SBI PO Preliminary Grand Test –SPP-170336
HINTS & SOLUTIONS

1. (2)　D
2. (1)　A
3. (3)　C
4. (2)　B
5. (5)　E
6. (1)　In comparative degree, than should be used.
7. (2)　Here, leaves very (Present Simple) should be used.
8. (2)　Here, on organisational (Adjective) performance have (Plural) ....should be used.
　　　　Here, the subject is numerous research studies (Plural).
9. (3)　The correct spelling is registered.
10. (1)　The correct spelling is different.
11. (2)　　　　　　12. (4)
13. (1)　　　　　　14. (2)
15. (3)　　　　　　16. (1)
17. (4)　　　　　　18. (4)
19. (5)　　　　　　20. (4)
21. (3)
22. (1)　Key (Adjective) = most important: essential; vital.
　　　　Look at the sentence :
　　　　He played a key role in the dispute.
23. (3)　Guard (Verb) = to protect property, places or people from danger.
　　　　Look at the sentence :
　　　　The dog was guarding its owner's luggage.
24. (5)　Vital (Adjective) = necessary or essential. Superfluous (Adjective) = unnecessary
　　　　Look at the sentences :
　　　　Good financial accounts are vital to the success of any enterprise.
　　　　She gave him a look that made words superfluous.
25. (4)　Alleviate (Verb) = to make something less severe; ease.
　　　　Aggravate (Verb) = to make worse; worsen.
　　　　Look at the sentences :
　　　　Pollution can aggravate asthma.
　　　　A sincere effort is needed to alleviate the sufferings of the poor.
26. (3)
27. (2)　Resource (Noun) = some-thing that can be used to help achieve an aim etc.
28. (5)　Lament = to feel or express great sadness or disappointment.
29. (5)　Tackle (Verb) = To make a determined effort to deal with a different problem.
30. (1)　Result in = to something happen.
31. (5)　Question can't be answered even after using all the information
32. (2)　From II and III,

$$P \times \left(1+\frac{10}{100}\right)^3 - P - \frac{P \times 3 \times 10}{100} = 465$$

$$\Rightarrow P = 15000$$

Total compound interest at the end of three year

$$= 15000 \times \left(1+\frac{10}{100}\right)^3 - 15000 = \text{`} 4965$$

33. (1)　From (C), 3x = 5z
　　　　From (C) and (B), 5x + y = 29
　　　　From (A), (B) and (C), x = 5, y = 4 and z = 3
　　　　Therefore 3x + 2y – 4z = 15 + 8 – 12 = 11.

34. (1)　From (A), Area = $\frac{3\sqrt{3}}{2} \times \left(\frac{12}{6}\right)^2 = 6\sqrt{3}$ sq. mtr.

　　　　From (B), Area = $\frac{3\sqrt{3}}{2} \times 1 \times 1 = 1.5\sqrt{3}$ sq. mtr.

　　　　From (C), Area = $\frac{3\sqrt{3}}{2} \times (\sqrt{5})^2 = 7.5\sqrt{3}$ sq. mtr.

　　　　Hence area can be found out by any one of them.

35. (5)　From (A), History + English + Physics = 210
　　　　From (B), English ~ History = 10
　　　　From (C), Biology + Physics = 120.
　　　　So, we cannot find marks in Physics by use any of the given statements.

36. (1)　x = 55, y = 36; x > y
37. (3)　x = - 7/3, y = 5.45 ; x < y
38. (1)　x = 13/2, y = 3 ; x > y
39. (5)　$x = 4, -\frac{8}{3}, y = 7, -\frac{2}{3}$
　　　　No Relation
40. (3)　x = -8, -8, y = 0, 121; x < y
41. (1)　$13 \times 1 + 1^2 = 13 + 1 = 14$

　　　　$14 \times 2 + 2^2 = 28 + 4 = 32$

　　　　$32 \times 3 + 3^2 = 96 + 9 = 105$

　　　　$105 \times 4 + 4^2 = 420 + 16 = 436$

　　　　$436 \times 5 + 5^2 = 2180 + 25 = \boxed{2205}$

42. (3)　$331 + 5^1 = 331 + 5 = 336$

　　　　$336 + 5^2 = 336 + 25 = 361$

　　　　$361 + 5^3 = 361 + 125 = 486$

　　　　$486 + 5^4 = 486 + 625 = 1111$

　　　　$1111 + 5^5 = 1111 + 3125 = \boxed{4236}$

43. (2)　$3 \times 1.5 = 4.5$
　　　　$4.5 \times 4 (= 1.5 + 2.5) = 18$
　　　　$18 \times 7.5 (= 4 + 3.5) = 135$
　　　　$135 \times 12 (= 7.5 + 4.5) = \boxed{1620}$
　　　　$1620 \times 17.5 (= 12 + 5.5) = 28350$

