SECTION I

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 1–6

Individual hour-long auditions will be scheduled for each of six saxophonists—Fujimura, Gabrieli, Herman, Jackson, King, and Lauder. The auditions will all take place on the same day. Each audition will begin on the hour, with the first beginning at 1 P.M. and the last at 6 P.M. The schedule of auditions must conform to the following conditions:

Jackson auditions earlier than Herman does.
Gabrieli auditions earlier than King does.
Gabrieli auditions either immediately before or immediately after Lauder does.
Exactly one audition separates the auditions of Jackson and Lauder.

1. Which one of the following is an acceptable schedule for the auditions, listed in order from 1 P.M. through 6 P.M?

(A) Fujimura, Gabrieli, King, Jackson, Herman, Lauder
(B) Fujimura, King, Lauder, Gabrieli, Jackson, Herman
(C) Fujimura, Lauder, Gabrieli, King, Jackson, Herman
(D) Herman, Jackson, Gabrieli, Lauder, King, Fujimura
(E) Jackson, Gabrieli, Lauder, Herman, King, Fujimura

2. Which one of the following must be true?

(A) Lauder is scheduled to audition earlier than Herman.
(B) Lauder is scheduled to audition earlier than King.
(C) Jackson's audition is scheduled to begin at either 1 P.M or 5 P.M
(D) Fujimura and Jackson are not scheduled to audition in consecutive hours.
(E) Gabrieli and King are not scheduled to audition in consecutive hours.

3. The earliest King's audition could be scheduled to begin is

(A) 5 P.M.
(B) 4 P.M.
(C) 3 P.M.
(D) 2 P.M.
(E) 1 P.M.

4. The order in which the saxophonists are scheduled to audition is completely determined if which one of the following is true?

(A) Herman's audition is scheduled to begin at 4 P.M.
(B) Jackson's audition is scheduled to begin at 1 P.M.
(C) Jackson's audition is scheduled to begin at 5 P.M.
(D) Lauder's audition is scheduled to begin at 1 P.M.
(E) Lauder's audition is scheduled to begin at 2 P.M.

5. If Fujimura's audition is not scheduled to begin at 1 P.M., which one of the following could be true?

(A) Herman's audition is scheduled to begin at 6 P.M.
(B) Gabrieli's audition is scheduled to begin at 5 P.M.
(C) Herman's audition is scheduled to begin at 3 P.M.
(D) Jackson's audition is scheduled to begin at 2 P.M.
(E) Jackson's audition is scheduled to begin at 5 P.M.

6. Which one of the following must be true?

(A) Gabrieli's audition is scheduled to begin before 5 P.M.
(B) Herman's audition is scheduled to begin after 2 P.M.
(C) Herman's audition is scheduled to begin before 6 P.M.
(D) King's audition is scheduled to begin before 6 P.M.
(E) Lauder's audition is scheduled to begin before 5 P.M.

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Questions 7–11

Four people—Grace, Heather, Josh, and Maria—will help each other move exactly three pieces of furniture—a recliner, a sofa, and a table. Each piece of furniture will be moved by exactly two of the people, and each person will help move at least one of the pieces of furniture, subject to the following constraints:

Grace helps move the sofa if, but only if, Heather helps move the recliner.

If Josh helps move the table, then Maria helps move the recliner.

No piece of furniture is moved by Grace and Josh together.

7. Which one of the following could be an accurate matching of each piece of furniture to the two people who help each other move it?

(A) recliner: Grace and Maria; sofa: Heather and Josh; table: Grace and Heather
(B) recliner: Grace and Maria; sofa: Heather and Maria; table: Grace and Josh
(C) recliner: Heather and Josh; sofa: Grace and Heather; table: Josh and Maria
(D) recliner: Heather and Josh; sofa: Heather and Maria; table: Grace and Maria
(E) recliner: Josh and Maria; sofa: Grace and Heather; table: Grace and Maria

8. If Josh and Maria help each other move the recliner, then which one of the following must be true?

(A) Heather helps move the sofa.
(B) Josh helps move the sofa.
(C) Maria helps move the sofa.
(D) Grace helps move the table.
(E) Heather helps move the table.

9. If Heather helps move each of the pieces of furniture, then which one of the following could be true?

(A) Grace helps move the recliner.
(B) Maria helps move the recliner.
(C) Josh helps move the sofa.
(D) Maria helps move the sofa.
(E) Grace helps move the table.

10. Which one of the following could be a pair of people who help each other move both the recliner and the table?

(A) Grace and Josh
(B) Grace and Maria
(C) Heather and Josh
(D) Heather and Maria
(E) Josh and Maria

11. If Josh and Maria help each other move the sofa, then which one of the following could be true?

(A) Heather and Josh help each other move the recliner.
(B) Heather and Maria help each other move the recliner.
(C) Grace and Josh help each other move the table.
(D) Grace and Maria help each other move the table.
(E) Heather and Maria help each other move the table.

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Questions 12–16

A town has exactly two public parks—Graystone Park and Landing Park—which are to be planted with North American trees. There are exactly four varieties of trees available—maples, oaks, sycamores, and tamaracks. The planting of the trees must be in accord with the following:

Each of the parks is planted with exactly three of the varieties.

At least one of the parks is planted with both maples and sycamores.

Any park that is planted with oaks will also be planted with tamaracks.

Graystone Park is planted with maples.

