



Hope Foundation's

International Institute of Information Technology

Department of Engineering Sciences

Innovative Practices in Teaching-Learning Activity Think-Pair-Share/ Technical Puzzle

Academic Year and Semester: 2023-24

Branch: Information Technology

Subject: Programming and Problem Solving

Day and Date: Friday, 28-03-2024

Class: FE IT A

Subject code: 110005

✓ **Objectives of the activity:**

- To engage students in active learning,
- To enable students to learn, understand and Remember the basic concepts of Python Programming
- Expected outcome: Students will be able to understand, remember and explain the concepts Python Programming

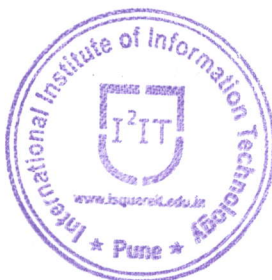
✓ **Relevance:** PO1, PO2, PO3, PO9, PO10, PO12

✓ **Justification:**

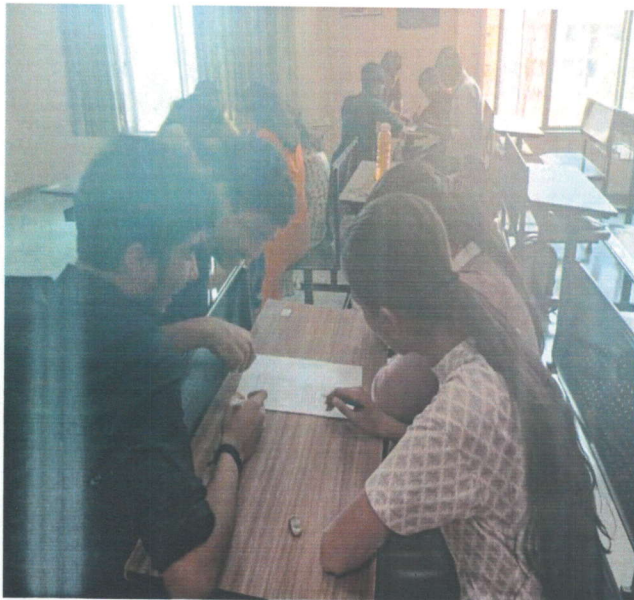
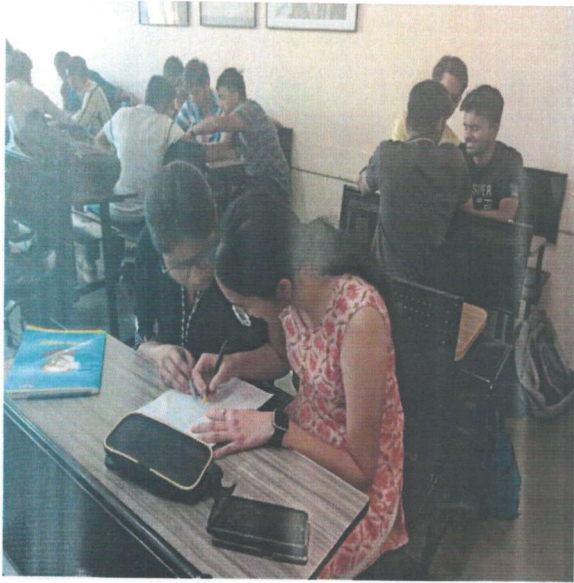
- PO1: Students will be able understand problem solving aspects.
- PO2: Students will be learning problem solving with computers with the help of Python.
- PO3: Students will be engaged in learning basic concepts of Python programming
- PO9: Students will be engaged in team works.
- PO10: Student will be able to develop communication skill in natural way.
- PO12: Student will experience Python Program Development environment in a comfortable way.

No. of Students attended: 35

Proof of resources shared: Screenshots Attached and sample copies of solved puzzles are attached.







Conduction platform: Offline Puzzle Solving in Groups and delivering Python concept

Recorded session video link: NIL

Assessment tool used to check learning of the students:

Description of the activity:

Process followed for performance Evaluation:

Remember: To understand and memorize the important concepts of Python programming through technical puzzle. And then deliver related topic to other students.

Impact of the innovative practice:

Students were able to remember, basic concepts of Python programming. Students got a chance to think and try different concepts of new language with ease and fun.

