

## DEPARTMENT OF MECHANICAL ENGINEERING

### “Two Days Workshop on ARDUINO Robotics”

Date- 20<sup>th</sup> and 21<sup>st</sup> August, 2016

With full enthusiasm Two days' workshop on ARDUINO robotics was organized by Mechanical Engineering department of Sinhgad College Of Engineering, Korti, Pandharpur on 20<sup>th</sup> and 21<sup>st</sup> August, 2016. The function was presided over by Prof. B. M. Shivagunde and Prof. A. D. Harale. 49 students were participated for this event.



The purpose is to give introduction of Arduino to students, especially Mechanical students so that they can build hobby in robotics and can also implement automation projects. Students were provided complete kit containing Arduino uno board, bread board, various sensors like potentiometer, LM35 temperature sensors, and LEDs, DC motor, LCD display.

The function was started with Saraswati Worship, followed by brief introduction of ARDUINO. Scope of robotics is also discussed to encourage Students. Dr. K. J. Karande, Principal, SKNSCOE encouraged students for participation in such technical events and also to increase the student membership in professional bodies. He also encouraged students for broader vision in acquiring the technical knowledge.

Prof. R. T. Vyavahare, HOD, Mechanical department, SKNSCOE also shared his thoughts and encouraged students for active participation in the workshop.



First session of 20<sup>th</sup> Aug started with Introduction of Arduino, followed by kit distribution and drivers and software installation. The second session is about programming the Arduino for various operation of Digital Write function of Arduino. In third session Digital Read function of Arduino is described and used in program to solve various problems.

The first session of 21<sup>st</sup> Aug was started with use of Analog Write function of Arduino followed by Servo motor control programming. In second session DC motor controlling is described. Various programs were written to control the speed and direction of rotation of DC motor.

The third session is about using LCD display, and Arduino was programmed to display various messages and sensor values on LCD display. The Analog Read function of Arduino was also discussed in this session.

In fourth session of 21<sup>st</sup> Aug use of Temperature sensor LM35 was discussed and the Arduino was programmed to display room

temperature on LCD display. Various sequencing operations were also discussed in this session.

The function was concluded with feedback from students and lot of promises and hope for future.