# LR-DI
# GOOD PUZZLES

P, Q, R, S, T and U are six persons, three from India and three from Pakistan. They are standing at a point X, which lies exactly on India-Pakistan border, on a line joining Amritsar in India and Lahore in Pakistan. Each one of them starts walking at the same time on hearing the sound of a gunshot during the evening flag lowering ceremony. Those from India start walking towards Amritsar and those from Pakistan start walking towards Lahore.

Following points are known exactly half an hour after they start walking:

I. The six persons had covered different distances out of 1 km, 2 km, 3 km, 4 km, 5 km and 6 km.

II. The sum of the distances travelled by P and T is 8 km.

III. R and S are 7 km away from each other.

IV. The sum of the distances travelled by Q and U is 6 km

V. The sum of the distances travelled by T and U is 3 km.

VI. R is closer to Amritsar as compared to P.

VII. T is closer to Lahore as compared to S.

VIII. U is closer to Amritsar as compared to T.

Eight friends: A, B, C, D, E, F , G and H have among them Apple, Banana, Orange, Guava, Papaya, Mango, Pomegranate and Carrot in that order. The total number of fruits between them is 36 and further no two of the friends have the same number of fruits with them and each friend has fruits of that type only and at least one unit of the type of hot they have.
Further, the following Information regarding the distribution of fruits is known.
1. The total number of Apples and Papayas is the same as number of Pomegranates that G has.
II. Oranges and Guavas put together are 10 on number.
III. The total number of Papaya and Mangoes is 8.
IV. Apples and oranges together are 6 in number.
V. If the number of fruits that F has is not equal to 6, then H will have more fruits than F.
VI. If the number of Papayas is not equal to I, then the number of carrots is greater than Bananas.
VII. If the number of fruits with G is not 8, then the number of fruits with F will be greater than the number of fruits with B.
VIII. If the number of Bananas is not 5, then the number of Pomegranates is also not 5.
IX. If E does not have 3 fruits with him, then C does not have 4 fruits with him.

Q1. Who among the following has got the largest number of units of fruits with him?
1) B 2) G 3) H 4) D

Q2. One of the friends has x number of units of a fruit where x is the root of the cubic equation x3 - x2 - 10x - 8 = 0. Who is that friend?
1) F 2) C 3) D 4) None of these

Q3. Which pair of the following has the least number of fruits between them?
I) E, F 2) A, D 3) F, G 4) D, H

Q4. If A, D and G take all their fruits and put it in a green bag. later, F comes to take out some fruits from the bag to eat. What is the probability that F can take out two guavas from this bag' Round off the answer to 2 decimal places

The table below shows the data of students from different institutes in Bhopal providing coaching for MBA entrance examinations.

| Coaching Institute | Number of Students | Different Examinations Taken by Students | | | | |
|---|---|---|---|---|---|---|
| | | CAT | XAT | SNAP | JMET | MAT |
| A | 300 | 80 | 60 | 140 | 50 | 180 |
| B | 400 | 110 | 50 | 170 | 70 | 200 |
| C | 200 | 50 | 80 | 90 | 100 | 70 |
| D | 500 | 100 | 20 | 150 | 140 | 100 |
| E | 200 | 150 | 100 | 200 | 130 | 190 |

It is also known that a student may write more than one examination. Also, every student has necessarily written at least one examination. Students attend only one coaching institute.

Q1. What would be the minimum number of students who could have written at most one examination?

Q2. What is the maximum number of students who wrote only one examination?

a. 1255 b. 1147 c. 1600 d. 390

Q3. If the number of students who wrote only one examination was maximum, what is the sum of the number of students from institute B who gave three exams only and the number of students from Institute D who took four exams only?

Q4. What is the maximum number of students who can write all the exams?

a. 270 b. 291 c. 293 d. None of these