SECTION II

Time—35 minutes

24 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

On the basis of an examination, nine students—Fred, Glen, Hilary, Ida, Jan, Kathy, Laura, Mike, and Nick—are each placed in one of three classes. The three highest scorers are placed in the level 1 class; the three lowest scorers are placed in the level 3 class. The remaining three are placed in the level 2 class. Each class has exactly three students.

Ida scores higher than Glen. Glen scores higher than both Jan and Kathy. Jan scores higher than Mike. Mike scores higher than Hilary. Hilary scores higher than Nick. Kathy scores higher than both Fred and Laura.

- 1. How many different combinations of students could form the level 1 class?
 - (A) one
 - (B) two
 - (C) three
 - (D) four
 - (E) six
- 2. Which one of the following students could be in the level 2 class but cannot be in the level 3 class?
 - (A) Fred
 - (B) Glen
 - (C) Jan
 - (D) Kathy
 - (E) Nick

- 3. Which one of the following students could be placed in any one of the three classes?
 - (A) Fred
 - (B) Jan
 - (C) Kathy
 - (D) Laura
 - (E) Mike
- 4. The composition of each class can be completely determined if which one of the following pairs of students is known to be in the level 2 class?
 - (A) Fred and Kathy
 - (B) Fred and Mike
 - (C) Hilary and Jan
 - (D) Kathy and Laura
 - (E) Laura and Mike
- 5. Which one of the following pairs of students cannot be in the same class as Fred?
 - (A) Hilary and Nick
 - (B) Jan and Laura
 - (C) Kathy and Laura
 - (D) Jan and Mike
 - (E) Laura and Mike

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Questions 6-12

Six reviewers—Frank, George, Hilda, Jackie, Karl, and Lena—will review four movies—*Mystery*, *Retreat*, *Seasonings*, and *Wolves*—according to the following conditions:

Each reviewer reviews exactly one movie, and each movie is reviewed by at least one of the six reviewers.

Hilda reviews the same movie as Frank.

Lena reviews the same movie as exactly one other reviewer.

George reviews Mystery.

Jackie reviews either Mystery or else Wolves.

Hilda does not review Wolves.

- 6. If Lena reviews *Seasonings*, which one of the following must be true?
 - (A) Hilda reviews Retreat.
 - (B) Jackie reviews Seasonings.
 - (C) Karl reviews Mystery.
 - (D) Karl reviews Retreat.
 - (E) Karl reviews Wolves.
- 7. If Karl does not review *Seasonings*, which one of the following must be true?
 - (A) Lena reviews Mystery.
 - (B) Lena reviews Retreat.
 - (C) Lena reviews Seasonings.
 - (D) Frank and Hilda review Retreat.
 - (E) Frank and Hilda review Seasonings.

- 8. Which one of the following is a complete and accurate list of the movies each of which could be the movie that Lena reviews?
 - (A) Mystery, Retreat
 - (B) Retreat, Seasonings
 - (C) Mystery, Seasonings, Wolves
 - (D) Retreat, Seasonings, Wolves
 - (E) Mystery, Retreat, Seasonings, Wolves
- 9. Which one of the following can be true?
 - (A) Frank and George review Mystery.
 - (B) Frank and Lena review Wolves.
 - (C) George and Jackie review Mystery.
 - (D) Karl reviews Wolves and Lena reviews Mystery.
 - (E) Lena reviews *Retreat* and Frank reviews *Seasonings*.
- 10. Lena can review any of the following EXCEPT
 - (A) Mystery with George
 - (B) Mystery with Karl
 - (C) Retreat with Karl
 - (D) Seasonings with Karl
 - (E) Wolves with Jackie
- 11. If Karl reviews the same movie as exactly one other reviewer, which one of the following is a complete and accurate list of the movies any one of which could be the movie that these two reviewers review?
 - (A) Mystery, Retreat
 - (B) Mystery, Seasonings
 - (C) Retreat, Seasonings
 - (D) Mystery, Seasonings, Wolves
 - (E) Retreat, Seasonings, Wolves
- 12. Which one of the following is an acceptable assignment of reviewers to movies?

