

Training on Embedded system

Introduction:

An embedded system is a microprocessor-based computer hardware system with software that is designed to perform a dedicated function, either as an independent system or as a part of a large system. At the core is an integrated circuit designed to carry out computation for real-time operations. Complexities range from a single microcontroller to a suite of processors with connected peripherals and networks, from no user interface to complex graphical user interfaces. The complexity of an embedded system varies significantly depending on the task for which it is designed. Embedded system applications range from digital watches and microwaves to hybrid vehicles and avionics. As much as 98 percent of all microprocessors manufactured are used in embedded systems. Embedded systems are managed by microcontrollers or digital signal processors (DSP), application-specific integrated circuits (ASIC), field-programmable gate arrays (FPGA), and gate arrays. These processing systems are integrated with components dedicated to handling electric and/or mechanical interfacing. Embedded systems programming instructions, referred to as firmware, are stored in read-only memory or flash memory chips, running with limited computer hardware resources. Embedded systems connect with the outside world through peripherals, linking input and output devices. The industry for embedded systems is expected to continue growing rapidly, driven by the continued development of Artificial Intelligence (AI), Virtual Reality (VR) and Augmented Reality (AR), machine learning, deep learning, and the Internet of Things (IoT). The cognitive embedded system will be at the heart of such trends as: reduced energy consumption, improved security for embedded devices, cloud connectivity and mesh networking, deep learning applications, and visualization tools with real time data.

Objectives: After attending the training, students should be able to understand:

1. The basic working of a microcontroller system and its programming in assembly language.
2. To integrate hardware and software for microcontroller applications systems.
3. The internal architecture and interfacing of different peripheral devices with Microcontrollers.
4. To write the programs for microcontroller.
5. The role of embedded systems in industry.
6. The design concept of embedded systems.

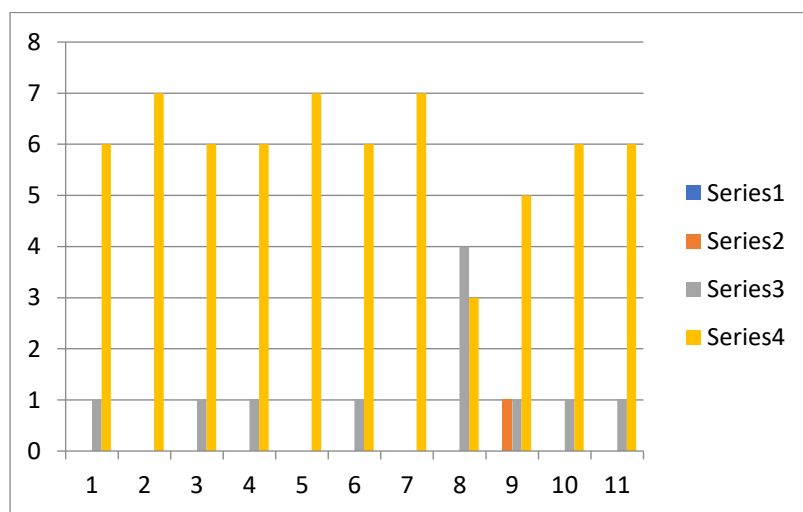
Program Details:

Training Program: Embedded system

Date: 6/7/2015 to 16/7/2015

Students who can attend: B. Tech (ECE) 6^h Sem-2016 PO.

Feedback Analysis



Report of Feedback Analysis 2nd Phase of Winter Training

Feedback for training was taken on 16th July, 2015 with the 3rd year students (2016 PO). Analysis of feedback are listed below:

1. Training was good.
2. Rooms need to be more updated with proper charging facilities for Laptop.
3. Breaks in regular interval should also be provided.
4. There are too many students so too much noise and chaos in class.
5. Projector was not working properly.
6. Training session should be more.

Training on Embedded system

List of Students

Sl.no	Roll No	Name	Enrolled	Participated
1	11900311052	RAHUL PAUL	Y	Y
2	11900312001	ABHISHEK KUMAR	Y	Y
3	11900312002	AMALENDU PAUL	Y	Y
4	11900312003	AMAN SHAW	Y	Y
5	11900312005	ANANDA SHANKAR BAGCHI	Y	Y
6	11900312006	ANKUR SINHA	Y	Y
7	11900312007	ANTARA BANERJEE	Y	Y
8	11900312008	ARNAB GHOSH	Y	Y
9	11900312010	ATINDRA NATH RAI	Y	Y
10	11900312011	AVINASH KUMAR	Y	Y
11	11900312012	AVIRUP BASU	Y	Y
12	11900312013	AWADH KISHORE	Y	Y
13	11900312015	BHUBAN NATH	Y	Y
14	11900312016	BIBEK RAUTH	Y	Y
15	11900312019	CHANDRASHEKHAR KUMAR	Y	Y
16	11900312020	CHITRANJAN KUMAR	Y	Y
17	11900312021	DEBAJYOTI SARKAR	Y	Y
18	11900312022	DEEPU KUMAR	Y	Y
19	11900312023	DIBYO GHOSH CHOWDHURY	Y	Y
20	11900312024	DIPANJAN KARMAKAR	Y	Y
21	11900312025	DRAVID KUMAR	Y	Y
22	11900312027	JAYA BISWAS	Y	Y
23	11900312029	JOYDEEP MAJI	Y	Y
24	11900312030	KANHAIYA AGARWAL	Y	Y
25	11900312031	KHALIDA TABASSUM	Y	Y
26	11900312032	KRISHNA KUMAR JHA	Y	Y
27	11900312033	KRISHNPRIYA SINHA	Y	Y
28	11900312036	MILAN MAHADANI	Y	Y
29	11900312037	MOUSUMA ROY	Y	Y
30	11900312038	NEHA PANKAJ	Y	Y
31	11900312039	NISHAT TARIK	Y	Y
32	11900312040	NIVEDITA MISHRA	Y	Y
33	11900312041	PALLAVI ARYA	Y	Y
34	11900312042	PIYUSH BENIA	Y	Y
35	11900312043	PRABHAT KUMAR	Y	Y
36	11900312044	PREETI PRIYANKA	Y	Y
37	11900312046	PRITAM SINGHA ROY	Y	Y
38	11900312047	PRIYA DEB ROY	Y	Y
39	11900312048	PROMIT ROY	Y	Y
40	11900312049	RABINDRA NATH RAI	Y	Y
41	11900312050	RAHUL BOSE	Y	Y
42	11900312051	RAHUL KHAN	Y	Y

