

SBI PO Preliminary Grand Test –SPP-190329

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

- 1.(2)
2.(1)
3.(4)
4.(3)
5.(5)
6. (5)
7. (1)
8. (1)
9. (4)
10. (3)
11. (3)
12. (2) **Resource (Noun)** = some-thing that can be used to help achieve an aim etc.
13. (5) **Lament** = to feel or express great sadness or disappointment.
14. (5) **Tackle (Verb)** = To make a determined effort to deal with a different problem.
15. (1) **Result in** = to something happen.

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 bea 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 requiredwill 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. (3)
22. (1) **Endeavour (Noun)** = an attempt to do something ; effort. Idleness (Noun) = laziness ; without work.
Look at the sentences :
Please make every endeavour to arrive on time.
After a period of idleness she found a new job.
23. (3)
24. (5)
25. (1) **Disability (Noun)** = a physical or mental condition that means you cannot use a part of body ; impairment.
Look at the sentence :
He qualifies for help on the grounds of disability.
26. (3) **Indigenous (Adjective)** = belonging to a particular place; native.
Alien (Adjective) = from another country or society ;foreign.
Look at the sentences :
The elephants are indigenous to Thailand.
India respects even an alien culture.
27. (1) **Degenerative (Adjective)** = getting or likely to get worse as time passes ; deteriorating.
Improving (Adjective) = becoming better than before.
28. (1)
29. (4)
30. (2)
31. (2) $4 \times 1.5 = 6$
 $6 \times 1.5 = 9$
 $9 \times 1.5 = 13.5$
 $13.5 \times 1.5 = 20.25$
 $20.25 \times 1.5 = 30.375$
 $30.375 \times 1.5 = 45.5625$
32. (2) $12 \times 2 = 22$
 $22 \times 3 = 69$
 $69 \times 4 = 272$
 $272 \times 5 = 1365$
 $1365 \times 6 = 8184$
33. (3) series is *2-2,*2+4,*2-6,*2+8,*2-10

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34. (3) $13 \times 1 + 1 = 14$
 $14 \times 2 + 2 = 30$
 $30 \times 3 + 3 = 93$
 $93 \times 4 + 4 = 376$
 $376 \times 5 + 5 = 1885$
 $1885 \times 6 + 6 = 11316$
35. (1) $9 \times 0.5 = 4.5$
 $4.5 \times 1 = 4.5$
 $4.5 \times 1.5 = 6.75$
 $6.75 \times 2 = 13.5$
 $13.5 \times 2.5 = 33.75$
 $33.75 \times 3 = 101.25$
36. (2) Required %
 $= \frac{58074 - 20833}{20833} \times 100 = 178.76\% \approx 179\%$
37. (3) Average of thermal - average of hydro
 $= 56878 - 20686 = 36190$ (approx.)
38. (2) Required percentage increase
 $= \frac{61157 - 50749}{61157} \times 100 \approx 17$
39. (3) $\frac{20379}{60043} \times 100 \approx 34\%$
40. (5) Required % growth
 $= \frac{21658 - 19576}{21658} \times 100 \approx 10\%$
41. (3) Ratio of equivalent capitals of A, B and C for 1 month
 $= 13600 \times 12 : 17600 \times 8 : 15200 \times 8 = 136 : 12 : 176$
 $\times 8 : 152 \times 8 = 51 : 44 : 38$
 Sum of ratios = $51 + 44 + 38 = 133$
 \therefore C's share = $\frac{38}{133} \times 46550 = \text{Rs. } 13300$
42. (1) Principal = Rs. P
 Interest = Rs. $\frac{9}{16}P$
 Rate = R% per annum
 Time = R years
 $\text{Rate} = \frac{\text{S.I.} \times 100}{\text{Principal} \times \text{Time}}$
 $R = \frac{9}{16} \times \frac{100}{R} \Rightarrow R^2 = \frac{900}{16} \Rightarrow R = \frac{30}{4} = 7.5\%$ per annum
43. (1) Total cost of 25 kg of rice = Rs. $(10 \times 30 + 36 \times 15)$
 $= \text{Rs. } (300 + 540) = \text{Rs. } 840$
 Total S.P. for a profit of 20% = $\frac{840 \times 120}{100} = \text{Rs. } 1008$
 \therefore Rate = $\frac{1008}{25} = \text{Rs. } 40.32/\text{kg}$
44. (1) Area of square = $24 \times 24 = 576$ sq.cm.
 \therefore Area of rectangle = $\frac{576}{2} = 288$ sq.cm.
 Length of rectangle = $24 - 4 = 20$ cm
 \therefore Its breadth = $\frac{288}{20} = 14.4$ cm
 \therefore Perimeter of rectangle = $2(1 + b)$
 $= 2(20 + 14.4) = 2 \times 34.4 = 68.8$ cm
45. (3) Remaining quantity of milk = Original quantity
 $= \left(1 - \frac{\text{Quantity taken out}}{\text{Total initial amount}}\right)^n$
 $= 80 \left(1 - \frac{16}{8}\right)^2 = 80 \left(1 - \frac{1}{5}\right)^2 = \frac{80 \times 4 \times 4}{5 \times 5} = 51.2$ litres
- Quantity of water = $80 - 51.2 = 28.8$ litres
 Required ratio = $51.2 : 28.8 = 16 : 9$
- 46-50. Students in college E $\Rightarrow 450$
 College C $\Rightarrow 450 \times 2 = 900$
 College D $\Rightarrow \frac{3}{4} \times 900 = 675$
 College A $\Rightarrow \frac{900 \times 100}{60} = 1500$
 University XYZ $\Rightarrow 1500 \times 4 = 6000$
 College B $\Rightarrow (6000 - 450 - 900 - 675 - 1500) = 2475$
46. (4) Students in colleges B and C = $2475 + 900 = 3375$
 Students in colleges A and D = $1500 + 675 = 2175$
- Required percent
 $= \left(\frac{3375 - 2175}{2175}\right) \times 100 = \frac{120000}{2175} = 55$
47. (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 = $207 : 243 = 23 : 27$
48. (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 = $1008 \times \frac{7}{12} = 588$
49. (5) Average number of students in colleges B, C and E
 $= \frac{2475 + 900 + 450}{3} = \frac{3825}{3} = 1275$
50. (5) Teacher in college A = $\frac{1}{20} \times 1500 = 75$
 Teachers in college C = $75 - 15 = 60$
51. (2) From statement I,
 Annual income of Boss = x
 Mr. Krishnamurthy's annual income = 70% of x
 We do not know the value of x
 From statement II,
 Initial Income = 12000
 Therefore income in May
 $= 12000 + 10\%$ of 12000 = 13200
 Similarly, the income for other months can be calculated.
52. (3) From statement I, Circumference = $2\pi r$
 We can find radius (r).
 Then we can find Area = πr^2
 From statement II,
 Diameter = $y = 2 \times$ Radius
 We can find area.
53. (5) Let the speed of boat in still water = x km/hr.
 Speed of current = y km/hr.
 Therefore rate upstream = $(x - y)$ km/hr.
 Rate downstream = $(x + y)$ km/hr.
 From statement I,

