SBI PO PHASE-I - 85 (SOLUTION)

REASONING

(1-5) :

Teachers	School	Rest Day
Xavier	St.Francis	Saturday
Lewis	DPS	Thursday
Rexon	St.Thomas	Friday
Quinton	Gyan Niketan	Tuesday
David	Bal Niketan	Sunday
Paes	St.Mary	Monday
Thomas	Bal Bhawan	Wednesday

1. (2)　　　　2. (2)　　　　3. (1)
4. (2)　　　　5. (1)

(6-10) :

Time	Doctors
9:00	Thomas
9:55	Hillary
10:50	Gotham
11:45	Alex
12:40	Robin
2:00	Xavier
2:55	David

6. (2)　　　　7. (3)　　　　8. (2)
9. (1)　　　　10. (2)

**(11-15) :**

11. (1) $T \geq Q > N \geq S = P > K > R$
　　I. $T > R \rightarrow$ True
　　II. $K \leq N \rightarrow$ False
　　If only conclusion I is true.

12. (4) $Z < U \geq M$
　　I. $Z > M \rightarrow$ False
　　$D > U = L \leq G$
　　II. $D > G \rightarrow$ False
　　If neither conclusion I nor II is true.

13. (4) $I > P \geq L > T = N \geq S$
　　I. $J \geq N \rightarrow$ False
　　II. $S \leq P \rightarrow$ False
　　If neither conclusion I nor II is true.

14. (1) $A \geq B \leq C = D < L \geq E$
　　I. $L > B \rightarrow$ True
　　II. $A \geq D \rightarrow$ False
　　If only conclusion I is true.

15. (2) $L < M = N > H \geq I > J = K$
　　I. $J > L \rightarrow$ Flase
　　II. $K < N \rightarrow$ True
　　If only conclusion II is true.

(16-20) :

16. (1)
$$\begin{array}{l} P^- \\ | \\ Q^- \!-\! S^- \\ \quad\quad | \\ \quad\quad T^- \!-\! W \end{array}$$

17. (2)
$$Q^- \!-\! M^+ \!-\! K^-$$
$$\quad\quad\quad | $$
$$\quad\quad\quad L^- \!-\! S$$

Sister of mother is aunt.

18. (4)
$$\begin{array}{l} S^+ \\ | \\ M^+ \\ | \\ Q^- \!-\! L^+ \!-\! K \end{array}$$
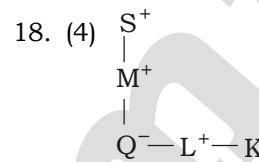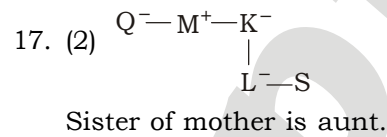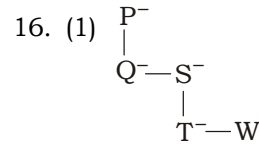
Here, gender of K is not known. Therefore, relation between K and S cannot be established.

(19-23)
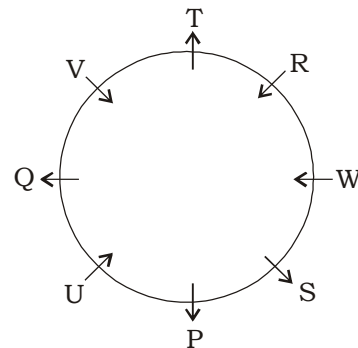
19. (2)　　　　20. (2)　　　　21. (4)
22. (1)　　　　23. (2)

(24-28) :

Company	Floor	Person
Titan	7	Shelly
Walmart	6	Alex
Puma	5	Richa
Nike	4	Veena
Reebok	3	David
Liberty	2	Nishant
Sonata	1	Saurav

24. (2)　　　　25. (3)　　　　26. (1)
27. (3)　　　　28. (4)

(29-33)
29. (5)　　　　30. (4)　　　　31. (2)
32. (1)　　　　33. (4)

