

SBI PO Preliminary Grand Test –SPP-180419

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

- 1.(4) Both (A) and (C)
 2.(2) Application of scientific research only in demonstration farms
 3.(2) The current means of rural transportation are ideal i.e. low cost and non-polluting
 4.(4) Only (B)
 5.(4) Only (B)
 6.(1) All (A), (B) and (C)
 7.(5) The meaning of the word Marginal (Adjective) as used in the passage is : small and not important; slight.
 Look at the sentence :
 The story will only be of marginal interest to our readers. Hence, the words marginal and insignificant are synonymous.
 8.(4) The meaning of the word Fault (Verb) as used in the passage is : to find a mistake or a weakness in somebody/ something; criticise; blame.
 Look at the sentences :
 His colleagues could not fault his dedication to the job. He had always been polite, you couldn't fault him on that. Hence, the words fault and blame are synonymous.

- 9.(1) The meaning of the word Potential (Adjective) as used in the passage is : that can develop into something or be developed in the future; possible.
 Look at the sentence :
 First we need to identify actual and potential problems. Out of the given alternatives, the word Unlikely (Adjective) means; not likely to happen; not probable. Look at the sentences :
 The project seemed unlikely to succeed.
 It is most unlikely that she will arrive before seven. Hence, the words potential and unlikely are antonyms.
 10.(5) The meaning of the word iniquitous (Adjective) as used in the passage is : very unfair or wrong; wicked.
 Hence, the words iniquitous and just are antonyms.
 11.(2) 12.(1)
 13.(3) 14.(5) 15.(5)
 16. (2) Here, passive voice i.e. a detective in the film, is alleged to have should be used.
 17. (4) Modals could not/ would not/cannot agree with Plural Verb (V1).
 Hence, could not undergo the procedure.... should be used here.
 18. (2) Structure of the sentence in Passive Voice:
 Subject + can /may + be + V3 (Past Participle)
 Hence, forced to review the selection ... should be used here.
 19. (3) Sentence shows present time Hence, where trained scientific personnel enjoy (Simple Present) should be used.
 20. (1) Here, Though the book is not yet available in India should be used.

21. (1) 22. (5)
 23. (5) 24. (3) 25. (2)
 26.(5) risk 27.(3) damaged
 28.(4) real 29.(2) ignored
 30.(2) serious

31. (1) Eq.-I: $3x^2 - 47x + 184 = 0$
 $\Rightarrow 3x^2 - 24x - 23x + 184 = 0$
 $\Rightarrow 3x(x - 8) - 23(x - 8) = 0$
 $\Rightarrow (x - 8)(3x - 23) = 0$
 $\Rightarrow x = 8, \frac{23}{3}$ (or) $x = 8, 7.6$
Eq.-II: $2y^2 - 23y + 66 = 0$
 $\Rightarrow 2y^2 - 12y - 11y + 66 = 0$
 $\Rightarrow 2y(y - 6) - 11(y - 6) = 0$
 $\Rightarrow (y - 6)(2y - 11) = 0$
 $\Rightarrow y = 6, \frac{11}{2}$ (or) $6, 5.5$
 $\therefore x > y.$
 32. (1) Eq.-I: $10x^2 - 17x - 11 = 0$
 $\Rightarrow 10x^2 + 5x - 22x - 11 = 0$

$$\Rightarrow 5x(2x + 1) - 11(2x + 1) = 0$$

$$\Rightarrow (2x + 1)(5x - 11) = 0$$

$$\Rightarrow x = \frac{-1}{2}, \frac{11}{5} \text{ (or) } x = -0.5, 2.2$$

Eq.-II : $6y^2 + 19y + 15 = 0$

$$\Rightarrow 6y^2 + 9y + 10y + 15 = 0$$

$$\Rightarrow 3y(2y + 3) + 5(2y + 3) = 0$$

$$\Rightarrow (2y + 3)(3y + 5) = 0$$

$$\Rightarrow y = \frac{-3}{2}, \frac{-5}{3} \text{ (or) } y = -1.5, -1.6$$

$\therefore x > y$.

