LRDI CLASS

The following table gives the number of schools in the four regions - North South East and west selected by the sports authority of India (SAI) for specialized training in five different sports – Cricket, Football, Basketball, Hockey and Tennis. The values in brackets give the total number of schools which were considered for selection from each region.

	Cricket	Football	Basket ball	Hockey	Tennis
North (70)	32	11	18	23	8
South (62)	21	17	15	7	12
East (35)	5	23	8	6	9
West (57)	27	14	12	17	11

Q1. At most how many schools in the four regions together were selected for all the five sports?

a) 29 b) 31 c) 34 d) None of these

Q2. At least how many schools in the four regions together were selected for more than one sport?

a) 19 b) 21 c) 22 d) 15

Q3. The number of schools selected for exactly two, three or four sports in the four regions together is at least?

a) 0 b) 2 c) 3 d) 5

Q4. At most how many schools in the East were not selected for any sport?

a) 12 b) 10 c) 7 d) 5

Refer to the data below and answer the questions that follow.
(i) In a 4 x 4 square grid, 6 boxes (i.e. cells in the grid) are to be occupied by letters A, B, C, D, E and F.
(ii) No two occupied boxes have a common side.
(iii) An occupied box has one common corner with at least one other occupied box.
(iv) Boxes A and D are at maximum possible distance from each other.
(v) Boxes B and C lie on the opposite sides of the line made by joining the centres of boxes A and D.
(vi) Distance of box A from box C is more than the distance of box A from box B.
(vii) Out of the remaining two occupied boxes, one is equidistant from the box A and box B and the other is equidistant from the box C and box D.
(Note: Distance from box A implies the distance measured from the centre of the grid cell occupied by box A)

1) Area of triangle formed by joining the centres of the boxes occupied by letters A, B and C is equal to the area of the triangle formed by the boxes containing which letters?
a. B, C and D b. B, C and E c. C, D and F d. C, D and E

2) Which of the following is true regarding the alignment of boxes?
a. Boxes A, F, E and D are on a straight line, in the same given order.
b. Boxes A, E, F and D are on a straight line, in the same given order.
c. Boxes B, E and F are on a straight line.
d. Boxes E, F, A and D are on a straight line.

3) If the distance of AB = 6 cm and BC = 9 cm then what is the distance of CD?

4) If A, B, D, C and A are joined in the given order, then A, B, D, C represent which of the following quadrilateral?
a. Parallelogram b. Rectangle c. Square d. Rhombus

At 12:00 in the afternoon, when I joined a railway reservation queue I was the 14th in line and the booking of the first person in the queue had just started at that time. The queue increases at the rate of 1 person every minute and one person leaves the counter after taking a ticket every 3 minutes. The first person in the queue is a male and there is one lady after every two men in the queue. There is a lunch break of 15 minutes at 12:30 p.m.. The person behind me is a female. The ratio of males to females of the people joining after the 15th person gets interchanged. At 12:02 p.m. and 12:04 p.m. females join the queue. Also, the sequence of males and females thereafter is maintained. The fourth lady takes two tickets (i.e. it takes 6 minutes at the counter). Assume all other persons in the queue take one ticket.

Q1. What time shall I be at the counter?
1) 1:03 p.m. 2) 12:57 p.m. 3) 12:42 p.m. 4) 12:54 p.m.

Q2. At what position in the queue will I be at 12:30 p.m., if the third lady decides to take two tickets?
1) 4th 2) 5th 3) 6th 4) 14th

Q3. How many ladies would be there at 12:25 p.m. in the queue?
1) 16 2) 19 3) 20 4) 18

Q4. How many men came during the lunch time?
1) 6 2) 10 3) 9 4) 5

In a particular year, a group of 300 people visited some of the countries among China, Sri Lanka, Bhutan, Bangladesh and Pakistan. Further, each person visited at least one country. Any person who visited China also visited Bhutan, while any person who visited Pakistan also visited Bangladesh. Any person who visited Sri Lanka also visited China, while no person who visited Bangladesh visited China. It is also known that

1. the number of persons who visited Sri Lanka was twice the number of persons who visited only Bangladesh.
2. the number of persons who visited only Bhutan was twenty less than the number of persons who visited exactly one country.
3. the number of persons who visited Pakistan was three more than the number of persons who visited China.
4. the number of persons who visited at least three countries was 145.
5. the number of persons who visited China was ninety more than the number of persons who visited only Bangladesh.
6. the number of persons who visited Bhutan was hundred more than the number of persons who visited Bangladesh.

Q1. How many persons visited exactly one country?

Q2. How many persons visited Bhutan and exactly one other country?

Q3. Among the persons who visited Bhutan, how many persons visited Bangladesh?

Q4. How many persons visited both Pakistan and China?