total CP = $64 \times 10 = 640$

Total SP = $30 \times 10 \times \frac{120}{100} + 80 \times 10 = 360 + 800 = \text{Rs. } 1160$

Required profit % = $\left(\frac{1160 - 640}{640} \right) \times 100 = 81.25\%$

38. (3)

Let each side of the square = x km

Let the average speed of the plane around the field = y kmph

According to the question,

$$\frac{x}{200} + \frac{x}{400} + \frac{x}{600} + \frac{x}{800} = \frac{4x}{y}$$

$$\text{Or, } \frac{25x}{2400} = \frac{4x}{y}$$

$$\text{Or, } y = \frac{2400 \times 4}{25} = 384$$

\therefore Average speed = 384 kmph

39. (2)

No. of questions attempted correctly

= (70% of 10 + 40% of 30 + 60% of 35)

= (7 + 12 + 21) = 40

Hence, Questions to be answered correctly for 60% grade

= 60% of 75 = 45

\therefore required no. of questions

= (45 - 40) = 5

Distance covered in two and half hours by thief = $60 \times 2.5 = 150$ km

$$\frac{150}{x-60} = 5.5, x = 87.27 \text{ km/hr}$$

40. (1)

Required difference = $\frac{14^0}{360} \times 1080000 = \text{Rs. } 42000$

41. (1)

Clearly wages paid to Daily wage workers & Maintenance staffs are equal to production unit II members.

42. (4)

$270000 = \frac{1}{4}$ of 1080000 = $\frac{90^\circ}{360^\circ}$ of 1080000

According to given pie-chart 90° belongs to production unit II.

Also $90^\circ = 60^\circ + 30^\circ$ which belongs to maintenance staff and Daily wage workers

Hence, option (4) is correct.

43. (4)

Wages paid to daily wage workers = $\frac{1}{6}$ of 1080000 = 180000

After ex-gratia grant,

Total wages paid = $180000 \times \frac{120}{100} = 216000$

No. of such workers = $\frac{216000}{48 \times 900} = 5$

44. (3)

For year 2016-17,

Total wages to be paid = $10,80,000 \times \frac{110}{100} = 11,88,000$

Required difference = $\frac{62-28}{360} \times 1188000 = \text{Rs. } 11,22,000$

45. (2)

I. $x^2 - 9x + 20 = 0$

$$\Rightarrow x^2 - 5x - 4x + 20 = 0$$

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

$$\Rightarrow x = 4, 5$$

II. $y^2 + 2y - 24 = 0$

$$\Rightarrow y^2 + 6y - 4y - 24 = 0$$

$$\Rightarrow (y+6)(y-4) = 0$$

$$y = -6, 4$$

$$\therefore x \geq y$$

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47. (3) I. $x^2 - 10.5x + 27 = 0$
 $\Rightarrow x^2 - 6x - 4.5x + 27 = 0$
 $\Rightarrow (x - 6)(x - 4.5) = 0$
 $x = 6, 4.5$
 II. $y^2 - 3y - 108 = 0$
 $\Rightarrow y^2 - 12y + 9y - 108 = 0$
 $\Rightarrow (y - 12)(y + 9) = 0$
 $y = 12, -9$
 \therefore No relation

48. (3) I. $x^2 - 90x + 3x - 270 = 0$
 $\Rightarrow (x - 90)(x + 3) = 0$
 $x = 90, -3$
 II. $7y^2 - 18y + 7y - 18 = 0$
 $\Rightarrow y(7y - 18) + 1(7y - 18) = 0$
 $y = \frac{18}{7}, -1$
 \therefore No relation

49. (3) On $(I \times 7) - (II \times 4)$
 $4x + 7y = 33 \quad \times 7$
 $7x + 4y = 33 \quad \times 4$
 $x = 3, y = 3$

50. (1) $2x + 7y = 15$
 $4y + 9x = 40$
 On $(I \times 9) - (II \times 2)$
 $x = 4, y = 1$
 $x > y$

51. (3) $\frac{15}{100} \times 960 + \frac{1}{8} \times 800 = 144 + 100 = 244$

52. (1) $\frac{3}{8} \times 400 + \frac{1}{4} \times 900 = 150 + 225 = 375$
 $\therefore ? = 375 - 81 = 294$

53. (3) $\frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} \times \frac{10}{8} \times \frac{7}{56} \times \frac{7}{56} \times 2^5 = 2$