33. (5) Eq.-I : $20x^2 - 31x + 12 = 0$

$$\Rightarrow 20x^2 - 15x - 16x + 12 = 0$$

$$\Rightarrow 5x(4x - 3) - 4(4x - 3) = 0$$

$$\Rightarrow (4x - 3)(5x - 4) = 0$$

$$\Rightarrow x = \frac{3}{4}, \frac{4}{5} \text{ (or) } x = 0.75, 0.8$$

Eq.-II : $20y^2 - y - 12 = 0$

$$\Rightarrow 20y^2 + 15y - 16y - 12 = 0$$

$$\Rightarrow 5y(4y + 3) - 4(4y + 3) = 0$$

$$\Rightarrow (4y + 3)(5y - 4) = 0$$

$$\Rightarrow y = \frac{-3}{4}, \frac{4}{5} \text{ (or) } y = -0.75, 0.8$$

\therefore Relationship can't be established.

34. (5) Alternate Method :

Eq.-I : $30x - 49\sqrt{x} + 20 = 0$

S-1 : $30 \times 20 = 600$

S-2 : $(-24, -25)$

$$[(-24) \times (-25) = 600, (-24) + (-25) = -49]$$

S-3 : (i) 24, 25

$$(ii) \sqrt{x} = \frac{24}{30}, \frac{25}{30} \Rightarrow \sqrt{x} = \frac{4}{5}, \frac{5}{6}$$

$$\therefore x = \frac{16}{25}, \frac{25}{36}$$

Eq.-II : $42y - 5\sqrt{y} - 25 = 0$

S-1 : $42 \times -25 = -1050$

S-2 : $(30, -35)$

$$[30 \times (-35) = -1050, 30 + (-35) = -5]$$

S-3 : (i) -30, 35

$$(ii) \sqrt{y} = \frac{-30}{42}, \frac{35}{42} \Rightarrow \sqrt{y} = \frac{-5}{7}, \frac{5}{6}$$

$$\therefore y = \frac{25}{49}, \frac{25}{36}$$

The relationship can't be determined.

35. (5) Eq.-I : $2x^2 + 3x = 14$

$$\Rightarrow 2x^2 + 3x - 14 = 0$$

$$\Rightarrow 2x^2 + 7x - 4x - 14 = 0$$

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

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

$$\Rightarrow x = \frac{-7}{2}, 2 \text{ or } x = -3.5, 2$$

Eq.-II : $4y^2 + 12y = 16$

$$\Rightarrow y^2 + 3y - 4 = 0$$

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

$$\Rightarrow y(y + 4) - 1(y + 4) = 0$$

$$\Rightarrow (y + 4)(y - 1) = 0$$

$$\Rightarrow y = -4, 1$$

\therefore Relation can't be determined.

36.(1) Required ratio = 40 : 35 = 8 : 7

37.(2) Required average

$$= \left(\frac{15 + 25 + 30 + 40 + 15 + 10}{6} \right) \text{ thousand}$$

$$= \frac{135}{6} = 22.5 \text{ thousand}$$

38.(3) Required percentage increase

$$= \frac{25 - 10}{10} \times 100 = 150$$

39.(5) Laptops manufactured by Apple, Lenovo and Samsung in

2010 = 15 + 40 + 25 = 80 thousand

Laptops manufactured by Dell, HP and Abascus in 2011

= 15 + 25 + 35 = 75 thousand

Difference = 5000

40.(1) Abascus \Rightarrow 35000

41.(2) Since, Total CP = 100 + 5 + 27 = 132

Total SP for getting 50% profit = 132 \times 150/100 = 198

To get, Remained amount after loss of 50% on first 50% item = 198 - 66/2 = 165 Rs.

Percentage increase in Rate of remained 50% item = $[(165 - 66) / 66] \times 100$.

42.(1) 49%

43. (5) Rate downstream

$$\frac{\text{Distance}}{\text{Time}} = \left(\frac{15.2}{\frac{24}{60}} \right) \text{ kmph} = \left(\frac{15.2 \times 60}{24} \right) \text{ kmph}$$

= 38 kmph

Speed of current = 2.5 kmph

\therefore Speed of boat in still water = (38 - 2.5) kmph

= 35.5 kmph .

