Short Report on the inhouse program on "Knowing And Understanding Electronics Through Hands-On Basic Electronics And Circuit Designing On Bread Boards"

The Department of Electronics as a part of the centenary celebration organised a 2 day in house programme, for class XII sc based on the theme **"Knowing And Understanding Electronics Through Hands-On Basic Electronics And Circuit Designing On Bread Boards"** on the 16th and 17th of November 2022 for students of the following schools-:

- 1. St Edmund's Higher secondary
- 2. Laban Bengalee Boys
- 3. Seven set
- 4. Gorkha pathshala

The program was organised keeping in mind the following main objectives :

- To raise an awareness about electronics and its applications for students.
- To give some exposure about the practical aspect of what is taught in class 12
- To provide students with a hands on experience on something they have learn.
- Reinforcing concepts that were taught theoretically in class 12

The program is coordinated by B P Thangkhiew and the schedule is as shown below

| | DAY 1 (16.11.22) & DAY 2 (17.11.22)* | | | | | | |
|---|--|--|--|--|--|--|--|
| S | SESSION: I: TIME: 10 AM TO 10:15 AM | | | | | | |
| Welcome speech :K Chakraborty | | | | | | | |
| SESSION: I - TIME: 10:15 AM TO 10:30 AM | | | | | | | |
| An Introductory presentation about the department | | | | | | | |
| and future prospects after completing BSc Electronics | | | | | | | |
| Session II - TIME 10:30 AM-12:00 PM | | | | | | | |
| Identification of components | ALL TEACHERS | | | | | | |
| | Passive components: Resistor capacitor inductor. | | | | | | |
| | Active components: Semiconductor devices | | | | | | |
| | motors and buzzer. | | | | | | |
| Use a Multimeter | ALL TEACHERS | | | | | | |
| | To measure the AC & DC voltage. | | | | | | |
| | Measure Resistance in Series and parallel and explain tolerance. | | | | | | |
| | Testing components. | | | | | | |
| Cathode ray oscilloscope | Dr D R Choudhury and Prof Soumen Chakraborty | | | | | | |
| | Working of a CRO. | | | | | | |
| | Half and full wave rectifier. | | | | | | |
| | Measurement of voltages, Frequency using different signals. | | | | | | |
| | RC differentiating and integrating, lissajous figure. | | | | | | |
| Making Circuit in a | Prof Kishore Chakraborty, Dr Hemen Medhi, and | | | | | | |
| Breadboard | Prof B.P. Thangkhiew | | | | | | |
| | LED with different, resistors, potentiometers. | | | | | | |
| | AND, OR & NOT gates. | | | | | | |
| | CD4017 running Lights. | | | | | | |
| | LDR dark sensor. | | | | | | |
| | Half and full wave rectifier. | | | | | | |
| TIME 12:00 PM -12:30 PM : F | EEDBACK AND DISCUSSION | | | | | | |
| VOIE OF THANKS | | | | | | | |
| LUNCH | | | | | | | |
| * I wo Schools per day | | | | | | | |

The total number of students who attended the program:39 The total number of resource persons:5

Feedback analysis:

After the session a feedback was given to the students for filling up. After analysis, it was discovered that, despite the fact that electronics is a major component of class 12 curriculum, students in the higher secondary section of the schools receive very little exposure to the subject's various equipment and theories.

Conclusion:

The program was conducted for the first time in such a level where an effort was taken to make students from higher secondary see the importance of hands on session, exposure to practical aspects of theory taught in class and an awareness about the different components that one has to know about the changes in Electronic industry and how has it shaped the way we are living right now.

B P Thangkhiew Coordinator in house program Department of Electronics





























16/11/2022 & 17/11/2022 Venue:Electronics department Laboratory

| | "KNO | WING AND UNDERSTANDING ELECTI | IN HOUSE PROGRA RONICS THROUGH HANDS (Att | MME FOR CLASS XII Se ON ON BASIC ELECTRONICS A endance) | ND CIRCUIT DESIGNING ON BREAD BOARDS" | |
|-------|-------------|-------------------------------|---|---|---------------------------------------|--------------|
| S NO | DATE | NAME | PHONE NUMBER | SCHOOL'S NAME | Short Feedback about the program | Signature |
| 1 | 17/11/2022 | Raffel foras Lyngdet, Nonghet | 9863621478 | Course Bot Annexe | 5 & Very Lun, Roder than class | d |
| 2 | 17/11/2012 | Karan Theta | 8721991889 | Cours bet Andere | very intrusting and get to learn , | The Thats |
| 3 | 14/11/2022 | Helson Kingha Lubber | 9174177 200 | S. S.L. Ass. | Experience more than what we | Quelos |
| 4 | 17/11/2022 | Lakonshisha Tanima | 9362041396 | Sun Cith | Hands on experience. Well detailing | - K.D.9 |
| 5 | 17/11/2022 | Sony Kunat | 63C0070717 | Stron Sel monte. | Soferativer! | Same . |
| 6 | 2/11/2022 | Subham Haima | 213249449G | Pauro of Colory | Quite anteresting | agg 7 |
| 7 | 17/11/2022 | towardal Manthiew | 9363703681 | Care Let America | 9 tarestine 1 " | IN: |
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| SNU | DATE | NAME | PHONE NUMBER | SCHOOL'S NAME | Short Feedback about the program | Signature |
| 2 | 16/11/2022 | Subarn Das | 9862640800 | LAB B. H.S.S | It was good. | SDay |
| 2 | 16/11/2022 | KUNAL DAS | 8794045724 | A.B.B.H.S.S | grings a good program. dee | and and as |
| 3 | 16/11/2022 | Tanmay Paul | 7630005397 | L.B.B.H.S.S | Dutstanding | Ry |
| | 16/11/2022 | Roscan Powel | 6909119577 | L.B.B. H.S.S . | Informative. | Jeenel |
| 6 | 10/11/2022 | Arnab Otta | 9774503135 | L.B.B.H.S.S. | Informative | - Friend |
| 7 | 16/11/2022 | Kohit Das | 6909529569 | S.E.H.S.S | Approvative | 2.00 |
| 0 | 16/11/2022 | Kunal Charh | 8787353907 | SEH.S.S | Information - | In 1 |
| 0 | 16/11/2022 | Ankit Kumen Ray | 7005206823 | S.E. H.S.S | very helphall | Alphoth |
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| 11 | 16/11/2022 | Arcy an Kunas Rai | 9612552876 | SE MSS | For to 1 | 6. Dudingjør |
| 12 | 16/11/2022 | Bankit bok Alar | 9402548889 | SEHSS | Fachati | Almar |
| 13 | 16/11/22 | Jason Lankaniang | 8787571796 | 224132 | P. D. K. | the |
| 14 | 16/11/22 | Hiamboklang N. Sohluja | 9412550205 | SEHIC | 1 modulutur | 車 |
| 15 | 16/11/22 | Nathaniel V. Susny | 9366978910 | Criter | Supervalue | quija |
| 16 | 16/11/22 | Deiborni Hanna | 6909350269 | CILLOS | truesting | An |
| 17 | 16/11/22 | Staigh R. novah | 874672 17 67 | sens) | Fontastie | Danfor- |
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