Department of Electronics and Communication Engineering

Alva's Institute of Engineering & Technology

Shobhavana Campus, Mijar, Moodbidri, D.K – 574225

Phone: 08258-262725, Fax: 08258-262726

Email-principalaiet08@gmail.com, www.aiet.org.in

INDUSTRIAL VISIT REPORT

ACADEMIC YEAR 2016-17

Industrial Visit Coordinator:

1. Mr. Parveez Shariff

2. Mr.Pradeep K

Head of the Department

Dr. D V Manjunatha

H. O. D.
Dept. Of Electronics & Communication
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

Introduction

The students of 5thsem ECE had been to an Industrial visit to Bangalorefrom 25th to 27th September, 2016. The total strength was 94 students from both A & B sections. Students were accompanied by 4 faculties who guided them throughout the journey. The firstday visit was on 26th 2016.The first visited is toNMIT Bangalore Nano-Materials & MEMs Lab at 9am, latervisited to IIScBangalore, CeNSE Lab. The second day i.e., on 27th 2016, visit was to All India Radio transmitter & receiver station at Bangalore.

NMIT Nano – Materials & MEMs Lab, Bangalore

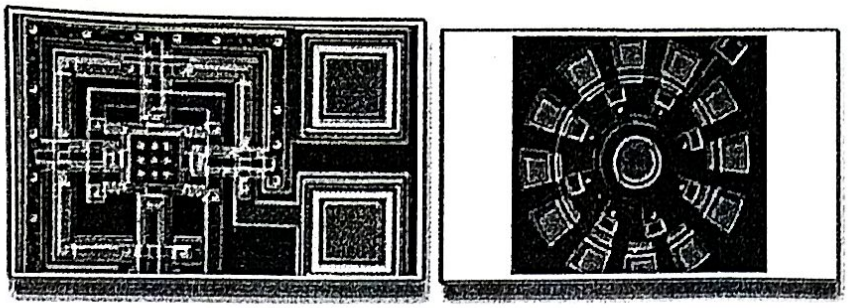
The Nano – Science lab is VGST funded lab for the research study on Nano materials & MEMs. It consists of following sections:

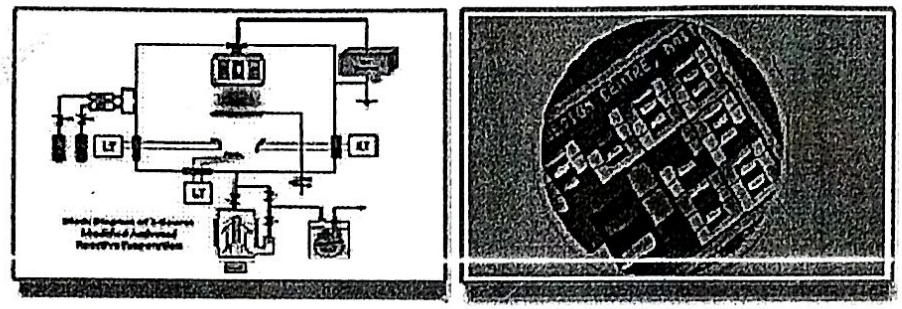
1. Sputtering Unit – Vaccum Coating System
2. Chemical Vapour Deposition
3. Polymer section – Magnetic stirrer, Spin Coater, Gas Mixer,
4. CoventorWare& Consolesimulation tool for MEMs

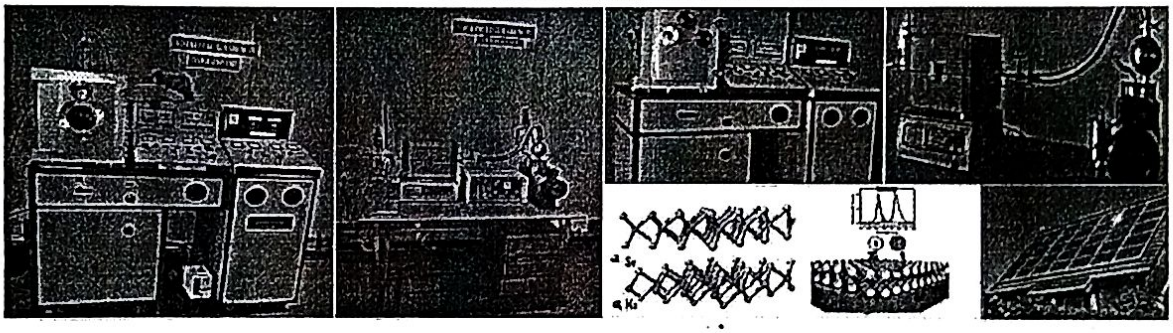
They explained for the students about

1. Design, Simulation & Development of Micro – Electro – Mechanical Systems (MEMs),
2. Explained about Thin film deposition using Sputtering unit.
3. Also explained about Nano materials synthesis.