(34-35) :

$$F > B > A > D > C > E$$

18 pens   13 pens   7 pens

34. (4)   35. (4)

MATHS

(36-40) :

36. (1) $? \approx (41)^2 + (8)^2 - (22)^2$
    $= 1681 + 64 - 484 = 1261 \approx 1280$

37. (3) $\dfrac{600 \times 40}{100} - 250 \approx ? - \dfrac{900 \times 80}{100}$

    $\Rightarrow 240 - 250 = ? - 720$

    $\Rightarrow ? = 720 + 240 - 250 = 710 \approx 700$

38. (2) $52000 \div 60 \times 30 = ? \times 40$

    $\Rightarrow \dfrac{52000}{60} \times 30 \approx ? \times 40$

    $\Rightarrow 26000 = ? \times 40$

    $\therefore ? = \dfrac{26000}{40} = 650 \approx 600$

39. (3) $? = \dfrac{701}{52} \times \dfrac{699}{11} \times \dfrac{112}{107}$

    $\approx \dfrac{700}{50} \times \dfrac{700}{11} \times \dfrac{110}{100} = 980 \approx 900$

40. (4) $? = \dfrac{\sqrt{6378} \times \sqrt{3330}}{\sqrt{360}}$

    $\approx \dfrac{80 \times 58}{19} = 244.21 \approx 250$

(41-45) :

41. (3) Percentage of student who success out of the students joined in

    $2010 = \left(\dfrac{5700 \times 18}{8550 \times 22} \times 100\right)\% = 54.54\%$

    $2011 = \left(\dfrac{5700 \times 17}{8550 \times 15} \times 100\right)\% = 75.55\%$

    $2015 = \left(\dfrac{5700 \times 15}{8550 \times 12} \times 100\right)\% = 83.33\%$

    $2016 = \left(\dfrac{5700 \times 12}{8550 \times 16} \times 100\right)\% = 50\%$

    $\therefore$ Required answer is 2015.

42. (1) Required % = $\left(\dfrac{5700 \times 9}{8550 \times 8} \times 100\right)\% = 75\%$

43. (4) No. of students successful in the year

    $2016 = 5700 \times \dfrac{13}{100} = 741$

$= 8550 \times \dfrac{10}{100} = 855$

$\therefore$ Required ratio = 741 : 855 = 247 : 285

44. (1) Total no. of students successful in the year 2011 and 2012 together

    $= \dfrac{5700}{100} \times (17+13) = \dfrac{5700}{100} \times 30 = 1710$

    Total no. of students joined in the year 2011 and 2012 together

    $= \dfrac{8550}{100} \times (15+10)$

    $= \dfrac{8550}{100} \times 25 = 2137.5$

    $\therefore$ Required % = $\left(\dfrac{1710}{2137.5} \times 100\right)\% = 80\%$

45. (2) Total no. of students successful in the year 2010 and 2013 together

    $= \dfrac{5700}{100} \times (18+16) = \dfrac{5700}{100} \times 34 = 1938$

    Total no. of students joined in the year 2012 and 2014 together

    $= \dfrac{8550}{100 \times} (10+8) = \dfrac{8550}{100} \times 18 = 1539$

    $\therefore$ Required difference = 1938 – 1539 = 399

46. (3) The pattern is :
    576 – 224 = 352
    752 – 576 = 176
    840 – 752 = 88
    884 – 840 = 44
    $\therefore$? = 884 + 22 = **906**

47. (4) The pattern is :
    55 + 11.15 = 66.15
    66.15 + 2 × 11.15 = 88.45
    88.45 + 3 × 11.15 = 121.9
    121.9 + 4 × 11.15 = 166.5
    166.5 + 5 × 11.15
    = 166.5 + 55.75 = **222.25**

