

Bank of Baroda PO Grand Test –BOB-170502

HINTS & SOLUTIONS

1. (4) From I We get
 *⁽⁺⁾ Amrendra's father
 • Amendra
 • Rishu⁽⁺⁾
 Thus, Rishu is either nephew or son of Amrendra. Still we need more information to conclude a specific relation between Rishu and Amrendra. Hence, statement I alone is not sufficient.
 From II The information does not give any such clue to reach answer. Hence, statement II alone is not sufficient. Even using the statements I and II together we can't obtain the number of brothers of Amrendra. Hence, both the statements I and II together are not sufficient.
2. (4) We do not have information about the positive of the Sun, i.e., whether it is in the East or in the West. Also, the position of the person gives no clue about the direct ion of the moving train.
3. (3) From I The symbols >, *, = and • have been used with some other symbols while coding STRIP, MAPRO and ASTER, Note that these words do not consist of the letter 'X'. obviously, the code for 'X' is the symbol ')'.
 From II The four letters M, I, E and R are present in both the words MIXER and MISER and the four symbols which are common in the codes of both the words are >, *, = and •. Thus, we can conclude that code for the letter is the symbols ')'.
 4. (5) Statement I alone is not sufficient because the statement says only about ratios of different categories. We need absolute figure of at least one of the categories. Statement II fulfils our requirement. Hence, both the statements I and II together are sufficient. We do not need its details to answer the question. But for your convenience the details are as follows.
 Suppose number of those statements who failed in all the three tests is X. Then, we get the following picture
 A: who failed in test P only.
 B: who failed in test Q only.
 C: who failed in test R only.
 D: who failed in test P and Q.
 E: who failed in test P and R.
 F: who failed in test R and Q.
 G: who failed in all the three tests.
 Since, half of the students passed in all the three tests, this implies 700 students failed in at least one tests, i.e.,
 $A + B + C + D + E + F + G = 700$
 $A = B = C = D = E = F = G = 100$
 Number of those students who passed in at least two tests = sum of the numbers who failed in only one test and the number of students who passed in all the three tests.
 Hence, required number of such students
 $= A + B + C + 700$
 $= 300 + 700 = 1000$
5. (4) From I We get that India won the matches first, second, third and the fourth.
 From II We get that India won the matches eighth, ninth and tenth.
 But these two statements even together do not tell about the result of the matches fifth, sixth and the seventh.
 6-10. From clue (III), we can make our task easy. If A is the grandfather of F, it means F is a person of the lowest generation. Again, since persons of same generation sat opposite each other. D, who sat adjacent to A, is not from the generation of A. But D is the father of C. this implies D is from the middle generation and C from the lowest generation. Again, since D is not the husband of E, A is the husband of E and D is the husband of B.
 Thus, we get the following family tree
 It is given in clue I that there are three females in the family. This implies that either C or F is a female. Now, let us fix their seating arrangement. From clue III, we get that A sat on the immediate right of D.
 Again, since B and D are of the same generation, this implies that B sat opposite D. similarly, E sat opposite A. obviously C and F sat opposite each other. Thus, we get the following arrangement.
 Again, from clue III, we get that F is not the youngest. This implies C is the youngest (because only C and F are from the lowest generation). Now, from clue I, we get that the youngest one is a male. This implies that C is a male and F is a female. Now, let us arrange the persons in the descending order, of their ages. Since, the oldest member is a female, this implies E is older than A. again, from clue II, we get that B occupies the third position. This implies B is older than D and since C is the youngest. Hence, F is older than C.
 Thus, the order of the persons according to descending order of age is as follows
 $E > A > B > D > F > C$
 Thus, we can conclude that B sat on the immediate right of F (because it is given that B sat on the immediate right of a female) and C on immediate left of D.
6. (1) The mother of F, the only person who sat between E and F.
7. (4) Related data not available. Hence, the option (4) is correct.
8. (3) C and B are adjacent to E. hence, the option (3) is correct.
9. (5) The correct order is A – F – B – E – C – D.
10. (4) All are true.