Training on Embedded system

List of Students

Sl.no	Roll No	Name	Enrolled	Participated
43	11900312052	RAHUL KUMAR SINGH	Y	Y
44	11900312053	RAVI SHANKAR	Y	Y
45	11900312054	RIMA DAS	Y	Y
46	11900312055	RITIKA SAHA	Y	Y
47	11900312056	ROSHAN KUMAR GUPTA	Y	Y
48	11900312057	SANDIPAN BANERJEE	Y	Y
49	11900312058	SARBARTHA DAS	Y	Y
50	11900312059	SATYAM SAURABH	Y	Y
51	11900312060	SHASHANK SAURABH	Y	Y
52	11900312062	SHIRSHENDU MODAK	Y	Y
53	11900312063	SHOURYADEEP SANYAL	Y	Y
54	11900312064	SHREYA CHANDRA	Y	Y
55	11900312065	SHUBHASHISH MUKHERJEE	Y	Y
56	11900312067	SMITHODHY RUDRA	Y	Y
57	11900312068	SMRITIKANA ROY	Y	Y
58	11900312070	SOMNATH DEB	Y	Y
59	11900312071	SONU KUMAR	Y	Y
60	11900312072	SOUBHIK PAL	Y	Y
61	11900312073	SOUMI GHOSH	Y	Y
62	11900312074	SOURAV KUMAR	Y	Y
63	11900312075	SRAMANA TALUKDAR	Y	Y
64	11900312077	SUBHADIP MUKHERJEE	Y	Y
65	11900312078	SUDESHNA CHATTERJEE	Y	Y
66	11900312079	SUDESHNA DEY	Y	Y
67	11900312080	SULAGNA PRAMANICK	Y	Y
68	11900312081	SUMAN DHAR	Y	Y
69	11900312082	SUNANDO DEBNATH	Y	Y
70	11900312083	SUNIRMAL PAUL	Y	Y
71	11900312084	SURAJIT SAHA	Y	Y
72	11900312086	SUSHIL KHATI	Y	Y
73	11900312087	SUSHOVAN ROY CHOWDHURY	Y	Y
74	11900312088	TRINALEENA KUNDU	Y	Y
75	11900312089	TRINANKUR CHAKRABORTY	Y	Y
76	11900312090	VASUNDHARA	Y	Y
77	11900312092	VISHANT PRASAD SHARMA	Y	Y
78	11900312093	WATAN AGARWAL	Y	Y
79	11900313067	ALOKE SAHA	Y	Y
80	11900313068	BIJOY RAJ BIKRAM SHARMA	Y	Y
81	11900313069	CHANDAN GHOSH	Y	Y
82	11900313070	DHIMAN MITRA	Y	Y
83	11900313071	GOPA BARMAN	Y	Y
84	11900313072	KAZI MD SAIDUR RAHAMAN	Y	Y

Training on Embedded system
List of Students

Sl.no	Roll No	Name	Enrolled	Participated
85	11900313073	MRINMAY DAS	Y	Y
86	11900313074	PRATIK DHAR	Y	Y
87	11900313075	RAJARSHI DAS	Y	Y
88	11900313076	RAMAN PRADHAN	Y	Y
89	11900313077	SOUMYASREE SARKAR	Y	Y
90	11900313078	SUCHANDA ROY	Y	Y
91	11900313079	TINKU SARKAR	Y	Y

SILIGURI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING

Brief report on 3 days' Workshop on "Introduction to MATLAB Programming" during 01.09.2016-03.09.2016

MATLAB is a high-performance language for technical computing and it is basically used for modeling, simulation and analysis of different dynamical systems. This workshop is intended to familiarization with different basic functions and programming concept of MATLAB in electrical engineering applications. The outcome of this workshop is to demonstrate about different tools associated with the MATLAB software and to develop different algorithms for solving various electrical engineering problems.

The program details are as below:

Title of workshop: Introduction to MATLAB Programming

Resource Person: Mr. Subhrajyoti Sarkar, Assistant Professor, Techno-India, Batangar

Duration: 01.09.16-03.09.16

Time: 9 am -5 pm

Venue: Departmental Seminar Hall & Departmental Lab

The interactive seminar was divided in two parts.

- At the beginning program starts with an introductory speech and a brief history of MATLAB software and related field of Engineering
- In the first day 1st half a brief introduction with MATLAB software, IF-ELSE commands, SWITCH case, formation of different loops (FOR & WHILE) has been discussed
- In the 2nd half concept of MATRICES and DETERMINANTS, introduction to STRING etc. was covered
- In the same day some practical classes comprising of declaring of different functions, loading and saving files in MATLAB, writing basic MATLAB commands etc was conducted
- In the later period some basic applications of electrical circuit analysis using MATLAB i.e. solving typical electric circuit problems by different network theorems like Thevenin's theorem, Norton's theorem, Maximum power transfer theorem was analyzed in MATLAB/SIMULINK environment.
- In the same day some aspects of different signals and their response like step response, ramp response, impulse response and a computation method for the determination of different control system specifications was carried out.
- In the last day some complex electrical engineering problems i.e. determination of different performance characteristics of DC machines, Induction machines by modeling and simulation was carried out
- In the last session some fruitful interactive discussions was held and a healthy response was received from students end

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DEPARTMENT OF ELECTRICAL ENGINEERING



- At the end of interactive session some assignments was given to the students related to the content of workshop.

In the concluding part, Mr. Sarkar thanked all the students for their patience hearing and gave his contact no. and email id in case any students have any query.

The program continued with 40 students from 3rd EE from Electrical Engineering Department.


H.O.D.

Dr. Bhusan Barua
Head of Department
Department of Electrical Engineering
Siliguri Institute of Technology