48. (5) The pattern is :
    36 + 13 = 49
    49 + 2 × 13 = 75
    75 + 13 = 88
    88 + 2 × 13 = 114
    114 + 13 = **127**

49. (2) The pattern is :
    $3 + 4 \times (2)° = 7$
    7 + 11 = 18
    $18 + 4 \times (2)^1 = 26$
    26 + 11 = **37**
    $37 + 4 \times (2)^2 = 53$
    53 + 11 = 64
    $64 + 4 \times (2)^3 = 96$

50. (3) The pattern is :
   1.7 + 1.5 = 3.2
   3.2 – 0.5 = 2.7
   2.7 + 1.5 = 4.2
   4.2 – 0.5 = 3.7
   3.7 + 1.5 = **5.2**
   5.2 – 0.5 = 4.7
   4.7 + 1.5 = 6z.2

51. (5) Required ratio = $4v_1 d_1 = 7v_2 d_2 = \dfrac{7v_1 d_1}{d_2} : 7v_2$

   where d is the density and v is the volume of liquids.
   Given, $117 d_1 = 151 d_2$

   $\therefore \quad \dfrac{d_1}{d_2} = \dfrac{151}{117}$

   Now, with $7v_2$ of sencond liquid, $4v_1$ of first liquid is used in place of $4v_1 \times \dfrac{151}{117}$

   $\therefore$ % error = $\left(\dfrac{34}{117} \times \dfrac{117}{151} \times 100 \right)\%$

   = 22.50% ≈ 22%

52. (3) Let salary = ₹ 100
   Expenses on education = ₹ 40
   Expenses in purchasing books of ₹40

   = 40 × $\dfrac{60}{100}$ = ₹24

   Remaining = 40 – 24 = ₹16
   Expenses in purchasing stationary items

   = 16 × $\dfrac{1}{2}$ = ₹ 8

   A/Q,

   8 × $\dfrac{1}{4}$ → 160

   $\therefore$ 100 → $\dfrac{160}{2} \times 100$ = ₹ 8000

53. (3) Let the cost price of Sunil be x. Then the cost price of Anil will be $1.2x$ and the cost price of Ramesh will be $1.2x \times 1.10 = 1.32x$
   Then the cost price of Suresh = x × 1.2 × 1.10 + 116 = ₹$132x + 116$
   Now, $1.32 x + 116 - x = 500$
   or, $0.32 x = 500 - 116 = 384$

   $\therefore x = \dfrac{384}{32} \times 100$ = ₹1200

   $\therefore$ Anil's cost price = 1200 × 1.2 = ₹ 1440
   Hence Anil paid to Sunil ₹1440.

54. (2) Ratio of men to women (15 × 10)M
   = (25 × 8)W
   or, 150 M = 200 W

   or, 3M = 4W $\therefore$ W = $\dfrac{3}{4}$ M

$\therefore$ 1 man's work = $\dfrac{1}{150}$

$\therefore$ (10W + 3M) = $\dfrac{21}{2}$ M can do the work in

$\dfrac{1}{150} \times \dfrac{21}{2} = \dfrac{7}{100}$ days

$\dfrac{65}{100}$ work done by 10 women in x days.

$\because$ 8 women complete a piece of work in 25 days

$\therefore$ 10 women complete the $\dfrac{65}{100}$ work in 25

× $\dfrac{8}{10} \times \dfrac{65}{100}$ = 13 days

55. (4) Speed of the first train = 54 kmph

   = 54 × $\dfrac{5}{18}$ = 15 m/s

   $\therefore$ Time = $\dfrac{\text{Sum of lengths of both trains}}{\text{Sum of speed of both trains}}$

   Then, 12 = $\dfrac{195 + 225}{(15 + x)}$

   or, 180 + 12x = 420
   or, 12x = 420 – 180 = 240

   $\therefore x$ = 20 m/s = $\left(20 \times \dfrac{18}{5} \right)$ km/hr = 72 kmph

(56-60) :

