

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 abut 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.

11-15.

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

T	Male	Swift D'zire	Delhi
V	Male	Ford Ikon	Chennai
W	M/F	Honda City	Hyderabad
Z	Female	Swift D'zire	Delhi

- 11. R, S and V are travelling to Chennai in Car Ford Ikon.
- 12. Four members are travelling in no car.
- 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.
- 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.
- 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	Psychiatriist/ Negotiator(i)
(tallest/shortest)	IA	(ii)
(Shortest/tallest)	SAS	(iii)
tallest/shortest	(x)	Pilot(iv-a)
6'		Shakir(iv-b)
(6' +)	MZI	Planning(v)



Shortest	unknown	Technician or Pil	ot(vi) (vii)	
5' 9" , 5' 10" , 5' 11",	6',6'1",6'			
ascending order				
	SAS	Psychiatriist	(ix)	
from (i) and (ix)				
5' 11" Now , using (viii), (iii) and (ix)	SAK	Negtiator	(A)	
6'2" Now , from (ii) and (viii)	SAS	Psychiatriist	(B)	
5' 9" Again, from (vii) and (C)	IA	Technician	(C)	
5' 10"	unknown	Ppilot	(D)	
Now fron (v), (vi)	and from confirmed results			
6'	shakir	Planning		
6'1"	MZI	Aviation expert		

All underlined are the only possibilities left

- 26. 5' 10" had the height of the unknown hijacker. Hence, option (2) is correct.
- 27. MistriZahur Ibrahim was expert in the field of Avaiation
- 28. Shakir had the expertise in planning.
- 29. ShaidAkhtarSayed was tallest among the hijackers.
- 30. 6' 1" was the height of MistriZahur Ibrahim. Hence, option (5) is correct.
- 31. 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.
- 32. 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
- 33. 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.
- 34. 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.
- 35. 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



examination is good mainly for mediocre students. The statement implies that sometimes highly brilliant and Industrious student also do not perform well in the written examination for one reason or another

- 36-38. ek la ki ---> don't touch flowers ...(i) raku —> respect teachers ...(ii) ekra le --> don't hurt teachers ...(iii) From (i) and (ii), ek --> don't ...(iv) From (ii) and (iii), ra -3 teachers ...(v)
- 36. From (ii)
- 37. Related data not sufficient.
- 38. From (i) and (iv), touch flowers <— la ki combining this with (v), we get the required ki la ra
- 39-40. 781 —> rose is red 276 —> old is gold 698 -> old looks red 8 --> red 1 --> rose
- 39. Code for 'is' is 7. 40.
- Code for 'rose' is 1.
- Statement (b) + conversation of statement (a) gives the 41. (1) conclusion "No dogs are rats" [: A + E = E]. hence, conclusion I follows (by implication). "No dogs are rats" ightarrow on conversion ightarrow "No rats are dogs." Hence, conclusion IV follows, Again, conversion of statement (b) + statement (c) gives conclusion II [I + A = I]. again conclusion + statement (c)gives conclusion III /E

+ A + O], Hence, all follow.

- Only IV and either I or III follow, Statement (c) + 42. (5) statement (b) gives conclusion "All dogs are elephants." [A + A = A]. \rightarrow on conversion \rightarrow "Some elephants are dogs". Hence, conclusions I and III do not follow. But these two conclusions make a complementary pair. Hence, either conclusion I or III follows. Again, "All dogs are elephants," + "No elephants are rats [statement (a)] given conclusion "No dogs are rats," [A + E = E]. Hence, conclusion IV follows.
- Statement (a) + statement (b) gives the conclusion "No 43. (2) books are copies" [A + E = E] \rightarrow "Some books are not copies." Hence, conclusion I follows. Again, conversion of "No books are copies," gives "No copies are books" → "Some copies are not books". Hence, conclusion II follows. Again "No books are copies," + statement (c) gives conclusion III [E + A = O*] but not conclusion IV.
- 44. (2) Statement (c) + statement (b) gives conclusion II [A + E = E]. Again, "No duster are books." + statement (a) gives conclusion III [E + A = o*]. But, conclusion I and IV do not follow. However, these two conclusions make a complementary pair. Hence, either conclusion I or IV follows.
- 45. (1) Conversation of Statement (b) + statement (a) gives conclusion "Some pens are pencils," [I + A = I]. Hence, conclusion III does not follow. Again, statement (c) + conversion of statement (b) gives conclusion "Some books are not pins." Hence, conclusion I does not follow. Again, statement (c) + "Some pens are pencils" gives the conclusion "Some pencils are not pins." [E + I = O*]. Hence, conclusion II does not follow. Conclusion IV can't be deduced from statement (b). hence, conclusion IV does not follow. Thus, no conclusion (among the given conclusions) follows.

