SBI PO PHASE - I - 146 (SOLUTION)

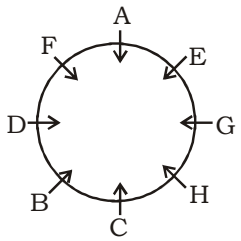
REASONING

(1–3) :

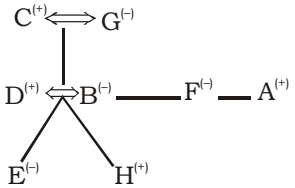
Q > S > U > R > T > P
(U → 81, T → 62)

1. (1) 2. (5) 3. (3)

(4–8):



Family Tree



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

(9-13):

& → ≥ @ → ≤
# → = % → >
$ → <

9. (2) M ≤ N < O ≥ P = Q
I. Q < O → False
II. Q ≤ O → True
III. M < O → True
IV. Q = M → False
II and III are true

10. (5) A = B ≥ C > D > E
I. A ≥ C → True
II. E < B → True
III. B > D → True
IV. A > D → True
All are true

11. (5) A ≥ B < C ≤ D > E
I. B > E → False
II. A ≥ D → False
III. B ≤ E → False
IV. A < D → False
None is true

12. (5) A > B ≤ C ≥ D = E
I. C > E → False
II. A ≥ C → False
III. A < C → False
IV. B = D → False

13. (3) T > U ≥ V < Z ≤ X
I. T ≥ V → False
II. T > V → True
III. X ≥ V → False
IV. X > V → True
II and IV are true

(14-18):

Person	Country	Day
P	Dubai	Wednesday
Q	Thailand	Sunday
R	China	Saturday
S	France	Thursday
T	Singapore	Tuesday
U	England	Friday
V	Japan	Monday

14. (4) 15. (1) 16. (3) 17. (3)
18. (5)

(19–23):

In the first step, two smallest numbers are removed to the left end. In the next step, two words with minimum characters are removed. In the next step again, next two smallest numbers are removed. This process is followed alternatively till last step.

Input: ice money 21 13 good 18 12 qualify 35 eligible 41 browse candidates 10
Step I: 10 12 ice money 21 13 good 18 qualify 35 eligible 41 browse candidates
Step II: ice good 10 12 money 21 13 18 qualify 35 eligible 41 browse candidates
Step III: 13 18 ice good 10 12 money 21 qualify 35 eligible 41 browse candidates
Step IV: money browse 13 18 ice good 10 12 21 qualify 35 eligible 41 candidates
Step V: 21 35 money browse 13 18 ice good 10 12 qualify eligible 41 candidates
Step VI: qualify eligible 21 35 money browse 13 18 ice good 10 12 41 candidates
Step VII: 41 qualify eligible 21 35 money browse 13 18 ice good 10 12 candidates
Step VIII: candidates 41 qualify eligible 21 35 money browse 13 18 ice good 10 12

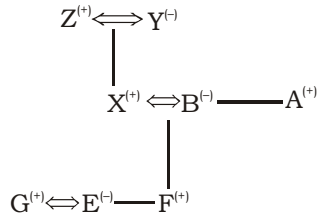
19. (3) 20. (4) 21. (4) 22. (1)
23. (3)

(24-28):

Floor	Person	Mobile
10	–	–
9	H	LG
8	B	Redmi
7	C	Samsung
6	G	Nokia
5	F	Motorola
4	–	–
3	E	Karbon
2	A	Vivo
1	D	Lenovo

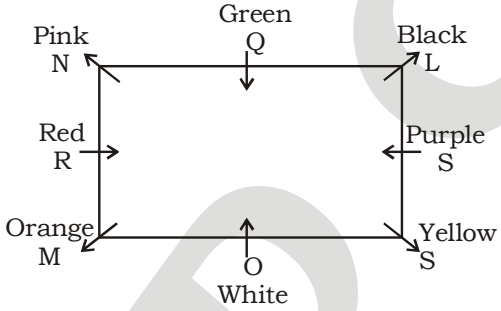
24. (1) 25. (5) 26. (3) 27. (3)
28. (5)

(29–30):



29. (1) 30. (3)

(31–35):



31. (5) 32. (4) 33. (2)
34. (4) 35. (5)

Maths

(36-40) :

36. (1) 369.01 ÷ 9.03 + 123.98 ÷ 8.01 + 1824.91 = ?

$\Rightarrow$? $\approx$ 369 ÷ 9 + 124 ÷ 8 + 1825

= 41 + 16 + 1825 = 1882

37. (2) $\sqrt{675.984}$ + 88.021 ÷ 10.985 × 6.025 = 16.987 × ?