54. (3) $? = \frac{3}{8} \times 400 - 27\% \text{ of } 350$
 Or, $? = 150 - 94.5 = 55.5$

55. (5) $? = \frac{1}{5} + \frac{2}{4} + \frac{3}{3} + \frac{4}{2} + 5 - \frac{9}{7} - \frac{8}{6} - \frac{7}{5}$
 $= \frac{10}{4} + \frac{19}{5} - \frac{2}{6} - \frac{9}{7} = \frac{1050 + 1596 - 140 - 540}{420} = \frac{983}{210}$

56. (2) From the table itself, the highest value is in QA.
 Hence QA had the highest average.

57. (2) No. of students appeared = $\frac{44460}{39} = 1140$

58. (3) Given that Max. Marks for one subject is 50
 \therefore Total max. marks = $1140 \times 50 \times 5 = 285000$
 Marks obtained = $34200 + 44460 + 52440 + 47880 + 29640 = 208620$
 Difference = 76380

59. (1) Total marks in English = $42875 + 34200 + 38700 + 50472 + 47619 = 213866$
 Total marks in DI = $40425 + 29640 + 50310 + 65894 + 52503 = 238772$
 Difference = $24906 \approx 25000$

60. (4) Required percentage = $\frac{500}{38700} \times 100 \approx 1.3\%$

61. (3) Pattern is $+2^3, +3^2, +4^3, +5^2, +6^3$
 Hence required no. $? = 15 + 3^2 = 24$

62. (2) Pattern is $\times 2 - 1, \times 3 + 1, \times 4 - 1, \times 5 + 1, \times 6 - 1$
 So, $1636 \times 6 - 1 = 9815$

63. (5) Series is $+2^2, +4^2, +6^2, +8^2, +10^2$
 $\therefore ? = 60 + 8^2 = 124$

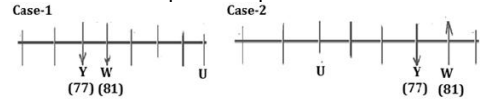
64. (2) Pattern is $+\frac{2}{3}, +\frac{4}{3}, +\frac{6}{3}, \dots$
 Hence, $? = \frac{31}{3} + \frac{12}{3} = \frac{43}{3}$

65. (4) Pattern is $(2^3 - 4), (3^3 - 6), (4^3 - 8), (5^3 - 10), \dots$
 Hence, $? = 7^3 - 14 = 329$

66-70. i- From the condition, Y sits 3rd from the extreme end of the row whose age is 7th lowest age, hence Y can sit either

3rd from left or 3rd from right end of the row and his age is 77.

ii- Y faces south. W sits immediate left of Y and W's age is perfect square as well as an odd number it means W's age is 81 because this is the only number which is an odd number as well as perfect square. U sits 4 left of W.

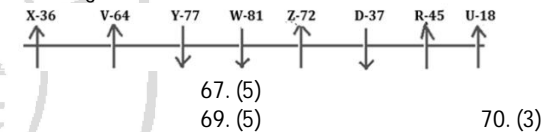


iii- X sits 3rd right of W, from this condition case 2 will be eliminated because there is no place is remaining for X in Case-2. Only Case -1 will be continued with the rest conditions.

iv- From the rest conditions, V sits right of W. V's age is perfect square as well as perfect cube, so V's age is 64 because 64 is the only number which is perfect square and perfect cube both. X's age is a perfect square, only one number is remaining which is perfect square that is 36 so X age is 36.

v- D sits 5th place away from the X. W and D are immediate neighbors of Z so Z will sit exactly middle of W and D. R's position will be fixed. U's age is 0.5 times of X's age it is clear that U's age will be 18.

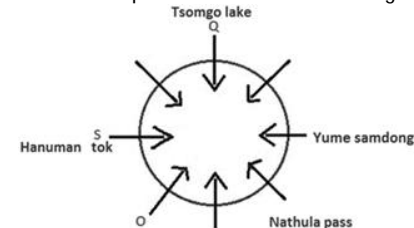
vi- Z's age is 1.6 times of R's age, so only one possibility that is Z's rank is 72 and R's rank is 45. D's rank will be fixed it is clear that D's rank is 37. W and D both face same direction, so it is clear that D faces south direction. Finally we will get the answer.



