SBI PO Preliminary Grand Test –SPP-180534

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1. (2) 2. (4)
3. (1) 4. (2)
5. (3) 6.(4)
7.(2) 8.(3) 9.(3)

10.(2) Take in means to understand something or absorb something completely so the antonym should be diffuse- to spread.

11.(5) Flexibility - the ability to change shape, size, direction etc. so the antonym should be obduracy - having the quality of being determined to act in a particular way and not to change despite argument or persuasion.

12.(3) Normally– Generally (in normal conditions or situations, usually). So the antonym should be - seldom- means rarely, not usually.

13.(1) analogy- means comparison between things which have similar features.
parallel- something very similar to something else. (comparison).
For other options:
partial - not complete
example-something which is same of a group of things, that it is a member of right– correct

14.(5) celestial - of or from outside the world or invisible heaven.
For other options:
karmic - related to fate or destiny
earthy - natural, realistic or practical
corporeal - of the nature of physical body, tangible.
infinite - measurably great.

15.(1) understand (we need to understand the information)
For other options:
acknowledge - to recognize the existence of something or something to be true.
channel - to convey through a channel.
restrict - keep something within limits treat - to act or behave toward (a person) in a particular way to deal with something (a disease, problem etc.)

16. (3) There are two possibilities in future. Hence, the first possible event should be expressed in Simple Present. Hence, re-place 'if I have recovered' by if I recover.

17. (2) In Indirect statement, if Reporting Verb Past Tense then the verb is in of Reported Speech will also be in Past Tense. Hence, that the taxes would be .... …a correct usage.

18. (4) When we use Neither.....nor, the verb agrees with the number/person of the noun/pronoun used after 'nor.
Hence, knowledge was required ……will be correct usage.

19. (1) Replace 'instead of by 'in spite of.
Look at the sentence :
They went swimming in spite of all the danger signs.
Now I can walk to work instead of going by car.

20. (4) Replace group of words 'to five year's imprisonment' by 'to five-year imprisonment'.
Remember : Numeral Adjective + hyphen + Noun (Singular).

21. (5) 22. (1)
23. (1) 24. (4) 25. (3)
26. (2) rises 27. (1) prevents
28. (3) associated 29. (2) impacts
30. (4) working

31. (2)
4×1.5=6
6×1.5=9
9×1.5=13.5
13.5×1.5=20.25
20.25×1.5=30.375
30.375×1.5=45.5625

32. (2)
12×2-2=22
22×3+3=69
69×4-4=272
272×5+5=1365
1365×6-6=8184

33. (3) series is *2-2,*2+4,*2-6,*2+8,*2-10

34. (3)
13×1+1=14
14×2+2=30
30×3+3=93
93×4+4=376
376×5+5=1885
1885×6+6=11316

35. (1)
9×0.5=4.5
4.5×1=4.5
4.5×1.5=6.75

6.75×2=13.5
13.5×2.5=33.75
33.75×3=101.25

36. (1) Total number of shirts sold by store C in 2007
$= \frac{2400\times 28}{100} = 672$
$\therefore$ Total number of shirts sold in 2008
= 2 x 555 – 672 = 1110 - 672 = 438
$\therefore$ Required percent
$= \left(\frac{672-438}{672}\right)\times 100 = \frac{23400}{672} = 35\%$

37. (2) Required difference = (32 - 8)% of 2400 =
$= \frac{2400\times 24}{100} = 576$

38. (3) $\because$ 100% = 360°
$\therefore$ 28% = $\frac{360}{100}\times 28 = 100.8$

39. (2) Total number of shirts sold by store A in the year 2009
$= 2400 \text{ x } \frac{20}{100}\times\frac{110}{100}\times\frac{75}{100} = 396$

40. (1) Total sales by sotre D = $\frac{2400\times 12}{100} = 288$
Formal shirts = 126
$\therefore$ Number of casual shirts = 288 - 126 = 162
$\therefore$ Required ratio = 126: 162 = 7 : 9