They showed MEMs Microphone & Micro Motor developed at their lab.







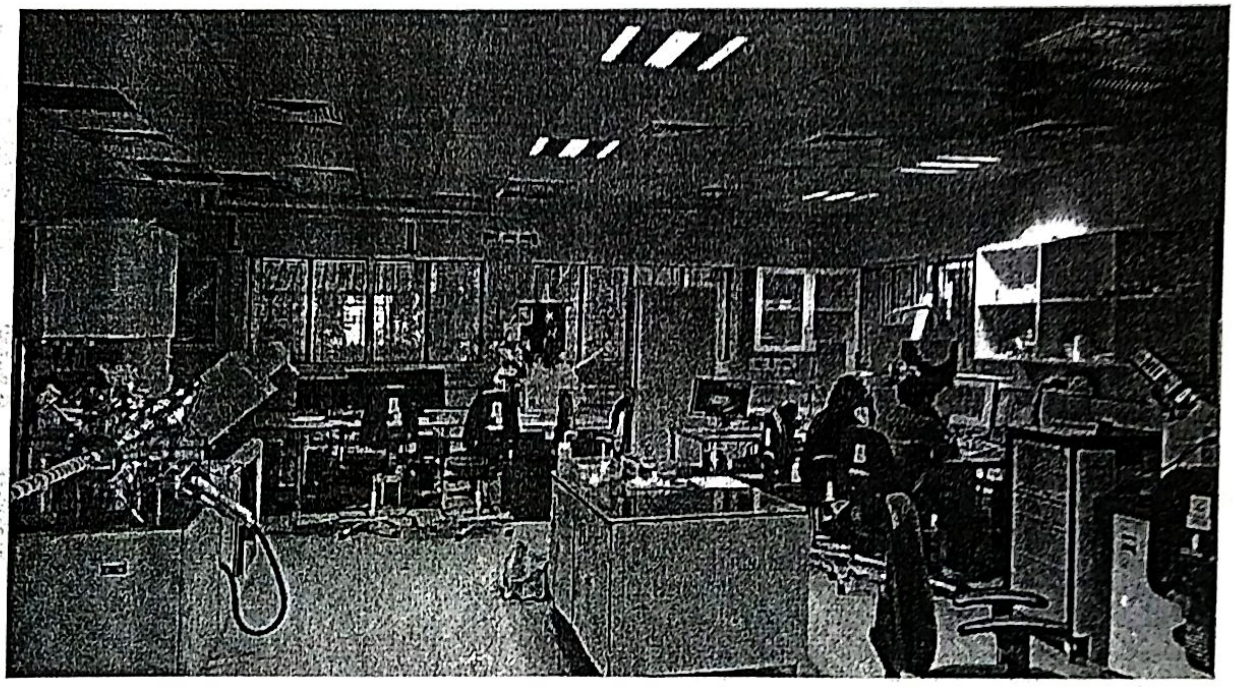
IIScCeNSE Lab, Bangalore

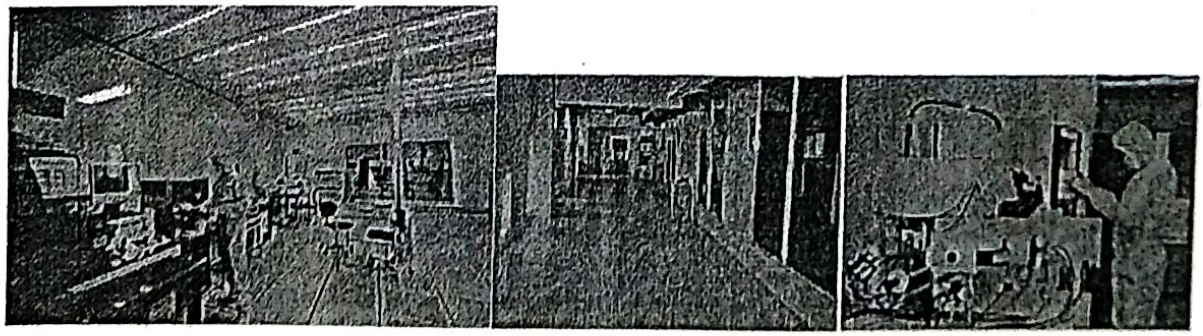
The CeNSE lab is the Centre for Nano Science & Engineering, to perceive interdisciplinary research across several disciplines with the focus on Nano scale systems.

