GAMES AND TOURNAMENT
CAT BASED

Direction: You are playing a matchstick game with Mr. Bond. There are N matchsticks on a table. On a players turn, he can pick any number of matchsticks up to 5.It is your turn first. Assuming that you are smart and will play to win answer the following questions.

The one who picks the last matchstick loses the game.

1. The smallest value of N (greater than 15) that ensures a win for Mr. Bond is
   a) 19   b) 20   c) 18   d) 16

2. The largest of N (less than 50) that ensures a win for Mr. Bond is
   a) 46   b) 47   c) 48   d) 49

3. If N = 63 how many matchsticks will you pick in your first turn to ensure your win?
   a) 3   b) 2   c) 4   d) 1

The one who picks the last matchstick wins the game.

4. If N=57 how many matchsticks will you pick in your first turn to ensure your win?
   a) 2   b) 4   c) 3   d) you can not win

5. Which of the following should be the value of N that ensures a win for Mr. Bond
   a) 48   b) 49   c) 17   d) 50

6. If I pick two matchsticks I will lose the game. Which of the following can be the value of N?
   a) 62   b) 65   c) 74   d) 50

Direction for question 7-10: Answer the following questions based on the information given below:
In a sports event, six teams (A, B, C, D, E and F) are competing against each other Matches are scheduled in two stages. Each team plays three matches in State – I and two matches in Stage – II. No team plays against the same team more than once in the event. No ties are permitted in any of the matches. The observations after the completion of Stage – I and Stage – II are as given below.

Stage-I:
- Once team won all the three matches.
- Two teams lost all the matches.
- D lost to A but won against C and F.
- E lost to B but won against C and F.
- B lost at least one match.
- F did not play against the top team of Stage-I.

Stage-II:
- The leader of Stage-I lost the next two matches
- Of the two teams at the bottom after Stage-I, one team won both matches, while the other lost both matches.
- Once more team lost both matches in Stage-II.

7. The two teams that defeated the leader of Stage-I are:
   a) F & D   b) E & F   c) B & D   d) E & D   e) F & D

8. The only team(s) that won both matches in Stage-II is (are):
   a) B   b) E & F   c) A, E & F   d) B, E & F   e) B & F

9. The teams that won exactly two matches in the event are:
   a) A, D & F   b) D & E   c) E & F   d) D, E & F   e) D & F

10. The team(s) with the most wins in the event is (are):
    a) A   b) A & C   c) F   d) E   e) B & E

DIRECTIONS for 11-14: Answer questions on the basis of the information given below.
In the table below is the listing of players, seeded from highest (#a) to lowest (#32), who is due to play in an Association of Tennis Players (ATP)tournament for women. This tournament has four knockout rounds before the final, i.e., first round, second round, quarterfinals, and semi-finals. In the first round, the highest-seeded player plays

the lowest-seeded player(seed # 32) which is designated match No. 1 of first round; the 2nd seeded player plays the 31st seeded player which is designated match No. 2 of the first round, and so on. Thus, for instance, match No. 16 of first round is to be played between 16lh seeded player and the 17th seeded player. In the second round, the winner of match No. 1 of-first round plays the winner of match No. 16 of first round and is designated match No. I of second round. Similarly, the winner of match No, 2 of first-round plays the winner of match No. 15 of first round, and is designated match No. 2 of second round. Thus, for instance, match No. 8 of the second round is to be played between the winner of match No. 8 of first round and the winner of match No. 9 of first round. The same pattern is followed for later rounds as well.

Seed#	Name of Player	Seed#	Name of Player	Seed#	Name of Player
1	Maria Sharapova	12	Mary Pierce	23	Silvia Farina Elia
2	Lindsay Davenport	13	Anastasia Myskina	24	Tatiana Golovin
3	Amelie Mauresmo	14	Alicia Molik	25	Shinobu Asagoe
4	Kim Clijsters	15	Nathalie Dechy	26	Francesca Schiavone
5	Svetlana Kuznetsova	16	Elena Bovina	27	Nicole Vaidisova
6	Elena Dementieva	17	Jelena Jankovic	28	Gisela Dulko
7	Justine Henin	18	Ana Ivanovic	29	Flavia Pennetta
8	Serena Williams	19	Vera Zvonareva	30	Anna Chakvetadze
9	Nadia Petrova	20	Elena Likhovtseva	31	Al Sugiyama
10	Venus Williams	21	Daniela Hantuchova	32	Anna-lena Groenefeld
11	Patty Schnyder	22	Dinara Safina		

11. If there are no upsets (a lower-seeded player beating a higher-seeded player) in the first round, and only match Nos. 6, 7, and 8 of the second round result in upsets, then who would meet Lindsay Davenport in quarter-finals, in case Davenport reaches quarter-finals?
a) Justine Henin   b) Nadia Petrova   c) Patty Schnyder   d) Venus Williams