44. (4)　$147 + 1^2 = 148$

　　　　$148 + 1^2 + 2^2 = 148 + 5 = 153$

　　　　$153 + 1^2 + 2^2 + 3^2$
　　　　$= 153 + 14 = 167$

　　　　$167 + 1^2 + 2^2 + 3^2 + 4^2$
　　　　$= 167 + 30 = 197$

　　　　$197 + 30 + 5^2 = 197 + 55 = \boxed{252}$

45. (1) $200 \times 0.5 + 2 = 100 + 2 = 102$

$102 \times 1.5 + 4 = 153 + 4 = 157$

$157 \times 2.5 + 8 = 392.5 + 8 = 400.5$

$400.5 \times 3.5 + 16 = 1401.75 + 16 = \boxed{1417.75}$

$1417.75 \times 4.5 + 32 = 6379.875 + 32 = 6411.875$

46. (2)   Ratio $= \left(\dfrac{5 \text{ crore}}{5000}\right) \times \left(\dfrac{4000}{25 \text{ crore}}\right)$ Air India $= 4 : 25$

47. (3)   Percentage $= \dfrac{\text{Total of Indiago (2012, 2013, 2014)}}{\text{(Total of Jet Airways) (2012, 2013, 2014)}}$

$= \dfrac{25 + 5 + 30}{5 + 25 + 20} \times 100 = 120\%$

48. (5)   Since, Fare of Jet Airways for one Passenger

$= 110\%$ of $7000 = ₹\ 7700$

Therefore No. of passenger in 2014

$= \dfrac{20 \text{ crore}}{7700} \approx 25975.$

49. (1)   Total of All aviation company in 2009 = 70

In 2010 = 80

In 2011 = 80

In 2012 = 75

In 2013 = 65

In 2014 = 110

Hence, in 2014, is maximum

50. (5)   Can't be determined, as fare per Passengers is not given in the data.

51. (2)   Total population of Christian = 137.5

Total population of other religion = 142.5

Total population of muslim = 137.5

52. (4)   Population density of,

Syria $= \dfrac{75 \times 100}{16 \times 50} = 9.375$

Egypt $= \dfrac{72.5 \times 100}{25 \times 50} = 5.8$

Somalia $= \dfrac{55 \times 100}{18 \times 50} = 6.11$

Sudan $= \dfrac{55 \times 100}{20 \times 50} = 5.5$

Maldives $= \dfrac{80 \times 100}{5 \times 50} = 9.375$

Hence, Sudan has minimum population density.

53. (1)   Percentage $= (32.5/10) \times 100 = 325\%$

54. (5)   Maximum population is for

Kenya & Maldives i.e. 80 lakh

55. (3)   Let population of Christian, Muslim and other religion in Maldives was, x, y and z.

$x\left(1 - \dfrac{20}{100}\right)^2 = 20 \Rightarrow x = 31.25$

$y\left(1 - \dfrac{50}{100}\right)^2 = 27.5 \Rightarrow y = 110$

$z\left(1 - \dfrac{50}{100}\right)^2 = 32.5 \Rightarrow z = 130$

Therefore total population was

$= 130 + 110 + 31.25 = 271.25$

56. (3)   Difference $= \left[7.8 \times \dfrac{7}{13} \times \dfrac{62}{100} - 7.8 \times \dfrac{6}{13} \times \dfrac{65}{100}\right]$

$= 26400$ lakh

57. (2)   Average $= \dfrac{2.604 + 1.4 + 1.224 + 2.592 + 2.08 + 2.7}{6}$

$= 2.1$ lakh

58. (1)   Percentage $= \dfrac{4.5 \times \dfrac{3}{5} \times \dfrac{36}{100} \sim 5.4 \times \dfrac{2}{3} \times \dfrac{25}{100}}{5.4 \times \dfrac{2}{3} \times \dfrac{25}{100}} \times 100$

$= \dfrac{0.972 - 0.9}{0.9} \times 100 = 8\%$

59. (3)   Percentage $= \dfrac{7.2 \times \dfrac{4}{9} \times \dfrac{35}{100}}{3.6 \times \dfrac{5}{9} \times \dfrac{70}{100}} \times 100 = 80\%$