41 – 45. Students in college E $\Rightarrow$ 450
College C $\Rightarrow$ 450 × 2 = 900
College D $\Rightarrow \frac{3}{4}\times 900 = 675$
College A $\Rightarrow \frac{900\times 100}{60} = 1500$
University XYZ $\Rightarrow$ 1500 × 4 = 6000
College B $\Rightarrow$ (6000 - 450 - 900 -675 - 1500) = 2475

41. (4) Students in colleges B and C = 2475 + 900 = 3375
Students in colleges A and D = 1500 + 675 = 2175
Required percent
$= \left(\frac{3375-2175}{2175}\right)\times 100 = \frac{120000}{2175} = 55$

42. (5) In college D,
Boys $\Rightarrow \frac{13}{25}\times 675 = 351$
Girls $\Rightarrow \frac{12}{25}\times 675 = 324$
Girls in college E $= 324\times\frac{3}{4} = 243$
= 450 - 243 = 207
$\therefore$ Required ratio = 207 : 243 = 23 : 27

43. (5) Students in the university PQR = $\frac{6000\times 28}{100} = 1680$
Students in science or commerce streams
$= \frac{1680\times 60}{100} = 1008$
Students in science stream $= 1008\times\frac{7}{12} = 588$

44. (5) Average number of students in colleges B, C and E
$= \frac{2475+900+450}{3} = \frac{3825}{3} = 1275$

45. (5) Teacher in college A = $\frac{1}{20}\times 1500 = 75$
Teachers in college C = 75 - 15 = 60

46. (1) From statement I,
Number of female students = x
$\therefore$ Number of male students = x + 3
$\therefore$ (x + 3) × 63 + 59 × x
= (2x + 3) × 61.08 kg
$\Rightarrow$ 63x + 189 + 59x = 122.16x + 183.24
$\Rightarrow$ 122.16x - 122x = 189 -183.24
$\Rightarrow$ 0.16x = 5.76 $\Rightarrow$ x = 36
$\therefore$ Total number of students
= 2x + 3 = 2 × 36 + 3 = 75

47. (2) From statement II,
Let the breadth be x metre.
$\therefore$ Length = (x + 6) metre
$\therefore$ 2 (x + 6 + x) = 32
$\Rightarrow$ 2x + 6 = 16 $\Rightarrow$ 2x = 16 - 6 = 10
$\Rightarrow$ x = $\frac{10}{2}$ = 5 metre = breadth
$\therefore$ Length = 6 + 5 = 11 metre
$\therefore$ Diagonal = $\sqrt{11^2+5^2}$
= $\sqrt{121+25} = \sqrt{146}$ metre

48. (3) From both the statements,
Let the numbers be a and b.
$\therefore$ a + b = 128
and ab = LCM × HCF = 504 × 8 = 4032
$\therefore$ $(a+b)^2 = a^2+b^2+2ab$
$\Rightarrow a^2+b^2 = (a+b)^2 - 2ab$
$= (128)^2 - 2\times 4032$
= 16384 - 8064 = 8320

49. (4) From statement I,
C.P. of table = Rs. [952 - (1054 - 952)]
= Rs. (952 - 102) = Rs. 850
From statement II,
Let the C.P. of table be Rs. x.
$\therefore \frac{x\times 104}{100} = \frac{1105\times 80}{100} \Rightarrow x = \frac{1105\times 80}{104} = \text{Rs.}850$

50. (1) C's income in 2008 = Rs. 369000
C's expenditure = Rs. 300000
$\therefore$ Profit per cent = $\frac{\text{Profit}}{\text{Expenditure}}\times 100$
= Rs. $\frac{(369000-300000)}{\text{Rs.}300000}\times 100$
$= \frac{69}{3} = 23\%$

51. (4) Required ratio = (220 + 320 + 500) : (140 + 300 + 440)
= 1040 : 880 = 13 : 11