- Option (3) may be a possible fallout of the given 46. situation
- 47. Option (3) may be a possible fallout of the given situation.
- 48. The district authority sent a police team to nab the culprits. It shows that the Government is committed to provide protection to travelers across the country.
- 49. All the three statements are probable causes of drop in sales of four wheelers during the past six months.
- 50. All the three statements can be effective steps to reverse the trend.
- $13 \times 3 4 = 35$ $35 \times 3 - 4 = \boxed{101}$ $101 \times 3 - 4 = 299$ $299 \times 3 - 4 = 893$ $893 \times 3 - 4 = 2675$

The series is

51.(3)

- 52.(4) Series is square of prime number ≥7.
- The series is 53. (5) 9 + 17 = 26 17 + 26 = 4326 + 43 = 6943 + 69 = 112 69 + 112 = 181 112 + 181 = 293 181 + 293 = 474 293 + 474 = 767 54. (4) The series is
 - $8 \times 3 + (2 \times 3) = 30$ $30 \times 4 + (3 \times 4) = 132$ $132 \times 5 + (4 \times 5) = 680$ $680 \times 6 + (5 \times 6) = 4110$ $4110 \times 7 + (6 \times 7) = 28812$
- $28812 \times 8 + (7 \times 8) = 230552$ The series is combination of two series 16 + 6 = 2213 + 7 = 20

$$20 + 14 = 34$$
 $22 + 12 = \boxed{34}$ $34 + 21 = 55$ $34 + 18 = 52$ $55 + 28 = 83$ $52 + 24 = 76$

56. From statement I,

> If the annual income of boss be Rs. x, then Mr. Krishnamurthy's annual income = 70% of x But we do not know the value of x. Hence, this statement is not sufficient. From statement II, Initial income = Rs. 12000 Percentage increase = 10 % per month

Time = 12 months : Income in May = Rs. 12000 + 10% of 12000

= Rs. (12000 + 1200) = Rs. 13200 Similarly, the income for other months can be calculated.

57. From statement I,

If the radius of the circular field be r m, then

 $2\pi r = x$

This relation gives us the value of radius.

∴. Area = $\pi \times (\text{Radius})^2$

Hence, statement I alone is sufficient to answer the question, $% \left(1\right) =\left(1\right) \left(1$

From statement II,

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

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 Rate upstream = (x - y) km/h

Rate downstream = (x + y) km/h

From statement I,

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

$$\therefore x + y = 7km/h$$
.....(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 and

$$6x = 42$$

Clearly, both statements are required to answer the question.

60. From statement I,

Profit percent = 20%

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

Arr Profit = Rs. (1740 – 1450) = 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) thousand dollars

- = T (225000 × 31.25)
- = T 7031250
- = T 700000 (approx.)

62. (3) The total export of wool

- = (65 + 60 + 68 + 75 + 70) quintals
- = 338 quintals

Wool exported in 1999 = 68 quintals

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

= 20% (approx.)

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



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

= 600 dollars

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

= 650 dollars

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

= 662 dollars (approx.)

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

= 693 dollars (approx.)

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

= 714 dollars (approx.)

66.

68.

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

65. (2) 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).

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

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

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

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

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

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

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

$$76x = 60y$$

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

 $\frac{-}{y} = \frac{-}{76} =$ Days

:.

