SECTION II

DATA INTERPRETATION AND LOGICAL REASONING

Directions for Questions 21 and 22

Read the information given below and answer the questions.

Four children *W*, *X*, *Y* and *Z* are the only patients on the children's ward of a hospital. Each child has either red hair or brown hair. Each child is assigned to either a private room of his or her own or a semi-private room which is shared with either one or two other children. All four children are of different ages.

- *X* a girl, is assigned to a private room.
- The youngest child is assigned to a semi-private room.
- At least one child is a red-haired boy.
- *Z* is not the oldest child and does not share a room with the oldest child.
- *W* and *X* both have brown hair.

21. If two red-haired children are assigned to a semi-private room, any of the following could be true EXCEPT:
    (a) *W* is the youngest child.
    (b) *Y* is the oldest child.
    (c) *W* is the oldest child.
    (d) *Z* is the youngest child.
22. Among the four children, if every boy is older than every girl, which of the following statements, each considered individually, must be false?
    I. Two children are brown-haired boys.
    II. Three children are assigned to a semi-private room.
    III. Only two children are boys, both of whom are assigned to a semi-private room.
    (a) I only (b) III only
    (c) I and III only (d) I, II and III

Directions for Questions 23 and 24

Read the information given below and answer the questions.

A director is casting a movie about twins. Selection must be made from among nine people—Adam, Bill, Cathy, Debbie, Ernie, Felicia, Gary, Henry, and Irene. Adam is Bill's twin, Cathy is Debbie twin, and Ernie is Felicia's twin. Gary, Henry and Irene may each be selected only as "extras."

- At least two pairs of twins must be selected.
- At least as many women as men must be selected.
- Adam and Bill must both be selected if either is selected.
- Cathy and Debbie must be selected if either is selected.
- Ernie and Felicia need not both be selected.
- At least one "extra" must be selected.

23. Which of the following is an acceptable cast for the movie?
    (a) Adam, Bill, Ernie, Felicia, Irene
    (b) Cathy, Debbie, Felicia, Gary, Henry, Irene
    (c) Bill, Cathy, Debbie, Ernie, Henry, Irene
    (d) Cathy, Debbie, Ernie, Felicia, Gary, Henry. Irene
24. Which of the following people must be included in the cast?
    (a) Debbie (b) Irene
    (c) Felicia (d) Henry

Directions for Questions 25 to 30

The following questions are based on the following rules of the ***2006 STRAW POLL RULES for the Wisconsin constituency.***

Voters were given the following instructions:

A list of probable candidates will appear in alphabetical order on a paper ballot for each question. A blank-line labeled "Other, Please specify" may follow the names.

All convention delegates, alternates, and official guests will be eligible to vote. Only one vote may be cast per person. WisPolitics staff will stamp or otherwise mark the credentials of all voters and use other means to ensure nobody votes more than once.

Ballots with more than one name marked under a question will not be counted. Ballots with an illegible write-in name will not be counted. WisPolitics will be the sole judge as to whether a ballot should be counted.

The results will be counted by WisPolitics staff and released at www.wispolitics.com on Saturday, June 10.

The following questionnaire for voting was provided to each voter:

Which politician would be your preferred Democratic presidential candidate in 2008?

1. Evan Bayh
2. Joe Biden
3. Wes Clark
4. Hillary Clinton
5. John Edwards
6. Russ Feingold
7. Al Gore
8. John Kerry
9. Bill Richardson
10. Tom Vilsack
11. Mark Warner

The following table shows the voting patterns of all the delegates, the alternates and the official guests in the first round of voting:

6.6 *Model Test Paper*

	Delegates	*Alternates*	*Official Guests*
Evan Bayh	3	6	12
Joe Biden	6	10	14
Wes Clark	4	3	13
Hillary Clinton	2	13	13
John Edwards	6	5	7
Russ Feingold	4	2	3
Al Gore	4	10	12
John Kerry	6	6	14
Bill Richardson	3	4	12
Tom Vilsack	5	2	11
Mark Warner	7	0	11

The following additional information is available:

1. For every vote cast by a delegate, the candidate who receives the vote gets three voter points.
2. For every vote cast by an Alternate, the candidate who receives the vote gets two voter points.
3. For every vote cast by an Official Guest, the candidate who receives the vote gets one voter point.
4. In the first round of voting there were a total of 5 voters whose ballot papers were cancelled.
5. Out of those whose ballot papers were cancelled, two categories of voters had an identical number of voters who were cancelled out, while 1 category had a different number of voters who was cancelled out.

