

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 car drives into the center ring of a circus and exactly eight clowns—Q, R, S, T, V, W, Y, and Z—get out of the car, one clown at a time. The order in which the clowns get out of the car is consistent with the following conditions:

V gets out at some time before both Y and Q.

Q gets out at some time after Z.

T gets out at some time before V but at some time after R.

S gets out at some time after V.

R gets out at some time before W.

- Which one of the following could be the order, from first to last, in which the clowns get out of the car?
 - T, Z, V, R, W, Y, S, Q
 - Z, R, W, Q, T, V, Y, S
 - R, W, T, V, Q, Z, S, Y
 - Z, W, R, T, V, Y, Q, S
 - R, W, T, V, Z, S, Y, Q
- Which one of the following could be true?
 - Y is the second clown to get out of the car.
 - R is the third clown to get out of the car.
 - Q is the fourth clown to get out of the car.
 - S is the fifth clown to get out of the car.
 - V is the sixth clown to get out of the car.
- If Z is the seventh clown to get out of the car, then which one of the following could be true?
 - R is the second clown to get out of the car.
 - T is the fourth clown to get out of the car.
 - W is the fifth clown to get out of the car.
 - V is the sixth clown to get out of the car.
 - Y is the eighth clown to get out of the car.
- If T is the fourth clown to get out of the car, then which one of the following must be true?
 - R is the first clown to get out of the car.
 - Z is the second clown to get out of the car.
 - W is the third clown to get out of the car.
 - V is the fifth clown to get out of the car.
 - Y is the seventh clown to get out of the car.
- If Q is the fifth clown to get out of the car, then each of the following could be true EXCEPT:
 - Z is the first clown to get out of the car.
 - T is the second clown to get out of the car.
 - V is the third clown to get out of the car.
 - W is the fourth clown to get out of the car.
 - Y is the sixth clown to get out of the car.
- If R is the second clown to get out of the car, which one of the following must be true?
 - S gets out of the car at some time before T does.
 - T gets out of the car at some time before W does.
 - W gets out of the car at some time before V does.
 - Y gets out of the car at some time before Q does.
 - Z gets out of the car at some time before W does.
- If V gets out of the car at some time before Z does, then which one of the following could be true?
 - R is the second clown to get out of the car.
 - T is the fourth clown to get out of the car.
 - Q is the fourth clown to get out of the car.
 - V is the fifth clown to get out of the car.
 - Z is the sixth clown to get out of the car.

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Questions 8–13

Each of six tasks—harvesting, milling, plowing, spinning, threshing, and weaving—will be demonstrated exactly once at a farm exhibition. No two tasks will be demonstrated concurrently. Three volunteers—Frank, Gladys, and Leslie—will each demonstrate exactly two of the tasks. The tasks must be demonstrated in accordance with the following conditions:

Frank demonstrates exactly one task before Gladys demonstrates any of the tasks.
 Frank performs neither the first nor the last demonstration.
 Gladys demonstrates neither harvesting nor milling.
 Leslie demonstrates neither harvesting nor threshing.
 Milling is the next task demonstrated after threshing is demonstrated.

8. Which one of the following is an acceptable list of the volunteers and the tasks each demonstrates, in order from the first to the last demonstration?

- (A) Frank: weaving; Gladys: threshing;
Leslie: milling; Leslie: spinning;
Frank: harvesting; Gladys: plowing
- (B) Leslie: plowing; Frank: harvesting;
Frank: threshing; Leslie: milling;
Gladys: spinning; Gladys: weaving
- (C) Leslie: plowing; Frank: spinning;
Gladys: threshing; Leslie: milling;
Frank: harvesting; Gladys: weaving
- (D) Leslie: spinning; Leslie: weaving;
Frank: plowing; Gladys: harvesting;
Frank: threshing; Gladys: milling
- (E) Leslie: weaving; Frank: threshing;
Gladys: spinning; Leslie: milling;
Frank: harvesting; Gladys: plowing

9. Which one of the following must be true?

- (A) Frank demonstrates harvesting.
- (B) Frank demonstrates milling.
- (C) Frank demonstrates threshing.
- (D) Gladys demonstrates plowing.
- (E) Gladys demonstrates weaving.

10. If Leslie performs the fourth demonstration, then harvesting could be the demonstration performed

- (A) first
- (B) second
- (C) third
- (D) fourth
- (E) sixth

11. If Gladys demonstrates plowing immediately before Frank demonstrates threshing, which one of the following must be true?

- (A) Frank demonstrates harvesting for the second demonstration.
- (B) Gladys demonstrates spinning for the fifth demonstration.
- (C) Leslie demonstrates weaving for the first demonstration.
- (D) Gladys performs the fourth demonstration.
- (E) Leslie performs the sixth demonstration.

12. Which one of the following must be true?

- (A) Frank performs the second demonstration.
- (B) Gladys performs the fourth demonstration.
- (C) Gladys performs the sixth demonstration.
- (D) Leslie performs the first demonstration.
- (E) Leslie performs the second demonstration.