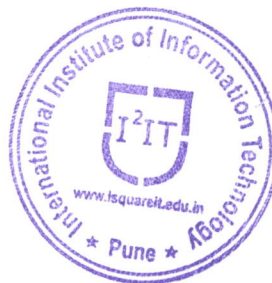
Reflective critiques for team assisted individualization:

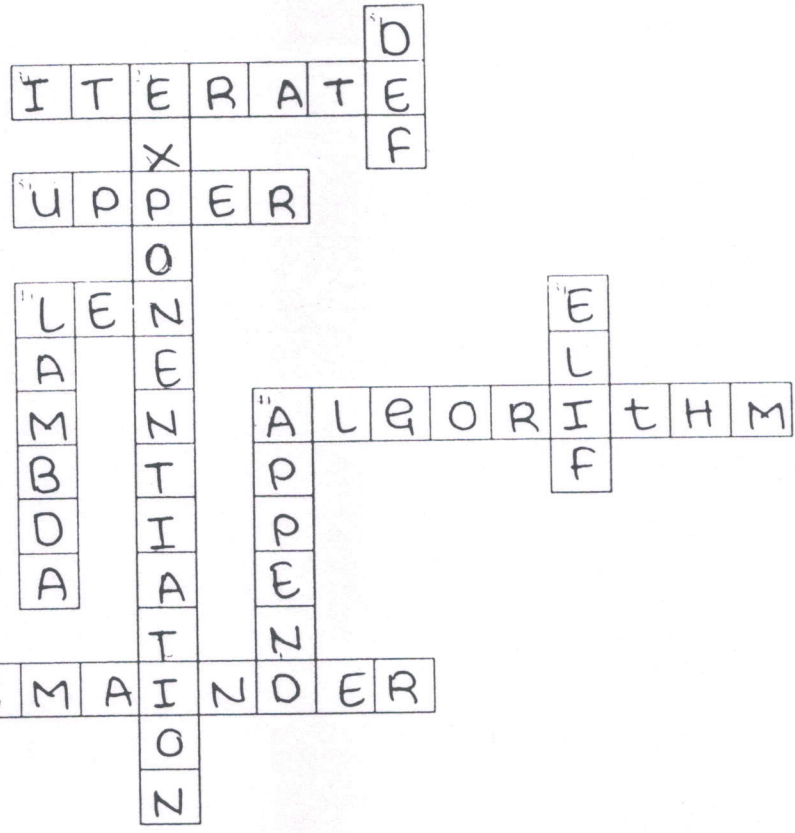
1. Challenges: To make students apply computational thinking and methodology of computer programming.
2. Steps to be taken to avoid the problems: Students solved crossword puzzles which comprised basic concepts of Python programming. And explained the concept to other students.
3. Changes for the next activity: Encourage all students for active presence while learning new concepts.