52. (5) Total expenditure in 2006 = Rs. (220 + 420 + 560) thousand = Rs. 1200 thousand
If the total income be Rs. x thousand, then
45 = $\frac{(x-1200)}{1200}\times 100$
$\Rightarrow$ 45 × 12 = x - 1200
$\Rightarrow$ 540 + 1200 = x
$\Rightarrow$ x = Rs. 1740 thousand

53. (5) Per cent increase

$= \frac{560-260}{260} \times 100$

$= \frac{3000}{26} = \frac{1500}{13} = 115\frac{5}{13}\%$

54. (3) Required average expenditure

= Rs. $\frac{1}{5}$(350 + 500 + 560 + 300 + 460) thousand

= Rs. $\left(\frac{2170}{5}\right)$thousand = Rs. 434 thousand

55. (3) In 2009,

Expenditure of A = $\frac{560 \times 105}{100}$ = Rs. 588 thousand

Expenditure of B = $\frac{460 \times 106}{100}$ = Rs. 487.6 thousand

Expenditure of C = $\frac{300 \times 112}{100}$ = Rs. 336 thousand

$\therefore$ Total expenditure = Rs. (588 + 487.6 + 336) thousand

= Rs. 1411.6 thousand

56. (4) $16^2 + 144 + 24 + ? = 784$

$\Rightarrow$ 256 + 144 + 24 + ? = 784

$\Rightarrow$ 424 + ? = 784

$\Rightarrow$? = 784 – 424 = 360

57. (2) $\frac{2430}{16} - 16.97 + \sqrt{?} = 164$

$\Rightarrow$ 152 - 17 + $\sqrt{?}$ = 164

$\Rightarrow \sqrt{?}$ =164 – 135 = 29

$\therefore$? = 29 x 29 = 841

58. (3) ? $\Rightarrow \frac{9600}{12} \times \sqrt{529} + 96$

$\approx$ 800 x 23 + 96

$\approx$ 18400 + 96 = 18496

59. (1) 16 x 10 - $\sqrt{625}$ -17 x 2 = $?^2$

$\Rightarrow$ 160 – 25 – 34 = $?^2$

$\Rightarrow ?^2 \approx 101 = ? \approx \sqrt{101} = 10$

60. (5) $\frac{?}{100} \times \frac{5225}{5} \times \frac{3}{11} = 375$

$\Rightarrow \frac{?}{100} \times 285 = 375 \Rightarrow ? = \frac{375 \times 100}{285} = 132$

61. (2) Let B's investment = Rs. x

$\therefore$ A's investment = Rs. $\frac{x}{3}$

and C's investment = Rs. $\frac{2x}{3}$

$\therefore$ Ratio of profit sharing = $\frac{x}{3} : x : \frac{2x}{3}$

= 1 : 3 : 2

Sum of the ratios = 1 + 3 + 2 = 6

B's share in profit = $\frac{3}{6} \times 45000 = Rs.22500$

62. (2) Let principal be Rs. x.

$\therefore$ Principal = $\frac{S.I \times 100}{Time \times Rate} = \frac{12000 \times 100}{2 \times 8}$ = Rs. 75000

Case II

Amount = $P\left(1 + \frac{R}{100}\right)^T$

= $75000\left(1 + \frac{10}{100}\right)^2 = 75000\left(1 + \frac{1}{10}\right)^2$

= $75000 \times \frac{11}{10} \times \frac{11}{10}$ = Rs. 90750

63. (1) Side of square = $\frac{diagonal}{\sqrt{2}} = \frac{8\sqrt{2}}{\sqrt{2}} = 8cm$

$\therefore$ Length of rectangle = 8 cm

$\therefore$ Breadth = 8 - 5 = 3 cm

$\therefore$ Area of rectangle = 8 $\times$ 3 = 24 sq.cm.

64. (1) Volume of earth taken out = (30 $\times$ 20 $\times$ 12) cu. metre

= 7200 cu. metre

The region where earth is to be spread out

= (500 $\times$ 30 - 30 $\times$ 20) sq. metre

= 15000 - 600 = 14400 sq. metre

$\therefore$ Rise in level = $\frac{7200}{14400} = \frac{1}{2}$ metre = 50 cm.

