1 Definition of the game:

ROS Robot challenge is a game measure your skills in using ROS, so the robot need to achieve maximum number of tasks in the minimum time. The robot should success in the take according to the instructions and rules of the game in this manual. The challenge is divided into two phases.

2 The first phase (Teleoperation)

It is a qualification stage, the robot of each team will remote controlling using ROS teleoperation functions and success to reach three spots that been marked by the referees. The main rules for ROS teleoperation challenge are:

- Team have to use ROS functions only for remote operation the robot.
- Team have to show evidence that they using ROS.
- The team how to setup the wifi network and setup the teleoperation station.
- The three target spots will setup by the referees and will change randomly, after the team member inter the teleoperation station.
- The team member cant know or direct seen the field of play or the spots location.
- The timer will start by the referees.
- If the robot stick and the teem need to restart the robot and retriever, the team have to ask the referees to bring back the robot to the station.
- The timer will not puss for any reasons including the time for retriever the robot to station.
- Each team have two rounds and the highest score will recorded.

2.1 Scoring sheet

Item	Scoring	Total
ROS used	compulsory	
Sport-A	x10	
Sport-B	x10	
Sport-C	x10	
Back to staion	x10	
Time	(_____ - 5)x10	
	Total =	

3 The second phase (SLAM challenge)

SLAM challenge is the secand phase of the ROS Game, where the team have to build map for the challenge area and autonomous navigation the robot from the start stop to the target location. The main rules for ROS SLAM challenge are:

- The team how to setup the wifi network and setup the robot.
- Team have to use ROS only for all the time.
- Team have to show evidence that they using ROS.
- Team have to show mapping the challenge area using ROS.
- The start and target spots are marked by referees and will not change.
- The timer will start by the referees.
- If the robot stick and the teem need to restart the robot and retriever, the team can go and bring back the robot to the station.
- The timer will not puss for any reasons including the time for retriever the robot to station.
- Each team will giving 30 minutes for mapping.

3.1 Scoring sheet

Item	Scoring	Total
ROS used	compulsory	
Mapping	x30	
autonomous navigation	x10	
reach the target spot	x30	
Time	(_____ - 5)x10	
	Total =	