Sharda Thete

Signature of the Course Teacher



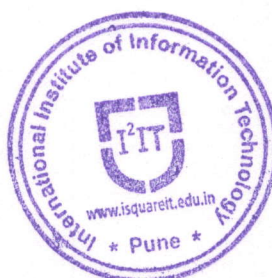


Across

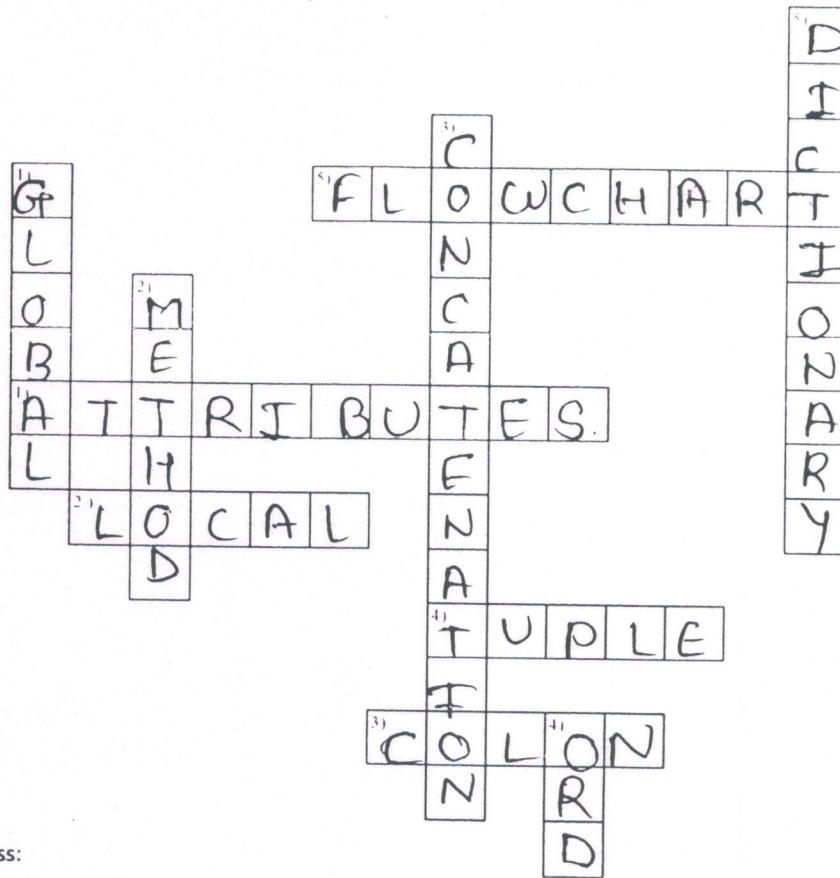
- 1) len() function is used to find the length of string.
- 2) % operator returns the remainder
- 3) for loop in Python is used to iterate over a sequence or other iterable objects.
- 4) Python is one of the problem solving tool
- 5) upper() function is used to convert the string into uppercase

Down

- 1) In Python _____ function does not have ~~the~~ name.
- 2) name of the operator ****** in Python
- 3) In Python, _____ keyword is used to check additional conditions if the previous conditions fail
- 4) _____ function is used to insert one element at the end of the list
- 5) _____ keyword we used to define a function



Python Crossword Puzzle 3

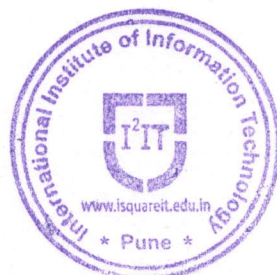


Across:

- 1) Parameters are also called as _____
- 2) The variable which is defined inside a function is called as _____
- 3) In a dictionary keys and values are separated by _____
- 4) _____ is one of the numeric data type in python
- 5) _____ is one of the problem solving tool.

Down

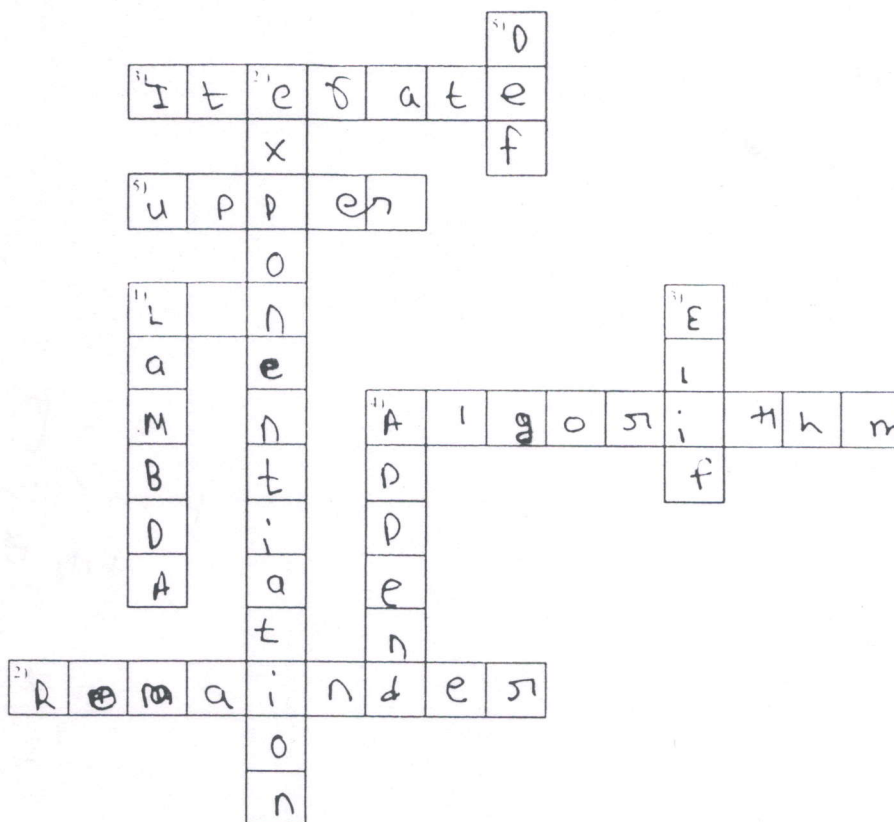
- 1) _____ keyword is used to change the scope of variable
- 2) The function, which is defined under a class, is called as _____
- 3) merging two strings is called _____
- 4) _____ function is used to convert character to it's ASCII value.
- 5) In order to store values in terms of key and value we use _____ data type.