Coordinator

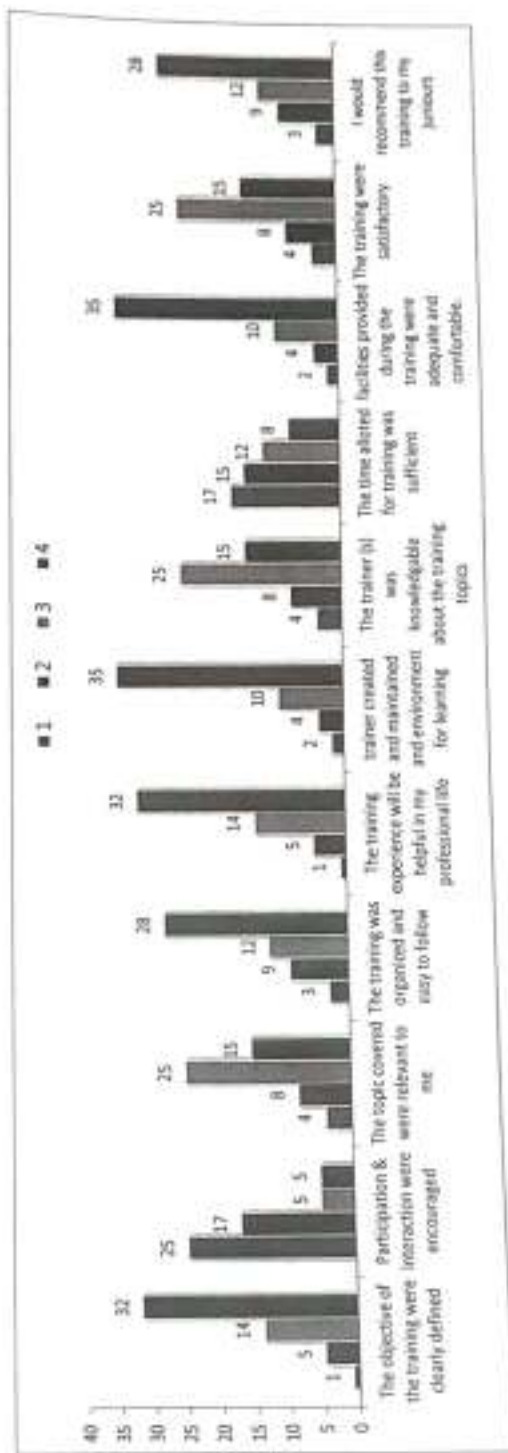
T & P Sub-Committee





Training Organized by: The Department of Electrical Engineering, S.I.T

Sl.no	Name of the trainer: Mr. Subrajyoti Sarkar, Assistant Professor, Techno India, Bata Nagar	Feedback elements	Ratings (1 being lower & 4 being highest rating)				Total No. of Respondents : 52			
			1	2	3	4	% of rating 1	% of rating 2	% of rating 3	% of rating 4
1		The objective of the training were clearly defined	1	5	14	32	1.92	9.62	26.92	61.54
2		Participation & interaction were encouraged	25	17	5	5	48.08	32.69	9.62	9.62
3		The topic covered were relevant to me	4	8	25	15	7.69	15.38	48.08	28.85
4		The training was organized and easy to follow	3	9	12	28	5.77	17.31	23.08	53.85
5		The training experience will be helpful in my professional life	1	5	14	32	1.92	9.62	26.92	61.54
6		The trainer created and maintained an environment for learning	2	4	10	35	3.85	7.69	19.23	67.31
7		The trainer [s] was knowledgeable about the training topics	4	8	25	15	7.69	15.38	48.08	28.85
8		The time allotted for training was sufficient	17	15	12	8	32.69	28.85	23.08	15.38
9		Facilities provided during the training were adequate and comfortable.	2	4	10	35	3.85	7.69	19.23	67.31
10		The training were satisfactory	4	8	25	15	7.69	15.38	48.08	28.85
11		I would recommend this training to my juniors	3	9	22	28	5.77	17.31	23.08	53.85



Siliguri Institute of Technology
Department of Electrical Engineering
Details for Receiving Certificate
Duration: 1.09.2016 to 3.09.2016

Roll no	Name	Signature
11901614001	ABHJIT DAS	<i>Abhijit Das</i>
11901614002	ABHJIT DUTTA	
11901614003	ABHISHEK KUMAR	
11901614004	ABHISHEK KUMAR DAS	
11901614005	AHINDRA NARAYAN CHOWDHURY	<i>Ahindra N. Chowdhury</i>
11901614006	ANKITA SAHA	<i>Ankita Saha</i>
11901614007	ANKOOR SINGH	
11901614008	ANUPAM DATTA	
11901614009	ARKAJIT FOZDER	
11901614010	ASHA KUMARI	<i>Asha Kumari</i>
11901614011	ASHIM SARKAR	
11901614012	AVIMANYU KUMAR TANTI	<i>Avimanyu Kumar Tanti</i>
11901614013	AVIRUPA DUTTA	<i>Avirupa Dutta</i>
11901614014	DEBAJIT KARMAKAR	
11901614015	DEBARPAN ROY	
11901614016	DEBASHI CHAKRABORTY	<i>Debarshi Chakraborty</i>
11901614017	DIPANJAN KARMAKAR	<i>Dipankar Karmakar</i>
11901614018	DURGESH KUMAR	<i>Durgesh Kumar</i>
11901614019	GOURAV GHOSH	
11901614020	HRIDOY BARMAN	
11901614021	KOUSHIK KARMAKAR	<i>Koushik Karmakar</i>
11901614022	KOUSIK BARMAN	
11901614023	MADHUMITA SARKAR	<i>Madhumita Sarkar</i>
11901614024	MAINAK DE	<i>Mainak De</i>
11901614025	MD ARIF EQUBAL	<i>MD Arif Equbal</i>
11901614026	NIKHIL RAJ	<i>Nikhil Raj</i>
11901614027	PEMBA BHUTIA	
11901614028	PRITAM ROY	<i>Pritam Roy</i>
11901614029	PRIYANKA DAS	<i>Priyanka Das</i>
11901614030	PURAN SAHA	
11901614031	RAJA CHOWDHURY	<i>Raja Chowdhury</i>
11901614032	RITU NANDI	<i>Ritu Nandi</i>
11901614033	RUPAK KUNDU	<i>Rupak Kundu</i>
11901614034	SABYASACHI MANDAL	<i>Sabyasachi Mandal</i>
11901614035	SAIKAT MITRA	<i>Saikat Mitra</i>
11901614036	SANDEEP KUMAR GUPTA	<i>Sandeep Kumar Gupta</i>
11901614037	SANJOY KARMAKAR	<i>Sanjoy Karmakar</i>
11901614038	SATARUPA MUKHERJEE	<i>Satarupa Mukherjee</i>
11901614039	SAUBIR GHOSH	<i>Saubir Ghosh</i>
11901614040	SHIVAM KUMAR CHOWDHARY	<i>Shivam Kumar Chowdhary</i>
11901614041	SOUMA BRATA GUHA	<i>Souma Brata Guha</i>
11901614042	SOUMYADEEP BARMAN	
11901614043	SOUMYADEEP CHANDA	
11901614044	SOUMYAJYOTI PAUL	
11901614045	SUBHADEEP MONDAL	<i>Subha Deep Mondal</i>

151190120047	SUBHAM DUTTA	Subham Dutta
151190120048	SUBHAM SAHA	Subham Saha
151190120049	SUBHAM SARKAR	Subham Sarkar
151190120050	SUCHISMITA ADHIKARY	Suchismita Adhikary
151190120051	SUDARSHAN BASAK	Sudarshan Basak
151190120052	SUMAN KARMAKAR	Suman Karmakar
151190120053	SUVRAJIT SAHA	Suvrajit Saha
151190120054	TUHIN CHAKRABORTY	
151190120041 (Y)	VINOD KUMAR JANA	Vinod Kumar Jana
151190120024	MD. IRSHAD ALAM	Md. Irshad Alam
151190120025	ABHJIT KUMAR MANDAL	Abhjit Kumar Mandal
151190120026	AKASH ROY	
151190120027	LABANI BARMAN	
151190120027	PURAJIT SARKAR	
151190120028	SANDIPAN NATH	
151190120029	SAYAN DAS	
151190120030	SOURAV GUHA	Sourav Guha

SILIGURI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING



Brief report on Basic Automation Training (PLC) by Siemens during
05.09.2016-28.09.2016

Industrial automation is the use of control systems, such as computers or robots, and information technologies for handling different processes and machineries in an industry to replace a human being. It is the second step beyond mechanization in the scope of industrialization. A PLC or Programmable Logic Controller is a digital computer used for the automation of electromechanical processes in industries. It is designed with multiple input and outputs and has internal relays that help in switching the state of the devices. Siemens is a global powerhouse focusing on the areas of electrification, automation and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of systems for power generation and transmission as well as medical diagnosis. In infrastructure and industry solutions the company plays a pioneering role.