	<u>Mystery</u>	<u>Retreat</u>	<u>Seasonings</u>	<u>Wolves</u>
(A)	George	Frank, Hilda	Jackie, Lena	Karl
(B)	George	Frank, Hilda	Karl, Lena	Jackie
(C)	George	Karl, Lena	Jackie	Frank, Hilda
(D)	George, Karl	Frank, Hilda	Lena	Jackie
(E)	Jackie	George, Lena	Frank, Hilda	Karl

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Questions 13–18

In a game, "words" (real or nonsensical) consist of any combination of at least four letters of the English alphabet. Any "sentence" consists of exactly five words and satisfies the following conditions:

The five words are written from left to right on a single line in alphabetical order.

The sentence is started by any word, and each successive word is formed by applying exactly one of three operations to the word immediately to its left: delete one letter; add one letter; replace one letter with another letter.

At most three of the five words begin with the same letter as one another.

Except for the leftmost word, each word is formed by a different operation from that which formed the word immediately to its left.

- 13. Which one of the following could be a sentence in the word game?
 - (A) bzeak bleak leak peak pea
 - (B) crbek creek reek seek sxeek
 - (C) dteam gleam glean lean mean
 - (D) feed freed reed seed seeg
 - (E) food fool fools fopls opls
- 14. The last letter of the alphabet that the first word of a sentence in the word game can begin with is
 - (A)
 - (B) w

t

- (C) x
- (D) y
- (E) z
- 15. If the first word in a sentence is "blender" and the third word is "slender," then the second word can be
 - (A) bender
 - (B) gender
 - (C) lender
 - (D) sender
 - (E) tender

- 16. If the first word in a sentence consists of nine letters, then the minimum number of letters that the fourth word can contain is
 - (A) four
 - (B) five
 - (C) six
 - (D) seven
 - (E) eight
- 17. If "clean" is the first word in a sentence and "learn" is another word in the sentence, then which one of the following is a complete and accurate list of the positions each of which could be the position in which "learn" occurs in the sentence?
 - (A) second
 - (B) third
 - (C) fourth, fifth
 - (D) second, third, fourth
 - (E) third, fourth, fifth
- 18. If the first word in a sentence consists of four letters, then the maximum number of letters that the fifth word in this sentence could contain is
 - (A) four
 - (B) five
 - (C) six
 - (D) seven
 - (E) eight

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Questions 19-24

A soloist will play six different guitar concertos, exactly one each Sunday for six consecutive weeks. Two concertos will be selected from among three concertos by Giuliani—H, J, and K; two from among four concertos by Rodrigo—M, N, O, and P; and two from among three concertos by Vivaldi—X, Y, and Z. The following conditions apply without exception:

If N is selected, then J is also selected.

If M is selected, then neither J nor O can be selected. If X is selected, then neither Z nor P can be selected. If both J and O are selected, then J is played at some time before O.

X cannot be played on the fifth Sunday unless one of Rodrigo's concertos is played on the first Sunday.

19. Which one of the following is an acceptable selection of concertos that the soloist could play on the first through the sixth Sunday?

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
(A)	Н	Z	M	N	Y	K
(B)	K	J	Y	O	Z	N
(C)	K	Y	P	J	Z	M
(D)	P	Y	J	Η	X	O
(E)	\mathbf{X}	N	K	O	J	Z

- 20. If the six concertos to be played are J, K, N, O, Y, and Z and if N is to be played on the first Sunday, then which one of the following concertos CANNOT be played on the second Sunday?
 - (A) J
 - (B) K
 - (C) O
 - (D) Y
 - (E) Z

- 21. If J, O, and Y are the first three concertos to be played, not necessarily in the order given, which one of the following is a concerto that CANNOT be played on the fifth Sunday?
 - (A) H
 - (B) K
 - (C) N
 - (D) P
 - (E) X
- 22. If O is selected for the first Sunday, which one of the following is a concerto that must also be selected?
 - (A)]
 - (B) K
 - (C) M
 - (D) N
 - (E) X
- 23. Which one of the following is a concerto that must be selected?
 - (A) J
 - (B) K
 - (C) O
 - (D) Y
 - (E) Z
- 24. Which one of the following is a concerto that CANNOT be selected together with N?
 - (A) M
 - (B) O
 - (C) P
 - (D) X
 - (E) Z

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.