Bank of Baroda PO Grand Test –BOB-170504
HINTS & SOLUTIONS

1. PrakashGokhalefulfils all the conditions except I but he fulfils the sub conditions (a). Hence, his case is to be referred to General Manager Advances.
2. Amit Narayan fulfils all the conditions, so he is to be selected.
3. Shobha Gupta fulfils all the conditions except II but she fulfils the sub condition (b), hence her case is to be referred to Executive Director.
4. RohanMaskare'ssection of Bank riot clear by the given statements.
5. SudhaMalhotra does not fulfill the condition V. So, she is not to be selected.

6-8.

| People ↓	Languages				
	Eng	Sp	Fr	Port	Ital
A	✗	✓	✓	✓	✗
B	✓	✓	✓	✓	✓
C	✓	✓	✗	✓	✓
D	✗	✓	✗	✗	✗
E	✗	✗	✓	✗	✓

6. B speak all five language. Hence, the option (2) is correct.
7. D only speak Spanish Hence all the above option (5) are correct.
8. Espeak Italian language. Hence the option (2) is correct.
9. D only speak Spanish. Hence, None of the above speak Spanish, option (5) is correct.
10. AD the pair of persons who speak neither English nor Italian.

11-15.

Hostel	Girl	State	Newspaper
PGW	1. Neha 2. Manisha	1. Bihar 2. Delhi	1. The Times of India 2. Pioneer
Megadoot	1.Priya 2. Rinki	1. UP 2. Haryana	1. The Indian Express 2. The Asian Age
Geetanjali	1. Puja 2. Reena	1. Rajasthan 2. Pachim Banga	1. The Hindustan times/The Hindu 2. The Hindu/TH

11. (1) Reena and Puja stay in Geetanjali.
12. (2) Neha reads The Times of India. Hence, the option (2) is correct.
13. (2) Priya stays with Rinki.
14. (4) Puja belongs to Rajasthan.
15. (1) Manisha stays in PG Women's hostel.
16. From I Buy three dusters get one free
    ⇒ ddeejjoottyy
    From II Purchase one sharpener get three free
    ⇒ ddee II oowwyy
    From I and II Code for 'Buy dusters'
    ⇒ jjtt. Still we don't know the code of 'dusters'.

17.
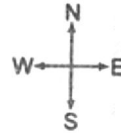
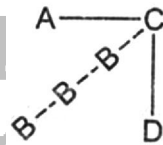From   I
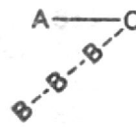
From II

In the above figure B can be placed at any point towards South-West of C. Thus, unless we get the specific position of B. We can't answer the question. Again, statement iI alone is not sufficient because it lacks information regarding B. Now,
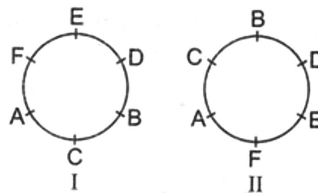From I and II We get

Still we are facing the same problem.
18. Comparisons of strike rates and centuries along with fifties are not enough to answer the question. We still need some more information.
19.(2) From I We get the following two seating arrangements

In figure I, D is on the immediate right of B whereas i figure II, C is on the immediate right of B. The give information is still inadequate to answer the question
From II We get the following arrangement
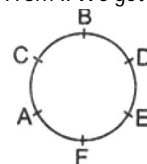
Obviously, C is on the immediate right of B.
20. From I

Still, we need more information to answer the question.
From II The information given in it does not lead u: to answer.

21. I is advisable because this will facilitate the homeless to fight against cold wave. II is a is also advisable because it will provide shelter to some more people. III is also advisable because extending timing of night shelter will give some more relief to the homeless.

22. I is not advisable because it will adversely affect the campaign. II is advisable because it will bolster support to the women constable. III is not advisable because cases of casualty will increase

23. I is impractical. II is ridiculous. Hence, neither I nor II follows. But III follows because it is the right way of action.

24. Only I and II follow. I is a advisable because it will be helpful in taking measures to make reform in the performance of the team. II is also advisable because practice makes a man perfect. III is not advisable since it is a matter of World Cup and newcomers will take some time to adjust themselves.

25. I does not follow because it is not appropriate in a globalized, WTO-regulated world. II follows, however, III is an act of piracy and therefore needs to be condemned.