The program details are as below:

Title of training: Basic Automation Training (PLC)

Resource Organization: Siemens

Duration: 05.09.2016-09.09.2016 (Batch 1), 10.09.2016, 12.09.2016 - 15.09.2016 (Batch 2), 16.09.2016-19.09.2016, 22.09.2016 (Batch 3), 23.09.2016-24.09.2016, 26.09.2016-28.09.2016 (Batch 4)

Time: 9 am -5 pm

Venue: Departmental Seminar Hall & Departmental Lab

The interactive training program was divided in two parts.

- At the beginning program starts with an introductory speech and a brief history of Basic automation and related field of Engineering.
- In the first day Basic constituents of PLC: Signal modules, CPU, Power Supply, mounting rail and MMC, basic operation of PLC are discussed.
- In the second day Installation guidelines, powering and wiring of modules with information on addressing are covered. In this context concept of programming language and representation in STL, FBD and LAD are discussed.
- In the next period of training Overview of SIMATIC S7 - PLC i.e. Programming Units and using PC as Programming Unit, Hardware Configuration and setting object Properties of Modules in STEP, Step 7 Instructions and programming: Set / Reset, Elementary data type, Load / Transfer, Comparison, basic math instructions, Timers / Counters List etc are covered.
- In the later period STEP 7 blocks and structured programming, Using Data Blocks, Use of Organization Blocks, Analog signal processing, Introduction to HMI have been covered.
- At the last period of training some hardware based PLC trainer kit has been demonstrated.

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DEPARTMENT OF ELECTRICAL ENGINEERING



- In the last session some fruitful interactive discussions was held and a healthy response was received from students end.
- At the end of interactive session some assignments was given to the students related to the outcome of training program.
- The attendance record of the students throughout the training session was satisfactory.
- As per the feedback received from the students end the training program was fruitful and motivating for the students and the trainers have demonstrated all the necessary topics in a healthy manner.

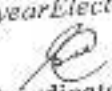
In the concluding part, the trainers thanked all the students for their patience hearing and gave his contact no. and email id in case any students have any query.

The program continued with 55 students from 3rd year and 60 students from 4th year Electrical Engineering Department.

H.O.D

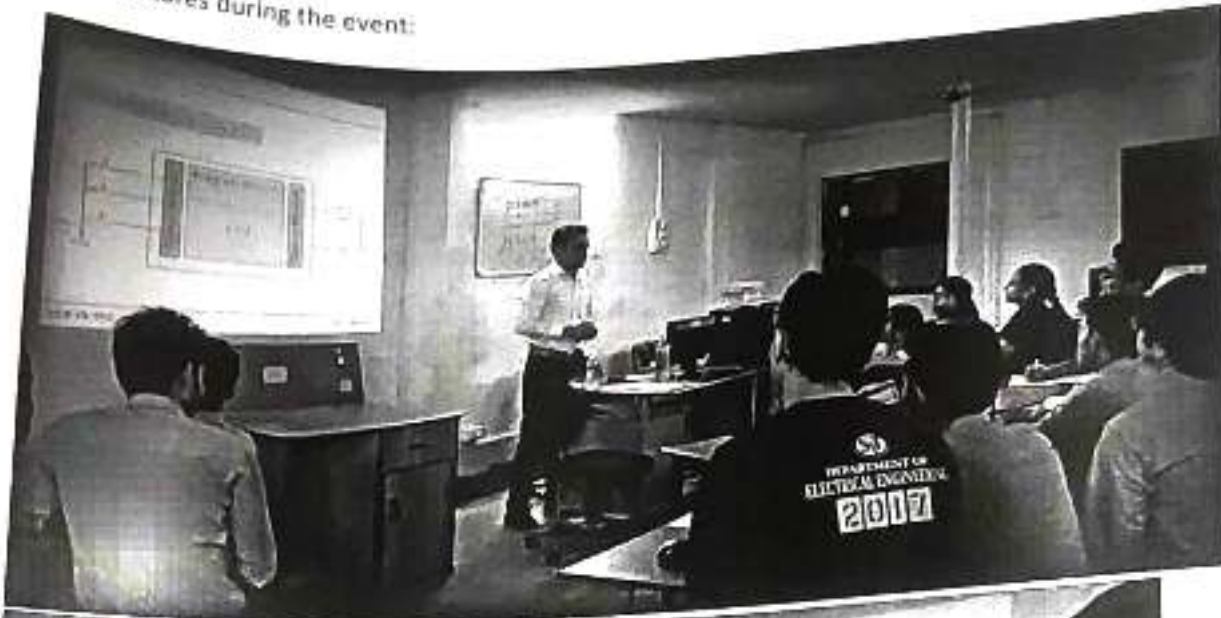
Department of Electrical Engineering

Jayanta Bhattacharya
Head of the Department
Department of Electrical Engineering
Siliguri Institute of Technology


Coordinator

T & P Sub-Committee

Some pictures during the event:



SIEMENS

SITRAIN

Certificate

Training for Industry

Anand Mohan
Siliguri Institute of Technology, Darjeeling
has undergone the following training programme

Basic Course on Automation

This course was conducted at Siliguri Institute of Technology full time
from 05/09/2016 to 09/09/2016



Nitesh Sawant
Chief Manager-Customer Trainings
Industry Sector-Customer Services
RC-IN DF CS TR (India)