Persons	Sex	Vehicles	Destination
P	Male	Honda City	Hyderabad
Q	M/F	Honda City	Hyderabad
R	Male	Ford Ikon	Chennai
S	Female	Ford Ikon	Chennai

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T	Male	Swift D'zire	Delhi	unknown	Technician or Pilot ... (vi)
V	Male	Ford Ikon	Chennai	Shortest	technician (vii)
W	M/F	Honda City	Hyderabad	5' 9" , 5' 10" , 5' 11" ,	6' , 6' 1" , 6' 2 " are heights in
Z	Female	Swift D'zire	Delhi	ascending order	

11. R, S and V are travelling to Chennai in Car Ford Ikon.
12. Four members are travelling in no car.
13. S and Z are female members, The third female member is either P, Q or W
14. P and Q are travelling with W
15. P,Q and W are travelling in Honda City.
16. Input Star 62 Rose 72 59 Tiger Gun 42
Step I 42 62 Rose 72 59 Tiger Gun Star
Step II 42 Tiger Rose 72 59 62 Gun Star
Step III 42 Tiger 59 72 Rose 62 Gun Star
Step IV 42 Tiger 59 Star Rose 62 Gun 72
Step V 42 Tiger 59 Star 62 Rose Gun 72
Step VI 42 Tiger 59 Star 62 Rose 72 Gun
For the final output only 6 steps are required.
17. Input Lemon 43 56 37 King 21 Network Master
Step 1 21 43 56 37 King Lemon Network Master
Step II 21 Network 56 37 King Lemon 43 Master
Step III 21 Network 37 56 King Lemon 43 Master
Step IV 21 Network 37 Master King Lemon 43 56
Step V 21 Network 37 Master 43 Lemon King 56
Step VI 21 Network 37 Master 43 Lemon 56 King
No such given step is there so given step is not possible from the given input.
18. Input "52 June March 42 April September 92 November 62 82" after the steps, step VI will be "42 September 52 November 62 March 92 June April 82"
19. Step III 21 Force 32 Defense Cargo 40 Air 36
Step IV 21 Force 32 Defense 36 40 Air Cargo
Step V 21 Force 32 Defense 36 Cargo Air 40
Step VI 21 Force 32 Defense 36 Cargo 40 Air
Step VI is the last step of the machine.
20. Input cannot be find out from any of the step. So, it is not possible to get input.
21. Only courses of actions I and II are essential to remove the block traffic movement.
22. In the given statement only course of action I is essential because if the Government provide Food grains to the poor people, then they will send their children to school.
23. The Government should direct the bank to refrain from retrenching its employees.
24. For the given statement, only courses of action II and III are necessary.
25. In order to remove, the problem of water-crisis only courses of action II and III are necessary.
- 26-30.

Height	Hijackers	Expertise
5' 11"	SAK	Psychiatrist/ Negotiator(i)
(tallest/shortest)	IA(ii)
(Shortest/tallest)	SAS(iii)
tallest/shortest	(x)	Pilot(iv-a)
6'		Shakir(iv-b)
(6' +)	MZI	Planning(v)

26. All underlined are the only possibilities left
27. 5' 10" had the height of the unknown hijacker. Hence, option (2) is correct.
28. MistriZahur Ibrahim was expert in the field of Aviation
29. Shakir had the expertise in planning.
30. ShaidAkhtarSayed was tallest among the hijackers.
31. 6' 1" was the height of MistriZahur Ibrahim. Hence, option (5) is correct.
32. Only assumption I is implicit in the statement. The instruction was issued assuming that people tend to be little shy and less objective while writing their self-appraisal report if not so instructed. Assumption II is not properly related with the statement.
33. Both assumptions I and II are implicit in the statement. If employees do not learn by observing the behaviour of their bosses the statement would not have made. Again, it has been highlighted that bosses should not be considered as merely sources of reward and punishments. It implies that bosses are generally considered as sources of reward and punishment. Hence, assumption II is implicit
34. Both assumptions I and II are implicit in the statement. If customers do not accept or follow the suggestion of the shopkeeper, the latter has not made such a statement. Again, the shopkeeper rendered his view assuming that customer question. will consider his view. Therefore, assumptions I is implicit. The statement clearly indicates that international technology ensures better quality.
35. Both assumptions I and II are implicit in the statement. The statement implies clearly that length of service or seniority does not alone reflect merit of an employee. Notice the use of word alone in the assumption. If it is not possible to measure the merit of an employee why such statement has been made.
36. Only assumption his implicit in the statement. Notice, the use of word always in the statement and assumption II. The statement does not imply that the written