60. (3)   Difference $= 4.5 \times \dfrac{2}{5} \times \dfrac{32}{100} \sim 4.5 \times \dfrac{3}{5} \times \dfrac{64}{100}$

$= 1.152$ lakh

61. (2) $\dfrac{7441}{34} \times 12 = ? \times 9 + 110$

$\Rightarrow 2626 = ? \times 9 + 110$

$\Rightarrow ? \times 9 = 2516$

$\Rightarrow ? = \dfrac{2516}{9} = 280$

62. (3) $? = \dfrac{989}{34} \times \dfrac{869}{65} \times \dfrac{515}{207} = 970$

63. (5) $? = (32)^2 + (24)^2 - (17)^2$

$= 1024 + 576 - 289 = 1311$

$\therefore$ Required answer $= 1310$

64. (3) $? = \sqrt{5456} \times \sqrt{2120} \div \sqrt{460}$

$= 74 \times 46 \div 21 = 162$

$\therefore$ Required answer $= 160$

65. (1) $\dfrac{800 \times 67}{100} - 231$

$= ? - \dfrac{800 \times 23}{100}$

$\Rightarrow 536 - 231 = ? - 184$

$\Rightarrow 305 = ? - 184$

$\therefore ? = 305 + 184 = 489$

$\therefore$ Required answer $= 490$

66. (1)   From statement I

reason to [learn better] → [xn zt] aJ [ly]

[to learn] study [better] → [zt xn ly] rJ

The code for 'reason' is 'aj'.

From statement II

[reason to] study important → yk [xn aj] rJ

[to] find [reason] necessary → st [xn] ds [aj]

The code for 'reason' may be 'xn' or 'aj'.

67. (2)   From statement I

$\underset{}{\overset{7 \text{ persons}}{\longrightarrow}}$ [L] [U] || [T] [S] ||

Or

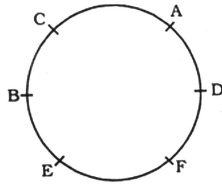[T] [S] [L] [U] $\overset{6 \text{ persons}}{\longleftarrow}$
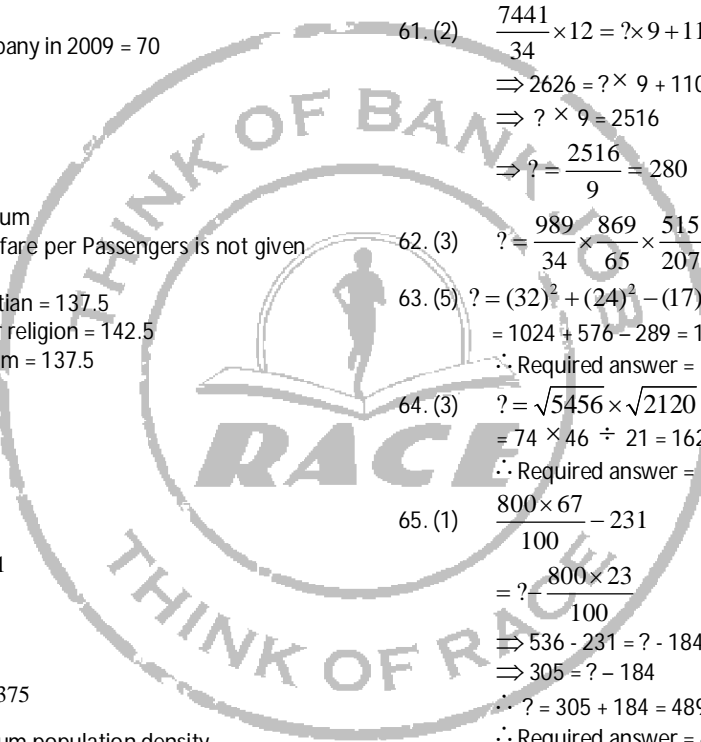
From Statement II

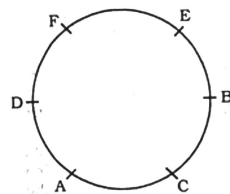O | M | L | S | T | R ← 8 Persons

T is 10th from the right end.

68. (3) From statement I

D is third to the left or right of B.

From statement II

D is third to the left or right or B.