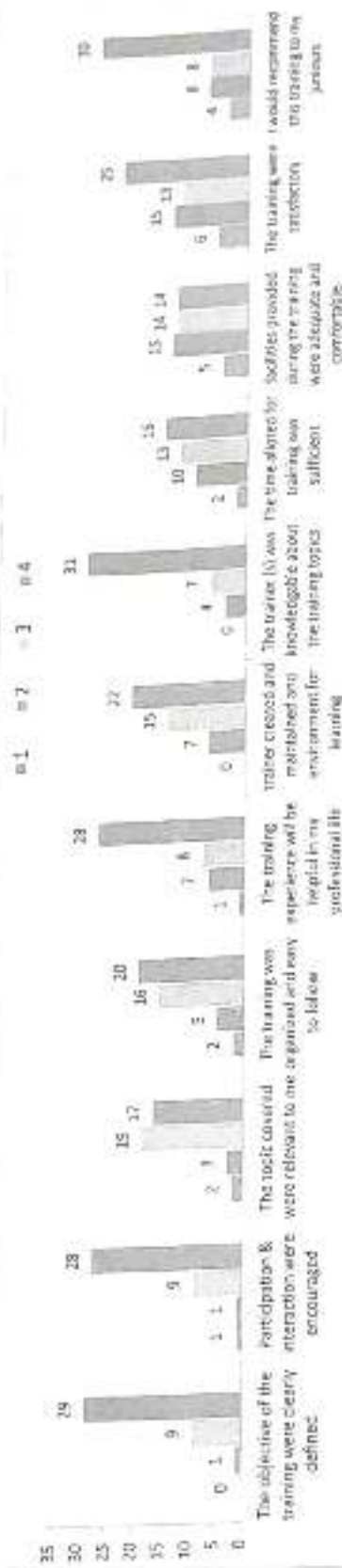
Siemens Ltd.
Department: RC-IN DF CS TR
Location: TSDC-Kalwa
Address: Near Airoli Station
Thane -Belapur Road
Thane: 400 601
Contacts: 0091-3966-3208/6067

www.siemens.co.in/sitrain



Training Organized by: The Department of Electrical Engineering, S.I.T

Sl. No.	Name of the trainer: Mr. Vinay Vishwakarma, Trainer, SIEMENS	Feedback elements	Rating 1 being lower & 4 being higher (avg)					Total No. of Respondents: 29		
			1	2	3	4	% of rating 1	% of rating 2	% of rating 3	% of rating 4
1		The objective of the training was clearly defined	0	1	1	9	0.00	2.16	23.08	74.84
2		Participation & interaction were encouraged	1	1	1	3	2.44	2.56	23.08	71.79
3		The topic covered were relevant to me	2	2	3	13	5.13	7.59	68.72	43.28
4		The training was organized and easy to follow	2	2	5	16	5.13	12.82	41.03	51.03
5		The training experience will be helpful in my professional life	1	1	3	8	2.54	17.95	20.31	79.29
6		Trainer created and maintained the environment for learning	0	0	7	15	0.00	17.95	18.48	79.11
7		The trainer [s] was knowledgeable about the training topics	0	0	4	7	0.00	10.36	17.05	79.49
8		The time allowed for training was sufficient	2	3	10	11	5.13	25.64	33.33	43.93
9		Facilities provided during the training were adequate and comfortable	5	5	14	14	22.82	33.45	35.90	35.90
10		The training was satisfactory	6	6	15	13	15.38	36.46	33.33	44.38
11		I would recommend this training to my juniors	4	8	8	33	10.26	10.51	23.51	55.72



Sl. No.	Comments	Student name
1	Arrange few more trainers for this training.	Chakraborty
2	Arrange a visit to any core industry where automation can be seen	Wahid
3	We require more industrial training regarding this topic	Debanjan
4	Please arrange a training on Power Grid in the future	Aditya Sen
5	Time will be more fair	Aditya Sen
6	Arrange a training in Power grid	Debnath
7	Arrange industrial visit in industrial	Sudhansu Adhikari

Jayanta Bhuyan Barua
Head of the Department
Department of Electrical Engineering
Siliguri Institute of Technology

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SILIGURI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
ATTENDANCE ON BASIC AUTOMATION TRAINING (PLC) BY SIEMENS
BATCH 2, 5th SEMESTER

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SILIGURI INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
ATTENDANCE ON BASIC AUTOMATION TRAINING(PLC) FROM SIEMENS
BATCH 1, 7th SEMESTER

Sl. No.	Roll No.	Name	5/8/2016	6/8/2016	7/8/2016	8/8/2016	9/8/2016	(Extra) 29/09/16
1	11901613001	AAMIR ALI						
2	11901613002	ABHINANDAN MISHRA	Abhinandan Mishra	Abhinandan Mishra	Abhinandan Mishra	Abhinandan Mishra	Abhinandan Mishra	
3	11901613003	ABHISEK BHATTACHARJEE						
4	11901613004	ABHISEK PODDER						
5	11901613005	ADRIJAA PODDAR						
6	11901613006	AKASH CHAKRAVORTY						
7	11901613007	AKASH KIRODIWAL	Akash Kirodiwal	Akash Kirodiwal	Akash Kirodiwal	Akash Kirodiwal	Akash Kirodiwal	Akash Kirodiwal
8	11901613008	AKASH KUMAR	Akash Kumar	Akash Kumar	Akash Kumar	Akash Kumar	Akash Kumar	Akash Kumar
9	11901613009	AKASHINEEL CHAKRAVORTY						
10	11901613010	AMIT KUMAR						
11	11901613011	ANAAH		Anaah				
12	11901613012	ANAND MOHAN	Anand Mohan	Anand Mohan				
13	11901613013	ANOSHU PRONTI MAHANTA						

14	11901613014	ASHUTOSH KUMAR						
15	11901613015	ARNAB BHATTACHARJEE	Arnab Bhattacharjee	Arnab Bhattacharjee	Arnab Bhattacharjee	Arnab Bhattacharjee	Arnab Bhattacharjee	Arnab Bhattacharjee
16	11901613016	ASHISH KUMAR	Ashish Kumar	Ashish Kumar	Ashish Kumar	Ashish Kumar	Ashish Kumar	Ashish Kumar
17	11901613017	ASHUTOSH KUMAR	Ashutosh Kumar	Ashutosh Kumar	Ashutosh Kumar	Ashutosh Kumar	Ashutosh Kumar	Ashutosh Kumar
18	11901613018	AVIK ADHIKARY	Avik Adhikary	Avik Adhikary	Avik Adhikary	Avik Adhikary	Avik Adhikary	Avik Adhikary
19	11901613019	AVISMIT DUTTA						
20	11901613020	AYANDEEP CHATTERJEE						
21	11901613021	BIJAN ROY	Bijan Roy	Bijan Roy	Bijan Roy	Bijan Roy	Bijan Roy	Bijan Roy
22	11901613022	BITHIKA DAS	Bithika Das	Bithika Das	Bithika Das	Bithika Das	Bithika Das	Bithika Das
23	11901613023	DEBANGAN SAHA	Debangana Saha	Debangana Saha	Debangana Saha	Debangana Saha	Debangana Saha	Debangana Saha
24	11901613024	DEBARGHA CHATTERJEE	Debargha Chatterjee	Debargha Chatterjee	Debargha Chatterjee	Debargha Chatterjee	Debargha Chatterjee	Debargha Chatterjee
25	11901613025	DEBRAJ DUTTA						
26	11901613026	DEEP DEBNATH	Deep Debnath	Deep Debnath	Deep Debnath	Deep Debnath	Deep Debnath	Deep Debnath
27	11901613027	EHSAN ANJUM	Ehsan Anjum	Ehsan Anjum	Ehsan Anjum	Ehsan Anjum	Ehsan Anjum	Ehsan Anjum
28	11901613028	GOURAB CHANDER	Gourab Chander	Gourab Chander	Gourab Chander	Gourab Chander	Gourab Chander	Gourab Chander
29	11901613029	IMTEAZ AHMED	Imteaz Ahmed	Imteaz Ahmed	Imteaz Ahmed	Imteaz Ahmed	Imteaz Ahmed	Imteaz Ahmed
30	11901613030							