$$x + y = \frac{35}{5} = 7 \text{ km/hr.} \quad \dots(1)$$

From statement II,

$$x - y = \frac{35}{7} = 5 \text{ km/hr.} \quad \dots(2)$$

From combined statement 1 and 2, we can get the required answer.

- 54.(5) From statement I,
Let the boys and girls be $5x$ and $6x$.
From statement II,
 $6x - 5x = 7 \Rightarrow x = 7$

$$\Rightarrow 5x = 35 \Rightarrow 7x = 42$$

- 55.(1) From statement I,

$$SP = 170$$

Profit percent = 20%

$$CP = \frac{1740 \times 100}{120} = 1450$$

$$\text{Profit} = 1740 - 1450 = 290$$

Information in statement II is not required.

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

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

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

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

$$= 1 : 3 : 2$$

$$\text{Sum of the ratios} = 1 + 3 + 2 = 6$$

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

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

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

Case II

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

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

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

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

$$\therefore \text{Length of rectangle} = 8 \text{ cm}$$

$$\therefore \text{Breadth} = 8 - 5 = 3 \text{ cm}$$

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

59. (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

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

$$= 15000 - 600 = 14400 \text{ sq. metre}$$

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

60. (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)

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

61. (1) Total no. of people (Literate) in Maharashtra and Karnataka

$$= \left[\frac{5}{6} \times 11\% + \frac{3}{5} \times 15\% \right] \text{ of } 25 \text{ lakh}$$

$$= \left[\frac{5}{6} \times \frac{11}{100} + \frac{3}{5} \times \frac{15}{100} \right] \text{ of } 25 \text{ lakh}$$

$$= \left[\frac{55}{6} + 9 \right] \times \frac{25}{100} \text{ lakh}$$

$$= \frac{109}{6} \times \frac{25}{100} \approx 4.5 \text{ lakh}$$

62. (5) Required ratio

$$= \frac{2}{5} \times 12\% \text{ of } 25 : \frac{4}{7} \times 8\% \text{ of } 25 = 21 : 20$$

