SECTION II

Time—35 minutes

24 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 1–7

Exactly six trade representatives negotiate a treaty: Klosnik, Londi, Manley, Neri, Osata, Poirier. There are exactly six chairs evenly spaced around a circular table. The chairs are numbered 1 through 6, with successively numbered chairs next to each other and chair number 1 next to chair number 6. Each chair is occupied by exactly one of the representatives. The following conditions apply:

Poirier sits immediately next to Neri.
Londi sits immediately next to Manley, Neri, or both.
Klosnik does not sit immediately next to Manley.
If Osata sits immediately next to Poirier, Osata does not sit immediately next to Manley.

1. Which one of the following seating arrangements of the six representatives in chairs 1 through 6 would NOT violate the stated conditions?

(A) Klosnik, Poirier, Neri, Manley, Osata, Londi
(B) Klosnik, Londi, Manley, Poirier, Neri, Osata
(C) Klosnik, Londi, Manley, Osata, Poirier, Neri
(D) Klosnik, Osata, Poirier, Neri, Londi, Manley
(E) Klosnik, Neri, Londi, Osata, Manley, Poirier

2. If Londi sits immediately next to Poirier, which one of the following is a pair of representatives who must sit immediately next to each other?

(A) Klosnik and Osata
(B) Londi and Neri
(C) Londi and Osata
(D) Manley and Neri
(E) Manley and Poirier

3. If Klosnik sits directly between Londi and Poirier, then Manley must sit directly between

(A) Londi and Neri
(B) Londi and Osata
(C) Neri and Osata
(D) Neri and Poirier
(E) Osata and Poirier

4. If Neri sits immediately next to Manley, then Klosnik can sit directly between

(A) Londi and Manley
(B) Londi and Poirier
(C) Neri and Osata
(D) Neri and Poirier
(E) Poirier and Osata

5. If Londi sits immediately next to Manley, then which one of the following is a complete and accurate list of representatives any one of whom could also sit immediately next to Londi?

(A) Klosnik
(B) Klosnik, Neri
(C) Neri, Poirier
(D) Klosnik, Osata, Poirier
(E) Klosnik, Neri, Osata, Poirier

6. If Londi sits immediately next to Neri, which one of the following statements must be false?

(A) Klosnik sits immediately next to Osata.
(B) Londi sits immediately next to Manley.
(C) Osata sits immediately next to Poirier.
(D) Neri sits directly between Londi and Poirier.
(E) Osata sits directly between Klosnik and Manley.

7. If Klosnik sits immediately next to Osata, then Londi CANNOT sit directly between

(A) Klosnik and Manley
(B) Klosnik and Neri
(C) Manley and Neri
(D) Manley and Poirier
(E) Neri and Osata

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Questions 8–13

A small software firm has four offices, numbered 1, 2, 3, and 4. Each of its offices has exactly one computer and exactly one printer. Each of these eight machines was bought in either 1987, 1988, or 1989. The eight machines were bought in a manner consistent with the following conditions:

The computer in each office was bought either in an earlier year than or in the same year as the printer in that office.

The computer in office 2 and the printer in office 1 were bought in the same year.

The computer in office 3 and the printer in office 4 were bought in the same year.

The computer in office 2 and the computer in office 3 were bought in different years.

The computer in office 1 and the printer in office 3 were bought in 1988.

8. If the computer in office 3 was bought in an earlier year than the printer in office 3 was, then which one of the following statements could be true?

(A) The computer in office 2 was bought in 1987.
(B) The computer in office 2 was bought in 1988.
(C) The computer in office 4 was bought in 1988.
(D) The printer in office 4 was bought in 1988.
(E) The printer in office 4 was bought in 1989.

9. Which one of the following statements could be true?

(A) The printer in office 1 was bought in 1987.
(B) The computer in office 2 was bought in 1987.
(C) The computer in office 3 was bought in 1989.
(D) The printer in office 4 was bought in 1988.
(E) The printer in office 4 was bought in 1989.

10. If as few of the eight machines as possible were bought in 1987, then what is the exact number of machines that were bought in 1987?

(A) 0
(B) 1
(C) 2
(D) 3
(E) 4

11. If the computer in office 4 was bought in 1988, then which one of the following statements must be true?

(A) The printer in office 1 was bought in 1988.
(B) The printer in office 1 was bought in 1989.
(C) The computer in office 2 was bought in 1988.
(D) The computer in office 3 was bought in 1987.
(E) The printer in office 4 was bought in 1989.

