

BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering

Activity: Classroom Learning Activity – Cross Word

Faculty Name: Dr. G Purnachandrarao

Class / Semester: I B. Tech I Semester – CSE-F

Academic Year: 2025—26 Odd

Subject Name: Fundamentals of Electronics Engineering (FEE)

Topic: Bipolar Junction Transistor (BJT)

Brief Write – Up:

An interactive learning activity in the form of a Crossword Puzzle was conducted for students on the topic Bipolar Junction Transistor (BJT) to strengthen conceptual clarity and improve retention of important terminologies.

The crossword included essential terms such as Emitter, Base, Collector, Biasing, Active Region, Saturation Region, Cut-off Region, Current Gain (β), Transistor Configurations (CB, CE, CC), Amplification, Leakage Current, and Load Line. Students solved the crossword individually/in groups within a stipulated time.

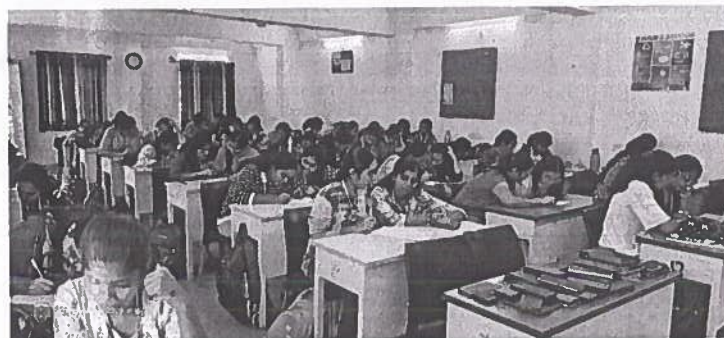
The activity promoted analytical thinking, reinforced theoretical understanding, and encouraged collaborative learning. A discussion session followed where each keyword was explained with its functional significance in transistor operation and applications such as amplification and switching.

The activity enhanced engagement and made learning transistor concepts more interactive and enjoyable.

Objective:

- To reinforce terminology associated with Bipolar Junction Transistors.
- To enhance conceptual clarity of transistor operation regions and configurations.
- To promote active and collaborative learning.
- To improve retention of core semiconductor device concepts.

Photos:



For any Queries contact: purnachandrarao.g@bvrithyderabad.edu.in

Signature:





BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering

Activity: "The Digital Blueprint: Concept Mapping Through Charts"

Faculty Name: Dr.V.Hindumathi

Class / Semester: II / I

Academic Year: 2025-26

Subject Name: Digital Electronics

Topic: Combinational Logic Design

Brief Write - Up

As part of an interactive and collaborative learning initiative, a chart preparation activity was conducted focusing on the fundamental concepts and components of Digital Electronic Circuits. The primary objective of this hands-on exercise was to strengthen students' understanding through visual representation and active teamwork.

Students were organized into groups of four to promote peer learning, effective communication, and cooperation. Each group was assigned a specific topic within the broad field of Digital Electronics, including logic gates, Adders, multiplexers, demultiplexers, encoders, decoders, and counters. The selected topics encompassed both basic and advanced elements of digital circuit design.

The activity not only reinforced theoretical concepts but also enhanced essential skills such as presentation, creativity, collaboration, and technical expression. It enabled students to develop a deeper conceptual understanding of how various digital components operate individually and interact within larger electronic systems.

Overall, the chart preparation exercise served as an effective pedagogical strategy, making the learning of digital electronics more engaging, clear, and enjoyable for students.

Objective:

- To enhance student's understanding of Digital Electronic Circuits.
- To foster collaborative learning and teamwork among students.
- To develop student's skills in presenting technical information visually

Photos:

DIGITAL ELECTRONICS ACTIVITY GROUP-16

Problem: Design a 3-input combinational circuit with inputs A, B, C whose output is 1 only when the 3-bit input contains more ones than zeros.

$$F = A\bar{B} + AC + BC$$

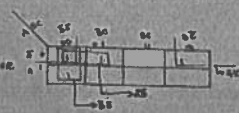
→ DPs can be implemented with 3 answers, 2-2 input array, 1-1 input array.

TRUTH TABLE

A	B	C	$\neg A \vee B \vee C$	F
0	0	0	1	1
0	0	1	1	1
0	1	0	1	1
0	1	1	1	0
1	0	0	1	1
1	0	1	1	0
1	1	0	1	0
1	1	1	0	0

> From the above truth Table,
minterms are $P_1, 2, 4$

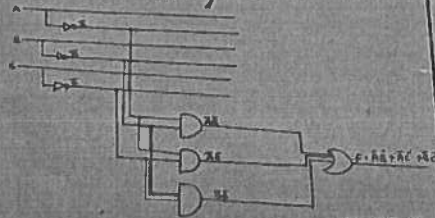
$\Delta F = \Sigma m (9.81/2.4)$



3 pairs ($\bar{A}C, \bar{A}E, EC$)
So, the final minimal SOP
became as follows

$$p(a, b, c) = \mu_1^2 + \mu_2^2 + \mu_3^2$$

LOGIC DIAGRAM



PRESENTED BY

- Mrs. Smith 2100000000
 - Mr. Brown 2100000000
 - A. Jones 2100000000
 - B. White 2100000000

2 BIT EQUALITY COMPARATOR

PROBLEM STATEMENT:

Design a Combinational circuit that compares 2-bit numbers to check if they are equal. The circuit output is equal to 1, if the two numbers are equal and 0 otherwise.

CONCEPT:

A 2-bit equality comparator compares two 2-bit numbers.

A = AgNO₃ and B = B₂O₃

→ Comparator checks if A and B are equal.

