

2013 *FIRST* Robotics Competition Quiz

1) What is the name of this year's FRC game?

- a. Diabolical Dynamics b. Tower Power c. Ultimate Ascent d. Rebound Rumble

2) A red team's Robot shoots a white Disc into one of the Middle red Goals during Tele-Operated period; how many points are earned?

- a. 1 pt for red b. 2 pts for red c. 3 pts for red d. 2 pts for blue

3) When can the Feeders start throwing Discs onto the Field over the Alliance Station wall?

- a. After the Autonomous period b. Never
c. During the last 30 seconds of the Match d. Only during the last 10 seconds of the Match

4) Which of the following actions could result in at least one Foul?

- a. Pinning an opponent for less than 5 seconds
b. Passing a Disc through the Alliance Station wall during Autonomous period
c. A Robot possessing three Discs at once
d. All of the above

5) What is the maximum vertical size of a Robot during a Match?

- a. 60" b. 60" in its Autozone and/or in contact with its Pyramid, 84" otherwise
c. 84" b. 84" in its Autozone and/or in contact with its Pyramid, 60" otherwise

6) What are the maximum allowable dimensions of the Robot frame perimeter?

- a. 112" total b. 28"X38"
c. Fit within a 54" diameter vertical cylinder d. Both a and c.

7) How many teams are on each Alliance?

- a. 2 b. 3 c. 4 d. 6

8) Each team can have the following as part of their field crew:

- a. Two Drivers, one Feeder, one Coach
b. One Driver, one Feeder, one Coach
c. Two Drivers, one Feeder, one Human Player, and one Coach
d. Two Drivers, one Feeder

9) Who is allowed to be a Coach on the field?

- a. Student b. Engineer c. Teacher d. All of the above

10) The Robot weight limit excludes which of the following:

- a. Batteries b. Bumpers c. Both d. Neither

11) The red Alliance wins their Match by a score of 80 to 30. How many qualifying points will they receive?

- a. 0 b. 1 c. 2 d. 80

12) After qualification score, what is used to rank teams during qualification matches?

- a. Average losing alliance score b. Cumulative sum of Auto Goal points
c. Total Coopertition points d. Cumulative sum of Climb points

13) A blue alliance Robot is out of control and commits many game rule violations during a Match. How will their Fouls and Technical-Fouls be applied to the Match score?

- a. 3 pts for each Foul and 20 pts for each Technical-Foul are subtracted from the blue alliance score
b. 3 pts for each Foul and 20 pts for each Technical-Foul are subtracted from the red alliance score
c. 3 pts for each Foul and 20 pts for each Technical-Foul are added to the blue alliance score
d. 3 pts for each Foul and 20 pts for each Technical-Foul are added to the red alliance score

14) When is Stop Build (or bag and tag) day?

- a. January 31st b. February 14th c. February 21st d. February 19th

15) Who is allowed to speak to the head referee about field play?

- a. Anyone b. Only mentors
c. Only the Coach d. Only pre-college students

16) During the Autonomous Period, a blue Robot is allowed to do which of the following?

- a. Play defense against the red alliance shooting Discs into goals
b. Setup in the Blue Loading Zone ready to receive Discs from the Feeders
c. Collect Discs from the Centerline
d. Both a and b

17) Which of the following is true?

- a. All robots must include 2 attachment points for the belay system
- b. Only climbing robots must include the belay system attachment points
- c. The belay system attachment point is provided by FIRST prior to each match
- d. None of the above

18) The following would always result in a foul:

- a. Contacting the opposing Alliance's Pyramid
- b. Contact outside of the Bumper Zone
- c. Going into the opposing Alliances Lane
- d. Contacting a robot in contact with its loading zone or pyramid

19) Who is allowed to handle the Discs?

- a. Feeders only
- b. Robots only
- c. Robots and Feeders
- d. Robots, Feeders, Drivers, and Coaches

20) Which of the following must be true in order for a robot to successfully complete a Level 3 Climb?

- a. The Robot must be fully supported by its Pyramid
- b. The Robot must be fully above the lower vertical limit of the Level 3 mark on its Pyramid
- c. The Robot must have contacted each level of the Pyramid sequentially (0,1,2,3)
- d. Both b and c

21) The Red alliance plays a Match. How many points will the Red alliance earn if the following is accomplished?

- 4 white Discs were scored in the Red Middle Goal during the Autonomous period
- 5 white Discs were scored in the Red High Goal during Tele-Operated period
- 10 white Discs and 1 blue Disc were scored in the Red Middle Goals during Tele-Operated period
- 7 white Discs were scored in the Red Low Goal during Tele-Operated period
- 2 Red Discs and 1 white Disc were scored in the Red Pyramid Goal during Tele-Operated period
- 1 Red Robot successfully completed a Level 2 climb on the Red Pyramid
- 1 Red Robot successfully completed a Level 3 climb on the Red Pyramid

- a. 112 points
- b. 118 points
- c. 120 points
- d. 125 points

22) What are the requirements for Starting Configuration of the robot?

- a. Touch its Pyramid
- b. Maximum height of 84”.
- c. No extensions beyond frame perimeter
- d. All of the above

23) A red Robot contacts the blue Pyramid while two blue Robots are attempting to climb the Pyramid and their climbing ability is affected. What is the outcome of this interaction?

- a. Red Robot is assigned a Technical-Foul
- b. Red Robot is assigned a Red Card
- c. Blue robots are counted as having completed a Level 3 Climb
- d. All of the above

24) Which of the following are required for Bumpers?

- a. Minimum 8" coverage in each corner
- b. Team numbers in or outlined in white on all sides
- c. Minimum 1” of bumper ends must be supported by robot frame
- d. All of the above

25) How far can a Robot extend outside of its Frame Perimeter?

- a. Not at all in starting configuration
- b. Not at all during the entire match
- c. Robot must remain within a 54” diameter vertical right cylindrical volume
- d. Both a and c.