65. (1) Total number of balls in the bag = 4 + 6 + 5 = 15

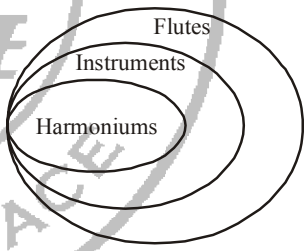
Total possible outcomes = selection of 3 balls out of 15 balls

= $15_{C_3} = \frac{15 \times 14 \times 13}{1 \times 2 \times 3} = 455$

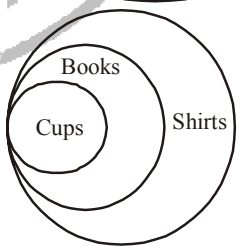
Favourable outcomes = selection of 3 balls out of 9 balls (except orange balls)

= $9_{C_3} = \frac{9 \times 8 \times 7}{1 \times 2 \times 3} = 84$

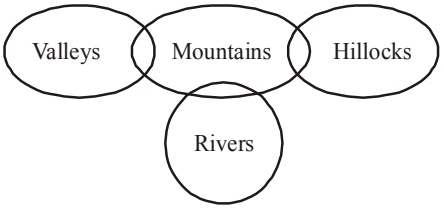
66. (5)



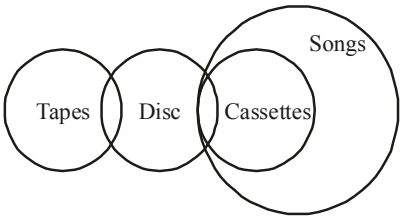
67. (5)



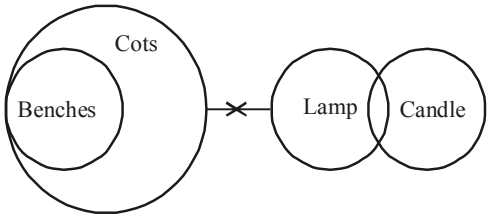
68. (2)



69. (4)



70. (3)

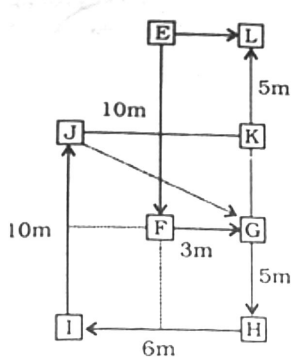


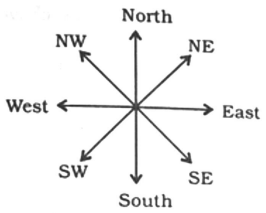
71. (1) L ÷ M → L is daughter of M.
M x O → M is father of 0.
O - P → O is son of P.
P ÷ Q → P is daughter of Q.
P is wife of M.
P is mother of L and O.
Therefore,L is granddaughters of Q.

72. (3) Q - R - → Q is son of R.
R ÷ S → R is daughter of S.
S x T → S is father of T.
R is sister of T.
Therefore, Q is nephew of T.

73. (5) A - B → A is son of B.
B x C → B is father of C.
C + D → C is wife of D.
D - E → D is son of E.
B is father of A and C.
A is brother of C.
A is brother-in-law of D.
C is sister of A
The sex of E is not known.

(74 – 75):





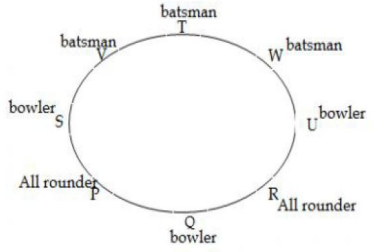
74. (1) Point G is to the Southeast of Point J.
75. (4) Point E is 3 metres West of Point L.

76 – 80.

Name	Department	Colony
Akhil	IB	Defence
Bharat	Marketing	Defence
Divya	Advertisement	Vasant Kunj
Farhan	Operation	Shree Kunj
Piyush	Finance	Defence
Rupesh	HR	Shree Kunj
Sujata	IT	Shree Kunj
Tarun	R & D	Vasant Kunj

76.(5) 77.(4)
78.(3) 79.(2) 80.(3)

81 – 85.