From the first round, the top five for the presidential candidates were allowed to participate in the second round. In the case of a tie the higher rank is allocated to the person who has more number of 'raw' votes (counted as 1 vote for every ballot cast). If there is still a tie, then the candidate with lower number of delegate votes is not given the higher position. If there is still a tie between two candidates, then the same rule is applied first to alternates and if the tie persists after that too, then the same rule is applied to official guests.

The results of the second round voting is given by the table below. Voter points are allocated in the same way as the previous round.

	Delegates	*Alternates*	*Official Guests*
A	13	10	12
B	12	11	28
C	8	11	24
D	9	13	31
E	10	18	28

The following further information is known:

1. There has been a total reversal of fortunes in the second round of voting... i.e. the topper of the first round has ended up being the fifth in the second round, the second highest and the fourth highest in the first round have interchanged positions and the last has become the first.
2. The winner for the presidential polls is decided on the basis of the total voter points earned by a candidate in the two rounds of voting combined. However, a lot of confusion was caused due to the fact that the rule book defined that the winner will be decided on the basis of net points which would count points on the basis of a 1:2 weightage of the two rounds respectively. Thus every point in the first round would count for 1 point while every point in the second round would count for 2 points for determining the final standings. The winner is the person with the highest points based on this weightage and is the presidential nomination. The second highest finisher on this basis is the "Veep" or the Vice Presidential nomination.
3. Nobody had a cancelled vote in the second round and it is also known that all the voters stayed back for the second round.

25. Which of the following were the last three for the presidential elections after the first round of voting (in ascending order)?
    (a) Bill Richardson, Tom Vilsack and Wes Clark
    (b) Russ Feingold, Bill Richardson and Tom Vilsack
    (c) Russ Feingold, Bill Richardson and Wes Clark
    (d) None of these
26. Who was the presidential candidate nominated?
    (a) Joe Biden (b) Hillary Clinton
    (c) John Kerry (d) John Edwards
27. What was the total number of points scored (based on the weighted average defined) by the Veep over the two rounds?
    (a) 222 (b) 216
    (c) 3.212 (d) None of these
28. Who was the Veep?
    (a) Joe Biden (b) Hillary Clinton
    (c) John Kerry (d) Al Gore
29. Which of the following statements is/are definitely true?
    (i) The topper for the Presidential nomination after the first round scored a total of 140 points in the second round.
    (ii) Hillary Clinton scored 142 points in the second round.
    (iii) John Kerry scored 84 points in the second round
    (iv) Al Gore was third in both rounds
    (a) (i), (ii) and (iii) only
    (b) (i) and (ii) only
    (c) (iii) only
    (d) (iii) and (iv) only
30. How many delegates had a cancelled vote in the first round?
    (a) 1 (b) 2
    (c) 3 (d) Cannot be answered

Directions for Questions 31 and 32

Read the information given below and answer the questions.

Five classic cars – three hardtop models and two convertible models—appear consecutively in a parade. Each car is either a Ford or a Chevy, and each car is either gray or red or white and each car is one color only, and each of the three colors is represented at least once among the five cars.

The first and fifth cars to appear are both hardtops.

No Ford is white.

Only one of the hardtops is a Chevy.

31. With respect to the first and fifth cars in the parade, which of the following statements must be false?
    I. Both cars are gray.
    II. Both cars are Chevys.
    III. Both cars are white.
    (a) I only (b) III only
    (c) I and III only (d) II and III only
32. If exactly three of the cars are Chevys, which of the following must be true?
    (a) A convertible immediately follows another convertible.
    (b) A hardtop immediately follows another hardtop.
    (c) A Ford immediately follows another Ford.
    (d) A Chevy immediately follows anther Chevy.