12. Which one of the following could be a complete and accurate list of the varieties of trees planted in each of the parks?

(A) Graystone Park: maples, oaks, sycamores
Landing Park: maples, oaks, sycamores

(B) Graystone Park: maples, oaks, tamaracks
Landing Park: maples, oaks, tamaracks

(C) Graystone Park: maples, sycamores, tamaracks
Landing Park: maples, oaks, sycamores

(D) Graystone Park: maples, sycamores, tamaracks
Landing Park: maples, oaks, tamaracks

(E) Graystone Park: oaks, sycamores, tamaracks
Landing Park: maples, sycamores, tamaracks

13. Which one of the following must be true?

(A) Graystone Park is planted with sycamores.

(B) Landing Park is planted with maples.

(C) Landing Park is planted with tamaracks.

(D) The number of the parks planted with maples is equal to the number of the parks planted with sycamores.

(E) The number of the parks planted with maples is greater than the number of the parks planted with sycamores.

14. If both parks are planted with sycamores, which one of the following could be true?

(A) The number of the parks planted with maples is equal to the number of the parks planted with oaks.

(B) The number of the parks planted with maples is greater than the number of the parks planted with sycamores.

(C) The number of the parks planted with oaks is equal to the number of the parks planted with sycamores.

(D) Graystone Park is planted with both maples and oaks.

(E) Landing Park is planted with both maples and oaks.

15. Which one of the following must be false?

(A) Both parks are planted with oaks.

(B) Both parks are planted with sycamores.

(C) Both parks are planted with tamaracks.

(D) Exactly one of the parks is planted with maples.

(E) Exactly one of the parks is planted with sycamores.

16. Which one of the following could be true?

(A) The number of the parks planted with oaks is equal to the number of the parks planted with tamaracks.

(B) The number of the parks planted with oaks is greater than the number of the parks planted with sycamores.

(C) Exactly one of the parks is planted with tamaracks.

(D) Neither park is planted with tamaracks.

(E) Both parks contain exactly the same three varieties of trees as each other.

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Questions 17–23

Five executives—Quinn, Rodriguez, Sasada, Taylor, and Vandercar—are being scheduled to make site visits to three of their company's manufacturing plants—Farmington, Homestead, and Morningside. Each site will be visited by at least one of the executives and each executive will visit just one site. Each of the three site visits will take place on a different day. The schedule of site visits must conform to the following requirements:

The Farmington visit must take place before the Homestead visit.

The Farmington visit will include only one of the executives.

The site visit that includes Quinn must take place before any site visit that includes either Rodriguez or Taylor.

The site visit that includes Sasada cannot take place after any site visit that includes Vandercar.

17. Which one of the following could be the executives included in each of the site visits, with the sites listed in the order in which they are visited?

(A) Farmington: Quinn
Homestead: Rodriguez, Sasada
Morningside: Taylor, Vandercar

(B) Farmington: Quinn
Homestead: Rodriguez, Vandercar
Morningside: Sasada, Taylor

(C) Farmington: Rodriguez
Morningside: Quinn, Taylor
Homestead: Sasada, Vandercar

(D) Homestead: Sasada
Farmington: Quinn
Morningside: Rodriguez, Taylor, Vandercar

(E) Morningside: Quinn
Farmington: Rodriguez, Sasada
Homestead: Taylor, Vandercar

18. If the second of the three site visits includes both Rodriguez and Taylor, which one of the following must be true?

(A) The Farmington visit includes Quinn.
(B) The Homestead visit includes Vandercar.
(C) The Morningside visit includes Sasada.
(D) The second of the three site visits includes Sasada.
(E) The second of the three site visits includes exactly three of the executives.

19. If one of the site visits includes both Quinn and Sasada, which one of the following could be true?

(A) The Farmington visit is the first of the three site visits.
(B) The Homestead visit is the second of the three site visits.
(C) One of the site visits includes only Vandercar.
(D) The second of the three site visits includes Sasada.
(E) The second of the three site visits includes exactly two of the executives.

20. The executives who visit Homestead CANNOT be

(A) Quinn and Vandercar only
(B) Rodriguez and Taylor only
(C) Sasada and Taylor only
(D) Quinn, Sasada, and Vandercar
(E) Rodriguez, Sasada, and Taylor

21. If the Morningside visit includes both Quinn and Vandercar, which one of the following could be true?

(A) One of the site visits includes both Rodriguez and Sasada.
(B) The second of the three site visits includes exactly three of the executives.
(C) The last of the three site visits includes exactly three of the executives.
(D) The Homestead visit takes place earlier than the Morningside visit.
(E) The Morningside visit takes place earlier than the Farmington visit.

22. Which one of the following must be true?

(A) The Farmington visit takes place earlier than the Morningside visit.
(B) The site visit that includes Vandercar takes place earlier than the site visit that includes Rodriguez.
(C) One of the first two site visits includes Sasada.
(D) The second of the three site visits includes at least two of the executives.
(E) At least one of the first two site visits includes only one of the executives.

23. If the Farmington visit includes Sasada, which one of the following must be true?

(A) One of the site visits includes exactly three of the executives.
(B) The last of the three site visits includes Rodriguez.
(C) The Homestead visit includes Quinn.
(D) The Morningside visit includes Taylor.
(E) The site visit that includes Vandercar also includes Quinn.

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.