There students got the chance to see the **Clean Rooms** of 1000 & 100 Grade rooms. Students were explained about Electrical Characterization on Nano material, Mechanical Characterization, Optical Characterization & Chemical Characterization.

Students were taken in batches of 20 each to show Clean room & to demonstrate Electron beam Lithography process, Thin Film deposition Process & Etching process.


NANO
SCIENCE





All India Radio Station, Bangalore

Students got an opportunity to learn about the types of Antenna & about the Antenna propagation. There the Frequency Modulation technique & the device used are demonstrated at the transmission section. The power amplifiers & the wave guides carrying the electromagnetic signal to antenna were shown. The students were taken to the different Recording rooms, live studios & editing room.

Conclusion

It was a wonderful experience for the students & for the faculty to grok about the MEMs technology, the design process, simulation, & fabrication of MEMs devices. The field visit to AIR, gave idea about Antenna & propagation, Modulation technique and the power devices. This industrial visit motivated students to understand the technical concepts.

ALVA'S INSTITUTE OF ENGINEERING TECHNOLOGY

Shobhavana Campus, Mijar, Moodbidri, D.K – 574225

Phone: 08258-262725, Fax: 08258-262726

To

ALL INDIA RADIO CAMPUS

RAJBHAVAN ROAD, BANGALORE,

KARNATAKA, INDIA,

PABX:080 22268151/152/153

PIN-560001

Date:10/09/2016

Respected Sir/Madam,

Sub: Seeking permission to visit your esteemed Industry.

Alva's Institute of Engineering and Technology (AIET) is a premier **Engineering Institute** of Alva's Education Foundation established in the year 2008. AIET is strategically located adjacent to Moodbidri-Mangalore National Highway, which is 24 Kms from Mangalore International Airport.

AIET is recognized by **All India Council for Technical Education (AICTE)**, New Delhi and affiliated to **Visvesvaraya Technological University (VTU)**, Belgaum, approved by Govt. of Karnataka. AIET is ranked as one of the best Technical Institute in Dakshina Kannada region.

Currently, Institute offers 5 under graduate and 4 post-graduate Programs. Institution also offers several Research Programs leading to doctoral (Ph.D) studies.

As a part of the curriculum, student's Industrial Visit is mandatory. So as to provide them the real insight of working procedure of an esteemed organization such as yours and it will also fulfill the curriculum demand.

In the above background, we would like to send two batches (94 students), studying in Semester **Electronics and Communication Engineering** along with 4 Faculty Members of Department of **Electronics and Communication Engineering** to visit your esteemed industry preferable on/ during.

I request you, kindly accord the necessary permission for the above visit and arrange for guides for the students.

We assure you that our students will observe the rules and regulations that are prescribed by your company for the visitors and will no way disturb the functioning of the company during their visit.

We shall be grateful for a favorable response.

With Regards

Dr. Peter Fernandes

ALVA'S INSTITUTE OF ENGINEERING TECHNOLOGY

Shobhavana Campus, Mijar, Moodbidri, D.K – 574225

Phone: 08258-262725, Fax: 08258-262726

To

The Registrar

Indian Institute of Science

Bangalore-560012, India.

Date:10/09/2016

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Phone: 08258-262725, Fax: 08258-262726

To

Nitte Meenakshi Institute of Technology,

P.B.No.6429,

Yelahanka, Bangalore 560064.

Date:10/09/2016

Respected Sir/Madam,

Sub: Seeking permission to visit your esteemed Industry.

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Shobhavana Campus, Mijar, Moodbidri, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

From,

The Principal

Alvas Institute of Engineering and Technology

Mijar, Moodbidri-574225

Date:16/09/2016

To,

ALL INDIA RADIO CAMPUS

RAJBHAVAN ROAD, BANGALORE,

KARNATAKA, INDIA,

PABX:080 22268151/152/153

PIN-560001

Respected Sir,

Sub: Acknowledgement for acceptance of Industrial Visit-Reg.