1 NO:- 54

1 NO:- 44

Python Crossword Puzzle 2

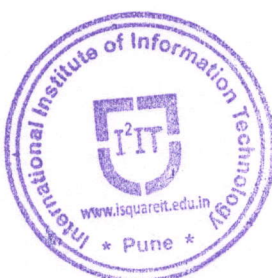


Across

- 1) _____ function is used to find the length of string.
- 2) % operator returns the ____
- 3) for loop in Python is used to ____ over a sequence or other iterable objects.
- 4) _____ is a one of the problem solving tool
- 5) _____ function is used to convert the string into uppercase

Down

- 1) In Python _____ function does not have in name.
- 2) name of the operator ** in Python
- 3) In Python, _____ keyword is used to check additional conditions if the previous conditions fail
- 4) _____ function is used to insert one element at the end of the list
- 5) _____ keyword we used to define a function



(2, 2, 3)



Hope Foundation's

International Institute of Information Technology

Department of Engineering Sciences

Innovative Practices in Teaching-Learning Activity

PROJECT COMPETITION

Programming and Problem Solving

Academic Year and Semester: 2023-24

Branch: Computer Engineering
B)

Class: ENTC/ IT (A &

Subject: PPS

Subject code: 110005

Day and Date: Wednesday, 24-4-2024

✓ **Objectives of the activity:**

- To engage students in active learning
- To enable students to learn and understand the concepts of problem solving.
- To acquaint the benefits of Python Programming with live project activity.

✓ **Expected outcome:**

- Students will be able to apply various skills in problem solving.