26-27. The number of handshakes and kisses add up to 55. Each member of Choudhary family said good-bye to each member of Thakur family. If we multiply the number of members of both families, the result should be 55.
There are two possibilities.
I. 55 = 11 × 5 (One family with 11 members and other one with 5).
II. 55 = 55 × 1 (Which is not possible, since a family is not formed by only one person)
We now analyze the handshakes following the same procedure. There are two possibilities
I. 21 = 7 × 3 (7 men in one family and 3 in the other)
II. 21 = 21 × 1 (Which is not possible, because none of these families has so many members, as seen above)
Therefore, one family is formed by 7 men and 4 women and the other by 3 men and 2 women.

26. 7 + 3 = 10
27. 4 + 2 = 6
28.
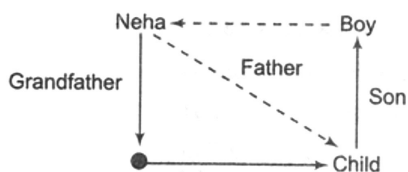
Hence, Neha is the sister of boy.

29. All the rest are metal. Hence, Porcelain is correct answer
30. Statement follows only conclusion II. Hence, the option (3) is correct.

31. None of the above. All give option are not a possible effect of the cause.
32. Option (3) substantiates the facts stated in the statement.
33. Option (1) can be a probable cause of the effect.
34. Only option(1) will be implicit.
35. Only option (3) can be drawn from the facts stated in the given paragraph.

36-40. The words get arranged one by one on the basis of the number of letters, the largest word getting arranged first. If the number of letters is the same, the word that comes later in the dictionary gets arranged first. While one word gets arranged, the others shift rightwards.

36. (3) The last step is the arrangement finally desired.
37. (2) Input   : the of   president new Indonesia is Waheed.
Step I   : president the of new Indonesia is Waheed.
Step II   : president Indonesia the of new is Waheed.
Step III   : president Indonesia Waheed the of new is.
Step IV   : president Indonesia Waheed new the of is.
Thus, step III.
38. (4) The step V for the given input is "inside yours have you it do."
39. (5) Can't be determined.
40. (1) Five steps can arrange the given input.

41-43. On the basis of given information and conclusions and sub-conclusions drawn from them we can draw the following table

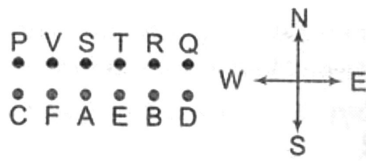| Student	Book	Author
Sujit	Biology	D'Souza
Randhir	Physics	Gupta
Neena	Maths	Khanna
Mihir	Chemistry	Edwin
Vinay	English	Harish

41. The combination Biology-Sujit – D'Souza is correct
42. Edwin is the author of the Chemistry book.
43. Vinay is the owner of the book written by Harish
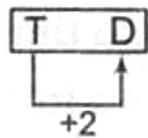44.

45. As   Similar

46-49.

RACE
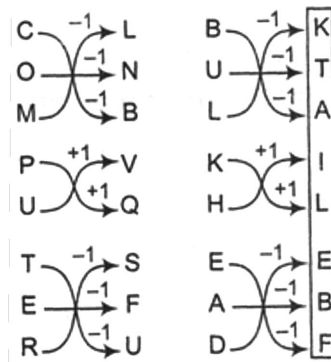
46. P, D sit at extreme ends of the rows.
47. A faces. Hence, the option (1) is correct.
48. Two person are seated between V and R. Hence, the option (2) is correct.
49.

Hence,

50. Option (4) will weaken the step taken by the Government.
51. Total exports for

$$A = 20 + 25 = 45$$
$$B = 22.5 + 30 = 52.5$$
$$C = 27.5 + 25 = 52.5$$
$$D = 35 + 37.5 = 72.5$$
$$E = 25 + 20 = 45$$

Thus, required case are = A and E, B and C
So, option (1) is correct.

52. Percentage change for

$$A = \frac{(25 - 20)}{25} \times 100 = 20\%$$

$$B = \frac{30 - 22.5}{30} \times 100 = 25\%$$

$$C = \frac{27.5 - 25}{27.5} \times 100 = 9.09\%$$

$$D = \frac{37.5 - 35}{37.5} \times 100 = 6.67\%$$

$$E = \frac{25 - 20}{25} \times 100 = 20\%$$

$\therefore$ Minimum percentage change is for 'D'

53. Required percentage $= \frac{35}{25} \times 100$
$= 140\%$

54. Number of E type vehicle exported in 2006 = 25lakh
25 lakh vehicle exported in 2007 are of type $\rightarrow$ A,C
$\therefore$ Required answer is option (4).