56. (3) No. of candidates appeared in interview

   for Others = 86700 × $\dfrac{12}{100}$ = 10404

   No. of candidates selected in PO

   = 25200 × $\dfrac{14}{100}$ = 3528

   $\therefore$ Required ratio
   = 10404 : 3528 = 289 : 98

57. (1) Total no. of cadidates appeared in interview for IT Officer and Others

   PO = $\dfrac{86700}{100} \times (14 + 12) = \dfrac{86700}{100}$ × 26
   = 22542
   No. of candidates appeared in Interview

   for Clerk = 25200 × $\dfrac{25}{100}$ = 6300

   $\therefore$ Required % = $\left(\dfrac{22542}{6300} \times 100 \right)\%$

   = 357.80% ≈ 358%

58. (2) The difference between no. of candidates appeared and selected in interview for

   PO = 86700 × $\dfrac{18}{100}$ – 25200 × $\dfrac{14}{100}$ = 12078

Clerk = $86700 \times \frac{25}{100} - 25200 \times \frac{25}{100}$

= 15375

Manager = $86700 \times \frac{16}{100} - 25200 \times \frac{20}{100}$

= 8832

IT Officer = $86700 \times \frac{14}{100} - 25200 \times \frac{16}{100}$

= 8106

$\therefore$ Required answer is Clerk.

59. (4) Required difference = $25200 \times \left(\frac{14-10}{100}\right)$

= $25200 \times \frac{4}{100}$ = 1008

60. (5) Total no. of candidates selected in Manager and Clerk together

= $25200 \times \left(\frac{20+25}{100}\right)$

= $25200 \times \frac{45}{100}$ = 11340

Total no. of candidates appeared in these

interview = $86700 \times \left(\frac{16+25}{100}\right)$

= $86700 \times \frac{41}{100}$ = 35547

$\therefore$ Required % = $\left(\frac{11340}{35547} \times 100\right)\%$

= 31.90% $\approx$ 32%

61. (1) 4 men can be selected out of 8 men in $^8C_4$ ways and 3 women can be selected out of 5 women in $^5C_3$ ways.
Hence required no. of ways
= $^8C_4 \times {}^5C_3 = 70 \times 10 = 700$

62. (3) Initially, the quantity of milk in the

mixture = $\left(\frac{456}{7+5} \times 7\right)$ = 266 litres

And the quantity of water = $\frac{456}{12} \times 5$

= 190 litres

Now, let the quantity of extra milk to be added be x litres

Then, $\frac{266+x}{190} = \frac{9}{5}$

or, $5x = 190 \times 9 - 266 \times 5$
= 1710 − 1330 = 380

$\therefore$ $x = \frac{380}{5}$ = 76 litres

63. (4) Total failed candidates
= $25x + 40x - 19x = 46x$
Passed in both subjects = $100x - 46x = 54$
Total no. of appeared candidates = $100x$
$\therefore$ $54x = 972$

$\therefore$ $100x = \frac{972}{54x} \times 100x = 1800$

64. (2) r = 39cm, h = 80 cm

$\therefore$ $l = \sqrt{r^2 + h^2} = \sqrt{39^2 + 80^2}$ = 89 cm
Area of the sheet = total surface area of the cone = $\pi rl + \pi r^2 = \pi r(l + r)$

= $\frac{22}{7} \times 39(89 + 80)$

= 20714.57 cm²

65. (3) Let the present age of boy's father be x years.