24/07/20

31	11901613031	INDRANIL NATH	S. Indranil						
32	11901613032	KARI NONIA	K. Karunia						
33	11901613033	KABITA GUPTA	Kabita Gupta	K. Kabita	K. Kabita	K. Kabita	K. Kabita	K. Kabita	K. Kabita
34	11901613034	KASIF HUSSAIN	K. Kasif	K. Kasif	K. Kasif	K. Kasif	K. Kasif	K. Kasif	K. Kasif
35	11901613035	KISHLAY KUMAR	K. Kishlay	K. Kishlay	K. Kishlay	K. Kishlay	K. Kishlay	K. Kishlay	K. Kishlay
36	11901613036	KRISHNA VISHWAKARMA	K. Krishna	K. Krishna	K. Krishna	K. Krishna	K. Krishna	K. Krishna	K. Krishna
37	11901613037	KUMAR KUNAL VERMA	K. Kunal	K. Kunal	K. Kunal	K. Kunal	K. Kunal	K. Kunal	K. Kunal
38	11901613038	KUMAR SHUBHAM	K. Shubham						
39	11901613039	MAITRI MOKTAN	M. Maitri	M. Maitri	M. Maitri	M. Maitri	M. Maitri	M. Maitri	M. Maitri
40	11901613040	MANJIT RAVIDAS	M. Manjit	M. Manjit	M. Manjit	M. Manjit	M. Manjit	M. Manjit	M. Manjit
41	11901613042	MD UNUS SALIM	M. Unus	M. Unus	M. Unus	M. Unus	M. Unus	M. Unus	M. Unus
42	11901613043	MOHANA SARKAR	M. Mohana	M. Mohana	M. Mohana	M. Mohana	M. Mohana	M. Mohana	M. Mohana
43	11901613044	MRINMOY GHOSH	M. Mrinmoy	M. Mrinmoy	M. Mrinmoy	M. Mrinmoy	M. Mrinmoy	M. Mrinmoy	M. Mrinmoy
44	11901613045	MUKESH KUMAR NONIA	M. Mukesh	M. Mukesh	M. Mukesh	M. Mukesh	M. Mukesh	M. Mukesh	M. Mukesh

45	11901613046	NEELU KUMARI	Neelu	Neelu	Neelu	Neelu	Neelu
46	11901613047	NEHA BHOWMICK					
47	11901613048	NILANJAN SAHA	Nilanjana	Nilanjana			
48	11901613049	NILESH KUMAR				Nilesh	Nilesh
49	11901613050	NITIN KUMAR		Nitinka			
50	11901613051	PINANKUR BHADRA					
51	11901613052	PRAWEEEN KUMAR					
52	11901613053	PRINCE PANKAJ		Pranav Pankaj	Pranav Pankaj	Pranav Pankaj	Pranav Pankaj
53	11901613054	CASE-4 MANDAL	Rajesh Mandal	Rajesh Mandal	Rajesh Mandal	Rajesh Mandal	Rajesh Mandal

Brief report on 10 days' Summer/Vocational Training on "Motor Winding and Home Appliances" by NSIC, Govt. of India during 01.08.2016-12.08.2016

National Small industries Corporation Ltd., (NSIC), an ISO 9001 certified company, has been working to promote aid and foster the growth of micro and small enterprises since its establishment in 1955. National Small industries Corporation Ltd., (NSIC), operates through its countrywide network of offices and technical Services Centres in country. In addition, NSIC has set up Training-cum Incubation centers in different parts of the country. National Small industries Corporation Ltd., (NSIC), has seven technical support services are being rendered to MSMEs. These centres are located at New Delhi, Rajkot, Chennai, Howrah, Hyderabad, Aligarh and Raipura. The objective of this scheme is to facilitate establishment of new small enterprises by way of providing integrated services in the areas of training for entrepreneurial skill development, selection of small projects, and preparation of project profile, reports, identification and sourcing of plant, machinery and equipment, facilitating sanction of credit facility and providing other support services in order to boost the development of small enterprises in manufacturing and services sectors.

The program details are as below:

Title of training: Motor Winding and Home Appliances

Resource Person: NSIC Trainers

Duration: 01.08.16-12.08.16

Time: 10 am -5 pm

Venue: Electrical Machines Lab

The interactive seminar was divided in two parts.

- At the beginning program starts with an introductory speech and a brief overview of different electrical machines (transformer, motor, and generator) and their construction, working and practical applications.
- In the first day 1st half a brief introduction of transformer winding configuration has been discussed and the detailed fabrication procedure regarding the same has been demonstrated
- In the 2nd half students forming several groups and they are entitled to design the transformer core and several kinds of winding used in the domestic/industrial transformers
- In the next day a brief discussion regarding the designing of 3-phase Induction motor has been discussed. In this discussion a systematic procedure for the designing of stator as well as rotor designs along with the detailed winding configuration was demonstrated

SILIGURI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRICAL ENGINEERING



- In the later period some specific ratings/specifications are allotted to the students for the designing of a 3-phase induction motor winding as well as core. In this particular area for the winding designing students are entitled to design no. of conductors, no. of slots, no. of poles, slots/pole/phase, no. of turns etc. parameters are taken into consideration.
- In the later period of the training discussion about the designing of DC machines has been discussed. Here the concept of lap winding, wave winding, pole-pitch, commutator pitch, back pitch, front pitch etc. parameters have been discussed and demonstrated.
- In the last day maintenance and repair of some house hold applications like mixer grinders, refrigerators, washing machine, ceiling fan etc has been discussed and demonstrated.
- In the last session some fruitful interactive discussions was held and a healthy response was received from students end
- At the end of interactive session some assignments was given to the students related to the outcome of the training program.

In the concluding part, trainers thanked all the students for their patience hearing and gave his contact no. and email id in case any students have any query.

The program continued with 106 students from 4th year and 62 students from 3rd year from Electrical Engineering Department.

