





3

SECTION III

Time—35 minutes

22 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 1-6

On one afternoon, Patterson meets individually with each of exactly five clients—Reilly, Sanchez, Tang, Upton, and Yansky—and also goes to the gym by herself for a workout. Patterson's workout and her five meetings each start at either 1:00, 2:00, 3:00, 4:00, 5:00, or 6:00. The following conditions must apply:

- Patterson meets with Sanchez at some time before her workout.
- Patterson meets with Tang at some time after her workout.
- Patterson meets with Yansky either immediately before or immediately after her workout.
- Patterson meets with Upton at some time before she meets with Reilly.
- 1. Which one of the following could be an acceptable schedule of Patterson's workout and meetings, in order from 1:00 to 6:00?
 - (A) Yansky, workout, Upton, Reilly, Sanchez, Tang
 - (B) Upton, Tang, Sanchez, Yansky, workout, Reilly
 - (C) Upton, Reilly, Sanchez, workout, Tang, Yansky
 - (D) Sanchez, Yansky, workout, Reilly, Tang, Upton
 - (E) Sanchez, Upton, workout, Yansky, Tang, Reilly
- How many of the clients are there, any one of whom could meet with Patterson at 1:00?
 - (A) one
 - (B) two
 - (C) three
 - (D) four
 - (E) five

- 3. Patterson CANNOT meet with Upton at which one of the following times?
 - (A) 1:00
 - (B) 2:00
 - (C) 3:00
 - (D) 4:00
 - (E) 5:00
- If Patterson meets with Sanchez the hour before she meets with Yansky, then each of the following could be true EXCEPT:
 - (A) Patterson meets with Reilly at 2:00.
 - (B) Patterson meets with Yansky at 3:00.
 - (C) Patterson meets with Tang at 4:00.
 - (D) Patterson meets with Yansky at 5:00.
 - (E) Patterson meets with Tang at 6:00.
- 5. If Patterson meets with Tang at 4:00, then which one of the following must be true?
 - (A) Patterson meets with Reilly at 5:00.
 - (B) Patterson meets with Upton at 5:00.
 - (C) Patterson meets with Yansky at 2:00.
 - (D) Patterson meets with Yansky at 3:00.
 - (E) Patterson's workout is at 2:00.
- 6. Which one of the following could be the order of Patterson's meetings, from earliest to latest?
 - (A) Upton, Yansky, Sanchez, Reilly, Tang
 - (B) Upton, Reilly, Sanchez, Tang, Yansky
 - (C) Sanchez, Yansky, Reilly, Tang, Upton
 - (D) Sanchez, Upton, Tang, Yansky, Reilly
 - (E) Sanchez, Upton, Reilly, Yansky, Tang

GO ON TO THE NEXT PAGE.







Questions 7–12

Exactly six people—Lulu, Nam, Ofelia, Pachai, Santiago, and Tyrone—are the only contestants in a chess tournament. The tournament consists of four games, played one after the other. Exactly two people play in each game, and each person plays in at least one game. The following conditions must apply:

Tyrone does not play in the first or third game. Lulu plays in the last game.

Nam plays in only one game and it is not against Pachai.

Santiago plays in exactly two games, one just before and one just after the only game that Ofelia plays in.

- 7. Which one of the following could be an accurate list of the contestants who play in each of the four games?
 - (A) first game: Pachai, Santiago; second game: Ofelia, Tyrone; third game: Pachai, Santiago; fourth game: Lulu, Nam
 - (B) first game: Lulu, Nam; second game: Pachai, Santiago; third game: Ofelia, Tyrone; fourth game: Lulu, Santiago
 - (C) first game: Pachai, Santiago; second game: Lulu, Tyrone; third game: Nam, Ofelia; fourth game: Lulu, Nam
 - (D) first game: Nam, Santiago; second game: Nam, Ofelia; third game: Pachai, Santiago; fourth game: Lulu, Tyrone
 - (E) first game: Lulu, Nam; second game: Santiago, Tyrone; third game: Lulu, Ofelia; fourth game: Pachai, Santiago
- 8. Which one of the following contestants could play in two consecutive games?
 - (A) Lulu
 - (B) Nam
 - (C) Ofelia
 - (D) Santiago
 - (E) Tyrone

- 9. If Tyrone plays in the fourth game, then which one of the following could be true?
 - (A) Nam plays in the second game.
 - (B) Ofelia plays in the third game.
 - (C) Santiago plays in the second game.
 - (D) Nam plays a game against Lulu.
 - (E) Pachai plays a game against Lulu.
- 10. Which one of the following could be true?
 - (A) Pachai plays against Lulu in the first game.
 - (B) Pachai plays against Nam in the second game.
 - (C) Santiago plays against Ofelia in the second game.
 - (D) Pachai plays against Lulu in the third game.
 - (E) Nam plays against Santiago in the fourth game.
- 11. Which one of the following is a complete and accurate list of the contestants who CANNOT play against Tyrone in any game?
 - (A) Lulu, Pachai
 - (B) Nam, Ofelia
 - (C) Nam, Pachai
 - (D) Nam, Santiago
 - (E) Ofelia, Pachai
- 12. If Ofelia plays in the third game, which one of the following must be true?
 - (A) Lulu plays in the third game.
 - (B) Nam plays in the third game.
 - (C) Pachai plays in the first game.
 - (D) Pachai plays in the third game.
 - (E) Tyrone plays in the second game.

