

SCHOOL OF ENGINEERING

FINAL REPORT

DESIGN OF THE DANCING ROBOT

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ABSTRACT

The engineering project was constructing a Dancing Robot using two semesters and it is a double unit module. This engineering project given to me was able to allow me to apply my knowledge that I had gained over the previous three years of studies with the practical skills and the theories to solve problems. The robot utilizes the PIC micro series of microcontroller from Microchip Technology Inc. intelligence and servo motor control, where it was controlled by using PIC 16F84A microcontroller and programmed with Microsoft Code Studio. The aim of this project was to develop a dancing robot to attend the august competition called robofest. The dancing robot constructed by using aluminum and iron material. This allows the robot able to start dancing once the music is on and it is controlled by the servo motor. This report represents the construction of the whole dancing robot including the important parts which are electronics, electrical, mechanical, and software. This final report had clearly shown what had been done these 8 months. Up on researching the prototype dancing robot 'Qrio' in new Delhi to 'rekindle scientific temper' in the student. The 'Qrio' entertainment robots from Japanese electronic giant Sony had done research on the dancing robot by using three cpu and 38 micro actuators to help them, move smoothly. The technologies used to build the robot are being used in the products and some would be used in future