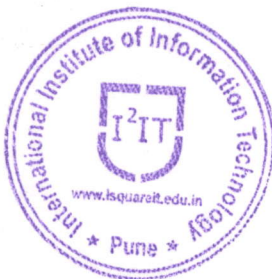
✓ **Relevance:** PO1,PO3,PO9,PO10,PO12

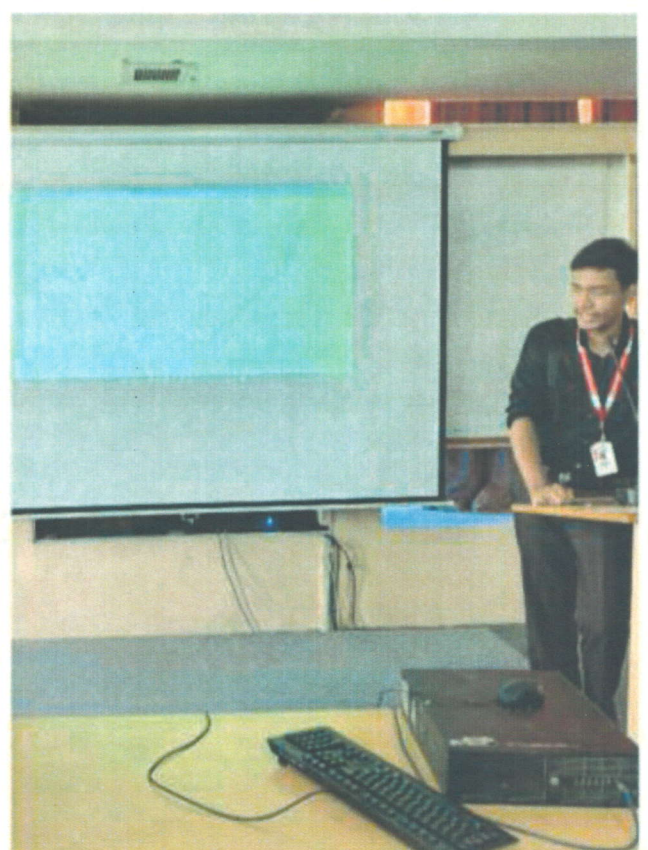
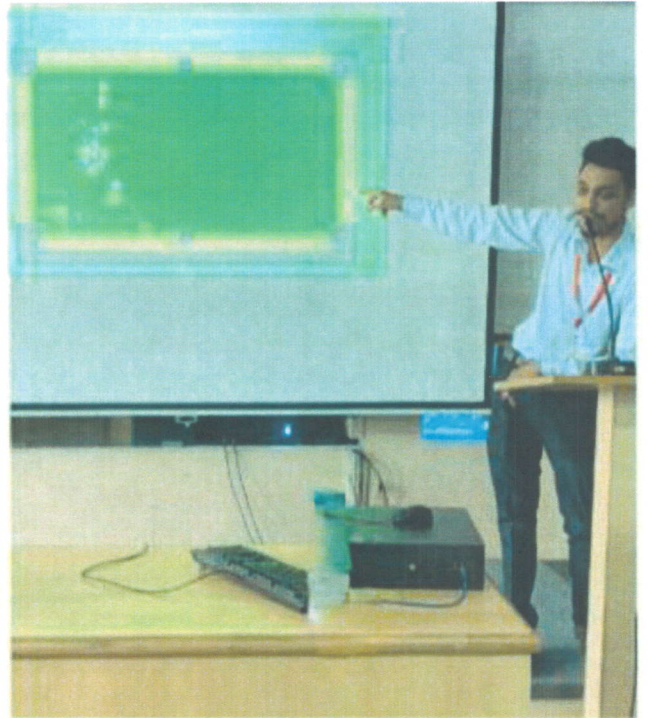
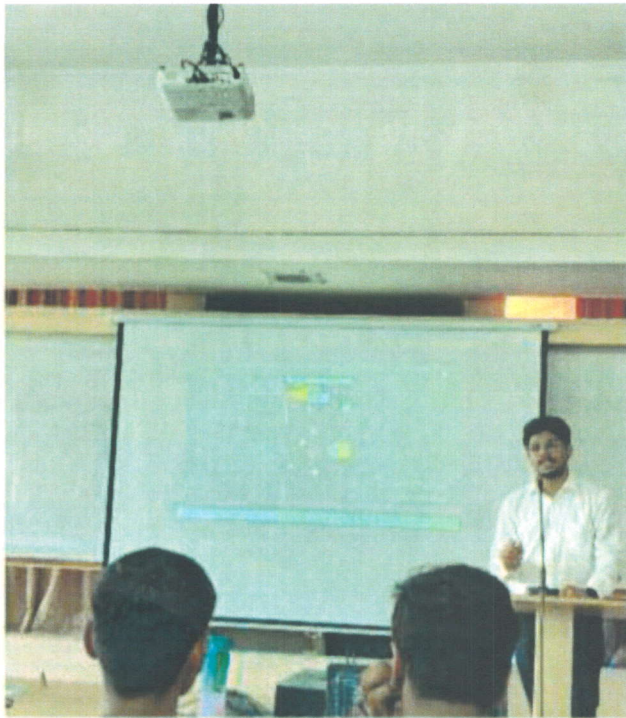
✓ **Justification:**

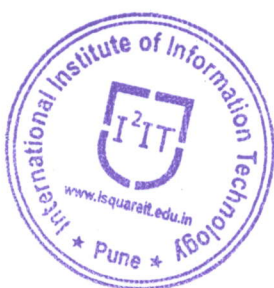
- PO1: Students will be able to remember the concepts of object
- PO3: Students will be engaged in solving examples
- PO9: Students will be engaged in team works
- PO10: Student will be able to develop communication and presentation skill
- PO12: Student will understand independent and life-long learning concepts in PPS