GO ON TO THE NEXT PAGE.







3

Questions 13–17

An album contains photographs picturing seven friends: Raimundo, Selma, Ty, Umiko, Wendy, Yakira, Zack. The friends appear either alone or in groups with one another, in accordance with the following:

- Wendy appears in every photograph that Selma appears in.
- Selma appears in every photograph that Umiko appears in.
- Raimundo appears in every photograph that Yakira does not appear in.
- Neither Ty nor Raimundo appears in any photograph that Wendy appears in.
- 13. Which one of the following could be a complete and accurate list of the friends who appear together in a photograph?
 - (A) Raimundo, Selma, Ty, Wendy
 - (B) Raimundo, Ty, Yakira, Zack
 - (C) Raimundo, Wendy, Yakira, Zack
 - (D) Selma, Ty, Umiko, Yakira
 - (E) Selma, Ty, Umiko, Zack
- 14. If Ty and Zack appear together in a photograph, then which one of the following must be true?
 - (A) Selma also appears in the photograph.
 - (B) Yakira also appears in the photograph.
 - (C) Wendy also appears in the photograph.
 - (D) Raimundo does not appear in the photograph.
 - (E) Umiko does not appear in the photograph.

- 15. What is the maximum number of friends who could appear in a photograph that Yakira does not appear in?
 - (A) six
 - (B) five
 - (C) four
 - (D) three
 - (E) two
- 16. If Umiko and Zack appear together in a photograph, then exactly how many of the other friends must also appear in that photograph?
 - (A) four
 - (B) three
 - (C) two
 - (D) one
 - (E) zero
- 17. If exactly three friends appear together in a photograph, then each of the following could be true EXCEPT:
 - (A) Selma and Zack both appear in the photograph.
 - (B) Ty and Yakira both appear in the photograph.
 - (C) Wendy and Selma both appear in the photograph.
 - (D) Yakira and Zack both appear in the photograph.
 - (E) Zack and Raimundo both appear in the photograph.

GO ON TO THE NEXT PAGE.







Questions 18–22

The Export Alliance consists of exactly three nations: Nation X, Nation Y, and Nation Z. Each nation in the Alliance exports exactly two of the following five crops: oranges, rice, soybeans, tea, and wheat. Each of these crops is exported by at least one of the nations in the Alliance. The following conditions hold:

None of the nations exports both wheat and oranges. Nation X exports soybeans if, but only if, Nation Y does also.

If Nation Y exports rice, then Nations X and Z both export tea.

Nation Y does not export any crop that Nation Z exports.

- 18. Which one of the following could be an accurate list, for each of the nations, of the crops it exports?
 - (A) Nation X: oranges, rice; Nation Y: oranges, tea; Nation Z: soybeans, wheat
 - (B) Nation X: oranges, tea; Nation Y: oranges, rice; Nation Z: soybeans, wheat
 - (C) Nation X: oranges, wheat; Nation Y: oranges, tea; Nation Z: rice, soybeans
 - (D) Nation X: rice, wheat; Nation Y: oranges, tea; Nation Z: oranges, soybeans
 - (E) Nation X: soybeans, rice; Nation Y: oranges, tea; Nation Z: soybeans, wheat

- 19. If Nation X exports soybeans and tea, then which one of the following could be true?
 - (A) Nation Y exports oranges.
 - (B) Nation Y exports rice.
 - (C) Nation Y exports tea.
 - (D) Nation Z exports soybeans.
 - (E) Nation Z exports tea.
- 20. If Nation Z exports tea and wheat, then which one of the following must be true?
 - (A) Nation X exports oranges.
 - (B) Nation X exports tea.
 - (C) Nation X exports wheat.
 - (D) Nation Y exports rice.
 - (E) Nation Y exports soybeans.
- 21. It CANNOT be the case that both Nation X and Nation Z export which one of the following crops?
 - (A) oranges
 - (B) rice
 - (C) soybeans
 - (D) tea
 - (E) wheat
- 22. Which one of the following pairs CANNOT be the two crops that Nation Y exports?
 - (A) oranges and rice
 - (B) oranges and soybeans
 - (C) rice and tea
 - (D) rice and wheat
 - (E) soybeans and wheat

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.