The purpose of this letter is to acknowledge the confirmation about the Industrial Visit for the date on 26/09/2016. Hereby AIET confirms the Industrial Visit along with students and faculty members (divided into two Batches).

Further we confirm that there are no foreign trainees / students in our group and our students will obey all your instructions in a disciplined manner.

Thanking you,

With Regards

Dr. Peter Fernandes

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Shobhavana Campus, Mijar, Moodbidri, D.K – 574225

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Alva's Institute of Engineering and Technology

Mijar, Moodbidri-574225

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To,

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Indian Institute of Science

Bangalore-560012, India.

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From,

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Alvas Institute of Engineering and Technology

Mijar, Moodbidri-574225

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To,

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Yelahanka, Bangalore 560064.

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Department of Electronics and Communication Engineering

5TH SEM EC (A - SECTION)

Sl. No	USN	NAME OF THE STUDENT
1	4AL12EC067	Sagar
2	4AL12EC092	Yadhukrishnan P V
3	4AL13EC046	Navneeth
4	4AL13EC067	Rohan D
5	4AL13EC092	Suraj K O
6	4AL14EC412	Pruthvi Raj P
7	4AL14EC420	Vijayakumar B M
8	4AL14EC001	A Shabaz Khan
9	4AL14EC002	Aishwarya
10	4AL14EC003	Akash O
11	4AL14EC004	Akshatha A
12	4AL14EC006	Anjana N katwe
13	4AL14EC007	Anusha A Poojary
14	4AL14EC008	Anushree Shettigar
15	4AL14EC010	Apoorva D
16	4AL14EC011	Arun Kumar K V
17	4AL14EC012	Ashik
18	4AL14EC013	Ashika H A
19	4AL14EC014	Ashok Singh Raj Purohit
20	4AL14EC016	Avinash A P
21	4AL14EC018	Bhandary Nishma Bhoja
22	4AL14EC020	Bindushree K
23	4AL14EC021	Chaithra
24	4AL14EC022	Chaitra Tungal
25	4AL14EC023	Chethak
26	4AL14EC024	Chethan M N
27	4AL14EC025	Chongtham Rakesh Singh
28	4AL14EC027	Deepika
29	4AL14EC028	Dheeraj A Shetty
30	4AL14EC029	Divya Konati
31	4AL14EC030	Divyashree M S
32	4AL14EC031	Gagana G D
33	4AL14EC032	Gangadhar Somanna Biradar
34	4AL14EC033	Gayathry T S
35	4AL14EC034	Govindrao M Mahendrakar
36	4AL14EC035	Hamsa P C
37	4AL14EC036	Hareesh S
38	4AL14EC037	Hariprasad
39	4AL14EC038	Harshith Somanna P B
40	4AL14EC040	Harshitha S
41	4AL14EC041	Jagadish Venkatraman Naik

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Department of Electronics and Communication Engineering

42	4AL14EC042	Jyothi
43	4AL14EC043	Karthik A R
44	4AL14EC044	Kavyashree K L
45	4AL14EC045	Keerthana K N
46	4AL14EC046	Keerthi Vadeyar
47	4AL14EC047	Kotian Sarvesh Umanath
48	4AL14EC048	Kshithija
49	4AL14EC049	Mahesh Biradar
50	4AL14EC050	Malika N
51	4AL14EC052	Manohara
52	4AL14EC053	Meghana Ravikumar
53	4AL14EC055	Nidhi Subhash Manjrekar
54	4AL14EC058	Nisha A C
55	4AL14EC060	Pallavi C
56	4AL15EC419	Prashanta Pateela
57	4AL15EC407	Girisha V
58	4AL15EC410	Mallikarjigouda Patil
59	4AL15EC422	Rohith A
60	4AL15EC433	Yashashwi S
61	4AL15EC425	Shashikumar Magadum
62	4AL15EC432	Vinay N

5TH SEM EC (B - SECTION)