$\Rightarrow$ 17 × ? $\approx$ $\sqrt{676}$ + 88 ÷ 11 × 6

$\Rightarrow$ 17 × ? = 26 + 8 × 6

$\Rightarrow$? = $\frac{74}{17}$ = 4.35 $\approx$ 4

38. (2) $\sqrt{675.984}$ × 17.025 + 135.985 ÷ 17 = 9 × ?

$\Rightarrow$? × 9 $\approx$ $\sqrt{676}$ × 17 + 136 ÷ 17

$\Rightarrow$? × 9 = 26 × 17 + 9

$\Rightarrow$? = $\frac{451}{9}$ = 50.11 $\approx$ 50

39. (1) 39.92% of 264.97 + 35.03% of 179.98 = 50% of ? + ?% of 80.02

$\Rightarrow$? × $\frac{50}{100}$ + ? × $\frac{80}{100}$ $\approx$ $\frac{40}{100}$ × 265 + $\frac{35}{100}$ × 180

$\Rightarrow$? × $\frac{1}{2}$ + ? × $\frac{2}{5}$ = 106 + 63

$\Rightarrow$ 9 × ? = 169 × 5

$\Rightarrow$? = $\frac{169 \times 5}{9}$ = 93.88 $\approx$ 100

40. (3) $(114\frac{18}{24} + 234.98) = 7\frac{3}{35}$ × ?

$\Rightarrow$? × 7 = 114 + 235

$\Rightarrow$? = $\frac{349}{7}$ = 49.85 $\approx$ 50

(41 – 45) :

41. (2) The number of male candidates qualified in SBI PO exam in branch

A = 25000 × $\frac{17}{100}$ × $\frac{27}{100}$ × $\frac{4}{9}$ = 510

B = 25000 × $\frac{19}{100}$ × $\frac{64}{100}$ × $\frac{3}{8}$ = 1,140

C = 25000 × $\frac{22}{100}$ × $\frac{55}{100}$ × $\frac{14}{25}$ = 1,694

D = 25000 × $\frac{24}{100}$ × $\frac{83}{100}$ × $\frac{7}{12}$ = 2,905

E = 25000 × $\frac{18}{100}$ × $\frac{52}{100}$ × $\frac{4}{13}$ = 720

$\therefore$ Required answer is branch D

42. (2) Required number = $25000 \times \frac{22}{100} \times \frac{55}{100} \times \frac{14}{25}$ = 1,694

43. (4) Required% = $\left(\frac{19}{18+17} \times 100\right)\%$
= 54.28% ≈ 54%

44. (5) Number of qualified female candidates from branch C
= $25000 \times \frac{22}{100} \times \frac{55}{100} \times \frac{11}{25}$ = 1,331
Required difference = 1694 – 1331 = 363

45. (4) Required total = $25000 \left[\frac{19}{100} \times \frac{64}{100} + \frac{22}{100} \times \frac{55}{100} + \frac{18}{100} + \frac{52}{100}\right]$
= 3040 + 3025 + 2340
= 8,405

(46-50):

46. (4) The number series is:
1 × 7 = 7
7 × 7 = 49
49 × 7 = 343
343 × 7 = **2401**

47. (4) The number series is:
13 + 2^2 + 3 = 20
20 + 4^2 + 3 = 39
39 + 6^2 + 3 = 78
78 + 8^2 + 3 = 145
145 + 10^2 + 3 = **248**

48. (1) The number series is:
12 × 2 + 11 = 35
35 × 2 + 11 = 81
81 × 2 + 11 = 173
173 × 2 + 11 = 357
357 × 2 + 11 = **725**

49. (5) The number series is:
3 + 97 = 100
100 + 197 = 297
297 + 297 = 594
594 + 397 = 991
991 + 497 = **1488**

50. (3) The number series is:
112 + 7 × 1 = 119
119 + 7 × 3 = 140
140 + 7 × 5 = 175
175 + 7 × 7 = 224
224 + 7 × 9 = **287**

51. (3) Let CP = ₹100
MP = $100 \times \frac{130}{100}$ = ₹130
Total SP = 40 + 50 = ₹90
∴ Loss = 100 – 90 = ₹10
∴ Loss% = $\left(\frac{10}{100} \times 100\right)\%$ = 10%