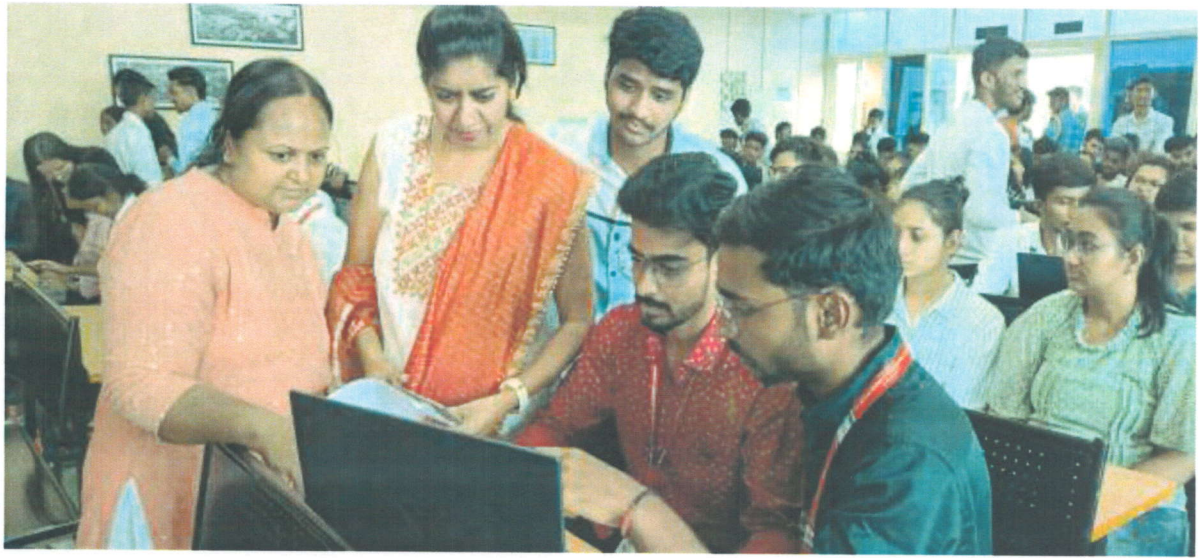
No. of Students attended: 199

Proof of resources shared: Screenshot Attached









Conduction platform: Live Presentation

Recorded session video link: NO

Assessment tool used to check learning of the students: Evaluation sheet

Description of the activity: Group Activity

Process followed for performance Evaluation:

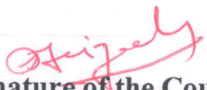
Every group had to perform Live project demo and also presented by each team members & explain the code.

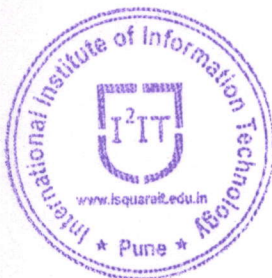
Impact of the innovative practice:

Students were able to understand & remember all advanced concepts of python with interactive applications like games, live weather app etc in fun and learn way. They were able to identify the career opportunities with python programming.

Reflective critiques for team assisted individualization:

1. Challenges :Inadequate skills of team members.
2. Steps to be taken to avoid the problems: train every members on most of the activity.
3. Changes for the next activity: Engage all student to actively participate in each activity. Allocate More time for project.

 
Signature of the Course Teacher





Hope Foundation's

International Institute of Information Technology
Department of Engineering Sciences
Innovative Practices in Teaching-Learning Activity
Peer Learning
Basic Electrical Engineering

Academic Year and Semester: 2023-24, Sem-II

Branch: Computer Engineering

Class: FE COMP A

Subject: Basic Electrical Engineering

Subject code: 103004

Day and Date: Wednesday 14/02/2024

✓ **Objectives of the activity:**

- To engage students in active learning.
- To enable students to learn, understand and remember the concepts of Electrical Engg.
- To encourage the students for the stage presentations.

✓ **Expected outcome:**

- Students will be able to remember and understand the concepts of Engineering Chemistry
- Students will get a chance to think, present and communicate as per their understanding.