Then, boy's age = $\frac{2x}{7}$ years

boy's brother's age = $\frac{2x}{7} + 3 = \frac{2x+21}{7}$

Now ratio between the present age of boy's father and the of boy's brother

= $\frac{x}{2x+21} = \frac{14}{5}$

or, $\frac{x}{2x+21} = \frac{2}{5}$
or, x = 42 years

$\therefore$ boy's present age = $42 \times \frac{2}{7}$ = 12 years

66. (2) I. $x^2 - 11x + 24 = 0$
$\Rightarrow x^2 - 8x - 3x + 24 = 0$
$\Rightarrow x(x-8) - 3(x-8) = 0$
$\Rightarrow (x-3)(x-8) = 0$
$\therefore x$ = 3 or 8
II. $2y^2 - 9y + 9 = 0$
$\Rightarrow 2y^2 - 3y - 6y + 9 = 0$
$\Rightarrow y(2y-3) - 3(2y-3) = 0$
$\Rightarrow (2y-3)(y-3) = 0$
$\therefore y = \frac{3}{2}$ or 3
Clearly, $x \geq y$

67. (3) I. $x^3 \times 13 = x^2 \times 247$

$\Rightarrow \frac{x^3}{x^2} = \frac{247}{13} \Rightarrow x = 19$

II. $y^{\frac{1}{3}} \times 14 = \frac{294}{y^{\frac{2}{3}}}$

$\Rightarrow y^{\frac{1}{3}} \times y^{\frac{2}{3}} = \frac{294}{14}$

$\Rightarrow y^{\frac{1}{3}+\frac{2}{3}} = 21 \Rightarrow y = 21$
Clearly, $x < y$

68. (4) I. $\dfrac{48}{x^{\frac{4}{7}}} - \dfrac{12}{x^{\frac{4}{7}}} = x^{\frac{10}{7}}$

$\Rightarrow \dfrac{48-12}{x^{\frac{4}{7}}} = x^{\frac{10}{7}} \Rightarrow 36 = x^{\frac{10}{7}+\frac{4}{7}}$

$\Rightarrow 36 = x^2 \Rightarrow x = \pm 6$

II. $y^3 = 999 - 783 = 216$

$\therefore \quad y = \sqrt[3]{216} = 6$

Clearly, $x \le y$

69. (3) I. $\sqrt{500}\, x = -\sqrt{402}$

$\Rightarrow x = \sqrt{\dfrac{402}{500}} \approx -\sqrt{\dfrac{400}{500}} \approx -0.9$

II. $\sqrt{360}\, y = -\sqrt{200}$

$y = -\sqrt{\dfrac{200}{360}} \approx -0.74$

Clearly $x < y$

70. (3) I. $x = 17^2 + 144 \times \dfrac{1}{18}$

$\Rightarrow x = 289 + 8 = 297$

II. $y = 26^2 - 18 \times 21$

$\Rightarrow y = 676 - 378 = 298$

Clearly, $x < y$

English

81. (4) Change 'fire' into 'firing'.
82. (4) Replace 'by' by 'from'.
83. (5) No error.
84. (2) Change 'endanger' into 'endangered'.
85. (2) Change 'body' into 'bodies'.
86. (3) Replace 'that' by 'whether or if'.
87. (4) Change 'do' into 'doing'.
88. (4) Change 'have' into 'has'.
89. (3) Change 'their' into 'its'.
90. (5) No error.

VOCABULARIES

Words	Meaning in English	Meaning in Hindi
Companion	fellow	संगी–साथी
Entice	attract or tempt by offering pleasure	आकर्षित करना
Coax	persuade (someone) gradually or by flattery to do something	मनाना, फुसलाना
Denial	a statement that says something is not true or does not exist	अस्वीकार करना
Escalation	a rapid increase; a rise	वृद्धि
Exemptions	the process of freeing	छूट
Taxonomic	arranging them into the groups	वर्गीकृत करना
Stagger	an unsteady walk or movement	लडखड़ाकर चलना
Proliferation	rapid increase in numbers	शीघ्रता से बढ़ना
Fade	the process of becoming less bright	फीका पड़ना
Tame	to control	नियंत्रित करना
Plague	cause continual trouble or distress to	महामारी
Induce	to persuade or influence somebody to do something	प्रेरित करना

SBI PO PHASE-I - 85 (ANSWER KEY)

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

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

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