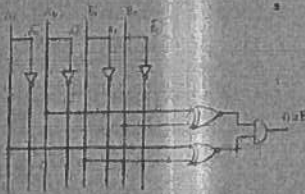
→ It gives 1 (high) as output only when both corresponding bits match:

112

92-4

→ It is commonly implemented using XNOR gates followed by an AND gate

LOGIC DIAGRAM:



TRUTH TABLE:

INPUTS				OUTPUTS		
A	B	$\bar{A}$	$\bar{B}$	$A \cdot B$	$A \cdot \bar{B}$	$\bar{A} \cdot B$
0	0	1	1	0	0	0
0	1	1	0	0	0	1
1	0	0	1	0	1	0
1	1	0	0	1	0	0

K-MAP:

	00	01	11	10
00	1	0	0	0
01	0	1	0	0
11	0	0	1	0
10	0	0	0	1

Chen, H. & S. C. 2005

458

Minimized Expression :

$$\begin{aligned}
 & 4 + \bar{A}_1 A_2 \bar{B}_1 \bar{B}_2 + \bar{A}_1 A_2 B_1 B_2 + A_1 A_2 \bar{B}_1 B_2 + \\
 & A_1 A_2 B_1 \bar{B}_2 \\
 & = \bar{A}_1 \bar{B}_1 (A_2 B_2) + A_1 B_1 (A_2 \bar{B}_2) \\
 & = (A_2 B_2) (A_1 \bar{B}_1)
 \end{aligned}$$

- 24111A0570

145041M72

-24WH1A05B2

24 APR 1968

- Group - 11

For any Queries contact: hindumathi.v@bvrithyderabad.edu.in

Signature:

Under.

BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering

Activity: Classroom Learning Activity – Word Search

Faculty Name: Dr. G Purnachandrarao

Class / Semester: I B. Tech I Semester – CSE-F

Academic Year: 2025—26 Odd

Subject Name: Fundamentals of Electronics Engineering (FEE)

Topic: PN Junction Diode and Its Application

Brief Write – Up:

An interactive classroom activity titled “Word Search – PN Junction Diode and Its Applications” was conducted for I B.Tech CSE-F students as part of Unit-1. The activity was designed to reinforce key terminologies and concepts related to PN junction diode in an engaging and student-centric manner.

Students were provided with a customized word search puzzle containing important technical terms such as: Depletion Region, Forward Bias, Reverse Bias, Breakdown, Zener Diode, Rectifier, Barrier Potential, Diffusion Current, Drift Current, Avalanche, Knee Voltage, etc.

The activity encouraged active participation, improved technical vocabulary, and strengthened conceptual understanding. Students worked individually/in groups to identify the hidden words within the given time. The session concluded with a brief discussion explaining each term and its practical relevance in semiconductor devices and applications.

The activity created a lively learning environment and enhanced student involvement in core semiconductor concepts.

Objective:

- To reinforce key concepts of PN Junction Diode.
- To improve students' technical vocabulary in semiconductor devices.
- To promote active learning through gamification.
- To enhance retention of fundamental concepts through interactive engagement.

Photos:



For any Queries contact: purnachandrarao.g@bvrithyderabad.edu.in

Signature:



Faculty Name: Dr.V.Hindumathi

Class / Semester: II / I

Academic Year: 2025-26

Subject Name: Digital Electronics

Topic: Complements

Brief Write - Up

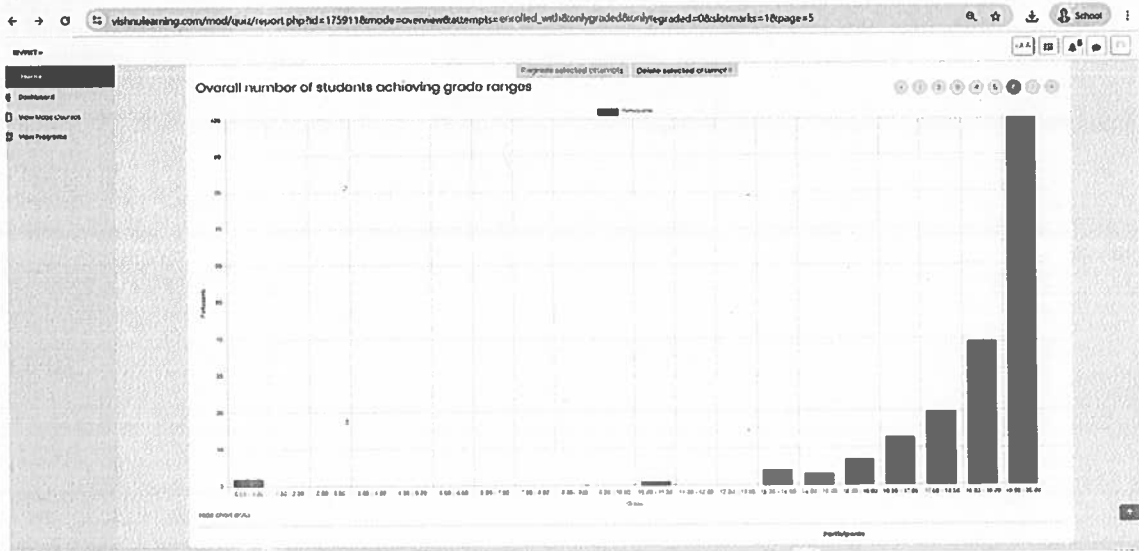
As part of an interactive and collaborative learning initiative, a chart preparation activity was conducted focusing on the fundamental concepts and components of Digital Electronic Circuits. The primary objective of this hands-on exercise was to strengthen students' understanding through visual representation and active teamwork. Students were organized into groups of four to promote peer learning, effective communication, and cooperation. Each group was assigned a specific topic within the broad field of Digital Electronics, including logic gates, Adders, multiplexers, demultiplexers, encoders, decoders, and counters. The selected topics encompassed both basic and advanced elements of digital circuit design.

The activity not only reinforced theoretical concepts but also enhanced essential skills such as presentation, creativity, collaboration, and technical expression. It enabled students to develop a deeper conceptual understanding of how various digital components operate individually and interact within larger electronic systems. Overall, the chart preparation exercise served as an effective pedagogical strategy, making the learning of digital electronics more engaging, clear, and enjoyable for students.