H.O.D

Department of Electrical Engineering

Jayanta
Head of the Department
Department of Electrical Engineering
Siliguri Institute of Technology

Coordinator

T & P Sub-Committee

Some pictures during the event:



NATIONAL SMALL INDUSTRIES CORPORATION LTD. TECHNICAL SERVICES CENTRE

(A Government of India Enterprise Under Ministry of MSME)

BALITIKURI, HOWRAH-711 113

Sl. No. NSIC-TSC(H)/SIT/EE 5th Sem/2016-17/2

Date: 22.08.2016

This is to certify that Mr./Ms. Abhijit Dutta
S/o/D/o/Mr./Ms. Ajit Dutta has successfully completed
Training in the course of Motor & Transformer Rewinding and Electrical Home Appliances
from 01.08.2016 to 12.08.2016
During the training period in this centre his/her conduct was Very Good
and his/her performance was found Very Good

Training Coordinator

Head of Training
PALASH BHOWMIK
MANAGER, TRAINING
NSIC TECHNICAL SERVICES CENTRE
BALITIKURI, HOWRAH-711113



Head of Institute
GENERAL MANAGER (SG)
NSIC TECHNICAL SERVICES CENTRE
(A GOVT. OF INDIA ENTERPRISE)
BALITIKURI, HOWRAH

Outstanding : 91%-100%, Very Good : 81%-90%, Good : 70%-80%, Satisfactory : 50%-70%

NATIONAL SMALL INDUSTRIES CORPORATION LTD. TECHNICAL SERVICES CENTRE

(A Government of India Enterprise Under Ministry of MSME)

BALITIKURI, HOWRAH-711 113

Sl. No. NSIC-TSC(H)/SIT/EE 5th Sem/2016-17/1

Date: 22.08.2016

This is to certify that Mr./Ms. Abhijit Das
S/o/D/o/Mr./Ms. Apurba Das has successfully completed
Training in the course of Motor & Transformer Rewinding and Electrical Home Appliances
from 01.08.2016 to 12.08.2016
During the training period in this centre his/her conduct was Very Good
and his/her performance was found Very Good

Training Coordinator

Head of Training
PALASH BHOWMIK
MANAGER, TRAINING
NSIC TECHNICAL SERVICES CENTRE
BALITIKURI, HOWRAH-711113



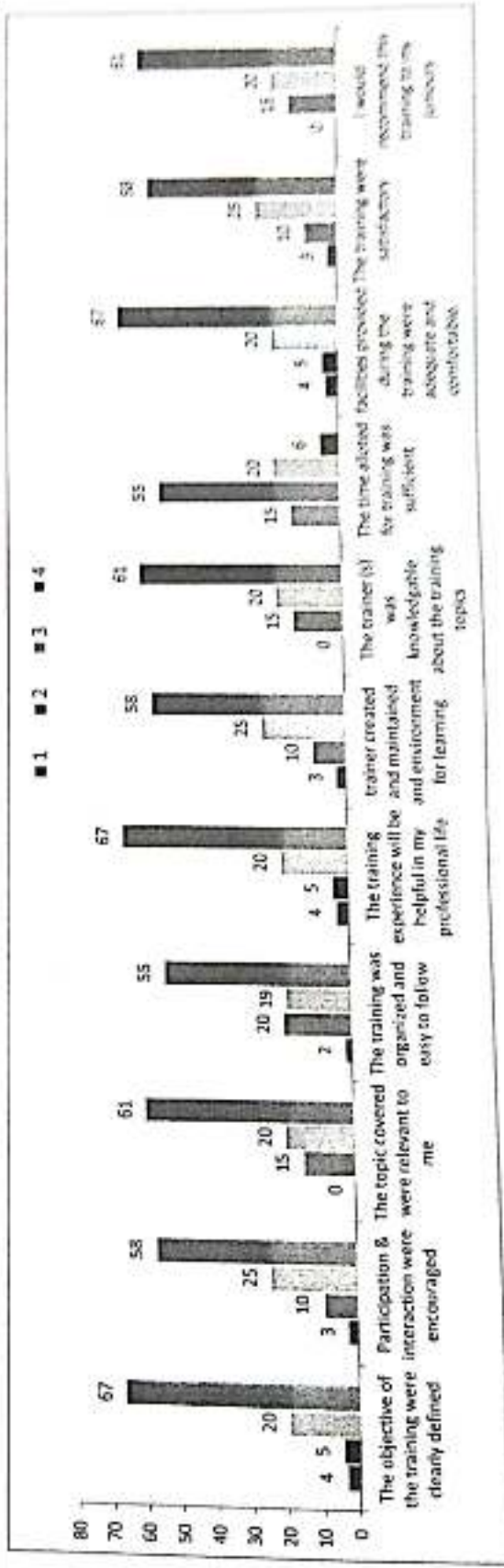
Head of Institute
GENERAL MANAGER (SG)
NSIC TECHNICAL SERVICES CENTRE
(A GOVT. OF INDIA ENTERPRISE)
BALITIKURI, HOWRAH

Outstanding : 91%-100%, Very Good : 81%-90%, Good : 70%-80%, Satisfactory : 50%-70%



DEPARTMENT OF ELECTRICAL ENGINEERING
Feedback analysis of Motor winding and Home appliances
2017,2018 Pass out
Duration: 01/08/16-05/08/16, 08/08/16-12/08/16
Training Organized by: The Department of Electrical Engineering, S.I.T

Name of the trainer: N.S.I.C, Govt. of India		Ratings(1 being lower & 4 being highest rating)		Total No. of Respondents : 95					
Sl.no	Feedback elements	1	2	3	4	% of rating 1	% of rating 2	% of rating 3	% of rating 4
1	The objective of the training were clearly defined	4	5	20	67	4.17	5.21	20.43	69.75
2	Participation & interaction were encouraged	3	10	25	62	3.43	10.41	26.24	60.42
3	The topic covered were relevant to me	0	15	20	65	0.00	15.63	20.43	63.94
4	The training was organized and easy to follow	2	20	18	60	2.08	20.83	18.75	58.33
5	The training experience will be helpful in my professional life	4	5	20	67	4.17	5.21	20.43	69.75
6	Trainer created and maintained an environment for learning	3	10	25	62	3.43	10.41	26.24	60.42
7	The trainer (s) was knowledgeable about the training topics	0	15	20	65	0.00	15.63	20.43	63.94
8	The time allotted for training was sufficient	15	55	20	10	15.63	57.49	20.43	5.45
9	Facilities provided during the training were adequate and comfortable.	4	5	20	67	4.17	5.21	20.43	69.75
10	The training were satisfactory	3	10	25	62	3.43	10.41	26.24	60.42
11	I would recommend this training to my juniours	0	15	20	65	0.00	15.63	20.43	63.94



Jyoti Kulkarni
 Head of the Department
 Department of Electrical Engineering
 S.I.T

Training name: Motor winding and home appliances
%of the classes attained by each students(2017P.O only)