81. (2) Q 82. (4) Q
83. (3) an all rounder 84. (5) Both P and R
85. (1) VS

(86 – 90):

(i) A $ B means A < B
Therefore, A ≥ B
(ii) A # B means A > B
Therefore, A ≤ B
(iii) A @ B means A < B and A ≠ B,
Therefore, A > B
(iv) A © B means A < B and A > B
Therefore, A = B
(v) A % B means A >B and A ≠ B
Therefore, A < B

86. (3) H % J ⇒ H < J
J © N ⇒ J = N
N@R ⇒ N > R
Therefore, H < J = N > R
Conclusions:
I. R % J ⇒ R <J : True
II. H @ J ⇒ H >J : Not true
III. N @ J ⇒ N > J : Not true

87. (5) M @ J ⇒ M > J
J $ T ⇒ J ≥ T

T© N $\Rightarrow$ T = N
Therefore, M > J $\geq$ T = N
Conclusions:
I. N # J $\Rightarrow$ N $\leq$ J : True
II. T % M $\Rightarrow$ T < M : True
III. M @ N $\Rightarrow$ M >N : True

88. (1) K # N $\Rightarrow$ K $\leq$ N
N $ T $\Rightarrow$ N $\geq$ T
T % J $\Rightarrow$ T > J
Therefore, K $\leq$ N $\geq$ T > J
Conclusions:
I. J @ N $\Rightarrow$ J >N : Not True
II. K @ T $\Rightarrow$ K >T : Not True
III. T @ K $\Rightarrow$ T >K : Not True

89. (4) M @ D $\Rightarrow$ M > D
D © V $\Rightarrow$ D = V
V $ W $\Rightarrow$ V $\geq$ W
Therefore, M > D = V $\geq$ W
Conclusions:
I. W @ M $\Rightarrow$ W >M : Not True
II. M % V $\Rightarrow$ M <V : Not True
III. D $ W $\Rightarrow$ D $\geq$ W : True

90. (2) R # D $\Rightarrow$ R $\leq$ D
D $ M $\Rightarrow$ D $\geq$ M
M © N $\Rightarrow$ M = N
Therefore, R $\leq$ D $\geq$ M = N
Conclusions:
I. R # M $\Rightarrow$ R $\leq$ M : Not True
II. N # D $\Rightarrow$ N $\leq$ D : True
III. N $ R $\Rightarrow$ N $\geq$ R: Not True

91. (1) If the Government has decided to construct super highway, it implies that the Government has adequate resources to construct it.

92. (2) The statement given against option (2) contradicts the finding.

93. (3) The third statement shows that impact of flu is diminishing.

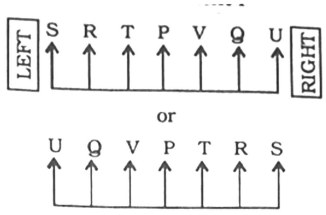
94. (5) All the four statements are possible effects.

95. (3) The third statement is the probable cause of price rise in case of petroleum products.

96. (1) From statement I
Mother $\rightarrow$ Ravi joined office in July, August or September. Clearly, Ravi joined office in the month of September.
From Statement II
Father $\rightarrow$ Ravi joined office in September, October or November.
Ravi joined office in the month of September or November.

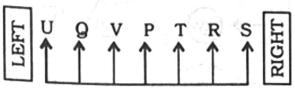
97. (5) From statement I
J and M are parents of F, K and L.
It is not clear whether J or M is the mother of L.
From statement II
J is the father of F, K and L.
From both the statements
M is the wife of J as J is the son-in-law of T who is the mother of M.
Therefore, M is the mother of L.

98. (1) From statement I



or

It is clear that P is in the middle.
From statement II



It is clear that P is in the middle.

99. (1) From statement I
C > E > A > D > B > F
Clearly, E is the second tallest.
From statement II
C > E/F > A > D > B > E/F

100. (5)