Objective:

To enhance students' understanding of Digital Electronic Circuits while fostering collaborative learning and teamwork, and developing their ability to present technical information effectively through visual means

Photos:



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Activity: Poster design and presentation

Faculty Name: Rama Lakshmi Gali

Class / Semester: IV/I

Academic Year: 2025-26

Subject Name: Radar Systems

Topic: FMCW radar application

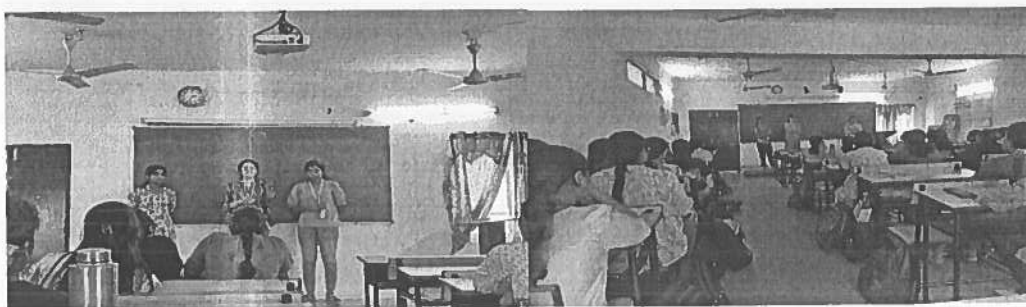
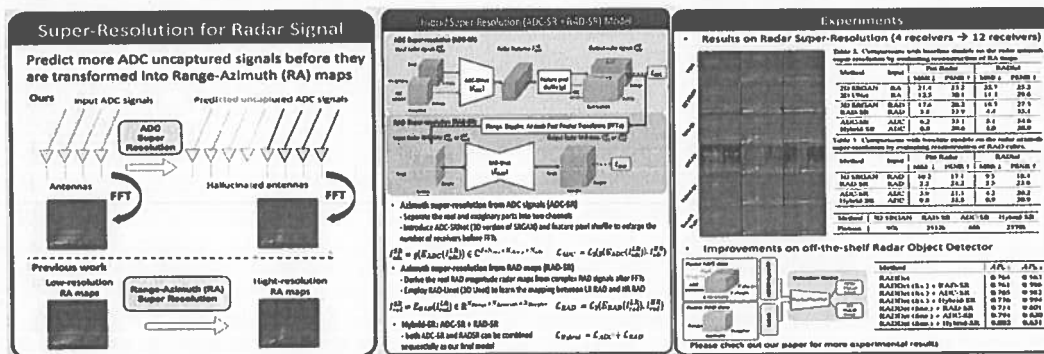
Brief Write - Up

FM-CW (Frequency Modulated Continuous Wave) radar is a key technology in modern radar systems design, valued for its simplicity, low power use, and ability to measure range and velocity simultaneously. Here are few poster concepts tailored for radar systems design presentations, each focusing on a core aspect with visuals like block diagrams, waveforms, and performance plots for clarity. Students will divide into teams and then the present the poster they designed.

Objective:

The objective of the FM-CW radar design activity, particularly in creating educational posters, is to deepen understanding of this radar technology's principles, components, and applications in modern systems like automotive sensing and 5G-related wireless research.

Photos:



For any Queries contact: ramalakshmi.g@bvrithyderabad.edu.in

Signature:

Activity: Quiz

Faculty Name: Rama Lakshmi Gali

Class / Semester: IV/I

Academic Year: 2025-26

Subject Name: Radar Systems

Topic: Radar basics and its applications

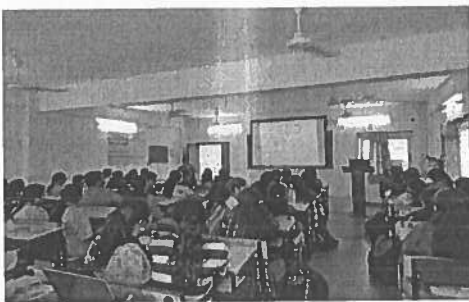
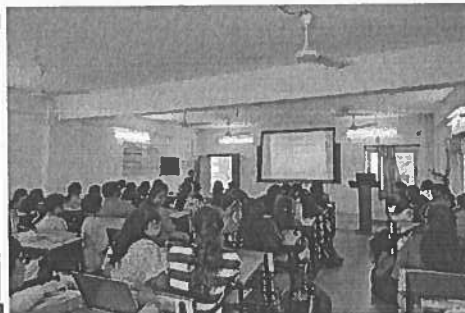
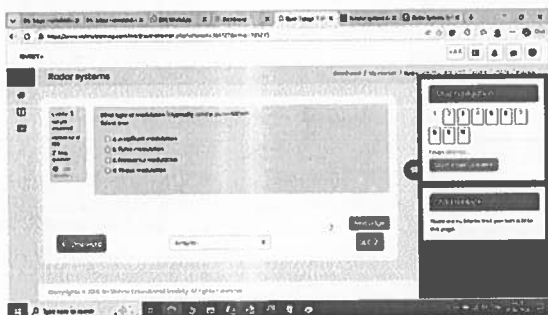
Brief Write - Up

A quiz on **Radar Basics and Its Applications** was conducted as an academic activity to enhance students' understanding of fundamental radar concepts and their real-world uses. The activity included multiple-choice questions, short-answer questions, and application-based problems covering topics such as radar principles, range measurement, Doppler effect, radar equation, types of radar systems, and applications in aviation, defense, weather forecasting, and navigation.

Objective:

The objective of this activity is to strengthen students' understanding of fundamental radar principles and system components. To improve analytical and problem-solving skills related to radar engineering concepts.

Photos:



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Signature:





