LRDI CLASS

The following table provides the number of persons, among the sixty, for any combination of language that they speak and sport that they play: Each person will speak at least one language and at least one sport.

	English	French	Hockey	Basketball
English	33			
French	10	37		
Hockey	25	24	41	
Basketball	20	25	19	38

In the table above, the value in the second column and second row (i.e., 37) indicates the number of people who speak French. The value in the second column and third row (i.e., 24) indicates the number of people who speak French and play Hockey.

Q9. How many persons speak both French and English and play both Hockey and Basketball?

10. How many persons speak French but not English and play Hockey but not Basketball?

Q11. Of the persons who speak exactly one language, how many persons play only Hockey?

Total five teams participated in a one-day cricket tournament. They were India, South Africa, New Zealand, Sri Lanka and Australia.
Following are the highlights and scoring rules of the tournament:
i. Each team plays against every other team exactly once.
ii. Every match can result in a win for one team or a draw. If the winning team wins by a margin of minimum 100 runs or by 10 wickets, it is said to have won the match comprehensively. Otherwise it is said to have won the match routinely.
iii. In a match that ends in a draw, both teams are awarded one point each. In a match that does not end in a draw, 3 points are awarded to winning team and no point is awarded to a losing team.
iv. Additional two bonus points are awarded to a winning team that wins a match comprehensively.
v. Match between India and Australia resulted in a draw.
vi. Only two teams were awarded additional bonus points for winning by a margin of 100 runs or by 10 wickets and no team won more than one match comprehensively
vii. Final point count of India, South Africa, New Zealand, Sri Lanka and Australia at the end of the tournament are 12, 7, 6, 5 and 1 respectively.
viii. Maximum number of matches drawn by a team was 2.

Q1. Out of five teams, for how many teams the number of matches won, lost and drawn can be definitely determined?
1) 5 2) 4 3) 3 4) 2
Q2. What was the result of the match between New Zealand and Australia?
1) New Zealand won routinely 2) New Zealand won comprehensively
3) Australia won routinely 4) The match ended in a draw

Q3. Which of the following matches ended in a draw?
I. South Africa Vs. Sri Lanka II. New Zealand Vs. Sri Lanka III. South Africa Vs. New Zealand
1) Both I and II 2) Both II and III 3) Both I and III 4) All I, II and III

Q4. Which of the following statement/s is/are correct?
I. Atleast one match played by each team ended in a draw.
II. Win–Loss–Draw table for exactly two teams looked similar that is they won, lost and drew equal number of matches.
1) I only 2) II only 3) Both I and II 4) Neither I nor IIb

A team of four is to be selected from seven boys — Anil, Bharath, Chanti, Dheeraj, Eswar, Fattu and Girish under the following constraints.
(i) At least one of Anil, Bharath, Eswar and Girish must not be selected.
(ii) Chanti must be selected, if at least one of Dheeraj and Fattu is selected.
(iii) Fattu and Bharath cannot be selected together.
(iv) If and only if Girish is selected, then Dheeraj is selected.

Q1. Which of the following is a possible team?
(A) Anil, Girish, Fattu, Chanti
(B) Chanti, Dheeraj, Anil, Eswar
(C) Anil, Bharath, Eswar, Fattu
(D) Anil, Bharath, Girish, Dheeraj

Q2. In how many ways can a team be selected?
(A) 6
(B) 9
(C) 8
(D) 7

Q3. If Eswar is not selected then who must be selected?
(A) Anil
(B) Dheeraj
(C) Girish
(D) More than one of the above

Two teams are to be selected from twelve persons -A, B, C, D, E, F, G, H, I, J, K and L under the following constraints.
(i) Each team must contain at least four persons.
(ii) If G is selected in a team, then H must be selected in the other team.
(iii) If I or J is selected in any team, then L must not be selected in any of the teams.
(iv) Unless D or E is selected in a team, K is selected in any team.
(v) F can be selected in a team only if A is selected in the other team.
(vi) If B is selected in a team then A should not be selected in that team.
(vii) No two of A, C and E can be selected in the same team.

Q1 If H is selected in a team, then which of the following cannot be the other team?
(A) K, D, L, G (B) G, D, I, A (C) A, G, L, F (D) More than one of the above

Q2. If B and E are selected in a team and each team has five members, then in how many ways can the other team be selected?
(A) 8 (B) 6 (C) 5 (D) 9
Q3. If A is selected in a team and J is selected in the other team, then who among the following must be selected in the team where A is selected?
(A) G (B) H (C) I (D) None of these

Q4. If F is selected in a team then how many of the ways the remaining persons can be selected in the other team?
(A) 11 (8) 10 (C) 9 (0) 8