\therefore Rate upstream = (35.5 - 2.5) kmph = 33 kmph

\therefore Distance covered in 18 minutes

44.(5) In the year 2013,

Male population = 6x

Female population = 7x

According to the question, In the year 2014,

$$\frac{6x \times 115}{100} + \frac{7x \times 112}{100} = 5896$$

$$\Rightarrow 690x + 784x = 589600$$

$$\Rightarrow 1474x = 589600$$

$$\Rightarrow x = \frac{589600}{1474} = 400$$

\therefore Female population in the year 2014

$$= 7x \times \frac{112}{100} = \frac{7 \times 400 \times 112}{100} = 3136$$

45. (1) Total marks = x For boy = 280 + 80 = 45x/100 x = 800

Passing marks for girls = 800 \times 30/100 = 240

Hence, She would score = 240 - 108 = 132 marks

46.(1) Average number

= 1/6 (2 + 3 + 4 + 5 + 4 + 7) lacs

Grand Test – SPP-180419



47.(2) $= 1/6 \times 25 \text{ lacs} = 4.1 \text{ lacs}$
 Required % = $[25/(5 + 6 + 5 + 8 + 5 + 9)] \times 100$
 $= 2500/38 = 66$

48.(3) The total number of candidates who applied for both the banks together is 9 lacs in 2004, 2009 and 2007 separately.

49.(1) Required number of disqualified candidates
 $= (80/100) \times 9 \text{ lacs} = 720/100 \text{ lacs} = 7.2 \text{ lacs}$

50.(2) Required ratio = $(5 + 7)/(5 + 9) = 12/14 = 6 : 7$.

51.(4) The pattern of the number series is :

$15 + 3 = 18$

$18 - 2 = 16$

$16 + 3 = 19$

$19 - 2 = 17$

$17 + 3 = 20$

$20 - 2 = \boxed{18}$

52.(1) The pattern of the number series is :

$1050 \times \frac{2}{5} = 420$

$420 \times \frac{2}{5} = 168$

$168 \times \frac{2}{5} = 67.2$

$\therefore 10.752 \times \frac{2}{5} = \boxed{4.3008}$

53.(5) The pattern of the number series is :

$0 + 1 \times 6 = 6$

$6 + 2 \times 9 = 24$

$24 + 3 \times 12 = 60$

$60 + 4 \times 15 = 120$

$120 + 5 \times 18 = 210$

$210 + 6 \times 21 = 210 + 126 = \boxed{336}$

54.(3) The pattern of the number series is :

$32 + 1 \times 17 = 32 + 17 = 49$

$49 + 2 \times 17 = 49 + 34 = 83$

$83 + 4 \times 17 = 83 + 68 = 151$

$151 + 8 \times 17 = 151 + 136 = 287$

$287 + 16 \times 17 = 287 + 272 = 559$

$559 + 32 \times 17 = 559 + 544 = \boxed{1103}$

55.(2) The pattern of the number series is :

$552 - 462 = 90$

$650 - 552 = 98$

$756 - 650 = 106$

$870 - 756 = 114$

$992 - 870 = 122$

$\therefore ? = 992 + 130 = \boxed{1122}$

56.(5) Difference in no. of students employed from finance and marketing = $1861 - 1096 = 765$.

57.(4) % increase in the average salary of finance

$= \frac{9810 - 5450}{5450} \times 100 = 80\%$

58.(3) Average annual rate at which the initial salary offered in software increase

$= \frac{1}{4} \left[\frac{8640 - 5290}{5290} \right] \times 100 = 15.9\%$

59.(1) Average monthly salary offered to a manager graduate in 1993 = $\frac{6380 + 6390 + 6440}{3} = 6403$

60.(2) Earning of students seeking job in finance
 $= 253 \times 7550 = 162850$

Difference in the amount earned

$= 19.10,150 - 162850 = 28160$

$= 2.81 \text{ lakh per month}$

$= \text{Rs. } 33.8 \text{ lakh per annum}$

61.(2) $623898 \times 99 = ? \times 60000$

Taking approximate values, $623900 \times 100 = ? \times 60000$

$\Rightarrow ? = \frac{623900 \times 100}{60000} = 1039.8 = 1030$

62.(3) $? = \frac{4}{5} \times \frac{3}{7} \times \frac{6}{7} \times \frac{5}{9} = \frac{4}{5} \times \frac{3}{7} \times \frac{7}{6} \times \frac{9}{5} = \frac{18}{25}$

