

## SECTION III

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 1–5

The members of two committees, a planting committee and a trails committee, are to be selected from among seven volunteers—F, G, H, J, K, L, and M. The following conditions govern the composition of the committees:

Each committee must have at least three members.

F cannot be on the same committee as K.

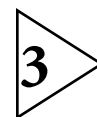
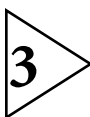
If K is on a committee, J must also be on that committee.

M must be on at least one of the committees.

The two committees must have at least one member in common.

1. Which one of the following represents an acceptable selection of volunteers for the committees?
  - (A) planting: F, G, H; trails: G, J, K, L
  - (B) planting: F, H, J; trails: G, H, L, M
  - (C) planting: F, H, M; trails: G, K, L, M
  - (D) planting: F, G, L, M; trails: F, H
  - (E) planting: F, H, J, K; trails: H, L, M
2. If the planting committee consists of F, H, L, and M, and if the trails committee consists of G, H, and J, then K could replace which one of the following committee members on a committee without violating any of the conditions governing the composition of the committees?
  - (A) F
  - (B) G
  - (C) H
  - (D) L
  - (E) M
3. If the only members of the planting committee are G, H, and L and if the two committees are to have as many members in common as the conditions allow, then which one of the following must be true?
  - (A) The trails committee and the planting committee have exactly one member in common.
  - (B) The trails committee and the planting committee have exactly two members in common.
  - (C) The trails committee and the planting committee have an equal number of members.
  - (D) The trails committee has at least one more member than the planting committee.
  - (E) The planting committee has exactly two more members than the trails committee.
4. If K is on both committees and L is also on both committees and if the planting committee has exactly three members, then which one of the following must be true?
  - (A) F is on the planting committee.
  - (B) F is on the trails committee.
  - (C) G is on the planting committee.
  - (D) M is on the planting committee.
  - (E) M is on the trails committee.
5. The largest number of members that the planting committee and the trails committee could have in common is
  - (A) three
  - (B) four
  - (C) five
  - (D) six
  - (E) seven

GO ON TO THE NEXT PAGE.



### Questions 6–12

Exactly six tourists—Harry, Irene, Klaus, Laura, Michael, Norma—are to be assigned to four guides: Valois, Xerxes, Yossarian, Zalamea. Each tourist is assigned to exactly one guide, with at least one tourist assigned to each guide. Valois speaks only French. Xerxes speaks only Turkish and Spanish. Yossarian speaks only French and Turkish. Zalamea speaks only Spanish and Russian. Each tourist speaks exactly one of the languages spoken by his or her guide and speaks no other language.

The following rules govern the assignment of the tourists to the guides:

At least Harry and Irene are assigned to Yossarian.

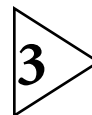
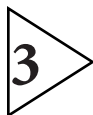
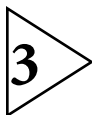
At least Laura is assigned to Zalamea.

If Klaus is assigned to Xerxes, then Michael speaks French.

6. Each of the following could be true EXCEPT:
  - (A) Both Klaus and Harry speak Turkish.
  - (B) Both Klaus and Michael speak French.
  - (C) Both Klaus and Michael speak Russian.
  - (D) Both Klaus and Norma speak French.
  - (E) Both Klaus and Norma speak Spanish.
7. Which one of the following must be true?
  - (A) Zalamea is assigned fewer than three of the tourists.
  - (B) Xerxes is assigned fewer than two of the tourists.
  - (C) Yossarian is assigned exactly two of the tourists.
  - (D) Valois is assigned exactly one of the tourists.
  - (E) Zalamea is assigned exactly one of the tourists.
8. Each of the following could be true of the assignment of tourists to guides EXCEPT:
  - (A) It assigns Klaus to Valois and Michael to Xerxes.
  - (B) It assigns Klaus to Yossarian and Norma to Zalamea.
  - (C) It assigns Laura to Zalamea and Michael to Zalamea.
  - (D) It assigns Michael to Valois and Klaus to Zalamea.
  - (E) It assigns Michael to Xerxes and Klaus to Zalamea.

9. If Klaus and Laura speak the same language as each other, then which one of the following must be true?
  - (A) At least one of Michael and Norma speaks Spanish.
  - (B) At least two tourists speak Russian.
  - (C) Klaus and Laura speak Russian.
  - (D) At least two tourists speak French.
  - (E) At least one of Michael and Norma speaks French.
10. If Laura and Norma speak the same language as each other, then the maximum number of the tourists who could speak Turkish is
  - (A) two
  - (B) three
  - (C) four
  - (D) five
  - (E) six
11. If exactly two tourists are assigned to Xerxes, then which one of the following could be true?
  - (A) Norma speaks Russian and Laura speaks Russian.
  - (B) Norma speaks French and Michael speaks French.
  - (C) Norma speaks French and Klaus speaks Turkish.
  - (D) Michael speaks Spanish and Klaus speaks Spanish.
  - (E) Michael speaks French and Klaus speaks Spanish.
12. If Harry, Irene, Michael, and Norma all speak the same language as each other, then which one of the following could be true?
  - (A) Klaus speaks Russian.
  - (B) Exactly two of the tourists speak Russian.
  - (C) Exactly three of the tourists speak Spanish.
  - (D) Exactly two of the tourists speak Turkish.
  - (E) Klaus speaks French.

