



"Techno - Social Excellence"

# Marathwada Mitramandal's Institute of Technology (MMIT)

Accredited with "A" Grade by NAAC

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Approved by AICTE, New Delhi, Recognised by DTE, M.S.Mumbai, Affiliated to Savitribai Phule Pune University

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DTE Institute Code : 6203



"Towards Ubiquitous Computing Technology"

## DEPARTMENT OF COMPUTER ENGINEERING

### Short Term Training Program (STTP)

*On*

### Development of Laboratory Instruction & Manual

*In Association with*

**National Institute of Technical Teacher's Training & Research  
(NITTTR), Kolkata**

*Held on*

**4<sup>th</sup> Feb 2019 to 8<sup>th</sup> Feb 2019**

Coordinator



HOD

## **Program Details:**

National Institute of Technical Teacher's Training & Research (NITTTR), Kolkata organizing a Short Term Training Programme through ICT Mode (On-Line) and Marathwada Mitra Mandal's Institute of Technology (MMIT), Lohgaon, Pune is a Nodal Center for this program.

**Programme Title:** Development of Laboratory Instruction and Manual (ICT12)

**Recourse Person:** Dr. Subrata Mondal

**Date:** 04/02/2019 to 08/02/2019

**Time:** 10.00am to 5.00pm

**Venue:** Smart Classroom E-101

## **Programme Objectives:**

After attending this programme, participants would be able to:

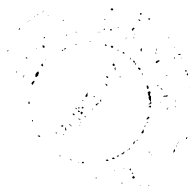
- explore the role of laboratory in student learning
- explore development of laboratory exercise
- explore writing of laboratory report
- explore standard operating procedure (SoP) in laboratory
- explore safety management in laboratory etc.

## **STTP Contents:**

The STTP is divided into following topics

### **Topic 1: The Role of Laboratory in Technical Education**

- Laboratories in Technical Education
- Role of Laboratory in Learning
- Aims of Laboratory Work
- Laboratory Methods
- Laboratory Class: Practical Skills and Abilities
- Goal of Laboratory in Learning
- Art of Experimentation
- Experimental and Analytical Skills in Laboratory Class
- Developing Collaborative Learning Skills
- Role of Laboratory Technician
- Level of Openness for Laboratory Activities
- Alternative Approaches to Laboratory Learning



## **Topic 2: Introduction to Laboratory Instruction and Manual**

- An Align Curriculum Matrix for Laboratory
- What is Laboratory Manual?
- Why Laboratory Manual?
- Laboratory Manual: Living Document
- What is Laboratory Instruction Sheet?
- The Role of Laboratory Instruction
- Goal for Laboratory Instruction
- A Model Laboratory Exercise
- Format of a Laboratory Manual


## **Topic 3: Development of Laboratory Exercise and Preparation of Report**

- Laboratory Exercise
- Various Steps for the Development of Exercise
- Cookbook Exercise
- Advantage of Cookbook Exercise
- Disadvantage of Cookbook Exercise
- What is Inquiry based Exercise?
- Advantage of Inquiry-based Exercise
- Disadvantage of Inquiry-based Exercise
- Written Laboratory Report
- General Rules for Written Laboratory Report
- Various Section of a Laboratory Report

## **Topic 4: Common Hazards in Laboratory**

- What is Hazards?
- Types of Hazards
- Potential Hazards in the Laboratory
- Major Routes of Chemical Exposure
- Criteria for Physical Hazards
- Criteria for Health Hazards
- Health Effects
- Why safety in laboratory work?
- Causes of Lab Incidents

## **Topic 5: Introduction to Safety Management in Laboratory**

- Safety Management
  - Primary Causes of Laboratory Incidents
  - Strategies to Control Hazards
  - To Start Laboratory Works
  - Material Safety and Data Sheet (MSDS)
  - Emergency Procedure
  - Laboratory Classifications
  - GHS labeling of hazardous chemicals
- 