Directions for 33 to 35

The following table gives the points scored by 8 different athletes in seven events of a heptathlon contest:

	100 meters	*200 meters*	*Long Jump*	*High Jump*	*Discuss Throw*	*400 meters*	*Steeple Chase*
India Soma Biswas	210	230	190	160	180	230	340
USA Jackie Jorner Kersie	390	340	450	290	350	400	500
Russia Svetlana Kuznetsova	320	290	300	340	270	350	350
Brazil Mauli Diaz	220	210	240	330	160	210	280
China Na Li	290	250	350	190	310	240	270
Argentina Gabriela Hurst	230	270	320	240	250	220	380
Canada							
Simone Singh	360	320	260	270	210	300	320
Australia Katy Landis	260	380	370	310	280	360	450
Average for all participants	250	270	280	210	180	250	280

Note: *The higher the points, the better the performance of that athlete in that event.*

- An athlete is said to be a super athlete if in at least three events she is in the top three athletes out of the top eight and in no event she is the last among the top eight athletes
- An athlete is said to be a World Class athlete if in one or two events she is in the top two athletes out of the top eight and in no event she is the last amongst the top eight athletes.
- An athlete is said to be a continental class athlete if in at most one event she is the top out of the top eight and in no event she is among the last three of the top eight athletes.
- Besides, the International Olympic Committee has another grading system for the athletes. i.e.
- An athlete is said to be Top Drawer if she is better than a Super athlete in atleast two events
- An athlete is said to be Middle Rung if she is better than a world class athlete for atleast three events.
- An athlete is said to be Low Rung if she is worse than a Continental class athlete for all events.

33. Which of the following is true?
    (a) No top drawer athlete can also be a Low rung athlete
    (b) All Super athletes are also continental class athletes
    (c) No Top drawer athlete is also a Middle Rung athlete
    (d) None of these.
34. For which event is the number of athletes (amongst the top 8) below the average highest?
    (a) 100 meters (b) Long Jump
    (c) 200 meters (d) 400 meters
35. If the criteria for a Continental Class athlete is changed as follows:
    An athlete is said to be Continental Class if in one or two events she is in the top three athletes and in no event is she the last, then what is the % increase in the number of athletes that fall under this category now over the number of athletes in this category before?
    (a) 50% 2. 33.33%
    (c) 66.66% (d) No increase

Directions for questions 36 to 40

Each problem contains a question statement and two statements A and B, giving some information. You have to select the correct answer from (1) to (4) depending on the sufficiency of the data given in the statements to answer the question. Mark your answer as:

Option (a): If the question can be answered by using one of the statements alone but cannot be answered by using the other statement alone.

Option (b): If the question can be answered by using either of the statements alone.

Option (c): If the question can be answered by using both the statements together but cannot be answered by using either statement alone.

Option (d): If the question cannot be answered even by using both the statements together.

36. At Zulu-Zulu in the seventh Cosmos of the universe, among six consecutive years A01, A02, A03, A04, A05 and A06, how many leap years are there if we know that the concept of year change at Earth applies to the years at Zulu-Zulu?
    A. The year next to A06 is a leap year.
    B. None of the years A04, A05 and A06 is a leap year.
37. At IIM Ahmedabad, during a group activity there are some males and some females in a group of managers. How many boys are there?
    A. If all the females are to be seated together, the number of ways of seating the managers is only 80% of the number of ways of seating them, if all the males are to be seated together.
    B. The ratio of the males to the females is less than 55/72.
38. How many of the 400 students at IIM Ranchi are commerce graduates?
    A. There are at least 200 commerce graduates among the students at IIM Ranchi.
    B. The number of Non-commerce graduates at IIM Ranchi is not less than the half the total number of students.
39. Jill the High school Mathematics teacher at Almont Senior High asked giving two choices to answer her question. "What is the sum of the roots of the quadratic equation"?
    (a) The sum of the squares of the roots added to twice their product is 49.
    (b) The roots of the quadratic equation are positive.
40. Mee and Cee are father and mother (not necessarily in same order) of Tee who has four aunts and three uncles, Tee's father has only two siblings and both are unmarried. None of Mee's siblings is married. How many brothers do any of Mee's sisters have?
    I. Cee is the only son of his parents.
    II. Mee has 5 siblings.