Avalahalli, Doddaballapur Main Road, Bengaluru – 560064

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report on Project Based Learning (Odd Semester 2018-19)

Odd semester of 2018-19 given an opportunity for students to demonstrate 140 projects students of first year and second year and third year participated in the project based learning (PBL)

In this year the exhibition of project based learning (PBL) was held on Sunday, 4th November 2018. These projects were evaluated in two levels. First level by the internal committee and next level by external committee. The internal committee consisted of course coordinators of analog electronics, digital electronics, digital signal processing and HDL. Following course coordinators conducted a first level evaluation of the projects.

- 1. Dr. Ambika R
- 2. Dr. Seema Singh
- 3. Mr. Thyagaraj T
- 4. Mrs. Shilpa Hiremath
- 5. Mrs. Sabina Rahaman
- 6. Mrs. Deepa Reddy
- 7. Mr. Suryakanth B
- 8. Mr. Jagannatha K B

The external evaluators were

- 1. Mr. K Manikandan, Founder and CEO of Infrakids.
- 2. Mr. Victor George, Assistant Professor, Dept. of EEE, Ramiah Institute of Technology.

In this year PBL. The students taken up small projects which are associated to four category of streams in which students may take up few challenges and realize the same with the help of peer groups and faculty mentors. The broad area of classification was

- 1. Analog electronics Projects
- 2. Digital Electronics Projects
- 3. Signal and Image processing projects
- 4. HDL/VLSI based projects.

The projects which falls under analog electronics and digital electronics were intended to second year students. In this semester the students are studying two courses which includes laboratory sessions also. Hence department felt the students taking up projects in these domains will enable them to strengthen their concepts in these courses primarily. However it is not limited, those students who are able to take up projects beyond this domain are always encouraged to take up higher challenges provided they are skilled enough to do that.

The projects which falls under signal processing and HDL/VLSI were intended to the third year students. In fifth semester the students are studying two courses ie. digital signal processing and verilog HDL which includes laboratory sessions also.

Out of 140 projects demonstrated, two best and two second best projects of fifth semester and three best and three second best projects of third semester were awarded with a cash prizes. For the best projects the cash prize was Rs.2000/- and for second best projects the prize was Rs.1000/-

Following are registration details and list and of prize winners.

Number of registrations in third semester: 56 projects, 211 students Number of registrations in fifth semester: 22 projects, 79 students

PRIZE WINNERS OF THIRD SEMESTER

FIRST PRIZE

SI No	Name of the students	Title of the project
1	Meghana B Prarthana K Sahana A K Nischitha G	 Metal Detector Signal Jammer
2	Pankaj Singh M S Vishal Karthik Raman Prem Prakash	 Distance measurement using ultrasonic sensor Automatic room light controller
3	Diksha B Shetty Drupad Ramesh Jerin Gregory Benny Karthik Patil	 IC Identifier Multitester

SECOND PRIZE

SI No	Name of the students	Title of the project
1	E Niveditha Anitha J Saini Divya Prakruthi S Aishwarya Narendra	 Music Rhythm LED Flash Light. Portable digital kit.
2	Vivek Prakash Rishu Anand Rajan Kumar Anurag Kumar	 Bat eyes for the deaf. Reverse car parking alert.
3	Pragathi S Pushpalatha Premalatha	 Touchless calling bell system Proximity sensing

PRIZE WINNERS OF FIFTH SEMESTER

FIRST PRIZE

SI No	Name of the students	Title of the project
1	Likhith Rahul K Mahesh B Preethi Muniraju Nagabindu R	 Verilog code for microcontroller Recognition of vehicle number plate.
2	Anubhav Ananth Bhat Aditya N Rao	 Crack detection using image segmentation Hamming encoder, decoder and error detection

SECOND PRIZE

SI No	Name of the students	Title of the project
1	Sthuthi K Bhat Vishal Golai Vamshikrishna R Swaraj S	 Vending machine using Verilog code Text to speech converter
2	Niharaj Nibhasya Prakriti	 Traffic lights controller using HDL Object tracker using colour detection

Saneesh Cleatus T HOD ECE

PBL Coordinator