BVRIT HYDERABAD College of Engineering for Women

Department of Electronics and Communication Engineering

Activity: Carousel Brainstorming

Faculty Name: Ms. M Praveena

Class: II ECE B

Academic Year: 2025-26

Subject Name: Digital Logic Design

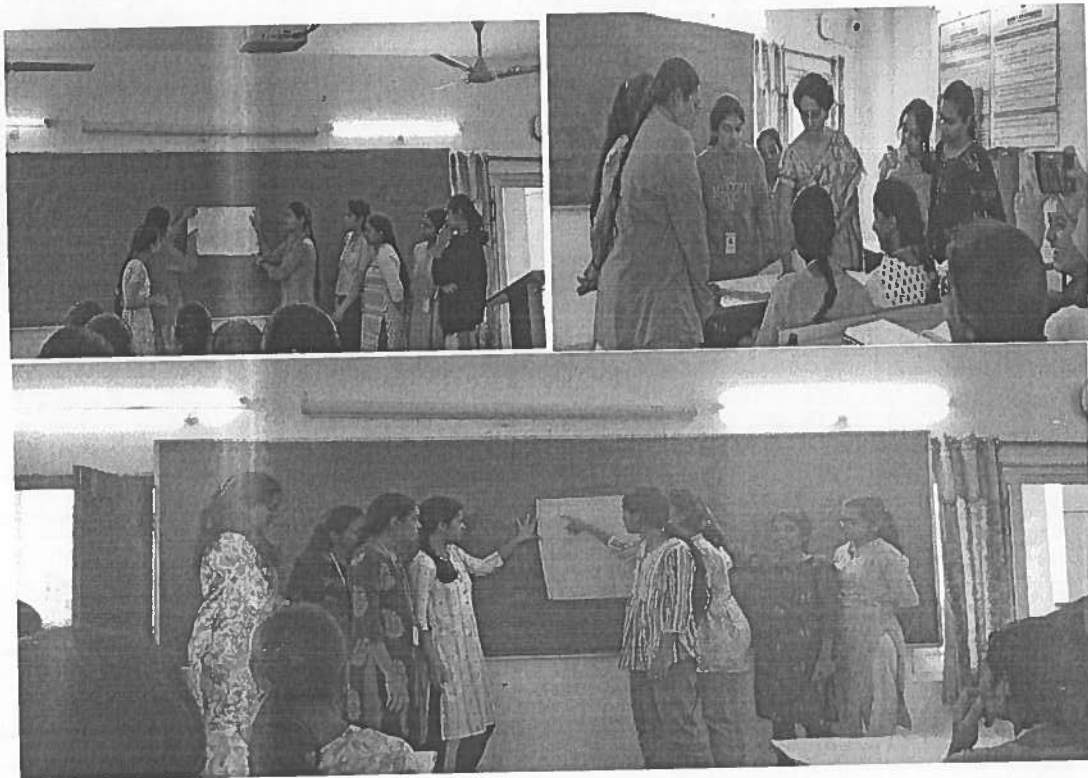
Topic: Counter Design

Date: 25-11-2025

Brief Write - Up

Carousel brainstorming conducted where student groups rotated across 7 stations, each with a counter design question (e.g., self-correcting MOD-5, sequence 3-5-7-2-6-3, prime counter, 00-59-minute counter, sequence detectors). Groups brainstormed state diagrams, flip-flop choices (JK/D), excitation tables, and self-correction logic in 5-min bursts per station, then rotated. Promoted diverse ideas and quick ideation.

Photo(s):



Impact: Students gained collaborative skills, exposed to multiple problem types rapidly, improving state machine design intuition and error-handling (e.g., invalid states). Enhanced understanding of synchronous counters and detectors for real apps like timers/digital clocks.

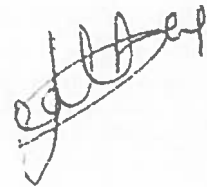
CO-PO Attainment

CO4: Design synchronous counters/FSM (Analyze/Apply).

CO5: Implement sequence detectors (Evaluate).

Attainment uplift 20% via group outputs vs individual.

For any queries contact praveena.m@bvrithyderabad.edu.in

A handwritten signature in black ink, appearing to be 'egall' or similar, with a horizontal line drawn through it.



BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering

Activity: Learning by Doing

Faculty Name: Ms. M Praveena

Class: II ECE B

Academic Year: 2022-26

Subject Name: Digital Logic Design

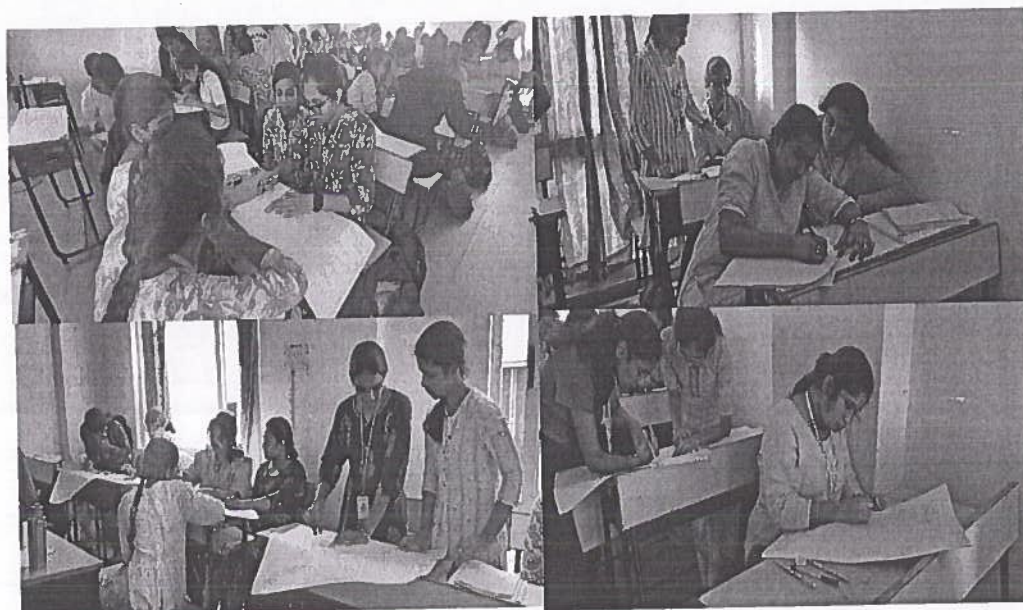
Topic: Combinational Logic Design

Date: 10-09-2025

Brief Write - Up

Students engaged in a hands-on "Learning by Doing" activity where they solved design problems on combinational circuits during the 2nd and 3rd hours. They implemented Boolean functions using multiplexers, decoders, and OR gates; designed circuits for Fibonacci and prime detection, arithmetic shifts, 2's complement, squarer, chemical reactor controls, and BCD excess-5 detectors. This practical approach reinforced theoretical concepts through problem-solving.

Photo(s):



Impact: Students developed practical skills in minimizing logic expressions, selecting appropriate MSI chips like multiplexers and decoders, and applying combinational design to real-world scenarios like sensor controls. They better understood gate-level implementation and verification, improving problem-solving confidence and readiness for VLSI projects.

