SECTION II

Time-35 minutes

23 Questions

<u>Directions:</u> 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

Seven workers—Quinn, Ruiz, Smith, Taylor, Verma, Wells, and Xue—are being considered for a special project. Exactly three of the workers will be selected to be project members, and exactly one of these project members will be the project leader. The selection is subject to the following constraints:

Quinn or Ruiz can be a project member only if leading the project.

If Smith is a project member, Taylor must also be.

If Wells is a project member, neither Ruiz nor Verma can be.

- 1. Which one of the following is an acceptable selection for the project?
 - (A) Ruiz (leader), Taylor, Wells
 - (B) Verma (leader), Quinn, Taylor
 - (C) Verma (leader), Smith, Taylor
 - (D) Verma (leader), Smith, Xue
 - (E) Xue (leader), Verma, Wells



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- 2. If Taylor is the project leader and Wells is a project member, then the third project member must be either
 - (A) Quinn or Smith
 - (B) Quinn or Xue
 - (C) Ruiz or Verma
 - (D) Smith or Xue
 - (E) Verma or Xue
- 3. Verma could be the project leader if which one of the following is true?
 - (A) Neither Quinn nor Smith is selected.
 - (B) Neither Ruiz nor Taylor is selected.
 - (C) Neither Smith nor Taylor is selected.
 - (D) Neither Smith nor Xue is selected.
 - (E) Neither Taylor nor Wells is selected.

- 4. If Taylor is not a project member, which one of the following workers must be a project member?
 - (A) Quinn
 - (B) Ruiz
 - (C) Verma
 - (D) Wells
 - (E) Xue
- 5. The selection for the project is completely determined if which one of the following is true?
 - (A) Neither Quinn nor Smith is selected.
 - (B) Neither Quinn nor Taylor is selected.
 - (C) Neither Quinn nor Xue is selected.
 - (D) Neither Ruiz nor Wells is selected.
 - (E) Neither Ruiz nor Verma is selected.

Questions 6-11

Four students will be assigned to a history project in which they will search archives from the years 1921, 1922, 1923, and 1924. Each of the four years will have exactly one student assigned to it. Six students—Louis, Mollie, Onyx, Ryan, Tiffany, and Yoshio—are available for this project. The following conditions apply:

Only Louis or Tiffany can be assigned to 1923.

If Mollie is assigned to the project, then she must be assigned to either 1921 or 1922.

If Tiffany is assigned to the project, then Ryan must be assigned to the project.

If Ryan is assigned to the project, then Onyx must be assigned to the year immediately prior to Ryan's.

6. Which one of the following could be an accurate

assignment of students, in order from the earliest year to

(A) Louis, Onyx, Ryan, Yoshio

the latest?

- (B) Mollie, Yoshio, Tiffany, Onyx
- (C) Onyx, Ryan, Louis, Tiffany
- (D) Tiffany, Onyx, Louis, Ryan
- (E) Yoshio, Onyx, Louis, Mollie



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- 7. Mollie must be assigned to 1922 if which one of the following is true?
 - (A) Louis is assigned to 1924.
 - (B) Onyx is assigned to 1921.
 - (C) Onyx is assigned to 1924.
 - (D) Tiffany is assigned to 1923.
 - (E) Yoshio is assigned to 1921.
- 8. If both Ryan and Yoshio are assigned to the project, which one of the following could be true?
 - (A) Louis is assigned to 1923.
 - (B) Mollie is assigned to 1921.
 - (C) Onyx is assigned to 1922.
 - (D) Tiffany is assigned to 1924.
 - (E) Yoshio is assigned to 1922.

- 9. How many of the students are there who could be the one assigned to 1921?
 - (A) six
 - (B) five
 - (C) four
 - (D) three
 - (E) two
- 10. If Yoshio is not assigned to the project, which one of the following could be true?
 - (A) Louis is not assigned to the project.
 - (B) Ryan is not assigned to the project.
 - (C) Tiffany is not assigned to the project.
 - (D) Onyx is assigned to 1922.
 - (E) Louis is assigned to 1924.
- 11. Which one of the following students CANNOT be assigned to 1922?
 - (A) Louis
 - (B) Mollie
 - (C) Onyx
 - (D) Ryan
 - (E) Yoshio

Questions 12-17

During the weeklong grand opening of a new antique shop, the antique dealer will auction exactly one antique per day for six consecutive days—June 1st through June 6th. The antiques to be auctioned are: a harmonica, a lamp, a mirror, a sundial, a table, and a vase. The following conditions apply:

The sundial is not auctioned on June 1st.

If the harmonica is auctioned on an earlier date than the lamp, then the mirror is also auctioned on an earlier date than the lamp.

The sundial is auctioned on an earlier date than the mirror and also on an earlier date than the vase.