Hence, statement I alone is sufficient to answer the question,
From statement II,

$$\therefore \text{Area} = \pi \times \left(\frac{\text{Diameter}}{2}\right)^2$$

Hence, statement II alone is also sufficient to answer the question.

58. Let the speed of boat in still water be x km/h and that of current be y km/h.

$$\therefore \text{Rate upstream} = (x - y) \text{ km/h}$$

$$\text{Rate downstream} = (x + y) \text{ km/h}$$

From statement I,

$$x + y = \frac{35}{5}$$

$$\therefore x + y = 7 \text{ km/h}$$

.....(i)

From statement II,

$$x - y = \frac{35}{7}$$

$$\therefore x - y = 5 \text{ km/h}$$

.....(ii)

From combined statements I and II, we can get the required answer.

59. From statement I,

Let the number of boys and girls be $5x$ and $6x$, respectively.

From statement II,

$$6x - 5x = 7$$

$$\Rightarrow x = 7$$

$$\therefore 5x = 35 \text{ and}$$

$$6x = 42$$

Clearly, both statements are required to answer the question.

60. From statement I,

$$\text{SP} = \text{Rs. } 1740$$

Profit percent = 20%

$$\therefore \text{CP} = \frac{100 \times 1740}{120}$$

$$= \text{Rs. } 1450$$

$$\therefore \text{Profit} = \text{Rs. } (1740 - 1450) = \text{Rs. } 290$$

Information in statement II is not required.

Hence, statement I alone is sufficient to answer the question.

61. (4) The earned foreign exchange in different years

$$= (39 + 39 + 45 + 52 + 50) \text{ thousand dollars}$$

$$= T (225000 \times 31.25)$$

$$= T 7031250$$

$$= T 700000 \text{ (approx.)}$$

62. (3) The total export of wool

$$= (65 + 60 + 68 + 75 + 70) \text{ quintals}$$

$$= 338 \text{ quintals}$$

Wool exported in 1999 = 68 quintals

$$\therefore \text{Required percentage} = \left(\frac{68}{338} \times 100\right)$$

$$= 20\% \text{ (approx.)}$$

63. (5) Price of wool per quintal in different years was as follows,

$$\text{In 1997} = \left(\frac{39000}{65}\right) \text{ dollars}$$

$$= 600 \text{ dollars}$$

$$\text{In 1998} = \left(\frac{39000}{65}\right) \text{ dollars}$$

$$= 650 \text{ dollars}$$

$$\text{In 1999} = \left(\frac{45000}{68}\right) \text{ dollars}$$

$$= 662 \text{ dollars (approx.)}$$

$$\text{In 2000} = \left(\frac{52000}{75}\right) \text{ dollars}$$

$$= 693 \text{ dollars (approx.)}$$

$$\text{In 2001} = \left(\frac{50000}{70}\right) \text{ dollars}$$

$$= 714 \text{ dollars (approx.)}$$

It is clear then the price per quintal was maximum in the year 2001

The ratio of the price of exported wool per quintal in 1997 to that of 2001 is $600 : 693 = 200 : 231$

Rate of wool in 1997 = 600 dollars per quintal

Rate of wool in 1998 = 650 dollars per quintal

Hence, the rate of wool increased by 50 dollars (per quintal).