12. If Elena Dementieva and Serena Williams lose in the second round, while Justine Henin and Nadia Petrova make it to the semi-finals, then who would play Maria Sharapova in the quarterfinals, in the event Sharapova reaches the quarterfinals?
a) Dinara Safina   b) Justine Henin   c) Nadia Petrova   d) Patty Schnyder

13. If, in the first round, all even-numbered matches (and none of the odd-numbered ones) result in upsets, and there are no upsets in the second round, then who could be the lowest-seeded player-facing Maria Sharapova in the semi-finals?
a) Anastasia Myskina   b) FlaviaPennetta   c) Nadia Petrova   d) Svetlana Kuznetsova

14. If the top eight seeds make it to the quarterfinals, then who, amongst the players listed below, would definitely not play against Maria Sharapova in the final, in case Sharapova reaches the final?
a) Amelie Mauresmo   b) Elena Dementieva   c) Kim Clijsters   d) Lindsay Davenport
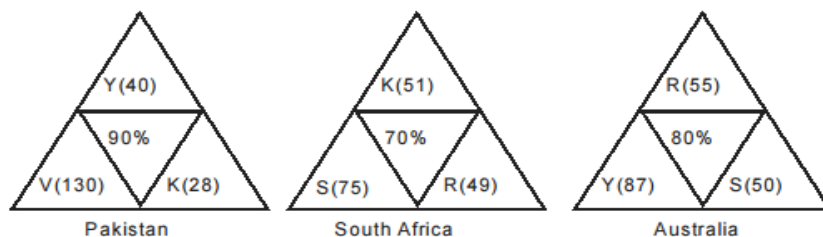
Read the following information carefully to answer the questions that follow
Sixteen teams have been invited to participate in the ABC Gold Cup cricket tournament. The tournament is conducted in two stages. In the first stage, the teams are divided into two groups. Each group consists of eight teams, with each team playing every other team in its group exactly once. At the end of the first stage, the top four teams from each group advance to the second stage while the rest are eliminated. The second stage comprises of several rounds. A round involves one match for each team. The winner of a match in a round advances to the next round, while the loser is eliminated. The team that remains undefeated in the second stage is declared the winner and claims the Gold Cup. The tournament rules are such that each match results in a winner and a loser with no possibility of a tie. In the first stage, a team earns one point for each win and no points for a loss. At the end of the first stage, teams in each group are ranked on the basis of total points to determine the qualifiers advancing to the next stage. Ties are resolved by a series of complex tie-breaking rules so that exactly four teams from each group advance to the next stage.

15. What is the total number of matches played in the tournament?
a) 28   b) 55   c) 63   d) 35

16. The minimum number of wins needed for a team in the first stage to guarantee its advancement to the next stage is
a) 5   b) 6   c) 7   d) 4

17. What is the highest number of wins for a team in the first stage in spite of which it would be eliminated at the end of first stage?
    a) 2　　　　　　b) 3　　　　　　c) 4　　　　　　d) 5

18. What is the number of rounds in the second stage of the tournament?
    a) 1　　　　　　b) 2　　　　　　c) 3　　　　　　d) 4

19. Which of the following statements is true?
    a) The winner will have more wins than any other team in the tournament.
    b) At the end of the first stage, no team eliminated from the tournament will have more wins than any of the teams qualifying for the second stage.
    c) It is possible that the winner will have the same number of wins in the entire tournament as a team eliminated at the end of the first stage.
    d) The number of teams with exactly one win in the second stage of the tournament is 4.

Direction for question (20-23): Coach John sat with the score cards of Indian players from the 3 games in a one-day cricket tournament where the same set of players played for India and all the major batsmen got out. John summarized the batting performance through three diagrams, one for each game. In each diagram, the three outer triangles communicate the number of runs scored by the three top scores from India, where K, R, S, V, and Y represent Kaif, Rahul, Saurav, Virender, and Yuvraj respectively. The middle triangle in each diagram denotes the percentage of the total score that was scored by the top three Indian scorers in that game. No two players score the same number of runs in the same game. John also calculated two batting indices for each player based on his scores in the tournaments; the R-index of a batsman is the difference between his highest and lowest scores in the 3 games while the M-index is the middle number, if his scores are arranged in a non-increasing order.

Pakistan　　　　　　South Africa　　　　　　Australia

20. For how many Indian players is it possible to calculate the exact M-index?
    a) 0　　　　　　　　　　b) 1
    c) 2　　　　　　　　　　d) More than 2

21. Among the players mentioned, who can have the lowest R-index from the tournament?
    a) Only Kaif, Rahul or Yuvraj
    b) Only Kaif or Rahul
    c) Only Kaif or Yuvraj
    d) Only Kaif

22. How many players among those listed definitely scored less than Yuvraj in the tournament?
    a) 0　　　　　　　　　　b) 1
    c) 2　　　　　　　　　　d) More than 2