✓ **Relevance: PO1, PO8, PO10**

✓ **Justification:**

- PO1: Students will be able to remember the concepts of object
- PO8: Students will be able to apply ethical principles with responsibilities and norms of the engineering practice.
- PO10: Student will be able to develop communication and presentation skill

No. of Students participated: 02

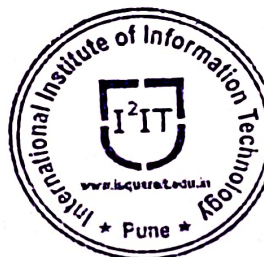
No. of Students attended: 61

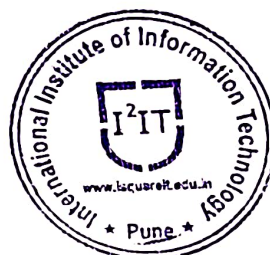
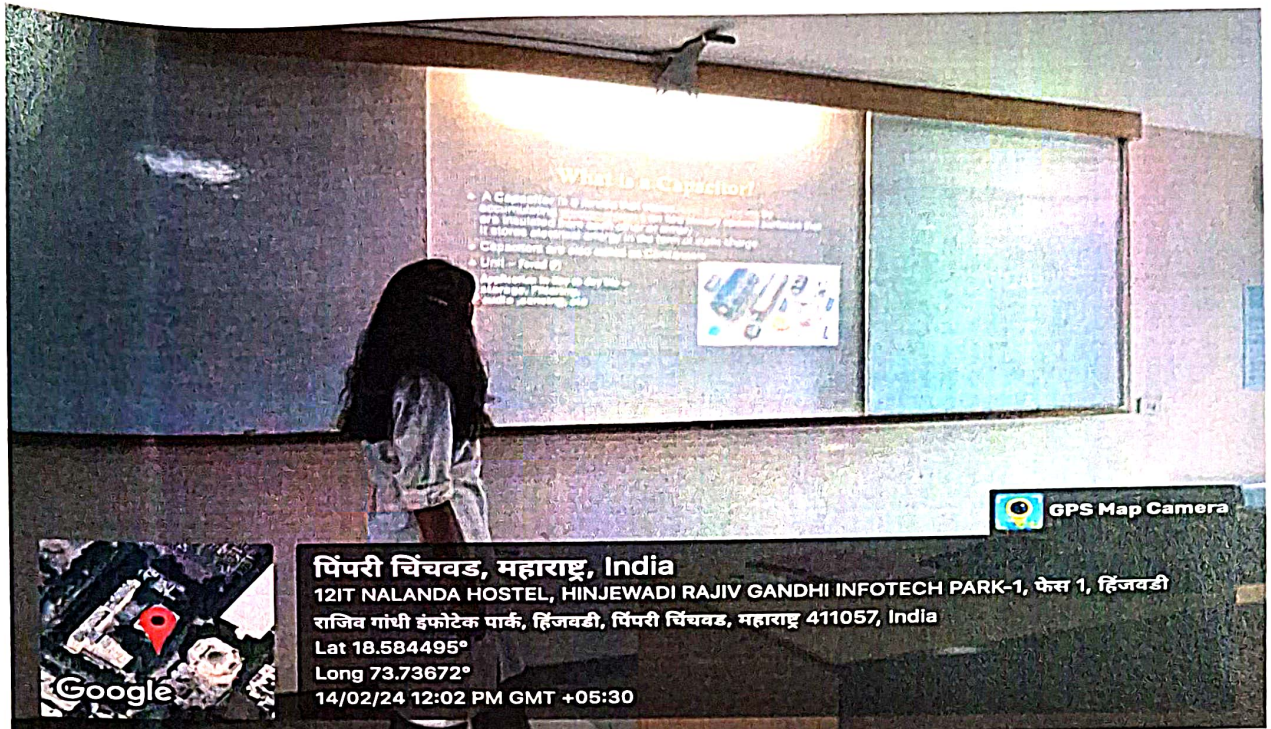
Name of Students- 1. Kaveri Gaware FCA22