$$R = \frac{12000 \times 100}{40000 \times 3} \left[R = \frac{SI \times 100}{P \times T} \right] = 10\%$$

$$\text{CI} = P \left[\left(1 + \frac{r}{100}\right)^2 - 1 \right] = 40000 \left[\left(1 + \frac{10}{100}\right)^3 - 1 \right]$$

$$= 40000 \left[\left(\frac{11}{10}\right)^3 - 1 \right] = 40000 \left[\frac{1331 - 1000}{1000} \right]$$

$$= 40000 \left[\frac{331}{1000} \right] = 40 \times 331 = \text{Rs. } 13240$$

67. Suppose the fraction is $\frac{x}{y}$

$$\therefore \frac{x + 3x}{y + y} = \frac{30}{19}$$

$$\frac{4x}{2y} = \frac{30}{19}$$

$$76x = 60y$$

$$\frac{x}{y} = \frac{60}{76} = \frac{15}{19}$$

68.

Days

18

21

Women

42

x

$$21 : 18 :: 42 : x$$

$$\therefore x = \frac{18 \times 42}{21}$$

$$= 36 \text{ women}$$

69.

Suppose the age of Sulekha and Arunima is $9x$ yr and $8x$ yr.

- $\therefore \frac{9x+5}{8x+5} = \frac{10}{9}$
 $81x+45 = 80x+50$
 $81x-80x = 50-45$
 $X = 5$
 \therefore Difference = $9 \times 5 - 8 \times 5$
 $= 45 - 40 = 5 \text{ yr}$
70. Suppose total amount was $\square \cdot x$.
 $\therefore x - 68357 - 25675 = x \times \frac{28}{100}$
 $\Rightarrow x - \frac{28x}{100} = 94032$
 $\Rightarrow \frac{72x}{100} = 94032$
 $\Rightarrow x = \frac{94032 \times 100}{72} = 130600$
 $\Rightarrow X = \square \cdot 130600$
71. Total number of students playing Cricket
 $= 38 + 40 + 12 + 17 + 25 + 18 + 20 = 170$
 \therefore Required percentage = $\frac{25}{170} \times 100$
 $= 14.706 = 15\%$
72. Required ratio = $27 : 18$
 $= 3 : 2$
73. Looking at the table we find Cricket is the most popular game.
74. Total number of students of class Xth playing different games.
 $= 5 + 12 + 7 + 21 + 18 + 8 + 11 + 33 = 115$
 \therefore Required percentage = $\frac{21}{115} \times 100$
 $= 1826 = 18\%$
75. Obviously Basket Ball and Badminton both have students in increasing order from IXth to XIIth.
76. $? \approx 1555 + 144 = 1700$
77. $? \approx 834 - 675 = 160$
78. $\sqrt{3480.9998} = 100.99 - ?$
 $\Rightarrow 59 = 101 - ?$
 $\therefore ? = 42$
79. $2\frac{1}{3} + \frac{1}{3} + \frac{1}{5} + \frac{1}{7} = \frac{316}{105} = 3$
80. $12^3 + (1.2)^2 + (1.02)^1 + (1.009)^0$
 $= 1728 + 1.44 + 1.02 + 1 \approx 1731$
81. Percentage of units sold in 1999 = 88%
 Percentage of units sold in 2000 = 91%
 \therefore Percentage increase = $91 - 88 = 3\%$
82. E (We can conclude this from table)
83. Number of units manufactured by company D in 2003 = 27 millions
 \therefore Number of units sold
 $= 27 \times \frac{75}{100} = 20.25 \text{ millions}$
 $= 20.25 \times 10^6 = 20250000$
84. Number of units not sold by company B in the years 1999, 2002 and 2004 = 17680000
85. C (from table)
86. Rate of the painting = Rs. 2 per sq.m

