

Important: All volunteers supporting events in the United States and Canada must be screened and assigned using the Volunteer Management System and are required to complete their certification test using the [online volunteer certification](#) system.

This test is provided publicly for team use and volunteer certification at events outside of the United States and Canada.

Revision History

Revision	Date	Description
1.0	10/15/2024	Initial Release
1.1	10/21/2024	Q4 - edited to reflect most current Competition Manual changes

Questions

- Q1. DRIVE TEAMS may not interact with their OPERATOR CONSOLES during AUTO, with the following exceptions (select all that apply)
- A. To press the start button at the start of the MATCH
 - B. To press the stop button before the end of AUTO
 - C. To correct an unexpected ROBOT behavior
 - D. For personal or OPERATOR CONSOLE safety
- Q2. DRIVE TEAMS must no longer actively control their ROBOT at the end of TELEOP. This can be done by either pressing the stop button on the DRIVER STATION app or by discontinuing any operation of the ROBOT by the end of the MATCH period.
- A. True
 - B. False
- Q3. ROBOTS may MOMENTARILY exceed CONTROL limits while collecting SAMPLES that are in the SUBMERSIBLE ZONE.
- A. True
 - B. False
- Q4. To initiate an ASCENT, the ROBOT CHASSIS must be outside of the ____ ZONE
- A. SUBMERSIBLE ZONE
 - B. ASCENT ZONE
 - C. NET ZONE
 - D. OBSERVATION ZONE

- Q5. ROBOTS are required to start in a legal configuration. ROBOTS that are unable to establish and maintain an appropriate starting configuration should be
- A. Removed from the FIELD
 - B. Allowed to play after AUTO
 - C. DISABLED for the entire MATCH
 - D. Both A and B
- Q6. MINOR FOULS add ____ points to the non-offending ALLIANCE'S score per occurrence; MAJOR FOULS add ____ points to the non-offending ALLIANCE'S score per occurrence.
- A. 5 and 10
 - B. 5 and 15
 - C. 10 and 30
 - D. 20 and 100
- Q7. ROBOTS may not grasp, damage, or attach to any ARENA element or structure other than SCORING ELEMENT
- A. True
 - B. False
- Q8. Referees are expected to review a teams' video replay of a MATCH
- A. True
 - B. False
- Q9. If a referee disagrees with a rule as written in the Competition Manual, they may choose not to apply that rule if they notice a violation of the rule.
- A. True
 - B. False
- Q10. Teams must immediately be penalized for stepping outside of the ALLIANCE AREA.
- A. True
 - B. False
- Q11. If a referee disagrees with a rule as written in the Competition Manual, they may choose not to apply that rule if they notice a violation of the rule
- A. True
 - B. False
- Q12. The Competition Manual as well as the latest Team Update should be reviewed prior to each event
- A. True
 - B. False
- Q13. You are trying to evaluate ASCENT LEVEL score, but the ROBOT is still moving. At what point do you evaluate and score the ASCENT?
- A. When the timer reaches zero

- B. 3 Seconds after the timer reaches zero
- C. When the ROBOT is motionless
- D. Either when all motion stops or 3 seconds after the timer reaches zero

Q14. What happens to SAMPLES that leave the FIELD?

- A. They are reintroduced approximately where they left the FIELD
- B. They are returned to the HUMAN PLAYER
- C. SAMPLES are not returned to the FIELD
- D. SAMPLES are placed in the OBSERVATION ZONE

Q15. HUMAN PLAYERS may introduce SCORING ELEMENTS in both AUTO and TELEOP periods of the MATCH

- A. True
- B. False

Q16. ROBOTS that invalidate their first attempt to ASCEND are no longer eligible for this scoring achievement

- A. True
- B. False

Q17. A ROBOT places a neutral SAMPLE with a CLIP attached into the HIGH BASKET. What is the score value for this achievement?

- A. 8 points
- B. 10 points
- C. 0 points

Q18. A ROBOT must make contact with the LOW RUNG in order to ASCEND to the HIGH RUNG.

- A. True
- B. False

Q19. In AUTO, a blue ALLIANCE ROBOT drives to the red ALLIANCE'S half of the FIELD. Blue ROBOT drives through three neutral SAMPLES on the SPIKE MARKS, displacing them from their starting location. What is the penalty for blue ROBOT?

- A. MAJOR FOUL (1 MAJOR FOUL)
- B. MAJOR FOUL per SCORING ELEMENT (3 MAJOR FOULS)
- C. MINOR FOUL per SCORING ELEMENT (3 MINOR FOULS)

Q20. During a MATCH, you notice a HUMAN PLAYER picking up SAMPLES and assembling SPECIMENS pre-MATCH, and during the AUTO to TELEOP transition. What do you do?