12. If the computer in office 3 was bought in 1988, then which one of the following statements could be true?

(A) The printer in office 1 was bought in 1988.
(B) The computer in office 2 was bought in 1987.
(C) The printer in office 2 was bought in 1988.
(D) The computer in office 4 was bought in 1987.
(E) The printer in office 4 was bought in 1989.

13. Suppose that the computer in office 2 and the computer in office 3 had been bought in the same year as each other. If all of the other conditions remained the same, then which one of the following machines could have been bought in 1989?

(A) the printer in office 1
(B) the computer in office 2
(C) the printer in office 2
(D) the computer in office 4
(E) the printer in office 4

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Questions 14–18

The eight partners of a law firm are Gregg, Hodges, Ivan, James, King, MacNeil, Nader, and Owens. In each of the years 1961 through 1968, exactly one of the partners joined the firm.

Hodges joined the firm before Nader.
King joined the firm before James.
Nader and James joined the firm before Gregg.
Nader joined the firm before Owens.
James joined the firm before MacNeil.
Gregg joined the firm before Ivan.

14. Which one of the following CANNOT be true?

(A) Hodges joined the law firm in 1961.
(B) Hodges joined the law firm in 1963.
(C) Gregg joined the law firm in 1964.
(D) MacNeil joined the law firm in 1964.
(E) Owens joined the law firm in 1964.

15. If James joined the firm in 1962, which one of the following CANNOT be true?

(A) Hodges joined the firm in 1963.
(B) MacNeil joined the firm in 1963.
(C) Hodges joined the firm in 1964.
(D) Nader joined the firm in 1964.
(E) Owens joined the firm in 1964.

16. Of the following, which one is the latest year in which James could have joined the firm?

(A) 1962
(B) 1963
(C) 1964
(D) 1965
(E) 1966

17. If Owens joined the firm in 1965 and MacNeil joined it in 1967, one can determine the years in which exactly how many of the other partners joined the firm?

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

18. Assume that Owens joined the law firm before MacNeil. Of the following, which one is the earliest year in which MacNeil could have joined it?

(A) 1963
(B) 1964
(C) 1965
(D) 1966
(E) 1967

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Questions 19–24

A railway company has exactly three lines: line 1, line 2, and line 3. The company prints three sets of tickets for January and three sets of tickets for February: one set for each of its lines for each of the two months. The company's tickets are printed in a manner consistent with the following conditions:

Each of the six sets of tickets is exactly one of the following colors: green, purple, red, yellow.
For each line, the January tickets are a different color than the February tickets.
For each month, tickets for different lines are in different colors.
Exactly one set of January tickets is red.
For line 3, either the January tickets or the February tickets, but not both, are green.
The January tickets for line 2 are purple.
No February tickets are purple.

19. If the line 3 tickets for January are red, then which one of the following statements must be true?

(A) The line 1 tickets for January are green.
(B) The line 1 tickets for January are yellow.
(C) The line 1 tickets for February are red.
(D) The line 2 tickets for February are yellow.
(E) The line 3 tickets for February are green.

20. If one set of the line 2 tickets is green, then which one of the following statements must be true?

(A) The line 1 tickets for January are red.
(B) The line 3 tickets for January are red.
(C) The line 1 tickets for February are red.
(D) The line 3 tickets for February are green.
(E) The line 3 tickets for February are yellow.

21. Which one of the following statements could be true?

(A) No January ticket is green.
(B) No February ticket is green.
(C) Only line 2 tickets are red.
(D) One set of January tickets is green and one set of January tickets is yellow.
(E) The line 2 tickets for January are the same color as the line 1 tickets for February.

22. Which one of the following statements could be true?

(A) Both the line 1 tickets for January and the line 2 tickets for February are green.
(B) Both the line 1 tickets for January and the line 2 tickets for February are yellow.
(C) Both the line 1 tickets for January and the line 3 tickets for February are yellow.
(D) The line 1 tickets for January are green, and the line 3 tickets for February are red.
(E) The line 3 tickets for January are yellow, and the line 1 tickets for February are red.

23. If the line 3 tickets for February are yellow, then each of the following statements must be true EXCEPT:

(A) One set of January tickets is green.
(B) One set of line 1 tickets is red.
(C) One set of line 2 tickets is red.
(D) The tickets in two of the six sets are red.
(E) The tickets in two of the six sets are yellow.

24. Suppose that none of the ticket sets are purple. If all of the other conditions remain the same, then which one of the following statements could be true?

(A) None of the January tickets are green.
(B) None of the February tickets are green.
(C) None of the line 2 tickets are green.
(D) No line 1 or line 2 tickets are yellow.
(E) No line 2 or line 3 tickets are red.

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.