- Area of rectangular floor = $\frac{256}{2} = 128 \text{sq.m}$
- Suppose the breadth of rectangular floor is $x \text{ m}$.
 Length = $2x \text{ m}$
 Area of rectangular floor = $l \times b$
 $128 = 2x \times x$
 $\Rightarrow 128 = 2x^2$
 $\Rightarrow x^2 = \frac{128}{2} = 64$
 $x = 8 \text{m}$
 So, the length of the floor = $2x = 2 \times 8 = 16 \text{m}$
87. Suppose $\angle A = x^0$
 $\angle B = x + 26$
 $\angle C = \frac{x+26}{2} = \frac{x}{2} + 13$
 $\angle D = \frac{x}{2} + 3$
 $\therefore x + x + 26 + \frac{x}{2} + 13 + \frac{x}{2} + 3 = 360^0$
 $\Rightarrow 3x + 42 = 360^0 \quad \left(\because \frac{x}{2} + \frac{x}{2} = x \right)$
 $3x = 318$
 $\therefore x = 106^0$
 So, the $\angle A = 106^0$
88. Suppose the number x .
 $x - \frac{x}{7} = 180$
 $\frac{7x - x}{7} = 180$
 $\frac{6x}{7} = 180$
 $\Rightarrow x = \frac{180 \times 7}{6}$
 $X = 210$
89. From point A to B, speed = 4 km/h
 From point B to A, speed = 6 km/h
 Ration of required time 6 : 4 or 3 : 2
90. In every 30 min the time of a watch increased by 3 min
 $= 12 \times 3 = 36 \text{min}$
 So, the time after 6 h = 5 am + 6 h + 36min
 $= 11:36 \text{am}$
- 91-95. Number of boys in the class = $\frac{5}{12} \times 84 = 35$
 Number of girls in the class = $\frac{7}{12} \times 84 = 49$
 Number of girls speaking Hindi and English both = 7
 50% i.e., 42 students speak Hindi alone.
 Number of students who speak English only = 32, as the ratio of students speaking Hindi and English only = 21 : 16
 Number of girls who speak English only = 20
 Number of boys who speak English only = 12
 Number of girls who speak Hindi only = 22
 Number of boys who speak Hindi only = 20

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Number of boys who speak both languages = $35 - 32 = 3$

91. (3) 92. (2) 93. (1)
94. (2) 95. (1)

96. Suppose the cost price of the article is Rs. x .

$$\Rightarrow 1754 - x = x - 1492$$

$$\Rightarrow 2x = 1754 + 1492$$

$$\Rightarrow 2x = 3246$$

$$\therefore x = \text{Rs. } 1623$$

97. Suppose sum of money divided among A, B, C and D is

Rs. $3x$, Rs. $4x$, Rs. $9x$ and Rs. $10x$ respectively.

$$9x - 4x = 2580$$

$$\Rightarrow 5x = 2580$$

$$\therefore x = \frac{2580}{5} = 516$$

Total amount of money of A and D together

$$= 3x + 10x = 13x = 13 \times 516 = \text{Rs. } 6708$$

98. There are 7 letter in the word OPERATE whereas E has come twice.

$$\text{Number of permutation} = \frac{7!}{2!}$$

$$= \frac{7 \times 6 \times 5 \times 4 \times 3 \times 2!}{2!}$$

$$= 7 \times 6 \times 5 \times 4 \times 3$$

$$= 2520$$

99. Suppose original number is $(10x + y)$.

$$\text{and } x + y = 16$$

$$\text{and } (10x + y) - (10y + x) = 18$$

$$\Rightarrow 10x + y - 10y - x = 18$$

$$\Rightarrow 9x - 9y = 18$$

$$\Rightarrow x - y = 2$$

Add Eq. (i) and Eq. (ii),

$$x + y = 16$$

$$\underline{x - y = 2}$$

$$2x = 18$$

$$\therefore x = 9$$

$$\text{and } y = 7$$

$$\text{Required Number} = 10x + y$$

$$= 90 + 7 = 97$$

100. Due to stoppages difference = $64 - 48 = 16\text{km}$

$$\text{Required time for stoppages} = \frac{16}{64} \times 60 = 15\text{min}$$

