

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

A closet contains exactly six hangers—1, 2, 3, 4, 5, and 6—hanging, in that order, from left to right. It also contains exactly six dresses—one gauze, one linen, one polyester, one rayon, one silk, and one wool—a different dress on each of the hangers, in an order satisfying the following conditions:

The gauze dress is on a lower-numbered hanger than the polyester dress.

The rayon dress is on hanger 1 or hanger 6.

Either the wool dress or the silk dress is on hanger 3.

The linen dress hangs immediately to the right of the silk dress.

1. Which one of the following could be an accurate matching of the hangers to the fabrics of the dresses that hang on them?
 - (A) 1: wool; 2: gauze; 3: silk; 4: linen; 5: polyester; 6: rayon
 - (B) 1: rayon; 2: wool; 3: gauze; 4: silk; 5: linen; 6: polyester
 - (C) 1: polyester; 2: gauze; 3: wool; 4: silk; 5: linen; 6: rayon
 - (D) 1: linen; 2: silk; 3: wool; 4: gauze; 5: polyester; 6: rayon
 - (E) 1: gauze; 2: rayon; 3: silk; 4: linen; 5: wool; 6: polyester
2. If both the silk dress and the gauze dress are on odd-numbered hangers, then which one of the following could be true?
 - (A) The polyester dress is on hanger 1.
 - (B) The wool dress is on hanger 2.
 - (C) The polyester dress is on hanger 4.
 - (D) The linen dress is on hanger 5.
 - (E) The wool dress is on hanger 6.
3. If the silk dress is on an even-numbered hanger, which one of the following could be on the hanger immediately to its left?
 - (A) the gauze dress
 - (B) the linen dress
 - (C) the polyester dress
 - (D) the rayon dress
 - (E) the wool dress
4. If the polyester dress is on hanger 2, then which one of the following must be true?
 - (A) The silk dress is on hanger 1.
 - (B) The wool dress is on hanger 3.
 - (C) The linen dress is on hanger 4.
 - (D) The linen dress is on hanger 5.
 - (E) The rayon dress is on hanger 6.
5. Which one of the following CANNOT be true?
 - (A) The linen dress hangs immediately next to the gauze dress.
 - (B) The polyester dress hangs immediately to the right of the rayon dress.
 - (C) The rayon dress hangs immediately to the left of the wool dress.
 - (D) The silk dress is on a lower-numbered hanger than the gauze dress.
 - (E) The wool dress is on a higher-numbered hanger than the rayon dress.
6. Which one of the following CANNOT hang immediately next to the rayon dress?
 - (A) the gauze dress
 - (B) the linen dress
 - (C) the polyester dress
 - (D) the silk dress
 - (E) the wool dress
7. Assume that the original condition that the linen dress hangs immediately to the right of the silk dress is replaced by the condition that the wool dress hangs immediately to the right of the silk dress. If all the other initial conditions remain in effect, which one of the following must be false?
 - (A) The linen dress is on hanger 1.
 - (B) The gauze dress is on hanger 2.
 - (C) The wool dress is on hanger 4.
 - (D) The silk dress is on hanger 5.
 - (E) The polyester dress is on hanger 6.

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Questions 8–12

At a children's festival, exactly four songs are performed, each exactly once: "Night's All Right," "Question Man," "Rhino Rock," and "Sammy." The songs are performed consecutively, each on a different one of exactly four instruments: flute, guitar, harmonica, or keyboard. The songs are performed in accordance with the following:

The first song performed is not performed on the flute.

If "Sammy" is performed on the keyboard, then "Rhino Rock" is performed on the harmonica.

If "Question Man" is performed on the keyboard, then "Night's All Right" is performed on the flute. The song performed on the keyboard immediately follows "Rhino Rock" and immediately precedes "Night's All Right."

8. Which one of the following could be an accurate matching of the four songs performed at the festival with the instruments on which they are performed, listed in order from the first song performed to the last?
 - (A) "Night's All Right": guitar; "Question Man": keyboard; "Sammy": guitar; "Rhino Rock": flute
 - (B) "Question Man": guitar; "Rhino Rock": harmonica; "Sammy": keyboard; "Night's All Right": flute
 - (C) "Rhino Rock": flute; "Question Man": keyboard; "Night's All Right": harmonica; "Sammy": guitar
 - (D) "Sammy": harmonica; "Night's All Right": guitar; "Question Man": keyboard; "Rhino Rock": flute
 - (E) "Sammy": harmonica; "Rhino Rock": guitar; "Question Man": flute; "Night's All Right": keyboard
9. Which one of the following could be true?
 - (A) "Question Man" immediately follows the song performed on the keyboard.
 - (B) "Night's All Right" immediately precedes the song performed on the keyboard.
 - (C) "Question Man" immediately precedes the song performed on the guitar.
 - (D) "Rhino Rock" immediately precedes the song performed on the harmonica.
 - (E) "Sammy" immediately precedes the song performed on the guitar.