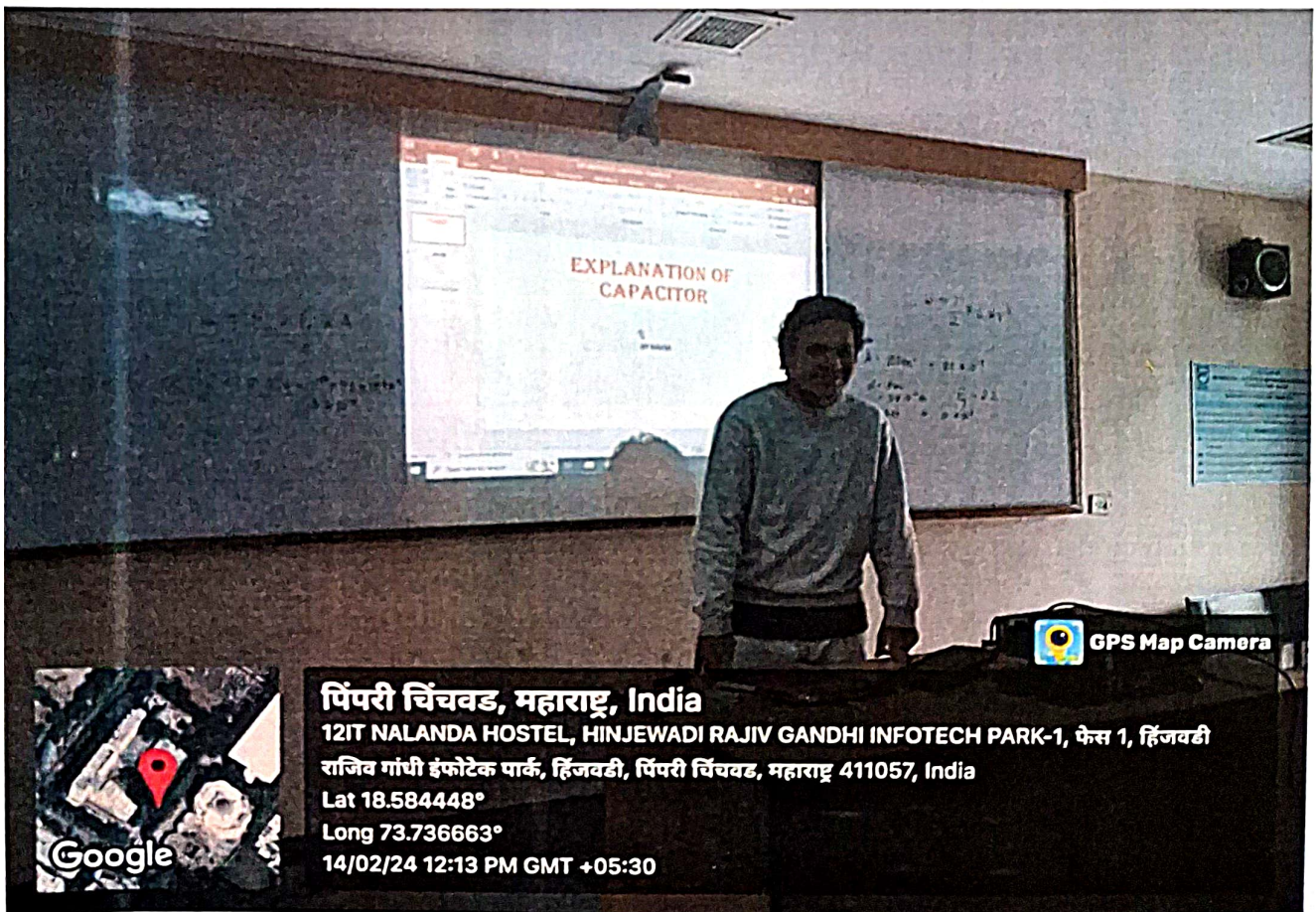
2. Kavya Kolamkar FCA33

Topic- Energy Stored in Capacitor

Proof of resources shared: Screenshots Attached

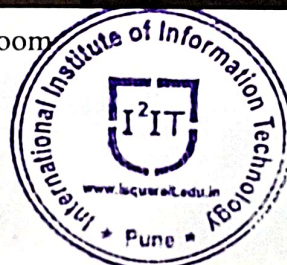






Conduction platform: Offline Presentation in classroom

Recorded session video link: NIL



Assessment tool used to check learning of the Students:

Innovative Practices in Teaching Learning- Peer Learning

Description of the activity: The academically strong and slow learner's students were selected based on their previous exam performance. Each student was asked to present one topic from current syllabus. Presentation was followed by Question answers session. All present student were allowed to take part in the discussion.

Process followed for performance Evaluation: Meer Observation by faculty for involvement of students during the discussion.

Impact of the innovative practice:

The whole class will be able to learn, understand & remember all concepts of the selected topic. Students' confidence increases multifold times and significantly benefited in their communication skills. Such a practices motivate other students as well for the class presentation participation in future.


Signature of the Course Teacher

(Kasar A. B.)