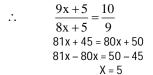


21:18::42:x

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

= 36 women

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



Difference = $9 \times 5 - 8 \times 5$

45 - 40 = 5 yr

70. Suppose total amount was \square . x.

$$\therefore x - 68357 - 25675 = x \times \frac{28}{100}$$

$$\Rightarrow \qquad x - \frac{28x}{100} = 94032$$

$$\Rightarrow \frac{72x}{100} = 94032$$

$$\Rightarrow \qquad x = \frac{94032 \times 100}{72} = 130600$$

Total number of students playing Cricket 71. = 38 + 40 + 12 + 17 + 25 + 1 8 + 20 = 170

$$\therefore \text{ Required percentage} = \frac{25}{170} \times 100$$

- Required ratio = 27:18 72.
 - = 3 : 2

Looking at the table we find Cricket is the most popular 73.

Total number of students of class Xth playing different 74. games.

$$\therefore \qquad \text{Required percentage} = \frac{21}{115} \times 100$$

75. Obviously Basket Ball and Badminton both have students in increasing order from IXth to XIIth.

- ?[≈] 1555 + 144 = 1700 76.
- 77. $? \approx 834 - 675 = 160$

78. $\sqrt{3480.9998} = 100.99 - ?$ ⇒ 59 = 101 - ?

∴?=42

 $2\frac{1}{3} + \frac{1}{3} + \frac{1}{5} + \frac{1}{7} = \frac{316}{105} = 3$ 79.

 $12^3 + (1.2)^2 + (1.02)^1 + (1.009)^0$ 80. = 1728 + 1.44 + 1.02 + 1 ≈ 1731

Percentage of units sold in 1999 = 88% 81. Percentage of units sold in 2000 = 91%

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

Number of units sold

$$=$$
 $27 \times \frac{75}{100} = 20.25$ millions

$$= 20.25 \times 10^6 = 20250000$$

Number of units not sold by company B in the years 84. 1999, 2002 and 2004 = 17680000

85. C (from table)

Rate of the painting = Rs. 2 per sq.m 86.

D RACE

Area of rectangular floor = $\frac{256}{2}$ = 128 sq.m

Suppose the breadth of rectangular floor is ${\bf x}\ {\bf m}$.

Length = 2x m

Area of rectangular floor = $I \times b$

$$128 = 2x \times x$$

$$\Rightarrow 128 = 2x^2$$

$$\Rightarrow \qquad x^2 = \frac{128}{2} = 64$$

$$x = 8n$$

So, the length of the floor = $2x = 2 \times 8 = 16m$

Suppose $\angle A = x^0$ 87.

$$\angle B = x + 26$$

$$\angle C = \frac{x+26}{2} = \frac{x}{2} + 13$$

$$\angle D = \frac{x}{2} + 3$$

$$\therefore x + x + 26 + \frac{x}{2} + 13 + \frac{x}{2} + 3 = 360^{\circ}$$

$$\Rightarrow 3x + 42 = 360^0 \quad \left(\because \frac{x}{2} + \frac{x}{2} = x\right)$$

$$3x = 318$$

$$x = 106^0$$

 $\angle A = 106^{0}$ So, the Suppose the number x.

88.

90

$$x - \frac{x}{7} = 180$$

$$\frac{7x-x}{-180}$$

$$\frac{6x}{180}$$

$$x = \frac{180 \times 7}{6}$$

$$X = 210$$

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

In every 30 min the time of a watch increased by 3 min

 $=12\times3=36$ min

So, the time after 6 h = 5 am + 6 h + 36 min

= 11:36am

Number of boys in the class = $\frac{5}{12} \times 84 = 35$ 91-95.

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:

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



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

93.(1)

- 91. (3) 92. (2)
- 94. (2) 95. (1)
- Suppose the cost price of the article isRs. x. 96.
 - \Rightarrow 1754 x = x 1492
 - \Rightarrow 2x = 1754 + 1492
 - \Rightarrow 2x = 3246
 - \therefore x = 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

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

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

Number of permutation =

$$=\frac{7\times6\times5\times4\times3\times2!}{2!}$$

= 2520

and
$$x + y = 16$$

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),

$$x + y = 16$$

$$\frac{x - y = 2}{2x = 18}$$

$$x = 9$$

$$\therefore x = 9$$
and $y = 7$

Required Number =
$$10x + y$$

Due to stoppages difference = 64 – 48 = 16km 100.

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