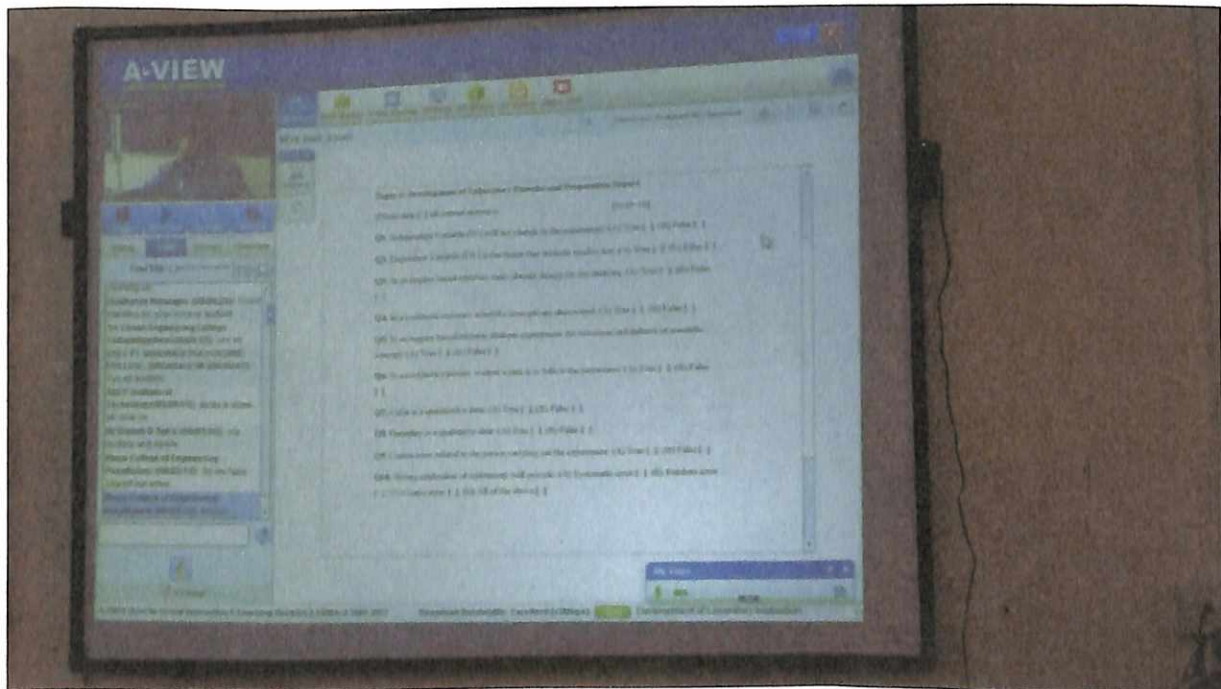
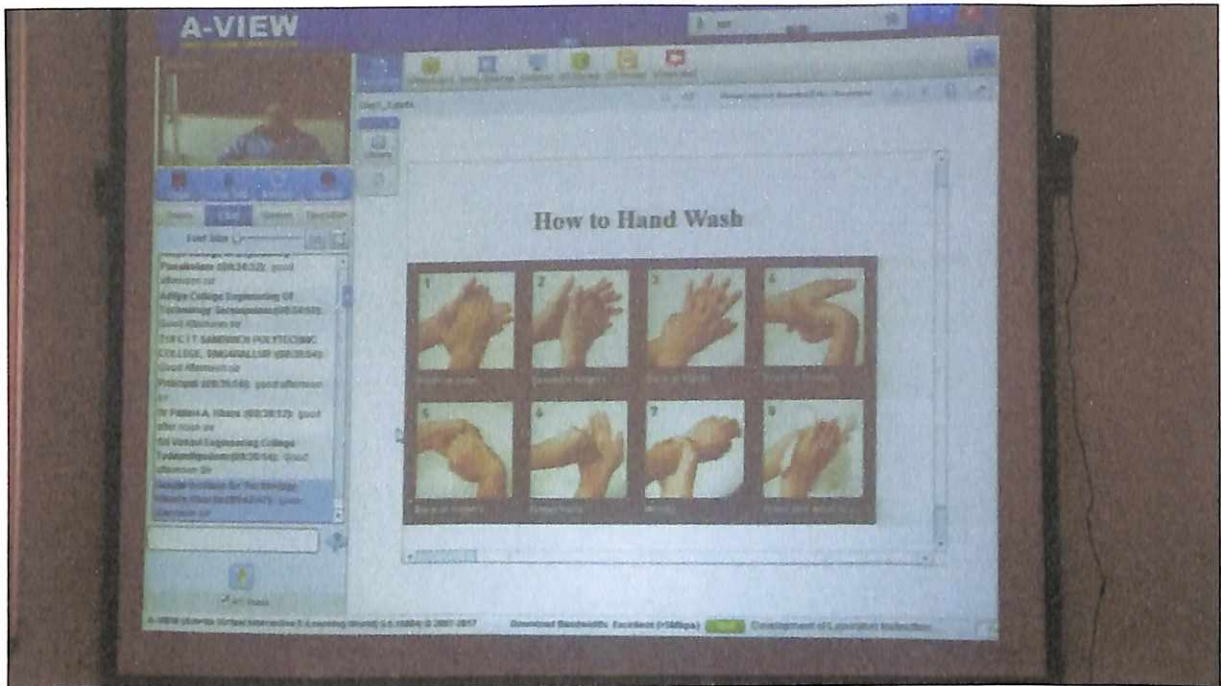
**Some Photos of STTP**