52. (4) Total ages of man and women
= 25 × 2 = 50 years
When the first son was born, the total ages = 3 × 18 = 54 years
This time the son age is 0 year, then the average age of man and women = $\frac{54}{2}$
= 27 years
When their daughter was born, the total ages = 4 × 15 = 60 years.
This time daugther age is 0 years, the average increased age of man, women and son = $\frac{60-54}{3} = \frac{6}{3}$ = 2 years
∴ Required average age of man and women
= $\frac{60-2}{2}$ = 29 years

53. (2) Total number of 8 different types of pen = 87 × 8 = 696
Total number of 6 different types of pen = 85 × 6 = 510
∴ Number of remaining pen = 696 – 510 = 186
Now, let the highest and the next highest number of pen are x and $(x-2)$, then
$x + (x-2)$, then
⇒ $2x = 188$
⇒ $x = 94$

54. (5)

55. (2) Volume of hemispherical ditch
= $\frac{2}{3}\pi r^3 = \frac{2}{3}\pi (12)^3 = 1152\pi$ m^3
Volume of the cylindrical ditch = volume of earth dug out = $\pi r^2 h$
= $\pi\ 6^2 \times 2 = 72\pi$ m^3
So, fraction of hemispherical ditch filled by the earth dug out from the cylindrical ditch = $\frac{72\pi}{1152\pi} = \frac{1}{16}$

(56-60) :

56. (1) Average population of village A

$$= \frac{40+55+45+65+50+60}{6} \times 1000$$

$= 52,500$

Average of population of village C

$$= \frac{55+50+60+55+60+50}{6} \times 1000$$

$= 55,000$

Required difference = 55000 – 52500

= 2,500

57. (4) Required less% = $\left(\frac{50-40}{50}\times 100\right)\%$

= 20% less

58. (5) Required% in the year

$$2004 = \left(\frac{65-55}{55}\times 100\right)\% = 18.18\%$$

$$2002 = \left(\frac{55-50}{50}\times 100\right)\% = 10\%$$

$$2006 = \left(\frac{60-50}{50}\times 100\right)\% = 20\%$$

Required year is 2006

59. (3) Required% = $\left(\frac{50+60}{50}\times 100\right)\%$

= 220%

60. (3) Required ratio = (45 + 45) : (50 + 45)

= 90 : 95 = 18 : 19

61. (1) (14W + 7M) × 12 ...(i)

(28W + 21M) × 5 ...(ii)

$\Rightarrow$ 168W + 84M = 140W + 105M

$\Rightarrow$ 28W = 21M

$\Rightarrow$ $1M = \frac{28}{21} = \frac{4}{3}W$

$\therefore$ 9W + 9M

$= 9W + 9 \times \frac{4}{3} = 21W$

Total work = $(14 + 7 \times \frac{4}{3}) \times 12 = 280$

$\therefore$ Remaning work = 280 – (21 × 10) = 70

Let the number of extra women = x

ATQ,

$$\frac{70}{9+x} = \frac{70}{21}$$

$\Rightarrow$ 1470 = 630 + 70x

$\Rightarrow$ 70x = 840

$\Rightarrow$ $x = \frac{840}{70}$ = 12 women

62. (2) 20% = $\frac{1}{5}$

5×36	6×36
25×6	36×6
125	216

Total = 455

ATQ,

455 unit $\rightarrow$ ₹5005

$\therefore$ 216 unit $\rightarrow \frac{5005}{455} \times 216$ = ₹2,376

63. (2)

	Book	Pen
CP	X	Y
SP	B	P

$y = 2x$ (Given)

Profit = 10 (B – X) = 3P

$$\text{Profit\%} = \left(\frac{3P}{10x}\times 100\right)\%$$

Loss = 10 (y – P) = 4B

$$\text{Loss\%} = \left(\frac{4B}{10y}\times 100\right)\%$$

ATQ,

$$\left(\frac{3P}{10x}\times 100\right)\% = \left(\frac{4B}{10y}\times 100\right)\%$$

$\Rightarrow$ Putting $y = 2x$

$\therefore$ $\frac{B}{P} = \frac{3}{2} = 3 : 2$

64. (2) Total amount = 4 + 5 = 9

$$\text{Profit} = 9 \times \frac{30}{100} = 2.7$$

Total amount = 9 + 2.7 = 11.7

$$\text{Second amount} = \frac{11.7\times 7}{6}$$

ATQ,

$\therefore$ $\frac{11.7\times 7}{13} \rightarrow 94500$

$\therefore$ $5 \rightarrow \frac{94500\times 5}{11.7\times 7}\times 13$

$\therefore$ = ₹75,000

65. (4) Largest size of bucket = HCF of 806, 930 and 992
$806 = 2 \times 13 \times 31$
$930 = 2 \times 15 \times 31$
$992 = 2 \times 16 \times 31$
$\therefore$ HCF $= 2 \times 31 = 62$
Therefore, total number of barrel required = 13 + 15 + 16 = 44