55. The average exports of B and C type of vehicle in 2007
$$= \frac{30 + 2.5}{2} = 27.5$$

56. (3) Number of students studying Agriculture
In 2001 = 4% of 1800 = 72
In 2002 = 3% of 2200 = 66
$\therefore$ Required Ratio = 72 : 66 = 12 : 11

57. (1) Number of students studying Science
In 2001 = 24% of 1800 = 432

In 2002 = 25% of 2200 = 550

$\therefore$ Percent increase $= \dfrac{(550 - 432)}{432} \times 100$

$= \dfrac{11800}{432} = 27\%$

58. (2) Number of students studying Commerce and Engineering
In 2001 = (28 + 15)% of 1800 = 43 × 18 = 774
In 2002 = (30 + 14)% of 2200 = 44 × 22 = 968

$\therefore$ Required percentage $= \dfrac{774}{968} \times 100 = 79.95 \approx 80\%$

59. (4) Number of students studying Arts in 2001 and 2002
= 12% of 1800 + 11% of 2200
= 12 × 18 + 11 × 22
= 216 + 242 = 458
Total number of students in 2001 and 2002
= 1800 + 2200 = 4000

$\therefore$ Required percentage $= \dfrac{458}{4000} \times 100 = 11.45\%$

60. (5) Number of students studying Arts in 2002 = 242
Number of students studying Management in 2001
= 8% of 1800
= 8 × 18 = 144
$\therefore$ Required ratio = 144 : 242 = 72 : 121

61. The series is
$7 \times 5 = 35$
$35 \times 3 = 105$
$105 \times 5 = 525$
$525 \times 3 = 1575$
$1575 \times 5 = 7875$
$7875 \times 3 = \boxed{23625}$

62. The series is
$0 \times 5 + 5 = 5$
$5 \times 4 + 4 = 24$
$24 \times 3 + 3 = 75$
$75 \times 2 + 2 = 152$
$152 \times 1 + 1 = \boxed{153}$

63. The series is combination of two series.
$17 + 4 = 21$
$21 + 4 = 25$
$25 + 4 = 29$
$29 + 4 = \boxed{33}$
$19 + 3 = 22$
$22 + 3 = 25$
$25 + 3 = 28$

64. The series is

3

$16 \times 3 = 48$

$48 \div 2 = 24$

$24 \times 3 = 72$

$72 \div 2 = 36$

$36 \times 3 = 108$

$108 \div 2 = \boxed{54}$

65. The series is

$$\frac{2 \times 2.5}{31 - 4} = \frac{5}{27}$$

$$\frac{5 \times 2.5}{27 - 4} = \frac{12.5}{23}$$

$$\frac{12.5 \times 2.5}{23 - 4} = \frac{31.25}{19}$$

$$\frac{31.25 \times 2.5}{19 - 4} = \frac{78.125}{15}$$

$$\frac{78.125 \times 2.5}{15 - 4} = \frac{\boxed{195.3125}}{11}$$

66. 2000

67. 32

68. 3

69. 29

70.(2)

71. Suppose the number is x.

$$\therefore \frac{15}{100} \text{ of } \frac{45}{100} x = 105.3$$

$$x \times \frac{45}{100} \times \frac{15}{100} = 105.3$$

$$x = \frac{105.3 \times 100 \times 100}{45 \times 15}$$

x = 1560

$$\therefore \frac{24}{100} \text{ of } x = 1560 \times \frac{24}{100} = 374.4$$

72. Let the numbers are x and y.

$$2x + 3y = 300 \qquad \text{.......(i)}$$

$$3x + 2y = 265$$

On multiply by 2 in Eq. (i) and multiply by 3 in Eq. (ii) and subtracted,

$$4x + 6y = 600$$
$$\underline{9 + 6y = 795}$$
$$-5x = -195$$

$$\Rightarrow x = \frac{195}{5}$$

$$\therefore x = 39$$

From Eq. (i)

$$2 \times 39 + 3y = 300$$

$$78 + 3y = 300$$

$$3y = 300 - 78$$

$$3y = 222$$

$$Y = \frac{222}{3}$$

Y = 74

∴ Large number = 74

73. Number of books   Days
Number of binders

1400		15
800	21	20
x		

$$\left. \begin{array}{l} 1400 : 800 \\ 20 : 15 \end{array} \right\} :: 21 : x$$

$$\therefore$$

$$\Rightarrow 1400 \times 20 \times x = 800 \times 15 \times 21$$

$$X = \frac{800 \times 15 \times 21}{1400 \times 20} = 9$$

So, 9 binders will be required.