The table is auctioned on an earlier date than the harmonica or on an earlier date than the vase, but not both.

- 12. Which one of the following could be an accurate list of the six antiques, in the order in which they are auctioned, from June 1st through June 6th?
 - (A) harmonica, table, sundial, lamp, vase, mirror
 - (B) lamp, harmonica, sundial, mirror, vase, table
 - (C) harmonica, sundial, table, mirror, lamp, vase
 - (D) sundial, mirror, harmonica, table, vase, lamp
 - (E) vase, sundial, lamp, harmonica, table, mirror



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- 13. Which one of the following could be true?
 - (A) The table is auctioned on June 2nd and the lamp is auctioned on June 3rd.
 - (B) The sundial is auctioned on June 2nd and the vase is auctioned on June 3rd.
 - (C) The mirror is auctioned on June 3rd and the sundial is auctioned on June 4th.
 - (D) The vase is auctioned on June 4th and the sundial is auctioned on June 5th.
 - (E) The sundial is auctioned on June 4th and the table is auctioned on June 5th.
- 14. If the table is auctioned on a date that is later than both the date on which the mirror is auctioned and the date on which the vase is auctioned, then which one of the following could be true?
 - (A) The harmonica is auctioned on an earlier date than the table.
 - (B) The table is auctioned on an earlier date than the lamp.
 - (C) The table is auctioned on an earlier date than the sundial.
 - (D) The mirror is auctioned on an earlier date than the vase.
 - (E) The sundial is auctioned on an earlier date than the lamp.

- 15. Which one of the following CANNOT be the antique auctioned on the day immediately preceding the day on which the vase is auctioned?
 - (A) the harmonica
 - (B) the lamp
 - (C) the mirror
 - (D) the sundial
 - (E) the table
- 16. Which one of the following could be true?
 - (A) The mirror is auctioned on June 2nd.
 - (B) The lamp is auctioned on June 2nd.
 - (C) The vase is auctioned on June 2nd.
 - (D) The lamp is auctioned on June 3rd.
 - (E) The mirror is auctioned on June 5th.
- 17. Which one of the following could be true?
 - (A) The sundial is auctioned on June 5th.
 - (B) The sundial is auctioned on June 4th.
 - (C) The lamp is auctioned on June 5th and the mirror is auctioned on June 6th.
 - (D) The table is auctioned on June 3rd and the lamp is auctioned on June 4th.
 - (E) The harmonica is auctioned on June 2nd and the vase is auctioned on June 3rd.

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Questions 18-23

A chorus director is planning to audition exactly six singers: Kammer, Lugo, Trillo, Waite, Yoshida, and Zinn. Kammer's audition and Lugo's audition will be recorded; the other four will not be. The six auditions are to take place one after the other on a single day, in accordance with the following conditions:

The fourth audition cannot be recorded.

The fifth audition must be recorded.

Waite's audition must take place earlier than the two recorded auditions.

Kammer's audition must take place earlier than Trillo's audition.

Zinn's audition must take place earlier than Yoshida's audition.



- 18. Which one of the following could be the order of the auditions, from first to last?
 - (A) Kammer, Trillo, Zinn, Waite, Lugo, Yoshida
 - (B) Waite, Kammer, Yoshida, Zinn, Lugo, Trillo
 - (C) Waite, Lugo, Kammer, Trillo, Zinn, Yoshida
 - (D) Waite, Zinn, Kammer, Trillo, Lugo, Yoshida
 - (E) Zinn, Yoshida, Waite, Lugo, Kammer, Trillo

- 19. Which one of the following CANNOT be the second audition?
 - (A) Kammer's audition
 - (B) Lugo's audition
 - (C) Trillo's audition
 - (D) Waite's audition
 - (E) Zinn's audition
- 20. Which one of the following could be the sixth audition?
 - (A) Kammer's audition
 - (B) Lugo's audition
 - (C) Trillo's audition
 - (D) Waite's audition
 - (E) Zinn's audition
- 21. If Kammer's audition is immediately before Yoshida's, which one of the following could be true?
 - (A) Kammer's audition is second.
 - (B) Trillo's audition is fourth.
 - (C) Waite's audition is third.
 - (D) Yoshida's audition is sixth.
 - (E) Zinn's audition is second.

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- 22. Yoshida's audition could be
 - (A) fifth
 - (B) fourth
 - (C) third
 - (D) second
 - (E) first
- 23. Which one of the following, if substituted for the condition that Waite's audition must take place earlier than the two recorded auditions, would have the same effect in determining the order of the auditions?
 - (A) Zinn's audition is the only one that can take place earlier than Waite's.
 - (B) Waite's audition must take place either immediately before or immediately after Zinn's.
 - (C) Waite's audition must take place earlier than Lugo's.
 - (D) Waite's audition must be either first or second.
 - (E) The first audition cannot be recorded.

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.