(66-70):

66. (5) I. $x^2 - 23x - 288 = 0$
$\Rightarrow x^2 - 32x + 9x - 288 = 0$
$\Rightarrow x(x - 32) + 9(x - 32) = 0$
$\Rightarrow x = -9, 32$
II. $y^2 + 2y - 224 = 0$
$\Rightarrow y^2 + 16y - 14y - 224 = 0$
$\Rightarrow y(y + 16) - 14(y + 16) = 0$
$\Rightarrow y = -16, 14$

67. (5) I. $x^2 - 8x - 240 = 0$
$x^2 - 20x + 12x + 240 = 0$
$\Rightarrow x(x - 20) + 12(x - 20) = 0$
$\Rightarrow x = -12, 20$
II. $y^2 + 7y - 144 = 0$
$\Rightarrow y^2 + 16y - 9y - 144 = 0$
$\Rightarrow y(y + 16) - 9(y + 16) = 0$
$\Rightarrow y = -16, 9$

68. (3) I. $7x^2 + 53x - 90 = 0$
$\Rightarrow 7x^2 + 63x - 10x - 90 = 0$
$\Rightarrow 7x(x + 9) - 10(x + 9) = 0$
$\Rightarrow x = \frac{10}{7}, -9$
II. $8y^2 - 61y + 78 = 0$
$\Rightarrow 8y^2 - 48y - 13y + 78 = 0$
$\Rightarrow 8y(y - 6) - 13(y - 6) = 0$
$\Rightarrow y = \frac{13}{8}, 6$
Clearly, $x < y$

69. (1) I. $2x^2 - 35x - 147 = 0$
$\Rightarrow 2x^2 - 14x - 21x - 147 = 0$
$\Rightarrow 2x(x - 7) - 21(x - 7) = 0$
$\Rightarrow x = \frac{21}{2}, 7$
II. $3y^2 + 40y + 117 = 0$
$\Rightarrow 3y^2 + 27y + 13y + 117 = 0$
$\Rightarrow 3y(y + 9) + 13(y + 9) = 0$
$\Rightarrow y = -\frac{13}{3}, -9$
Clearly, $x > y$

70. (4) I. $x^2 + 9x - 486 = 0$
$\Rightarrow x^2 + 27x - 18x - 486 = 0$
$\Rightarrow x(x + 27) - 18(x + 27) = 0$
$\Rightarrow x = 18, -27$
II. $y^2 - 40y + 396 = 0$
$\Rightarrow y^2 - 22y - 18y + 396 = 0$
$\Rightarrow y(y - 22) - 18(y - 22) = 0$
$\Rightarrow y = 18, 22$
Clearly, $x \leq y$

ENGLISH LANGUAGE

(81–85):

81. (3) Change 'disrupt' with 'disrupted'.
82. (4) Change 'continue' with 'continues'.
83. (1) Change 'the' with 'a'.
84. (3) Change 'out' with 'down'.
85. (5) No error

VOCABULARIES

Word	Meaning in English	Meaning in Hindi
Incumbents	the holder of an office or post	पदग्राही
Undergo	experience or be subjected to (something, typically something unpleasant, painful, or arduous)	गुजरना
Resistant	offering resistance to something or someone	प्रतिरोधी
Reluctant	unwilling and hesitant; disinclined	अनिच्छुक
Disruption	disturbance or problems that interrupt an event, activity, or process	विघटन
Defunct	no longer existing or functioning	मृत
Averse	having a strong dislike of or opposition to something	प्रतिकूल
Enthusiastic	having or showing intense and eager enjoyment, interest, or approval	उत्साही
Clinch	confirm or settle (a contract or bargain)	कड़ी
Intended	planned or meant	इरादा
Penetrate	succeed in forcing a way into or through (a thing)	घुसना
Incited	encourage or stir up (violent or unlawful behavior)	उकसाया
Inflicted	cause (something unpleasant or painful) to be suffered by someone or something	प्रवृत्त
Endure	suffer (something painful or difficult) patiently	सहना
Recant	say that one no longer holds an opinion or belief, especially one considered heretical	अपने को वंचित करना

SBI PO PHASE - I - 146 (ANSWER KEY)

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

Note:- If you face any problem regarding result or marks scored, please contact 9313111777

Note:- Whatapp with Mock Test No. and Question No. at 7053606571 for any of te doubts. Join the group and you may also share your suggestions and experience of sunday Mock Test.

Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003