GO ON TO THE NEXT PAGE.



### Questions 13–18

Each of six people—Kim, Lina, Maricella, Oliver, Paulo, and Shigeru—plays exactly one of two sports—golf, and tennis. If a sport is played by more than one of the six people, then the people who play that sport are ranked in order of ability from highest to lowest, with no ties. The following conditions must apply:

Oliver plays tennis.

Lina plays golf.

There is no golf player ranked higher than Lina.

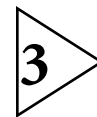
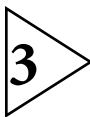
If Maricella plays golf, then Paulo and Shigeru play golf, Paulo ranking lower than Maricella but higher than Shigeru.

If Maricella plays tennis, then Shigeru plays tennis, Shigeru ranking lower than Oliver but higher than Maricella.

If Paulo plays tennis, then Kim plays tennis, Oliver ranking lower than Kim but higher than Paulo.

13. Which one of the following could be true?
  - (A) Maricella plays tennis and Shigeru plays golf.
  - (B) Paulo plays tennis and Kim plays golf.
  - (C) Kim plays tennis and Paulo plays golf.
  - (D) Paulo and Oliver play tennis, Paulo ranking higher than Oliver.
  - (E) Maricella and Shigeru play tennis, Maricella ranking higher than Shigeru.
14. Each of the following could be the lowest-ranking tennis player EXCEPT:
  - (A) Shigeru
  - (B) Kim
  - (C) Oliver
  - (D) Paulo
  - (E) Maricella
15. Which one of the following could be a complete and accurate list of the people who play tennis, listed in order of rank from highest to lowest?
  - (A) Shigeru, Paulo, Oliver
  - (B) Oliver, Paulo, Kim
  - (C) Shigeru, Oliver, Maricella
  - (D) Oliver, Shigeru, Kim, Maricella
  - (E) Paulo, Maricella, Shigeru, Kim
16. If Shigeru plays golf, then each of the following are pairs of people who must play the same sport as each other EXCEPT:
  - (A) Paulo and Maricella
  - (B) Paulo and Shigeru
  - (C) Kim and Maricella
  - (D) Paulo and Lina
  - (E) Maricella and Shigeru
17. If Oliver is the highest-ranking tennis player, which one of the following must be true?
  - (A) Oliver and Maricella play the same sport as each other.
  - (B) Paulo and Lina play the same sport as each other.
  - (C) Paulo and Oliver play the same sport as each other.
  - (D) Kim and Lina do not play the same sport as each other.
  - (E) Kim and Paulo do not play the same sport as each other.
18. Suppose that the condition is added that Shigeru and Paulo do not play the same sport as each other. If all the other conditions remain in effect, then each of the following could be true EXCEPT:
  - (A) Maricella and Kim play the same sport as each other.
  - (B) Paulo and Kim play the same sport as each other.
  - (C) Paulo and Maricella play the same sport as each other.
  - (D) Kim and Paulo do not play the same sport as each other.
  - (E) Maricella and Kim do not play the same sport as each other.

GO ON TO THE NEXT PAGE.



**Questions 19–24**

A disc jockey will play a sequence consisting of exactly seven different songs: three ballads—F, G, and H—and four dance tunes—R, S, V, and X. The following conditions must be met:

No dance tune can be played immediately after another dance tune.

H must be played earlier in the sequence than V.

V and S must be separated from each other by exactly one song.

S must be played immediately before or immediately after F.

F must be played immediately after R, unless G is played earlier than R.

19. Which one of the following could be the order of the songs in the sequence?
- (A) G, H, S, X, V, F, R  
 (B) R, H, X, G, S, F, V  
 (C) S, F, X, G, R, H, V  
 (D) V, F, S, H, X, G, R  
 (E) X, G, R, H, S, F, V
20. Which one of the following must be true about the sequence?
- (A) The first song is X.  
 (B) The fifth song is S.  
 (C) No ballad is played immediately after a dance tune.  
 (D) No ballad is played immediately after another ballad.  
 (E) No dance tune is played immediately after a ballad.
21. Which one of the following could be the fourth song in the sequence?
- (A) G  
 (B) R  
 (C) S  
 (D) V  
 (E) X
22. Which one of the following could be the first song in the sequence?
- (A) R  
 (B) S  
 (C) V  
 (D) F  
 (E) G
23. If the third song in the sequence is S, which one of the following must be the sixth song?
- (A) G  
 (B) H  
 (C) R  
 (D) V  
 (E) X
24. If the seventh song in the sequence is R, which one of the following could be the fifth song?
- (A) F  
 (B) G  
 (C) H  
 (D) V  
 (E) X

**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.