74. Suppose the cost price of music system = Rs. x

140% of 120% of x = 10500

$$\Rightarrow \quad x \times \frac{120}{100} \times \frac{140}{100} = 10500$$

$$\Rightarrow \quad x = \frac{10500 \times 100 \times 100}{120 \times 140}$$

$$\therefore \quad x = \text{Rs. } 6250$$

75. Total monthly income of 4 members

Rs. 4 × 15130 = Rs. 60520

Except daughter, total monthly income of 3 members

= Rs. (3 × 14660) = Rs. 43980

∴ Monthly income of married daughter

= 60520 – 43980

= Rs. 16540

76. Suppose, the present age of Farah is x yr.

$$x = 1\frac{2}{7}(x - 8) = \frac{9}{7}(x - 8)$$

$$\Rightarrow x = \frac{9}{7}x - \frac{72}{7}$$

$$\Rightarrow x = \frac{9x - 72}{7}$$

$$\Rightarrow 7x = 9x - 72$$

$$\Rightarrow 9x - 7x = 72$$

$$\Rightarrow 2x = 72$$

$$\Rightarrow x = 36$$

$$\because \text{Present age of the daughter} = \frac{1}{6} \times 36 = 6 \text{ yr}$$

∴ Three years ago, the age of the daughter was = 6-3 = 3 yr

77. 25a + 25b = 115

$$a + b = \frac{115}{25} = 4.6 \Rightarrow a + b = 4.6$$

$$\therefore \text{Required average} = \frac{a + b}{2} = \frac{4.6}{2} = 2.3$$

78.

2	36	48	42
3	18	24	21
2	6	8	7
	3	4	7

LCM of 36, 48 and 42

$$= 2 \times 3 \times 2 \times 3 \times 4 \times 7 = 1008s$$

So, Swapnil, Aakash and Vinay will meet again after 1008 s.

79. 60% of 250 = $\dfrac{250 \times 60}{100} = 150$

Number of correct answer out of first 125 questions

$= \dfrac{125 \times 40}{100} = 50$

Remaining number of correct answer = 150-50 = 100

Now x % of 125 = 100

$\Rightarrow \quad \dfrac{x \times 125}{100} = 100 \Rightarrow x = \dfrac{100 \times 100}{125}$

∴ x = 80%

80. Suppose, the five consecutive odd numbers are

x, x + 2, x + 4, x + 6 and x + 8.

∴ A + C = 146

$\Rightarrow$ x + x + 4 = 146

$\Rightarrow$ 2x = 146 – 4 = 142

∴ x = 71

∴ E = x + 8 = 71 + 8 = 79

81-85.

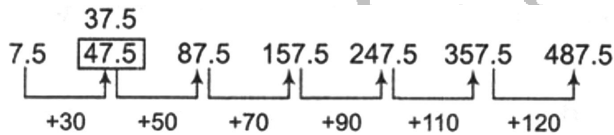|	Total	Singing	Dancing	Painting	Cooking
Boys	1200	480	180	240	300
Girls	1600	960	225	15	400

81. Required ratio = 240 : 480 = 1 : 2

82. Required per cent = $\dfrac{400}{2800} \times 100 = \dfrac{100}{7} = 14\%$

83. Required per cent = $\dfrac{300}{2800} \times 100 = 10.71\%$

84. Number of children in dancing classes
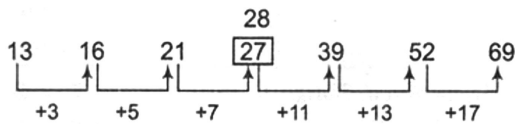= 180 + 225 = 405

85. Number of girls taking painting classes = 15

86.