23. Which of the players had the best M-index from the tournament?
    (1) Rahul　　　　　　(2) Saurav
    (3) Virender　　　　　(4) Yuvraj
    a) 0　　　　　　b) 1　　　　　　c) 2　　　　　　d) 4

Read the following information carefully to answer the questions that follow
The year was 2006. All six teams in Pool A of World Cup hockey, play each other exactly once. Each win earns a team three points, a draw earns one point and a loss earns zero points. The two teams with the highest points qualify for the semifinals. In case of a tie, the team with the highest goal difference (Goal For - Goals Against) qualifies.
 In the opening match, Spain lost to Germany. After the second round (after each team played two matches), the pool table looked as shown below

Pool A

Teams	Games Played	Won	Drawn	Lost	Goals For	Goals Against	Points
Germany	2	2	0	0	3	1	6
Argentina	2	2	0	0	2	0	6
Spain	2	1	0	1	5	2	3
Pakistan	2	1	0	1	2	1	3
New Zealand	2	0	0	2	1	6	0
South Mica	2	0	0	2	1	4	0

In the third round, Spain played Pakistan, Argentina played Germany, and New Zealand played South Africa. All the third-round matches were drawn. The following are some results from the fourth and fifth-round matches
a) Spain won both the fourth and fifth-round matches.
b) Both Argentina and Germany won their fifth-round matches by 3 goals to 0.
c) Pakistan won both the fourth and fifth-round matches by 1 goal to 0.

24. Which one of the following statements is true about matches played in the first two rounds?
    a) Germany beat New Zealand by 1 goal to 0.
    b) Spain beat New Zealand by 4 goals to 0.
    c) Spain beat South Africa by 2 goals to 0.
    d) Germany beat South Africa by 2 goals to 1.

25. Which one of the following statements is true about matches played in the first two rounds?
    a) Pakistan beat South Africa by 2 goals to 1.
    b) Argentina beat Pakistan by 1 goal to 0.
    c) Germany beat Pakistan by 2 goals to 1.
    d) Germany beat Spain by 2 goals to 1.

26. If Pakistan qualified as one of the two teams from Pool A, which was the other team that qualified?
    a) Argentina   b) Germany   c) Spain   d) Cannot be determined

27. Which team finished at the top of the pool after five rounds of matches?
    a) Argentina   b) Germany   c) Spain   d) Cannot be determined

Directions for questions (24-27): Six teams among A, B, C, D, E and F participated in a football tournament where each team played against every other team exactly once. Three points were awarded to the winner of each match whereas for a drawn game one point was awarded to each of the two teams, there being no points for a loss.
At the end of all the games the following observations were made
- No two teams got the same number of points.
- C ended with more points than F.
- The matches between B and C and that between D and F both ended in 1 — 1 draws.
- In the matches between A and B and that between A and C. 6 and 4 goals respectively were scored.
- In the matches between C and D and that between C and E, 3 and 2 goals respectively were scored.
- In each of the matches played by F. the total number of goals scored was 2 and only one of them was a draw.
- The result of the match between A and D ended in 2 to 1 in favour of A.
- Four matches in the tournament ended in a draw.

The following table gives partial information about the teams performance at the end of the tournament.

Teams	Win	Draw	Loss	Goals for	Goals against	Points
A				7	10	5
6				7	5	8
C					4	
D				6	6	7
E				5	5	6
F						

28. What was the points of C?
    a) 10   b) 9   c) 7   d) 11

29. How many goals were made by D against E?
    a) 1   b) 2   c) 3   d) 4

30. How many goals were scored in the match between B and C?
    a) 2   b) 4   c) 6   d) 1

31. In how many matches (apart from matches against F) exactly two goals were scored?
    a) 0   b) 1   c) 2   d) 4

Read the following information carefully to answer the questions that follow

	India	Australia	South Africa	Pakistan	Sri Lanka
India		Aus	Ind	Ind	Ind
Australia			SA	Aus	Aus
South Africa				Pak	SA
Pakistan					Pak
Sri Lanka					

The above table shows the results of the league matches played in the recent T20 championships (for e.g. Aus won its match against Ind, SA won its match against Aus, and so on). The first league match was played on Monday and the last on Friday. On each day, two matches were played — one in the morning and the other in the evening. No team played more than one match on any particular day. The following information is also known:

- Pakistan won the Tuesday morning match.
- India played two morning matches and two evening matches. Australia did not play on Thursday.
- South Africa won its match against Sri Lanka in the evening.
- Pakistan won against SA on Monday.
- South Africa lost its match on Wednesday evening.
- India did not play on Monday.

32. Who won the match on Thursday evening?
    a) India   b) Australia   c) Pakistan   d) South Africa

33. When was the match between Australia and Pakistan played?
    a) Monday morning   b) Wednesday morning
    c) Friday evening   d) Tuesday morning

34. How many matches did Australia win in the morning?
    a) 1   b) 2   c) 3   d) Cannot be determined

35. Who won the match on Friday morning?
    a) India   b) Pakistan   c) Australia   d) South Africa