CO-PO Attainment

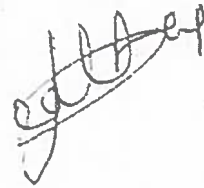
Targeted COs:

CO2: Minimize Boolean expression using minimization techniques (Use of K-maps)

CO3: Design optimized combinational circuits for given specifications.

Estimated attainment improved by 15-20% post-activity based on quiz performance.

For any queries contact praveena.m@bvrithyderabad.edu.in

A handwritten signature in black ink, appearing to be 'Praveena M', is located on the right side of the page.

Faculty Name: N SRINIVASARAO

Class / Semester: II/I

Academic Year: 2025-2026

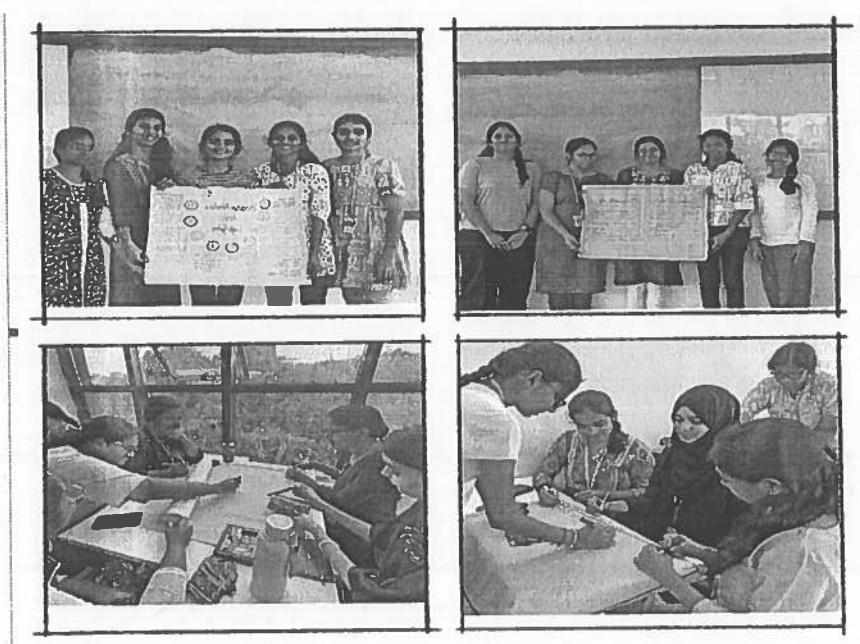
Subject Name: Digital Electronics

Topic: Combinational Circuit Design

Brief Write Up: After teaching the topic of combinational circuits, students were engaged in an activity where they prepared charts illustrating key concepts. Each group selected specific components such as logic gates, truth tables, adders, multiplexers, and decoders. They visually represented circuit diagrams along with their corresponding truth tables and analysis.

Objective: To enhance students' conceptual clarity of combinational circuits by engaging them in a hands-on chart preparation activity that promotes active learning and visual understanding.

Photos:



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Signature:



Faculty Name: Ms. T. Amy Prasanna

Class / Semester: EEE / III – I

Academic Year: 2025-26

Subject Name: MICROPROCESSORS AND MICROCONTROLLERS

Topic: 8051 MICROCONTROLLER

Brief Write – Up

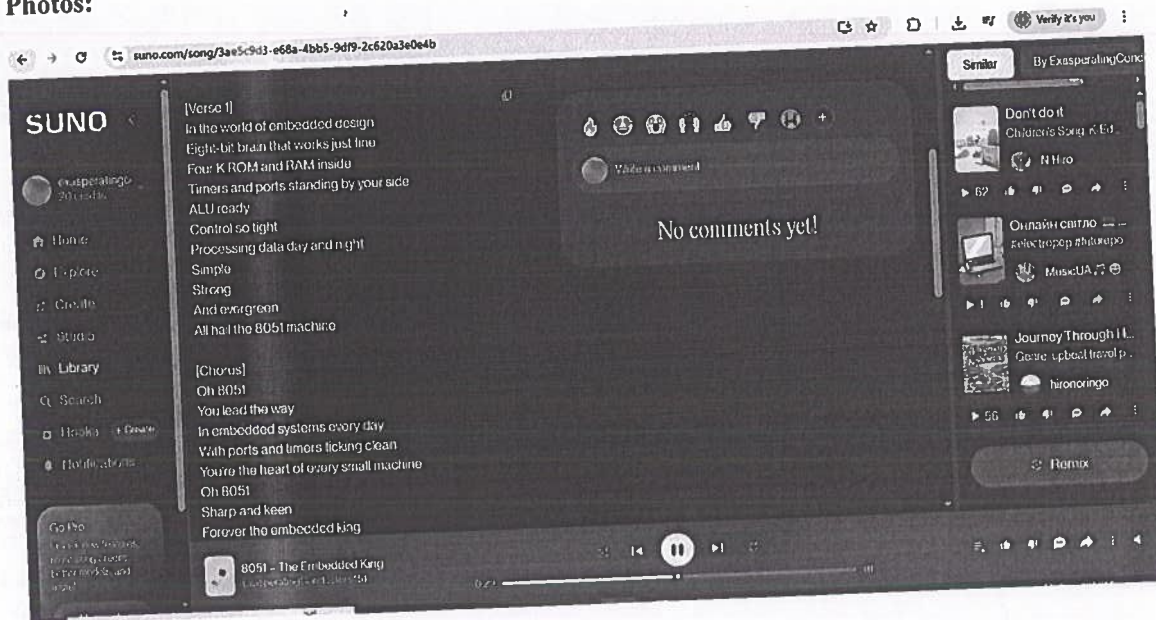
As part of innovative teaching practices in the Microcontrollers course, a creative classroom activity was conducted where students composed lyrics based on the **8051 microcontroller architecture and features**. The lyrics incorporated key technical concepts such as memory organization, I/O ports, timers, interrupts, registers, and serial communication.