69. (1) From statement I
T is daughter of R.
T is wife of M.
L is daughter of M and T.
L is cousin of J.
So, M is uncle of J.
From statement II
Y is sister of daughter in-law of A.
J is son of D and Y.
A is father-in-law of T.
M is grandfather or great grandmother of J.

70. (3) From statement I

Day	Play
Monday	U
Tuesday	Z
Wednesday	V
Thursday	W
Friday	Y
Saturday	T/X
Sunday	T/X

From statement II

Day	Play
Monday	U
Tuesday	U
Wednesday	Y
Thursday	Z
Friday	Z/V
Saturday	V/W
Sunday	W

71. (3) M # R $\Rightarrow$ M > R
R % P $\Rightarrow$ R < P
P δ J $\Rightarrow$ P = J
Therefore, M > R < P = J
Conclusions
I. M # P $\Rightarrow$ M > P : Not true
II. J # R $\Rightarrow$ J > R : True
III. J % M $\Rightarrow$ J < M : Not true

72. (2) P*D $\Rightarrow$ P $\geq$ D
D # Q $\Rightarrow$ D > Q
Q @ R $\Rightarrow$ Q $\leq$ R
Therefore, P $\geq$ D > Q $\leq$ R
Conclusions:
I. Q % P $\Rightarrow$ Q < P : True
II. R # D $\Rightarrow$ R > D : Not true
III. P # D $\Rightarrow$ P>D : Not true

73. (1) T % M $\Rightarrow$ T < M
M @ K $\Rightarrow$ M $\leq$ K
K * F $\Rightarrow$ K $\geq$ F
Therefore, T < M $\leq$ K $\geq$ F
Conclusions:
I. F % M $\Rightarrow$ F < M : Not true
II. F % T $\Rightarrow$ F < T : Not true
III. K # T $\Rightarrow$ K > T : True

74. (5) H @ K $\Rightarrow$ H $\leq$ K
K δ N $\Rightarrow$ K = N
N % T $\Rightarrow$ N < T
Therefore, H $\leq$ K = N < T
Conclusions
I. T # K $\Rightarrow$ T > K : True
II. N δ H $\Rightarrow$ N = H : Not true
III. H % N $\Rightarrow$ H < N : Not true
Either II or III is true.

75. (4) F δ D $\Rightarrow$ F = D
D * K $\Rightarrow$ D $\geq$ K
K # M $\Rightarrow$ K > M
Therefore, F = D $\geq$ K > M
Conclusions:
I. M % D $\Rightarrow$ M < D : true
II. K @ F $\Rightarrow$ K $\leq$ F : True
III. F # M $\Rightarrow$ F > M : true

76. (3) Grandson
77. (5) None of these
78. (2) $M - J + R - N$
79. (4) Z
80. (3) Two

(81 – 85):

Floor number	person	Subject
8	W	Economics
7	U	English
6	P	History
5	T	Mathematics
4	V	Hindi
3	R	Geography
2	S	Sociology
1	Q	Statistics

81. (3) Professor of Hindi, V lives exactly between the floors of T and professor of Geography R.

82. (1) The professor of Economics W lives on the topmost floor.
83. (4) Professor of Sociology S lives immediately above the floor of professor of Statistics Q.
84. (2) Professor of Geography R lives on the third numbered floor.
85. (4) Four persons U, P, T, and V live between the floors of W and the professor of Geography R.

(86 – 90):

Name	Profession	Husband's Profession
Madhu	Teacher	Navy Officer
Kanchan	Accountant	Sales Manager
Chandni	Housewife	Engineer
Sheela	Doctor	Doctor
Rekha	Housewife	Lawyer

86. (1) Sheela
87. (4) Engineer, Chandni
88. (1) Chandni, Rekha
89. (3) House Wife
90. (4) Madhu

(91 – 95): (i) All tables are umbrellas → Universal Affirmative (A-type).
(ii) Some pens are tables → particular Affirmative (I-type).
(iii) No box is bottle → Universal Negative (E-type).
(iv) Some boxes are not bottles → Particular Negative (O-type).

91. (1)   92. (4)
93. (5)   94. (3)
95. (3)

96. (5) Obviously both the statements (A) and (B) are effects of same (common) cause. Both statements seek to promote education among slum children.
97. (2) It is clear that statement (B) is the cause and statement (A) is its effect.
98. (1) obviously, statement (A) is the cause and statement (B) is its effect.
99. (1) obviously, statement (A) is the cause and statement (B) is its effect
100. (1) obviously, statement (A) is the cause and statement (B) is its effect.