- A. Ask the HUMAN PLAYER to put down the SCORING ELEMENTS
- B. Advise the HUMAN PLAYER that they cannot interact with SCORING ELEMENTS outside of the AUTO and TELEOP periods of the MATCH
- C. Give the team a MAJOR FOUL
- D. Nothing, this is allowed

- Q21. Which circumstances allow for replay of a match? (select all that apply, not an all-inclusive list)
- A. Failure of the MATCH timer display
 - B. Verified Wi-Fi interference
 - C. Robot electrical failures
 - D. Unexpected robot behavior
- Q22. In addition to the referee roles and responsibilities, head referees must also:
- A. Serve as a knowledge reference and training resource for the referee crew
 - B. Communicate and interact clearly and effectively with teams
 - C. Help manage the tournament schedule
 - D. Work together with all other key volunteers
 - E. All of the above
- Q23. When answering team questions:
- A. Listen to the concerns from an adult representative
 - B. Listen patiently to the team representative and hear them out completely
 - C. Allow the entire team to ask their question
 - D. Engage in a debate with a team representative
- Q24. Teams who ask questions of the head referee about a call are encouraged to bring supporting documentation.
- A. True
 - B. False
- Q25. As a head referee, it is your role to:
- A. Be patient and listen to team questions and hear their concerns out completely.
 - B. Act as a role model to teams
 - C. Reinforce positive behaviors displayed by the teams
 - D. All of the above
- Q26. If a team does not agree with the head referee's decision, they are allowed to:
- A. Engage in repeated attempts to reopen the discussion about the decision
 - B. Send an adult over to discuss the decision with the referee
 - C. Send multiple students over to discuss the decision
 - D. None of the above, the decision made by the head referee is final
- Q27. If a score must change after the conclusion of a match, and the change impacts the outcome (i.e., the blue alliance now wins, versus the red alliance that originally won the match), the head referee should:
- A. Post the new score immediately
 - B. Pause the event

C. Speak with each team involved in the match prior to making the change.

Q28. Prior to allowing teams onto the FIELD to retrieve their ROBOTS after a MATCH has concluded, the Head Referee must (select all that apply):

- A. Confirm with the Referee crew that all scores are entered and certified
- B. Tell the teams to press the stop button on their DRIVER STATION
- C. Remove ROBOTS from the SUBMERSIBLE
- D. Reset the field

Q29. During the MATCH, a referee notices a team grossly exceeding the sizing constraints in G418. Which of these are correct next steps if the infraction was NOT determined to be used for strategic benefit?

- A. If more than MOMENTARY, issue a MAJOR FOUL
- B. If less than MOMENTARY, do nothing
- C. Request reinspection from the LRI
- D. DISABLE the ROBOT immediately

Answer Key

- Q1. A, B, D
- Q2. A – per G406
- Q3. A – per G410
- Q4. A – per G420
- Q5. C – per G301
- Q6. B – per Table 10-4 in Section 10.6
- Q7. A – per G416
- Q8. B – per T201
- Q9. B - All rules outlined in the Competition Manual must be applied to all. This ensures a consistent experience for all teams competing during the season
- Q10. B - If a DRIVE TEAM member simply breaks the plane of the ALLIANCE AREA during a MATCH, this should not be penalized.
- Q11. B - All rules outlined in the Competition Manual must be applied consistently and fairly to all. This ensures a consistent experience for all teams competing during the season
- Q12. A
- Q13. D – per section 10.5, scoring
- Q14. C – per G408
- Q15. A – per G431
- Q16. B – Robots may disengage from the SUBMERSIBLE, and can attempt their ASCENT again
- Q17. C – Neutral SAMPLES with a CLIP have no score value per section 10.5.1
- Q18. B - ROBOTS may directly contact the HIGH RUNG as long as they are not in contact with the TILES, either directly or transitively through SCORING ELEMENTS, and not supported by any other part of the SUBMERSIBLE structure except for the LOW RUNG
- Q19. B – MAJOR FOUL per each SAMPLE the ROBOT contacts (per G404 part B)
- Q20. D – the HUMAN PLAYER may interact with SCORING ELEMENTS during pre-MATCH and the AUTO and TELEOP transition. They may only introduce SCORING ELEMENTS to the FIELD during AUTO and TELEOP
- Q21. A, B
- Q22. E
- Q23. B
- Q24. A
- Q25. D
- Q26. D – per T201
- Q27. C - It is recommended to gather the captains from all teams from both ALLIANCE before sharing the change. This is ESPECIALLY important during playoff MATCHES.
- Q28. A, B
- Q29. B – per G418.