63.(1) $(399.98)^2 = ?$

$\Rightarrow ? \approx (400)^2 = 160000$

64.(1) $? = \frac{3\sqrt{9 \times 9 \times 9}}{3\sqrt{12 \times 12 \times 12}} \times \frac{8}{15} \times \frac{3}{8}$

$= \frac{9}{12} \times \frac{8}{15} \times \frac{3}{8} = \frac{3}{20} = 0.15$

65.(2) $\left(\frac{9^3}{10^3}\right)^{\frac{2}{3}} + \frac{\sqrt{12996}}{\sqrt{625}} = ? \times 10^{-2}$

$\Rightarrow \left(\frac{9}{10}\right)^2 + \frac{114}{25} = ? \times 10^{-2} \cdot 8$

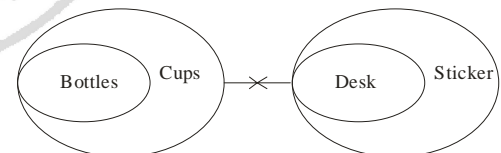
$\Rightarrow \frac{81}{100} + \frac{114}{25} = \frac{?}{100}$

$\Rightarrow \frac{81 + 456}{100} = \frac{?}{100}$

$\Rightarrow \frac{537}{100} = \frac{?}{100}$

$\Rightarrow ? = 537$

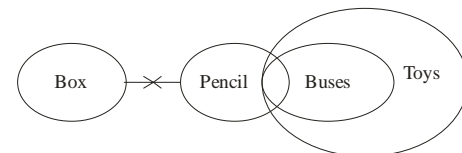
66-67.



66.(2)

67.(5)

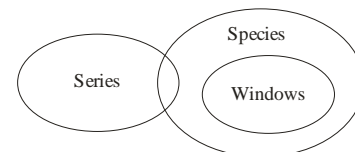
68-69.



68.(2)

69.(1)

70.(1)



71.(3)

B + D means B is mother of D.
 D × M means D is father of M.
 M ÷ N means M is both of N.

Therefore, M is grandson of B.
72. (5) Option (1)

$J \div R$ means J is brother of R
 $R - T$ means R is sister of T.
 $T \times F$ means T is father of F.
Therefore, J is uncle of F.

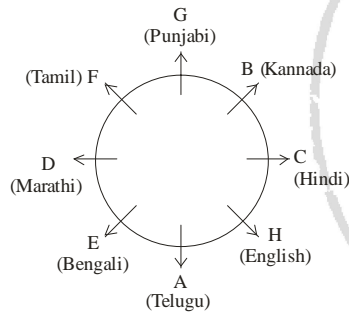
Option (2)
 $J + R$ means J is mother of R
J is a female.

Option (3)
 $J \div M$ means J is brother of M.
 $M - N$ means M is sister of N.
 $N \times F$ means N is father of F.
Therefore, J is uncle of F.

73. (2) Option (1)
 $M \div K$ means M is brother of K.
 $K \times T$ means K is father of T.
 $T - R$ means T is sister of R.
The sex of R is not clear.
R is either nephew or niece of M.

Option (2)
 $M - J$ means M is sister of J.
 $J + R$ means J is mother of R
 $R - N$ means R is sister of N.
Therefore, R is niece of M.

74. (2) 75. (4)
76-80.



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

80. (5)

81. (4) 82. (3)
83. (2) 84. (5) 85. (1)
86. (5) Both the arguments are strong as they are both true and desirable.
87. (2) 1 is not strong as it is trivial.
88. (1) I is a strong argument as it is true that most of the present energy sources are exhaustible. II is not strong as it is not true. In fact, harnessing solar energy on the contrary is cheaper.
89. (2) Only I and III are valid courses if action. II is not valid as it does not solve the problem.
90. (5) Both II and III follow.
Don't go for (3), because it would be wiser to adopt a two pronged strategy –both II and III.
91. (2) $E > C$ is true.
92. (5) $E < J \leq H > Z$
 $E > F$
 $F < E < J \leq H > Z$
 $F < E < J \leq H \leq Y$
93. (5) $H \geq I = J = K \leq L < M$
94. (1) $K \geq L = M > N$
Now, $N < K$

95. (3) 97. (3)
96. (4) 99. (3)
98. (2) 100. (2)