POORNIMA
INSTITUTE OF ENGINEERING & TECHNOLOGY

Report on Robotics workshop

DATE: 13/01/2016
Venue: PIET CAMPUS

The event was held for the students of **Second year and Third year** of Electrical Engineering Department. It was held to make students aware about the Robotics and the benefits of carrier in it. They were informed about robotics field. These technologies are used to develop machines that can substitute for humans and replicate human actions. Robots can be used in any situation and for any purpose, but today many are used in dangerous environments (including bomb detection and de-activation), manufacturing processes, or where humans cannot survive. Information about the robotics in much greater detail was passed on to students.

This helped them understand more deeply what robotics is and how they can shape their studies to form a carrier in the same.

These technologies are used to develop machines that can substitute for humans. Robots can be used in any situation and for any purpose, but today many are used in dangerous environments (including bomb detection and de-activation), manufacturing processes, or where humans cannot survive. Robots can take on any form but some are made to resemble humans in appearance. This is said to help in the acceptance of a robot in certain replicative behaviors usually performed by people. Such robots attempt to replicate walking, lifting, speech, cognition, and basically anything a human can do. Many of today's robots are inspired by nature, contributing to the field of bio-inspired robotics.

APPLICATIONS..

Current and potential applications include:

- Military robots
- Caterpillar plans to develop remote controlled machines and expects to develop fully autonomous heavy robots by 2021. Some cranes already are remote controlled.
- It was demonstrated that a robot can perform a herding task.

- Robots are increasingly used in manufacturing (since the 1960s). In the auto industry, they can amount for more than half of the "labor". There are even "lights off" factories such as an IBM keyboard manufacturing factory in Texas that is 100% automated
- Robots such as HOSPIare used as couriers in hospitals (hospital robot). Other hospital tasks performed by robots are receptionists, guides and porters helpers.
- Robots can serve as waitersand cooks also at home. Boris is a robot that can load a dishwasher.
- Robot combat for sport – hobby or sport event where two or more robots fight in an arena to disable each other. This has developed from a hobby in the 1990s to several TV series worldwide.

LEARNING OUTCOMES..

- Students will gain an appreciation of the effort needed in construction and have a sense of achievement with something they have made.
- Students are encouraged to try their hand at assembling and modeling of Robots.
- This is a creative approach to the learning of science through real life exposure, mechanical innovation and simultaneously promotes to do hands on projects on Robots.