- 66. (3)
- 67. (5)
- 68. (2)
- 69. (5)
- 70. (3)
- I. $A > M$ (False)
- II. $O > I$ (True)
- I. $R > Q$ (False)
- II. $K < R$ (True)
- I. $R > M$ (False)
- II. $R \leq M$ (False)
- I. $N < Z$ (True)
- II. $C < D$ (True)
- I. $B < R$ (False)
- II. $J > R$ (False)

i- It is given that there are two persons sit between those who like Nathula pass and Tsomgo lake when counted clockwise from the person who likes Tsomgo lake and neither of them sits opposite to M.Q, who likes Tsomgo lake, sits second to the left of S, who likes Hanuman Tok.

ii- The immediate neighbour of Q faces O, who sits third to the left of the one who likes Yume samdong. O does not like Nathula pass so O sits immediate right to S.



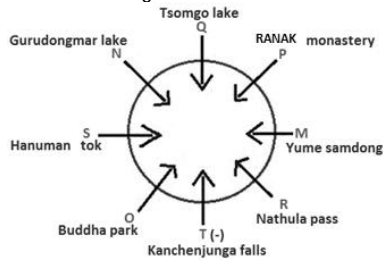
iii- M, who likes Yume samdong, sits second to the right of the girl who likes Kanchenjunga falls so the one who likes Kanchenjunga sits opposite to Q. N likes Gurudongmar lake

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and he is not the neighbour of M so N sits immediate right to Q. P likes Ranak monastery hence P sits immediate left to Q.

iv-R does not like Kanchenjunga falls so R likes Nathula pass. T likes Khanchenjunga falls and O likes Buddha park. The final arrangement is-



Floor No.	Person	Food	Age (years)
7	C	Chinese	
6	G	Korean	
5	E	Italian	
4	B	Thai	
3	A	Mexican	
2	F	Spanish	
1	D	Indian	

v-The age of the one who likes Thai food is more than 30 years. The total age of the persons who like Mexican and Spanish food is 63 years so the age of A and F is either 28 or 35 years. The difference between the age of the persons who like Indian and Spanish food is 12 years so F's age is 28 years, D's age is 16 years and A's age is 35 years. Hence the one who likes Thai food is 32 years. The age of the one who likes Chinese food is a perfect square so C's age is 25 years. The final arrangement is-

Floor No.	Person	Food	Age (years)
7	C	Chinese	25
6	G	Korean	30/24
5	E	Italian	24/30
4	B	Thai	32
3	A	Mexican	35
2	F	Spanish	28
1	D	Indian	16

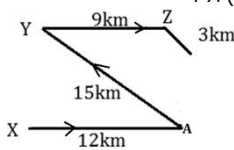
76. (5)

77. (3)

78. (3)

79. (4)

81-83.



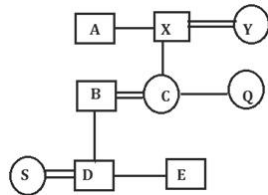
80. (1)

81. (2) North-East

82. (4) Total distance = 15+9+3 = 27km

83. (3) South-West

84-86.



84. (2)

85. (3)

87-92.

i- It is given that the person who likes Thai food lives on floor numbered four. A does not live on the lowermost floor. A lives on any odd numbered floor below the one who likes Thai food so A lives on the 3rd floor.

ii-Only two persons live between A and the one who likes Korean food. Only one person lives between B and F. F lives on an even numbered floor and does not like Thai food so F lives either on 2nd or 6th floor and B lives on 4th floor.

Floor No.	Person	Food	Age (years)
7			
6	F/	Korean	
5			
4	B	Thai	
3	A		
2	F/		
1			

iii-Only three persons live between the persons who like Italian and Indian food respectively. The person who likes Italian food lives on any floor above the B's floor. The person who likes Italian food does not live on the topmost floor so the one who likes Italian food lives on 5th floor and the one who likes Indian food lives on 1st floor.

iv-G lives on an even numbered floor but neither immediately above nor immediately below the floor of A so G lives on 6th floor and F lives on 2nd floor. C does not like Italian or Indian food. Only two persons live between D and the one who likes Thai food. The person who likes Mexican food lives on the floor immediately above the floor of the person who likes Spanish food so the arrangement is-

87. (3)

90. (5)

93. (3)

94. (4)

95. (4)

96. (3)

97. (4)

98. (3)

99. (2)

100. (1)

88. (3)

91. (2)

89. (1)

92. (4)