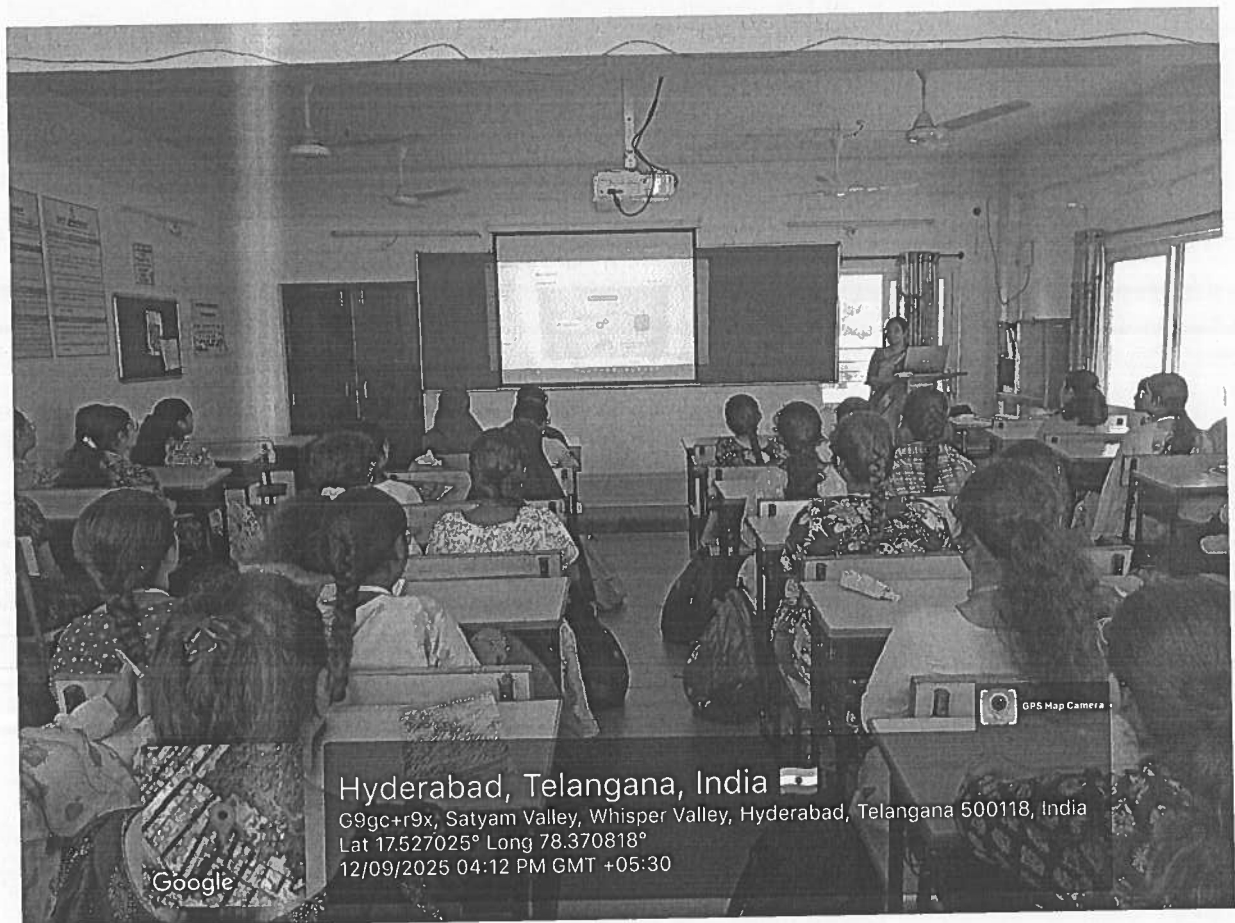
Students used an AI-based music generation tool to convert their technical lyrics into a complete song. The activity encouraged students to present their songs in class along with a technical explanation of the embedded concepts. This approach made learning interactive, engaging, and concept-oriented while integrating technology into education.

The activity successfully combined creativity, AI tools, and technical knowledge, enhancing student participation and improving conceptual retention.

Objective: To strengthen understanding of the **8051 microcontroller architecture and features** and to integrate AI tools into technical education.

Photos:





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Signature: Amy prasanna

Activity: CROSSWORD PUZZLE

Faculty Name: Ms. Rajidi Sahithi

Class / Semester: I/I

Academic Year: 2025-26

Subject Name: Fundamentals of Electronics Engineering

Topic: PN Junction Diode

Brief Write - Up

A crossword puzzle activity was conducted for I CSE C & E sections using the institutional LMS portal. The crossword was designed based on key terms, definitions, concepts, and important terminology from the specified topic.

Students were required to solve the puzzle within a given time limit. The activity aimed to reinforce conceptual understanding in an engaging and interactive manner. The LMS platform enabled structured question presentation, automated evaluation (where applicable), and participation tracking.

The activity encouraged active recall, improved subject vocabulary, and enhanced conceptual clarity among students. Students showed enthusiastic participation and found the activity both informative and engaging.

Objective:

- To reinforce key concepts and terminology through active learning.
- To enhance memory retention using gamified learning techniques.
- To encourage student participation and engagement.

Photos:

X	RISHITHA GANDRU	PM	PM	PM	9	2	Q	Q
X	RISHITHA GANDRU	Thursday, 18 December 2025, 2:51 PM	Thursday, 18 December 2025, 2:51 PM	Thursday, 18 December 2025, 2:51 PM	5	2	Q	Q
X	RISHITHA GANDRU	Thursday, 18 December 2025, 2:48 PM	Thursday, 18 December 2025, 2:50 PM	Thursday, 18 December 2025, 2:50 PM	4	2	Q	Q
X	TEJASWI VANGA	Thursday, 18 December 2025, 2:31 PM	Thursday, 18 December 2025, 2:50 PM	Thursday, 18 December 2025, 2:50 PM	97	3	Q	Q
X	DUNNAPOTHULA SUNETHRA	Sunday, 23 November 2025, 2:02 PM	Thursday, 18 December 2025, 2:48 PM	Thursday, 18 December 2025, 2:48 PM	95	38	Q	Q
X	VISLAVATH JAHANAVI	Thursday, 18 December 2025, 2:37 PM	Thursday, 18 December 2025, 2:48 PM	Thursday, 18 December 2025, 2:48 PM	97	3	Q	Q
X	AMBHATI MOKSHITHA	Thursday, 18 December 2025, 2:47 PM	Thursday, 18 December 2025, 2:47 PM		0	1	Q	Q
X	RISHITHA GANDRU	Thursday, 18 December 2025, 2:28 PM	Thursday, 18 December 2025, 2:47 PM	Thursday, 18 December 2025, 2:47 PM	87	4	Q	Q
X	AMBHATI MOKSHITHA	Thursday, 18 December 2025, 2:08 PM	Thursday, 18 December 2025, 2:48 PM	Thursday, 18 December 2025, 2:48 PM	100	4	Q	Q
X	KHATROTH SAMATHA	Thursday, 18 December 2025, 2:35 PM	Thursday, 18 December 2025, 2:42 PM	Thursday, 18 December 2025, 2:42 PM	100	2	Q	Q
X	SHINDE SANJANA	Thursday, 18 December 2025, 2:40 PM	Thursday, 18 December 2025, 2:40 PM		0	1	Q	Q
X	BARTAKAVI LAVANYA	Thursday, 18 December 2025, 2:32 PM	Thursday, 18 December 2025, 2:39 PM	Thursday, 18 December 2025, 2:39 PM	88	2	Q	Q
X	SHINDE SANJANA	Sunday, 23 November 2025, 1:20 PM	Thursday, 18 December 2025, 2:39 PM	Thursday, 18 December 2025, 2:39 PM	97	11	Q	Q

BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering

Name of the Activity: Mind Map Charts

Faculty Name: Dr. Anwar Bhasha Pattan

Class: II – I / ECE –A

Academic Year: 2025-26

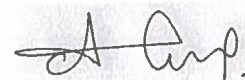
Subject Name: Digital Logic Design

Topic: Combinational and Sequential Circuits

Brief Write - Up

This group activity is to summarize the concepts of combinational and sequential logic design to create overall understanding of the topic. In this activity students have to draw a mind map or tree structure depicting the topics related to each other on a chart. This will enable the students to understand the connectivity that helps in synthesis of digital circuits

Photos:



Faculty Sign

BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering

Name of the Activity: Learning by Design

Faculty Name: Dr. Anwar Bhasha Pattan

Class: II – I / ECE –A

Academic Year: 2025-26

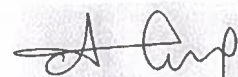
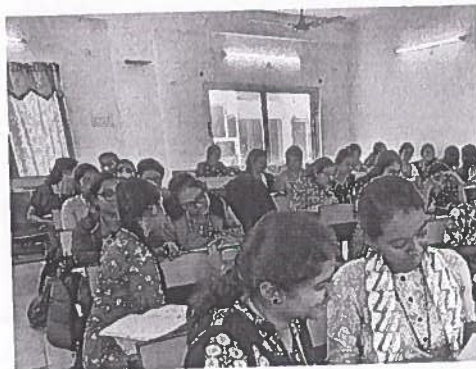
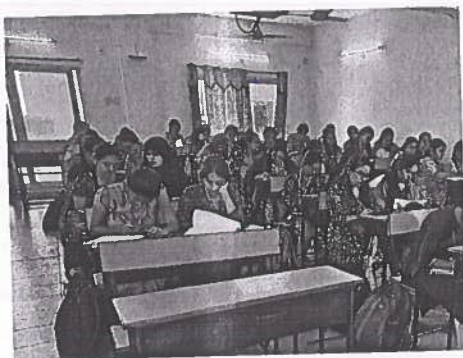
Subject Name: Digital Logic Design

Topic: Combinational Circuits

Brief Write - Up

This is a team activity where the students are teamed up and design a combinational circuit with given specifications. The questions are not direct and test their analytical and reasoning skills. This activity ignites their thinking and problem solving skills. The students participated enthusiastically and designed the circuits. This enhances the creativity and collaboration among the students.

Photos:



Faculty Sign

BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering

Name of the Activity: Prepare a question

Faculty Name: Dr. Anwar Bhasha Pattan

Class: II – I / ECE –A

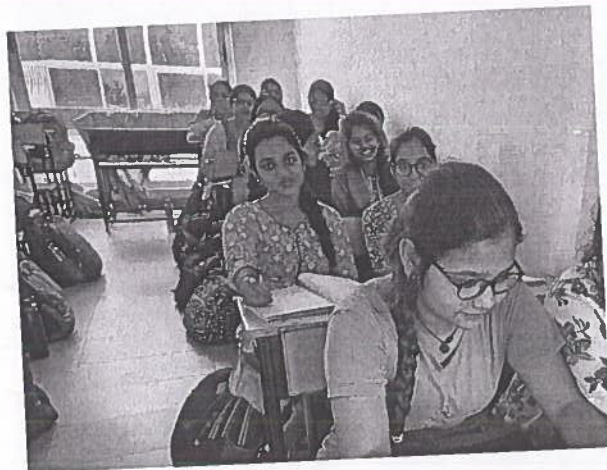
Academic Year: 2025-26

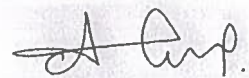
Subject Name: Digital Logic Design

Topic: Number Systems, Codes, Boolean Algebra, Combinational Logic, Flip flops.

Brief Write - Up

In this activity students in the same bench are grouped (2 or 3). They have to create a question and ask the remaining students. The other groups can answer the question. In this way all the groups have to come up with a new question which should not be previously asked. In this activity all the students will revise the topics to form a new question, the difficulty in preparing questions will be increased when more number of groups asked the questions already. It will be a fun and challenging task yet help the students revise the topics.





