



Report on the event ‘Hardware Model Design and Arduino Programming Competition’ held on 20th September 2017

Like previous year the Technical Forum of BP Poddar Institute of Management & Technology, Abhyantran organized the intra-college technical event on ‘Hardware Model Design and Arduino Programming Competition’ on 20th September 2017 at the Institute Campus with an objective to instill a passion of innovation in the students. The competition had two sub-events: FORMA 2.17 (Hardware Model Design) and JUNO 2.17 (Arduino Programming). The main focus of FORMA 2.17 was to encourage students to extend their knowledge to a professional level in electrical and electronic circuit designing and to nurture their creativity and innovation on applied engineering concepts at par with present day requirements. They needed to display a working model of their design supported with a power point presentation. Each group consisted of maximum four members. Nine groups participated in that sub-event. Dr. Ivy Majumdar, Head of ECE Department and Dr. Nandita Sanyal, Head of EE Department acted as the Judges for FORMA 2.17. Jit Ghatak, Sohan Paul, Sohom Sen and Arindam Banerjee, students of EE department grabbed the first position for their project on ‘Stair Climbing Wheel Chair’. Soham Bhattacharyya, Soumyadeep Ghosh and Rudra Nath Palit, students of ECE department won the second prize (project on ‘Air Drum’) and Pradip Kr. Pandey with Priyadarshini Dutta (students of ECE department) secured the third position (project on ‘Surveillance Car Control via DTMF’). Other notable projects were Drone with Surveillance and Rescue Features, Arduino Based Radar System, Mini CNC Machine, Arduino Animation, Density Based Traffic Control and Rain Alarm. The sub-event was acclaimed as a considerable success.

The aim of the sub-event JUNO 2.17 was to nurture the programming concepts of undergraduate students as nowadays it is mandatory for all students to know the basic programming both in assembly language and in C. In order to register for that sub-event, programming concepts of Arduino and basic knowledge of interfacing were required. Each group comprised two students. Participants had to cross three successive levels of microcontroller programming which were as follows:

Level 1 (Time-10 min) – One of the two

- Traffic light control using LED with 5 sec delay
- Brightness control of LED

Level 2 (Time-15 min) – One of the three

- Seven segment display interfacing
- Bluetooth controlled LED on/off
- Measure of an object distance using an ultrasonic sensor

Level 3 (Time-30 min) – One of the two

- 16×2 LCD interfacing with Arduino
- To write a security program using 4×4 keypad and buzzer with Arduino

Nine groups participated in JUNO 2.17. The group consisting of Rudra Nath Palit and Soham Bhattacharyya, students of ECE Department won the first prize in that sub-event. Sayan Das with Sayantan Ghosh Dastider (students of ECE Department) and Abhijit Banerjee with Arnab Ghosh

(students of CSE Department) secured the second and third positions respectively. Dr. Arijit Saha, Associate Professor of ECE Department and Dr. Bikromaditya Mondal, Assistant Professor of CSE Department acted as the Judges of the sub-event.

Ms. Susmita Dey (Asst. Prof., EE), Mr. Arindrajit Chaudhury (Asst. Prof., ECE), Mr. Panthadeb Saha (Asst. Prof., ECE), Mr. Subhasish Das (Asst. Prof., EE), Mr. Debasish Sarma (STA, ECE), Mr. Ranjit Kumar Paul (SLA, EE) and Dr. Surajit Mandal (Coordinator, Technical Forum and Associate Professor, ECE) along with twelve student volunteers conducted the whole event. Regular classes were held as per schedule.