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        37.5
7.5   [47.5]   87.5   157.5   247.5   357.5   487.5
   +30    +50    +70    +90    +110    +120
```

∵ Right Number = 37.5

∴ Wrong Number = 47.5

87.

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                  28
13    16    21    [27]    39    52    69
   +3    +5    +7    +11    +13    +17
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∵ Right Number = 21 + 7 = 28

∴ Wrong Number = 27

88. $1400 + (10)^2 = 1500$

$1500 + (9)^2 = 1581$

$1600 = (8)^2 = 1664$

$1700 + (7)^2 = 1749$

$1800 + (6)^2 = \boxed{1833}\,1836$

$1900 + (5)^2 = 1925$

$2000 + (4)^2 = 2016$

∴ Right number = $1800 + (6)^2 = 1836$

89 ∵ Right Number = 190 + 41 = 231

∴ Wrong Number = 233

90. $(11)^3 \to 1331$

$(13)^3 \to 2197$

$(15)^3 \to 3375$

$(17)^3 \to \boxed{4914}\,4913$

$(19)^3 \to 6859$

$(21)^3 \to 9261$

$(23)^3 \to 12167$

∵ Right Number = $(17)^3 = 4913$

∴ Wrong Number = 4914

91-95. Number of students in different facilities

Subject	Year 2001	Year 2002
Arts	4200	4400
Commerce	7700	9600
Science	8400	8800
Agriculture	2450	2000
Engineering	6300	7600
Pharmacy	2100	3600
Medicine	3850	4000

91. The number of students decreased from 2450 to 2000 in Agriculture.

92. Number of students studying Pharmacy in 2001 = 2100

Number of students studying Pharmacy in 2002 = 3600

∴ Required ratio = 2100 : 3600 = 7 : 12

93. Difference = 7600 – 6300 = 1300

∴ Required percentage increase =

$\dfrac{1300}{6300} \times 100 = 20.63\%$

94. Total number of students in Arts and Commerce faculties in 2001 = 4200 + 7700 = 11900

Total number of students in Arts and Commerce faculties in 2002 = 4400 + 9600 = 14000

∴ Required percentage

$= \dfrac{11900}{14000} \times 100 = 85$

95. Percentage increase in the faculty of Arts

$\to \dfrac{4400 - 4200}{4200} \times 100 = 4.761$

Commerce $\to \dfrac{9600 - 7700}{7700} \times 100 = 24.675$

Science $\to \dfrac{8800 - 8400}{8400} \times 100 = 4.76$

Engineering $\to \dfrac{7600 - 6300}{8400} \times 100 = 20.63$

Pharmacy $\rightarrow \dfrac{3600 - 2100}{2100} \times 100 = 71.42$

Medicine $\rightarrow \dfrac{4000 - 3850}{3850} \times 100 = 3.896$

Hence, the percentage increase in Medicine was minimum.

96. Suppose the numbers are x and y.
Where, x > y
According to question,
$$x^2 - y^2 = 63 \qquad ......(i)$$
$$x - y = 3 \qquad ......(ii)$$
Dividing by Eq. (ii) and (i),
$$\dfrac{x^2 - y^2}{x - y} = \dfrac{63}{3}$$
$$x + y = 21 \quad ......(iii)$$
Adding Eqs. (ii) and (iii),
$$\begin{array}{r} x - y = 3 \\ \underline{x + y = 21} \\ 2x = 24 \\ x = 12 \end{array}$$
∴ Larger number = 12

97. Number of invalid votes $= 15200 \times \dfrac{15}{100} = 2280$

Number of valid votes = 15200 – 2280 = 12920
Number of valid votes getting by other candidate
$$= 12920 \times \dfrac{(100 - 55)}{100}$$
$$= 12920 \times \dfrac{45}{100} = 5814$$

98. $R = \dfrac{SI \times 100}{P \times T} = \dfrac{15300 \times 100}{45000 \times 4} = 8.5\%$ per annum

$$CI = P\left[\left(1 + \dfrac{r}{100}\right)^t - 1\right]$$
$$= 45000\left[\left(1 + \dfrac{8.5}{100}\right)^4 - 1\right]$$
$$= 45000\left[(1 + 0.085)^4 - 1\right]$$
$$= 45000[1.3858587 - 1]$$
$$= 45000[0.3858587]$$
= 17364.64
= Rs. 17364

99. $\dfrac{3}{5}, \dfrac{1}{8}, \dfrac{8}{11}, \dfrac{4}{9}, \dfrac{2}{7}, \dfrac{5}{7}, \dfrac{5}{12}$

∵ $\dfrac{3}{5} = 0.600, \dfrac{1}{8} = 0.125$

$\dfrac{8}{11} = 0.727, \dfrac{4}{9} = 0.444$

$\dfrac{8}{11} = 0.727, \dfrac{4}{9} = 0.444$

$\dfrac{2}{7} = 0.285, \dfrac{5}{7} = 0.714$

$\dfrac{5}{12} = 0.416$

∴ Decreasing order

$\dfrac{8}{11}, \dfrac{5}{7}, \dfrac{3}{5}, \dfrac{4}{9}, \dfrac{5}{12}, \dfrac{2}{7}, \dfrac{1}{8}$

So third highest is $\dfrac{3}{5}$

100. Required Difference
$$= \left(\dfrac{5}{6} \text{ of } 1248\right) - \left(\dfrac{4}{5} \text{ of } 1150\right)$$
= 1040 – 920 = 120