1. Team Composition:

1.1 Team size:

- The number of players participating max-3.

1.2 Age Restriction:

- No age restrictions for participants.

1.3 Registration and Documentation:

- Teams typically need to register for the event in advance and provide all necessary documentation, such as team information, robot specifications and any required fees.

2. Robot Specifications:

2.1 Weight Limit:

- The weight category are 5Kg ,10Kg and 15Kg.Robots above 15Kg are not allowed.

2.2 Dimensions:

- *The minimum dimension of the robot should be a cube of about 1 foot (30cm) on each side.*

2.3 Robot Mobility:

- All type of locomotion such as wheels, tracks, legs, etc. are acceptable.

2.4 Power source:

- The following types of batteries are allowable: i) LiPo (Lithium Polymer) Batteries, ii) LiFePO4 (Lithium Iron Phosphate) Batteries, iii) NiMH (Nickel Metal Hydride) Batteries, iv) Lead-Acid Batteries.
- **Maximum voltage & capacity limits**

3. Weaponry and Armor:

3.1 No projectile Weapons:

- This (Robowars) events do not allow projectile weapons like firearms, rockets, or any weapon that could pose a safety hazard.

3.2 Limits on Weapon Power:

- *State the power or energy output of weapons to prevent excessive damage or safety concerns.*

3.3 No Entanglement Devices:

- Robots are prohibited from using entanglement devices like nets, wires, or adhesive substances that could trap or reisist an opponent.

3.4 Anti-Entanglement Measures:

- Robots should be designed to prevent entanglement with opponents, such as by using smooth surfaces or avoiding protruding edges.

4. Safety Measures:

4.1 Robot Construction and Operation:

- Structural Integrity: Robots must be built with a strong and robust structure to prevent accidental disintegration during combat. Weak or brittle materials should be avoided.

4.2 Electrical and Power Safety:

- Isolation of Electrical Components: Electrical components must be properly insulated and isolated to prevent short circuits and electric shock hazards.
- Battery Safety: Batteries must be securely mounted, and their terminals should be protected from damage. Teams must adhere to specific battery regulations.

4.3 Radio Interference and Frequency Coordination:

- Frequency Management: Teams using radio-controlled robots must coordinate their frequencies with event organizers to prevent interference with other robots.
- Fail-Safe Mechanisms: Robots should have fail-safe mechanisms that activate in the event of signal loss to ensure they do not go out of control.

4.4 Fire Safety:.

- Flame-Resistant Materials: Robots must not use materials that are highly flammable, and special precautions should be taken if any pyrotechnic or flame-producing devices are part of the robot's design.

4.5 Noise and Hearing Protection:

- Noise Levels: Robots should not produce excessive noise levels that could harm hearing. Teams are encouraged to use hearing protection when working on or near their robots.

4.6 Compliance with Inspection:

- Pre-Event Inspection: All robots must pass a pre-event safety inspection to ensure compliance with safety regulations.
- Post-Match Inspection: Robots may be inspected after matches to verify their continued compliance with safety rules. Teams must make necessary adjustments if required.

4.7 Reporting Safety Concerns:

- Participants Responsibility: All participants are encouraged to report any safety concerns or potential hazards to event organizers immediately.

5. Remote Control:

5.1 Remote Control Systems:

- Reliability: Remote control systems must be reliable and capable of maintaining a stable connection with the robot throughout the match.
- Frequency Coordination: Teams using remote control systems must coordinate their radio frequencies with event organizers to prevent interference with other robots.

5.2 Autonomy and Autonomous Mode:

- Controlled Autonomy: Robots with autonomous capabilities must ensure that their autonomous functions are controllable and do not pose a safety risk. The robot must be under human control at all times when in proximity to people or other robots.
- Autonomous Behavior Testing: Autonomous robots must undergo rigorous testing to ensure that their behavior is predictable and safe during matches.

5.3 Emergency Shutdown:

- E-stop Button: All remote control systems must include an easily accessible Emergency Stop (E-stop) button or switch. Pressing this button should immediately disable all robot movements and weapon systems.
- Operator Awareness: Operators must be trained to recognize situations where the E-stop should be used and must react swiftly to any potential safety risks.

5.4 Operator Training:

- Operator Competency: Operators should be trained and competent in using the remote control system to ensure safe and effective robot operation.
- Operator Station Setup: The operator station should be arranged to provide a clear view of the arena and the robot's actions during the match.

5.5 Remote Control Failures:

- Backup Controls: Robots should have backup control options or fail-safes in case the primary remote control system experiences technical failures.
- Technical Support: Technical support personnel will be available to assist teams in resolving remote control system issues promptly.

5.6 Interference Mitigation:

- Signal Interference: Teams must take measures to minimize interference in the radio signals between the remote control and the robot.
- Pre-Match Checks: Remote control systems should undergo pre-match checks to ensure they are functioning correctly.

5.7 Reporting Issues:

- Technical Problems: Teams experiencing technical problems with their remote control systems should report them to event organizers immediately.
- Safety Concerns: Any safety concerns related to remote control systems should be reported to event organizers promptly.

6. Match Format:

- Define the format of the matches (e.g., single elimination, round-robin).
- Specify the duration of each match (e.g., 5 minutes).
- Describe how points are scored or how a winner is determined (e.g., disablement of the opponent, judges' decision).

7. Arena Specifications:

- The competition will be held on a *insert material* arena measuring 12ft X 12ft with a maximum altitude of 4ft from the ground.
- The battleground is made of non-slippery *material* measuring XXft X XXft.
- The entire arena is encased in a metal cage, safeguarding it from any external access during matches.
- The arena also features multiple hazards and obstacles like_____.
- Overhead LED lighting will illuminate the arena evenly to provide optimal visibility.
- Minimum *XX 120V* power outlets will be distributed for use.
- High definition cameras with be positioned to ensure no foul-play is practiced.

Arena Rules:

- Each participant must initially place their robots on the space provided for each team. Neglecting this requirement may result in penalties.
- Any serious damage to the arena will incur fines.

8. Repair and Maintenance:

- Participants are required to bring their own tools and parts for any repair or changes required.
- Participants will be given maximum 15 minutes between matches for repair and maintenance.
- Participants are allowed to use only one robot throughout the tournament. Not following this rule may lead to disqualification.

9. Ethical Guidelines:

Participants are requested to contribute to the seamless operation of the competition making it fair, safe and respectful.

9.1 Safety:

- All teams must design robots with the safety of spectators, participants and event staff in mind. Failure to pass the safety test may lead to disqualification.

9.2 Fair Play:

- Cheating and unauthorized modifications to the robots is strictly prohibited..
- Intentionally interfering with the control systems or attempts of tampering and sabotage of opposition robots is also considered cheating.
- Match-fixing/Pre-arranging outcomes and disrupting on-going matches is a severe breach of fair play..

9.3 Decorum:

- Unsupportive behavior like bullying, threatening, showing aggression towards other teams or event staff will not be tolerated.
- A respectful and cooperative atmosphere shall be maintained at all times.

10. Judging Criteria:

- Describe the criteria used by judges to evaluate the robots' performance (e.g., aggression, control, damage).

11. Prizes and Awards:

- 1st Prize-25,000
- 2nd Prize-15.000
- 3rd Prize-10,000
- There would be a surprise prize money of ₹3,000 which will be declared on spot.

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