Sl. No	USN	NAME OF THE STUDENT
1	4AL13EC068	Rohith Pawar
2	4AL13EC113	Sandeep B N
3	4AL14EC054	Nagesha Gowda
4	4AL14EC056	Nikhilesh M
5	4AL14EC061	Pooja Arekal K
6	4AL14EC062	Pooja D Patkar
7	4AL14EC063	Pooja S K
8	4AL14EC064	Prabhakara
9	4AL14EC068	Raina Benita Lobo
10	4AL14EC069	Ranjan
11	4AL14EC070	Rashmitha K
12	4AL14EC071	Renuka
13	4AL14EC072	Sachin K V
14	4AL14EC075	SatishNayak
15	4AL14EC076	Sevanthika H V
16	4AL14EC077	Sheethal M Nayak
17	4AL14EC079	Shilpashree N
18	4AL14EC080	Shiva kumar
19	4AL14EC082	Soujanya H N
20	4AL14EC083	Soumya R K

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21	4A:14EC084	Soundaraya P
22	4AL14EC085	Soudaryashree N
23	4AL14EC086	Subramani M
24	4AL14EC087	Sumanshekar A
25	4AL14EC088	Sumiya Sultana R A
26	4AL14EC089	Supriya A M
27	4AL14EC091	T Hithaishi Mohan
28	4AL14EC092	UpparaSangeetha
29	4AL14EC094	Vandana Shree J S
30	4AL14EC096	Varsha K
31	4AL14EC097	Varshitha C R
32	4AL14EC100	Vithoba Narayanapur
33	4AL14EC101	Yadappa Hawaldar
34	4AL14EC102	Yashodha A Bommanahalli
35	4AL15EC401	Abhilash Gowda H R
36	4AL15EC403	Amrutha J N
37	4AL15EC406	Doddavva Beesanakoppa
38	4AL15EC411	Manasa K.M
39	4AL15EC412	Manjunath Agasagi
40	4AL15EC413	Manjushree D
41	4AL15EC416	Prakash K S
42	4AL15EC417	Pranav Prakash Latti
43	4AL15EC 420	Prashanthakumar H G
44	4AL15EC 421	Priyanka Hanumappa Nagaral
45	4AL15EC 423	Roopa
46	4AL15EC 426	Shilpa H
47	4AL15EC 428	Shwetha Hangaragi
48	4AL15EC 429	Shwetha T M
49	4AL15EC 430	Sujaya L
50	4AL15EC431	Vanishri

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IMPACT ANALYSIS

Company Name : AIR,CENSE LAB IISC and NMIT	**Date: 29.09.2016**
Academic year: 2016-17	

3rd year students of ECE (94 students) visited to All India Radio (AIR), CENSE LAB IISC and NMIT, Bangalore under the Industry Visit event from the department of ECE, on 26.09.2016 and 27.09.2016 along with the following faculty incharges:

1. Ms. Jyothi Pramal
2. Mr. Parveez Shariff
3. Mr. Prasanna Kumar
4. Ms. Prithvi Shetty

The students learnt about:

1. Antennas, Transmitter Complex Specifications at AIR, Bangalore.
2. Nano fabrication facility and MEMS Characterizations at CENSE LAB IISC, Bangalore.
3. Thin Film Deposition using sputtering unit at NMIT, Bangalore.

A test was conducted based on the technical concepts that were briefed to the students during the Industry Visit to the above organizations. The test answer sheets were evaluated by the faculty of the department. The test results show that 88% of the students scored more than 17 out of 20 Marks. The students could apply the knowledge gained by this industrial visit to their projects. The students learnt the working of these organizations in detail. Hence the overall outcome of the Industry Visit is achieved.

INDUSTRIAL VISIT
CO-ORDINATOR

HOD
H. O. D.
Dept. of Electronics & Communication
Alva's Institute of Engineering & Technology
Mijar, MOODBIDRI-574 225