10. Which one of the following CANNOT be true of the song performed on the flute?
 - (A) It immediately precedes "Question Man."
 - (B) It immediately follows "Question Man."
 - (C) It immediately precedes "Rhino Rock."
 - (D) It immediately follows "Night's All Right."
 - (E) It immediately follows "Sammy."
11. If "Rhino Rock" is the second song performed at the festival, then which one of the following could be true?
 - (A) The first song performed is performed on the keyboard.
 - (B) The third song performed is performed on the guitar.
 - (C) The third song performed is performed on the flute.
 - (D) "Night's All Right" is performed on the guitar.
 - (E) "Rhino Rock" is performed on the guitar.
12. If "Question Man" is the third song performed at the festival, then each of the following could be true EXCEPT:
 - (A) "Question Man" is performed on the guitar.
 - (B) "Question Man" is performed on the keyboard.
 - (C) "Rhino Rock" is performed on the guitar.
 - (D) "Sammy" is performed on the guitar.
 - (E) "Sammy" is performed on the harmonica.

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Questions 13–17

Each of the seven members of the board of directors—Guzman, Hawking, Lepp, Miyauchi, Upchurch, Wharton, and Zhu—serves on exactly one of two committees—the finance committee or the incentives committee. Only board members serve on these committees. Committee membership is consistent with the following conditions:

If Guzman serves on the finance committee, then Hawking serves on the incentives committee.

If Lepp serves on the finance committee, then Miyauchi and Upchurch both serve on the incentives committee.

Wharton serves on a different committee from the one on which Zhu serves.

Upchurch serves on a different committee from the one on which Guzman serves.

If Zhu serves on the finance committee, so does Hawking.

13. Which one of the following could be a complete and accurate list of the members of the finance committee?
- (A) Guzman, Hawking, Miyauchi, Wharton
 - (B) Guzman, Lepp, Zhu
 - (C) Hawking, Miyauchi, Zhu
 - (D) Hawking, Upchurch, Wharton, Zhu
 - (E) Miyauchi, Upchurch, Wharton
14. Which one of the following pairs of board members CANNOT both serve on the incentives committee?
- (A) Guzman and Hawking
 - (B) Guzman and Wharton
 - (C) Hawking and Wharton
 - (D) Miyauchi and Upchurch
 - (E) Miyauchi and Wharton
15. What is the maximum number of members on the finance committee?
- (A) two
 - (B) three
 - (C) four
 - (D) five
 - (E) six
16. If Miyauchi and Wharton both serve on the finance committee, then which one of the following could be true?
- (A) Guzman and Lepp both serve on the finance committee.
 - (B) Guzman and Upchurch both serve on the incentives committee.
 - (C) Hawking and Zhu both serve on the finance committee.
 - (D) Lepp and Upchurch both serve on the incentives committee.
 - (E) Zhu and Upchurch both serve on the finance committee.
17. If Guzman serves on the incentives committee, then which one of the following must be true?
- (A) Hawking serves on the finance committee.
 - (B) Lepp serves on the incentives committee.
 - (C) Miyauchi serves on the finance committee.
 - (D) Wharton serves on the incentives committee.
 - (E) Zhu serves on the finance committee.

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Questions 18–24

Eight people—Fiona, George, Harriet, Ingrid, Karl, Manuel, Olivia, and Peter—are sitting, evenly spaced, around a circular picnic table. Any two of them are said to be sitting directly across from one another if and only if there are exactly three other people sitting between them, counting in either direction around the table. The following conditions apply:

Fiona sits directly across from George.

Harriet sits immediately next to neither Fiona nor Karl.

Ingrid sits immediately next to, and immediately clockwise from, Olivia.

18. Which one of the following could be the order in which four of the people are seated, with no one else seated between them, counting clockwise around the table?
(A) George, Peter, Karl, Fiona
(B) Harriet, Olivia, Ingrid, Karl
(C) Ingrid, Fiona, Peter, Manuel
(D) Olivia, Manuel, Karl, George
(E) Peter, Harriet, Karl, Fiona
19. If Harriet and Olivia each sits immediately next to George, then which one of the following could be the two people each of whom sits immediately next to Peter?
(A) Fiona and Karl
(B) Fiona and Olivia
(C) Harriet and Ingrid
(D) Harriet and Karl
(E) Karl and Manuel
20. If George does not sit immediately next to Harriet, then which one of the following could be the two people each of whom sits immediately next to Manuel?
(A) Fiona and Harriet
(B) Fiona and Peter
(C) George and Karl
(D) George and Peter
(E) Harriet and Peter
21. If Manuel sits immediately next to Olivia, then which one of the following people must sit immediately next to Fiona?
(A) Harriet
(B) Ingrid
(C) Karl
(D) Manuel
(E) Peter
22. What is the minimum possible number of people sitting between Ingrid and Manuel, counting clockwise from Ingrid around the table?
(A) zero
(B) one
(C) two
(D) three
(E) four
23. If Karl sits directly across from Ingrid, then each of the following people could sit immediately next to Olivia EXCEPT:
(A) Fiona
(B) George
(C) Harriet
(D) Manuel
(E) Peter
24. If Karl sits directly across from Harriet, then what is the minimum possible number of people sitting between George and Karl, counting clockwise from George to Karl?
(A) zero
(B) one
(C) two
(D) three
(E) four

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.