**Faculty Participant in STTP**







### Live STTP Contents from Kolkata

#### Enclosure

1. Notice
2. Registration Sheet
3. Attendance Sheet
4. Feedback forms
5. Expenditure Bills





Marathwada Mitra Mandal's  
INSTITUTE OF TECHNOLOGY (MMIT)  
Lohgaon, Pune-411047.

Department of Computer Engineering

Attendance

Date:- 4-8/02/2019

Total Count:-55

Sr. No	Name	Signature	Sr. No	Name	Signature
1	Tejashwini Abhoye		31	Dajananand Jesane	
2	Sneha Shende		32	Sudhir more	
3	U.B. Karanaye		33	Shital Nerker	
4	Shweta K. Patil		34	Yamini warke	
5	K.S. Surawase		35	Sneha shind	
6	Pusra Chormani		36	Profali Deshkar	
7	Subhat Kottavale		37	Aphinav whalle	
8	D.J. Bonde		38	Sonali mule	
9	Rashmi Tendulkar		39	Purnika Patil	
10	Yamini Warkhe		40	Mule S.S.	
11	M.S. Jagtap		41	Aparna chavan	
12	Madheth salunke		42	S.P. Yadav	
13	Ajit. Kezarkar		43	S.A. Agrawal	
14	Dr. Subhath Rathod		44	Ganesh Jagdale	
15	D.B.S. Sathre		45	Bhoge. Dhanraj	
16	N.P. Rathod		46	Smita mande	
17	Leena Dethmukh		47	Rohit Mohite	
18	U.L. Turpe		48	Namrata Jadhav	
19	K.S. Surawase		49	Bhaukhar Suziya	
20	Mangeth salunke		50	Rucha Agrawal	
21	Sonali Borawake		51	Sonali Borawake	
22	Meghana Jadhavkar		52	E.D. Kurke	
23	Sonali Mule		53	Naresh Dhamne	
24	D.S. Sawant		54	Vaibhav Rewastkar	
25	Y.B. Dongare		55	Rishha Gunki	
26	S.S. Chaudhari		56		
27	Ritesh Mahajan		57		
28	Poojan Rajale		58		
29	Sethi Sonali		59		
30	Sandip Kadam		60		