SECTION II

Time—35 minutes

23 Questions

Directions: Each group of questions in this section is based on a set of conditions. In answering some of the questions, it may be useful to draw a rough diagram. Choose the response that most accurately and completely answers each question and blacken the corresponding space on your answer sheet.

Questions 1–5

Each of seven candidates for the position of judge—Hamadi, Jefferson, Kurtz, Li, McDonnell, Ortiz, and Perkins—will be appointed to an open position on one of two courts—the appellate court or the trial court. There are three open positions on the appellate court and six open positions on the trial court, but not all of them will be filled at this time. The judicial appointments will conform to the following conditions:

Li must be appointed to the appellate court.
Kurtz must be appointed to the trial court.
Hamadi cannot be appointed to the same court as Perkins.

1. Which one of the following is an acceptable set of appointments of candidates to courts?

   (A) appellate: Hamadi, Ortiz
   trial: Jefferson, Kurtz, Li, McDonnell, Perkins
   (B) appellate: Hamadi, Li, Perkins
   trial: Jefferson, Kurtz, McDonnell, Ortiz
   (C) appellate: Kurtz, Li, Perkins
   trial: Hamadi, Jefferson, McDonnell, Ortiz
   (D) appellate: Li, McDonnell, Ortiz
   trial: Hamadi, Jefferson, Kurtz, Perkins
   (E) appellate: Li, Perkins
   trial: Hamadi, Jefferson, Kurtz, McDonnell, Ortiz

2. Which one of the following CANNOT be true?

   (A) Hamadi and McDonnell are both appointed to the appellate court.
   (B) McDonnell and Ortiz are both appointed to the appellate court.
   (C) Ortiz and Perkins are both appointed to the appellate court.
   (D) Hamadi and Jefferson are both appointed to the trial court.
   (E) Ortiz and Perkins are both appointed to the trial court.

3. Which one of the following CANNOT be true?

   (A) Jefferson and McDonnell are both appointed to the appellate court.
   (B) Jefferson and McDonnell are both appointed to the trial court.
   (C) McDonnell and Ortiz are both appointed to the trial court.
   (D) McDonnell and Perkins are both appointed to the appellate court.
   (E) McDonnell and Perkins are both appointed to the trial court.

4. If Ortiz is appointed to the appellate court, which one of the following must be true?

   (A) Hamadi is appointed to the appellate court.
   (B) Jefferson is appointed to the appellate court.
   (C) Jefferson is appointed to the trial court.
   (D) Perkins is appointed to the appellate court.
   (E) Perkins is appointed to the trial court.

5. Which one of the following, if substituted for the condition that Hamadi cannot be appointed to the same court as Perkins, would have the same effect on the appointments of the seven candidates?

   (A) Hamadi and Perkins cannot both be appointed to the appellate court.
   (B) If Hamadi is not appointed to the trial court, then Perkins must be.
   (C) If Perkins is appointed to the same court as Jefferson, then Hamadi cannot be.
   (D) If Hamadi is appointed to the same court as Li, then Perkins must be appointed to the same court as Kurtz.
   (E) No three of Hamadi, Kurtz, Li, and Perkins can be appointed to the same court as each other.

GO ON TO THE NEXT PAGE.

Questions 6–10

Exactly six members of a skydiving team—Larue, Ohba, Pei, Treviño, Weiss, and Zacny—each dive exactly once, one at a time, from a plane, consistent with the following conditions:

Treviño dives from the plane at some time before Weiss does.

Larue dives from the plane either first or last.

Neither Weiss nor Zacny dives from the plane last.

Pei dives from the plane at some time after either Ohba or Larue but not both.

6. Which one of the following could be an accurate list of the members in the order in which they dive from the plane, from first to last?

(A) Larue, Treviño, Ohba, Zacny, Pei, Weiss
(B) Larue, Treviño, Pei, Zacny, Weiss, Ohba
(C) Weiss, Ohba, Treviño, Zacny, Pei, Larue
(D) Treviño, Weiss, Pei, Ohba, Zacny, Larue
(E) Treviño, Weiss, Zacny, Larue, Pei, Ohba

7. Which one of the following must be true?

(A) At least two of the members dive from the plane after Larue.
(B) At least two of the members dive from the plane after Ohba.
(C) At least two of the members dive from the plane after Pei.
(D) At least two of the members dive from the plane after Treviño.
(E) At least two of the members dive from the plane after Weiss.

8. If Larue dives from the plane last, then each of the following could be true EXCEPT:

(A) Treviño dives from the plane fourth.
(B) Weiss dives from the plane fourth.
(C) Ohba dives from the plane fifth.
(D) Pei dives from the plane fifth.
(E) Zacny dives from the plane fifth.

9. If Zacny dives from the plane immediately after Weiss, then which one of the following must be false?

(A) Larue dives from the plane first.
(B) Treviño dives from the plane third.
(C) Zacny dives from the plane third.
(D) Pei dives from the plane fourth.
(E) Zacny dives from the plane fourth.

10. If Treviño dives from the plane immediately after Larue, then each of the following could be true EXCEPT:

(A) Ohba dives from the plane third.
(B) Weiss dives from the plane third.
(C) Zacny dives from the plane third.
(D) Pei dives from the plane fourth.
(E) Weiss dives from the plane fourth.