ALVA'S INSTITUTE OF ENGINEERING TECHNOLOGY

Shobhavana Campus, Mijar, Moodbidri, D.K – 574225

Phone: 08258-262725, Fax: 08258-262726

List of questionnaire for the Industrial Visit

Company Name :All India Radio(AIR),CENSE LAB IISC and NMIT		**Date:29.09.2016**
Academic year: 2016-17		
1.	How many broadcasting stations are present today in India? a.82 b.10 c.36 d.5	
2.	AIR uses the following satellite for the transmission of its programs. a.GSAT-2 Satellite b.GSAT-6 Satellite c.GSAT-10 Satellite d.GSAT-8 Satellite	
3.	Software used for processing the raw version of the recorded program is a. RADIO RECORD b.RADIO PLAY c.RADIO ONE d.RADIO ASSIST	
4	The processed version of program is made available for broadcasting by scheduling it to the program list using the following software. a.VIRTUAL STUDIO b.VISUAL STUADIO c.RADIO STUDIO d.ANTENNA STUDIO	
5.	The output of the studio room console is directed to the a.STUDIO TRANSMITTER LINK b.STANDARD TEMPLATE LINK c.STANDARDTRANSMITTER LINK d.STANDARD TRANSMISSION LINK	
6.	Full form of ISDN. a.Integrated Social Data Network b.Integrated Services Data Network c.Integrated Services Digital Network d.Integrated Services Data Node	
7.	Yagi antennas are mounted on the top of a mast of height around a.5m b.100m c.20m d.45 m.	

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8.	C-band receiver antenna with a dish whose diameter is about a.45m b.100m c.20m d.5 m.
9.	Full form of NNfC a. National Nanofabrication b.Negative Nanofabrication c.New Nanofabrication d.Novice Nanofabrication
10.	Frequency used for RF device is upto. a. 50hz b. 70hz c.60hz d. 20hz
11.	Photolithography is used with resolution of a. 1 µm b. 2 µm c. 4 µm d.3 µm
12.	The e-beam used for lithography is of a..10nm b.100nm c.50nm d.80nm
13.	Full form of MNCF a. Micro and Nano Characterization Facility b.MiniandNanoCharacterizationFacility c.Macro and Nano Channel Facility d.Macro and Nano Channel Family
14.	Inline characterization using a. Integrated tools b. metrology tools. c.Network tools d. service tools
15.	Full form for CeNSE a.Centre for Nano Science and Engineering

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	b.Centre for New Service and Engineering c. Channel for Micro Science and Engineering d.Centre for Macro Science and Engineering
16.	Number of manufacturing units of BEL present in India a.50 b.5 c.9 d.20
17.	The cascading of transformers to generate High AC voltages is known as a.Impulse generator b.power generator c.voltage generator d.current generator
18.	Full form of HUD a.Head Up Display b.Head Usual Data c.Head Ultra Display d.Heat Up Data
19.	Full form of STARS-V a.Secure Tactical Army Radio System b.Secure Total Amount Rating System c.System Time Assist Radio System d.System Tactics Amount Rating System
20.	Full form of CNR a.Compute Net Rate b.Complex Net Rate c.Complex New Radio d.Composite Net Radio

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ANSWER SHEET FOR INDUSTRIAL VISIT 2016-2017

Name: Aishwarya.	USN: 4AL14EC002	Date of Visit: 29.09.16
Signature:		
Company Name: AIR, CENSE LAB AND NMIT		

Questions 1-10					Questions 11-20				
Sl. No.	A	B	C	D	Sl. No.	A	B	C	D
1.	⊘	○	○	○	11.	⊘	○	○	○
2.	○	○	⊘	○	12.	○	⊘	○	○
3.	○	○	○	⊘	13.	⊘	○	○	○
4.	⊘	○	○	○	14.	○	○	⊘	○
5.	⊘	○	○	○	15.	⊘	○	○	○
6.	⊘	○	○	○	16.	○	○	⊘	○
7.	⊘	⊘	○	○	17.	⊘	○	○	○
8.	○	○	○	○	18.	○	⊘	○	○
9.	⊘	○	○	○	19.	○	○	⊘	○
10.	○	⊘	○	○	20.	○	○	⊘	○

18/20

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ANSWER SHEET FOR INDUSTRIAL VISIT 2016-2017

Name: Anusha. A Poojary	USN: 4AL14EC007.	Date of Visit: 29.09.16
Signature: Anusha		
Company Name: AIR, CESE Lab, IISc, NMIT.		

Questions 1-10					Questions 11-20				
Sl. No.	A	B	C	D	Sl. No.	A	B	C	D
1.	●	○	○	○	11.	○	○	○	●
2.	○	○	●	○	12.	○	○	●	○
3.	○	●	○	○	13.	●	○	○	○
4.	●	○	○	○	14.	○	○	●	○
5.	●	○	○	○	15.	●	○	○	○
6.	○	●	○	○	16.	○	○	●	○
7.	○	○	●	○	17.	●	○	○	○
8.	○	○	○	●	18.	○	○	●	○
9.	●	○	○	○	19.	○	○	●	○
10.	○	●	○	○	20.	○	○	○	●

18/20