63. (2) Required percentage

$$= \frac{3}{5} \times 9\% \text{ of } 25$$

$$= \frac{2}{5} \times 12\% \text{ of } 25$$

$$\times 100 = 112.5\% \approx 110\%$$

64. (5) Total Male in UP, Maharashtra and Kerala

$$= 6.25 \times \frac{5}{8} + 2.75 \times \frac{3}{7} + 2 \times \frac{3}{7}$$

$$= 3.90 + 1.178 + 0.85 = 5.935.$$

$$\text{Required \%} = \frac{5.935}{11} \times 100 = 54\% \text{ approximately.}$$

65. (4) Total no. of illiterates in Tamil Nadu

= $(100 - 70 = 30\%)$ of females

+ $(100 - 75 = 25\%)$ of males in state

$$= \left(\frac{30}{100} \times \frac{2}{5} + \frac{25}{100} \times \frac{3}{5} \right) \times \frac{12}{100} \times 25 \text{ lakh}$$

$$= \left(\frac{6 \times 2}{100} + \frac{5 \times 3}{100} \right) \times \frac{12}{100} \times 2500000$$

$$= \left(\frac{12}{100} + \frac{15}{100} \right) \times 12 \times 25000$$

$$= \frac{27}{100} \times 12 \times 25000 = 27 \times 12 \times 250 = 81000$$

- 66-70. (i) All tables are umbrellas \rightarrow Universal Affirmative (A-type).

(ii) Some pens are tables \rightarrow particular Affirmative (I-type).

(iii) No box is bottle \rightarrow Universal Negative (E-type).

(iv) Some boxes are not bottles \rightarrow Particular Negative (O-type).

66. (1)

67. (4)

68. (5)

69. (3)

70. (3)

71. (1)

Only Course of action I seems to be appropriate. First course of action properly handles the situation.

72. (4)

None of Courses of action is suitable for pursuing. Both the courses of action are very harsh steps.

73. (3)

From I, weight of each pole = (4×5) kg = 20 kg

Total weight of 10 pole = $20 \times 10 = 200$ kg

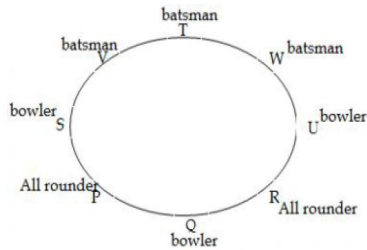
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From II, weight of each pole = (weight of 3 poles) – (weight of 2 poles)

Weight of 10 poles = (20×10) kg = 200 kg.

74. (5) From both I and II we get that Rahul is $(35-25) = 10$ years older than his brother, M who was born in 1964, So, Rahul was born in 1954.
75. (4) From I, we conclude that H is the only daughter of M. But this does not indicate that M has no son. The information given in II is immaterial.

76-80.



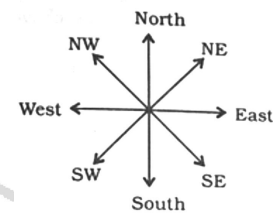
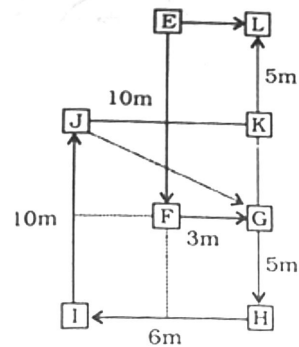
76. (2) Q
77. (4) Q
78. (3) an all rounder
79. (5) Both P and R
80. (1) VS

81-85.

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

81. (1) Sheela
82. (4) Engineer, Chandni
83. (1) Chandni, Rekha
84. (3) House Wife
85. (4) Madhu
86. (1) If the Government has decided to construct super highway, it implies that the Government has adequate resources to construct it.
87. (2) The statement given against option (2) contradicts the finding.
88. (3) The third statement shows that impact of flu is diminishing.
89. (5) All the four statements are possible effects.
90. (3) The third statement is the probable cause of price rise in case of petroleum products.
91. (5) Only either III or IV and I are true
92. (1) None is true
93. (2) Only I, II and IV are true
94. (5) Only II and IV are true.
95. (5) Only IV is true

96-97.



96. (1) Point G is to the Southeast of Point J.
97. (4) Point E is 3 metres West of Point L.
98. (1) $L \div M \rightarrow$ Lis daughter of M.
 $M \times O \rightarrow$ M is father of O.
 $O - P \rightarrow$ O is son of P.
 $P \div Q \rightarrow$ P is daughter of Q.
P is wife of M.
P is mother of L and O.
Therefore, L is granddaughters of Q.
99. (3) $Q - R \rightarrow$ Q is son of R.
 $R \div S \rightarrow$ R is daughter of S.
 $S \times T \rightarrow$ S is father of T.
R is sister of T.
Therefore, Q is nephew of T.
100. (5) $A - B \rightarrow$ A is son of B.
 $B \times C \rightarrow$ B is father of C.
 $C + D \rightarrow$ C is wife of D.
 $D - E \rightarrow$ 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.