13. Which one of the following could be true?

- (A) Harvesting is demonstrated first.
- (B) Milling is demonstrated second.
- (C) Threshing is demonstrated first.
- (D) Threshing is demonstrated last.
- (E) Weaving is demonstrated first.

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Questions 14–19

Seven job applicants—Feng, Garcia, Herrera, Ilias, Weiss, Xavier, and Yates—are hired to fill seven new positions at Chroma, Inc. One position is in the management department, three are in the production department, and three are in the sales department. The following conditions must apply:

Herrera is hired for a position in the same department as Yates.

Feng is hired for a position in a different department from Garcia.

If Xavier is hired for a sales position, then Weiss is hired for a production position.

Feng is hired for a production position.

14. Which one of the following could be a complete and accurate matching of the applicants with the departments in which they were hired?
- (A) management: Weiss;
production: Feng, Herrera, Yates;
sales: Garcia, Ilias, Xavier
- (B) management: Weiss;
production: Garcia, Ilias, Xavier;
sales: Feng, Herrera, Yates
- (C) management: Xavier;
production: Feng, Garcia, Herrera;
sales: Ilias, Yates, Weiss
- (D) management: Xavier;
production: Feng, Herrera, Ilias;
sales: Garcia, Weiss, Yates
- (E) management: Xavier;
production: Feng, Ilias, Weiss;
sales: Garcia, Herrera, Yates
15. Which one of the following is a complete and accurate list of the applicants, each of whom CANNOT be hired for a production position?
- (A) Feng, Ilias, Xavier
(B) Garcia, Herrera, Yates
(C) Herrera, Yates
(D) Garcia
(E) Ilias
16. It can be determined in which department each of the seven applicants is hired if which one of the following statements is true?
- (A) Feng and Weiss are both hired for production positions.
(B) Garcia and Yates are both hired for sales positions.
(C) Ilias and Weiss are both hired for sales positions.
(D) Ilias and Weiss are both hired for production positions.
(E) Ilias and Xavier are both hired for production positions.
17. Each of the following could be an accurate partial list of the applicants hired for sales positions EXCEPT:
- (A) Garcia, Ilias
(B) Garcia, Xavier
(C) Garcia, Yates
(D) Herrera, Weiss
(E) Herrera, Xavier
18. If Feng is hired for a position in the same department as Xavier, then each of the following could be true EXCEPT:
- (A) Garcia is hired for a sales position.
(B) Herrera is hired for a production position.
(C) Ilias is hired for a sales position.
(D) Weiss is hired for the management position.
(E) Weiss is hired for a production position.
19. If Xavier is not hired for one of the production positions, then which one of the following could be true?
- (A) Feng and Herrera are both hired for sales positions.
(B) Herrera and Weiss are both hired for sales positions.
(C) Feng and Yates are both hired for production positions.
(D) Garcia and Weiss are both hired for production positions.
(E) Herrera and Weiss are both hired for production positions.

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Questions 20–24

Musicians perform each of exactly five pieces—Nexus, Onyx, Synchrony, Tailwind, and Virtual—once, and one at a time; the pieces are performed successively (though not necessarily in that order). Each piece is performed with exactly two instruments: Nexus with fiddle and lute, Onyx with harp and mandolin, Synchrony with guitar and harp, Tailwind with fiddle and guitar, and Virtual with lute and mandolin. The following conditions must apply:

Each piece shares one instrument with the piece performed immediately before it or after it (or both).

Either Nexus or Tailwind is performed second.

20. Which one of the following could be the order, from first to last, in which the pieces are performed?
- (A) Nexus, Synchrony, Onyx, Virtual, Tailwind
 (B) Synchrony, Tailwind, Onyx, Nexus, Virtual
 (C) Tailwind, Nexus, Onyx, Virtual, Synchrony
 (D) Tailwind, Nexus, Synchrony, Onyx, Virtual
 (E) Virtual, Nexus, Synchrony, Onyx, Tailwind
21. Which one of the following instruments CANNOT be shared by the third and fourth pieces performed?
- (A) fiddle
 (B) guitar
 (C) harp
 (D) lute
 (E) mandolin

22. If each piece (except the fifth) shares one instrument with the piece performed immediately after it, then which one of the following could be true?
- (A) Virtual is performed first.
 (B) Synchrony is performed second.
 (C) Onyx is performed third.
 (D) Nexus is performed fourth.
 (E) Tailwind is performed fifth.
23. Each of the following could be the piece performed first EXCEPT:
- (A) Nexus
 (B) Onyx
 (C) Synchrony
 (D) Tailwind
 (E) Virtual
24. If Synchrony is performed fifth, then which one of the following could be true?
- (A) Nexus is performed third.
 (B) Onyx is performed third.
 (C) Tailwind is performed fourth.
 (D) Virtual is performed first.
 (E) Virtual is performed second.

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.