GO ON TO THE NEXT PAGE.

Questions 11–17

A company's six vehicles—a hatchback, a limousine, a pickup, a roadster, a sedan, and a van—are serviced during a certain week—Monday through Saturday—one vehicle per day. The following conditions must apply:

At least one of the vehicles is serviced later in the week than the hatchback.

The roadster is serviced later in the week than the van and earlier in the week than the hatchback.

Either the pickup and the van are serviced on consecutive days, or the pickup and the sedan are serviced on consecutive days, but not both.

The sedan is serviced earlier in the week than the pickup or earlier in the week than the limousine, but not both.

11. Which one of the following could be the order in which the vehicles are serviced, from Monday through Saturday?

(A) the hatchback, the pickup, the sedan, the limousine, the van, the roadster
(B) the pickup, the sedan, the van, the roadster, the hatchback, the limousine
(C) the pickup, the van, the sedan, the roadster, the limousine, the hatchback
(D) the van, the roadster, the pickup, the hatchback, the sedan, the limousine
(E) the van, the sedan, the pickup, the roadster, the hatchback, the limousine

12. Which one of the following CANNOT be the vehicle serviced on Thursday?

(A) the hatchback
(B) the limousine
(C) the pickup
(D) the sedan
(E) the van

13. If neither the pickup nor the limousine is serviced on Monday, then which one of the following must be true?

(A) The hatchback and the limousine are serviced on consecutive days.
(B) The hatchback and the sedan are serviced on consecutive days.
(C) The van is serviced on Monday.
(D) The limousine is serviced on Saturday.
(E) The pickup is serviced on Saturday.

14. If the limousine is not serviced on Saturday, then each of the following could be true EXCEPT:

(A) The limousine is serviced on Monday.
(B) The roadster is serviced on Tuesday.
(C) The hatchback is serviced on Wednesday.
(D) The roadster is serviced on Wednesday.
(E) The sedan is serviced on Wednesday.

15. If the sedan is serviced earlier in the week than the pickup, then which one of the following could be true?

(A) The limousine is serviced on Wednesday.
(B) The sedan is serviced on Wednesday.
(C) The van is serviced on Wednesday.
(D) The hatchback is serviced on Friday.
(E) The limousine is serviced on Saturday.

16. If the limousine is serviced on Saturday, then which one of the following must be true?

(A) The pickup is serviced earlier in the week than the roadster.
(B) The pickup is serviced earlier in the week than the sedan.
(C) The sedan is serviced earlier in the week than the roadster.
(D) The hatchback and the limousine are serviced on consecutive days.
(E) The roadster and the hatchback are serviced on consecutive days.

17. Which one of the following could be the list of the vehicles serviced on Tuesday, Wednesday, and Friday, listed in that order?

(A) the pickup, the hatchback, the limousine
(B) the pickup, the roadster, the hatchback
(C) the sedan, the limousine, the hatchback
(D) the van, the limousine, the hatchback
(E) the van, the roadster, the limousine

GO ON TO THE NEXT PAGE.

Questions 18–23

A street entertainer has six boxes stacked one on top of the other and numbered consecutively 1 through 6, from the lowest box up to the highest. Each box contains a single ball, and each ball is one of three colors—green, red, or white. Onlookers are to guess the color of each ball in each box, given that the following conditions hold:

There are more red balls than white balls.

There is a box containing a green ball that is lower in the stack than any box that contains a red ball.

There is a white ball in a box that is immediately below a box that contains a green ball.

18. If there are exactly two white balls, then which one of the following boxes could contain a green ball?

(A) box 1
(B) box 3
(C) box 4
(D) box 5
(E) box 6

19. If there are green balls in boxes 5 and 6, then which one of the following could be true?

(A) There are red balls in boxes 1 and 4.
(B) There are red balls in boxes 2 and 4.
(C) There is a white ball in box 1.
(D) There is a white ball in box 2.
(E) There is a white ball in box 3.

20. The ball in which one of the following boxes must be the same color as at least one of the other balls?

(A) box 2
(B) box 3
(C) box 4
(D) box 5
(E) box 6

21. Which one of the following must be true?

(A) There is a green ball in a box that is lower than box 4.
(B) There is a green ball in a box that is higher than box 4.
(C) There is a red ball in a box that is lower than box 4.
(D) There is a red ball in a box that is higher than box 4.
(E) There is a white ball in a box that is lower than box 4.

22. If there are red balls in boxes 2 and 3, then which one of the following could be true?

(A) There is a red ball in box 1.
(B) There is a white ball in box 1.
(C) There is a green ball in box 4.
(D) There is a red ball in box 5.
(E) There is a white ball in box 6.

23. If boxes 2, 3, and 4 all contain balls that are the same color as each other, then which one of the following must be true?

(A) Exactly two of the boxes contain a green ball.
(B) Exactly three of the boxes contain a green ball.
(C) Exactly three of the boxes contain a red ball.
(D) Exactly one of the boxes contains a white ball.
(E) Exactly two of the boxes contain a white ball.

S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.