Duration: 01/08/2016-12/08/2016

Department of Electrical Engineering, SIT

Sl. No.	Roll	Name	Attendance	Total class held	% of attendance
1	11901613001	AAMIR ALI	8	10	80
2	11901613002	ABHINANDAN MISHRA	10	10	100
3	11901613003	ABHISEK BHATTACHARJEE	5	10	50
4	11901613004	ABHISHEK PODDER	8	10	80
5	11901613005	ADRIJAA PODDAR	7	10	70
6	11901613006	AKASH CHAKRAVORTY	0	10	0
7	11901613007	AKASH KIRODIWAL	10	10	100
8	11901613008	AKASH KUMAR	6	10	60
9	11901613009	AKASHNEEL CHAKRABORTY	1	10	10
10	11901613010	AMIT KUMAR	6	10	60
11	11901613011	ANAAB	5	10	50
12	11901613012	ANAND MOHAN	0	10	0
13	11901613013	ANGSHU PRONIT MAHANTA	1	10	10
14	11901613014	ANINDYA KUMAR DAS	0	10	0
15	11901613015	ARJIT BOSE	0	10	0
16	11901613016	ARNAB BHATTACHARJEE	10	10	100
17	11901613017	ASHISH KUMAR	6	10	60
18	11901613018	ASHUTOSH KUMAR	10	10	100
19	11901613019	AVIK ADHIKARY	0	10	0
20	11901613020	AVISMIT DUTTA	2	10	20
21	11901613021	AYANDEEP CHATTERJEE	9	10	90
22	11901613022	BIJAN ROY	10	10	100
23	11901613023	BITHIKA DAS	10	10	100
24	11901613024	DEBANGAN SAHA	8	10	80
25	11901613025	DEBARGHA CHATTERJEE	0	10	0
26	11901613026	DEBRAJ DUTTA	0	10	0
27	11901613027	DEEP DEBNATH	10	10	100
28	11901613028	EHSAN ANJUM	10	10	100
29	11901613029	GOURAB CHANGDER	0	10	0
30	11901613030	IMTEAZ AHMED	0	10	0
31	11901613031	INDRANIL NANDI	0	10	0
32	11901613032	KABI NUNIA	8	10	80
33	11901613033	KABITA GUPTA	10	10	100
34	11901613034	KASIF HUSSAIN	9	10	90
35	11901613035	KISHLAY KUMAR	2	10	20
36	11901613036	KRISHNA VISHWAKARMA	9	10	90
37	11901613037	KUMAR KUNAL VERMA	2	10	20
38	11901613038	KUMAR SHUBHAM	7	10	70
39	11901613039	MAITRI MOKTAN	8	10	80
40	11901613040	MANJIT RAVIDAS	8	10	80
41	11901613042	MD UNUS SALIM	10	10	100

42	11901613043	MOHANA SARKAR	8	10	80
43	11901613044	MRINMOY GHOSH	6	10	60
44	11901613045	MUKESH KUMAR NONIA	5	10	50
45	11901613046	NEELU KUMARI	10	10	100
46	11901613047	NEHA BHOWMICK	0	10	0
47	11901613048	NILANJAN SAHA	6	10	60
48	11901613049	NILISH KUMAR	6	10	60
49	11901613050	NITIN KUMAR	9	10	90
50	11901613051	PINANKUR BHADRA	0	10	0
51	11901613052	PRAWLEN KUMAR	9	10	90
52	11901613053	PRINCE PANKAJ	8	10	80
53	11901613054	PUJA DAS	0	10	0
54	11901613055	RAHUL GHOSH	0	10	0
55	11901613056	RAHUL KARMAKAR	0	10	0
56	11901613057	RAHUL SHAW	9	10	90
57	11901613058	RAJESH MONDAL	4	10	40
58	11901613059	RAJNISH KUMAR	9	10	90
59	11901613061	SAIKAT KUNDU	9	10	90
60	11901613062	SAMEER RAJ	8	10	80
61	11901613063	SAMIR TIHATRI	5	10	50
62	11901613064	SAMRAGGI GHOSH	2	10	20
63	11901613065	SANDIPON ROY	7	10	70
64	11901613066	SANJEEV NARAYAN	2	10	20
65	11901613067	SANKET SAHA	0	10	0
66	11901613068	SAPTARSHI MONDAL	0	10	0
67	11901613069	SHAIBAL KANTA	0	10	0
68	11901613070	SHANKAR BANERJEE	1	10	10
69	11901613071	SHANU KUMAR	6	10	60
70	11901613072	SHIVAM KUMAR	9	10	90
71	11901613073	SHUBHAM KUMAR GUPTA	1	10	10
72	11901613074	SIBARJUN DHAR	2	10	20
73	11901613075	SOHAM SAIPATI	7	10	70
74	11901613076	SOMNATH CHAKRABORTY	7	10	70
75	11901613077	SOMNATH CHAKRABORTY	1	10	10
76	11901613078	SOUALYA HOM ROY	0	10	0
77	11901613079	SOUMYENDU CHOWDHURY	7	10	70
78	11901613080	SOURAMITA KHAN	8	10	80
79	11901613081	SOURAV GHOSH	10	10	100
80	11901613082	SUBHAJIT SAHIS	4	10	40
81	11901613083	SUBHAM KUMAR ROY	9	10	90
82	11901613084	SUBHANKAR CHOWDHURY	8	10	80
83	11901613085	SUDIPTO MAJI	10	10	100
84	11901613086	SUMAN CHABRI	5	10	50
85	11901613087	SUPRIYA GORAI	9	10	90
86	11901613088	SUSHMITA SEN	9	10	90
87	11901613089	SUVAYU DAS	1	10	10
		SWARUP MONDAL	6	10	60

88	11901613090	SWASTI ARYA	10	10	100	✓
89	11901613091	TANMOY SHIL SHARMA	0	10	0	
90	11901613092	VED VIRT KUMAR	0	10	0	
91	11901613093	VIJAY SARKAR	9	10	90	✓
92	11901613094	VIKRAM KUMAR	9	10	90	✓
93	11901613095	VIVEK KUMAR DUTTA	1	10	10	
94	11901613096	VIVEK RAJ	2	10	20	
95	11901613097	VIVEK RAJ	7	10	70	✓
96	11901614055	VINAY KUMAR CHAUDHAR	8	10	80	✓
97	11901614056	GOURAV BARUA	5	10	50	✓
98	11901614057	JOYDEEP SARBADHIKARY	10	10	100	✓
99	11901614058	PRERNA BHADRA	9	10	90	✓
100	11901614059	SANJEEB BALA	5	10	50	✓
101	11901614060	SANKHA SUBHRA NANDY	7	10	70	✓
102	11901614061	SHAHIDA ASHRAFI	0	10	0	✓
103	11901614062	SHRAMONA BANERJEE	8	10	80	✓
104	11901614063	SUBHADIP SARKAR	6	10	60	✓
105	11901614064	SWAPRAVA JHAMPATI	0	10	0	✓
		VIKASH PANDEY				