Faculty Sign

Activity: Jeopardy Lab Activity

Faculty Name: Dr. Y Alekhya

Class / Semester: III-I

Academic Year: 2025-26

Subject Name: Data Communications & Computer Networks

Topic: Data Communications Concepts & Physical Layer

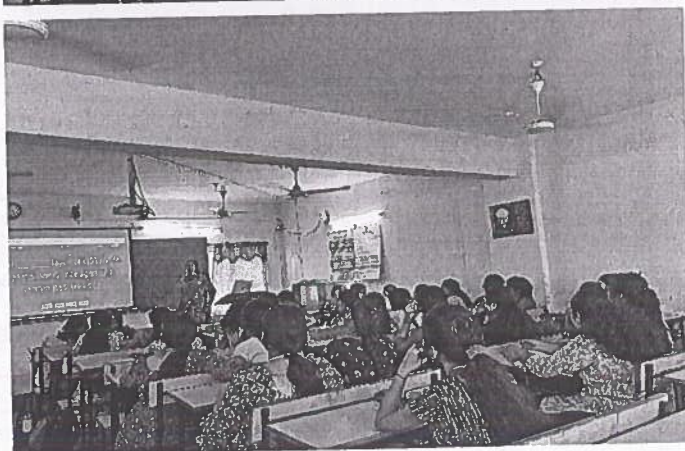
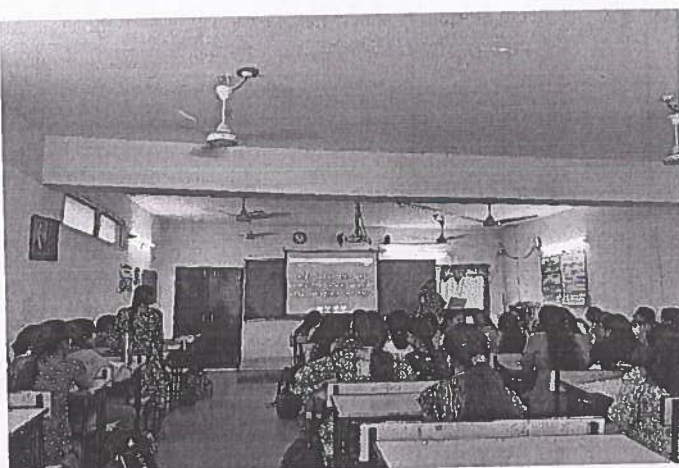
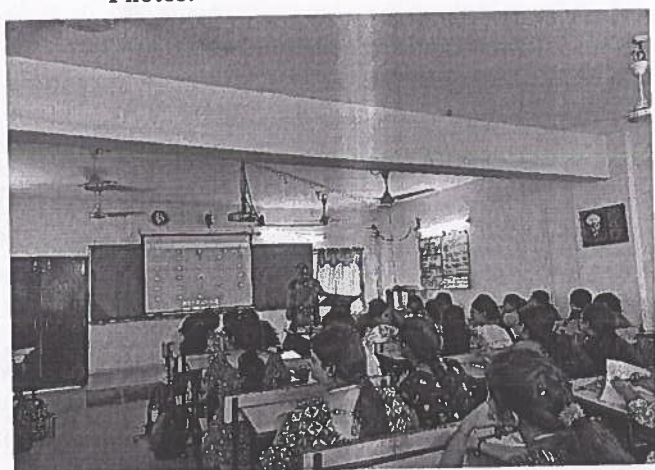
Brief Write – Up

The Jeopardy activity was conducted by dividing participants into teams and presenting a quiz board with different categories and point values. Teams selected questions in turns and answered within a fixed time limit to score points. The team with the highest score at the end was declared the winner.

Objective:

- Encourages students to engage with material rather than passively absorb it.
- Helps reinforce and review key ideas before tests or exams.
- Promotes better memory retention through repetition and gamification.
- Allows students to apply what they have learned in a low-pressure setting.

Photos:



S.No	TEAM1	TEAM2	TEAM3	TEAM4
1	23WH1A0483	23WH1A0401	23WH1A0445	23WH1A0412
2	23WH1A0496	23WH1A0422	23WH1A0447	23WH1A0446
3	23WH1A0414	23WH1A0434	23WH1A0449	23WH1A0461
4	23WH1A0429	23WH1A0437	23WH1A0451	24WH5A0401
5	23WH1A0483	23WH1A0440	23WH1A0455	24WH5A0402
6	23WH1A0445	23WH1A04C0	23WH1A0457	24WH5A0403
7	23WH1A0449	23WH1A04C2	23WH1A0459	24WH5A0404
8	23WH1A0450	23WH1A04C7	23WH1A0460	24WH5A0405
9	23WH1A0452	24WH5A0408	23WH1A0482	24WH5A0406
10		24WH5A0409	23WH1A04A8	

For any Queries contact: alekhya.yalla@bvrithyderabad.edu.in



Signature: Dr. Y Alekhya

Activity: Problem-Solving and Coding Activity

Faculty Name: Ms. T. Amy Prasanna

Class / Semester: EEE/ III-I

Academic Year: 2025-26

Subject Name: MICROPROCESSORS & MICROCONTROLLERS LAB

Topic: emu 8086 and KEIL

Brief Write – Up

As part of the **MPMC (Microprocessors and Microcontrollers) Laboratory**, students were assigned a set of programming problem statements ranging from basic to advanced levels. The activity covered implementation using **8086 (EMU8086)** and **8051 (Keil IDE)** platforms.

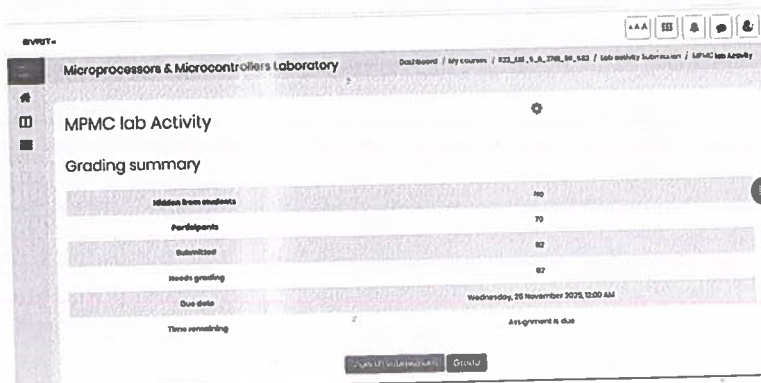
- Student Record Management System using 8086 (EMU8086)
- Traffic Light Controller using 8051 Microcontroller (Keil IDE)
- 2×2 Matrix Multiplication using 8051 (Keil IDE)
- Digital Seconds Counter using 8051 Timer 0
- Countdown Timer using 8086 Microprocessor
- Binary to Decimal Conversion using 8051 (Keil IDE)
- Simple Calculator using 8086 (EMU8086)
- Palindrome Number/String Check using 8086
- Temperature Converter (Celsius $\leftrightarrow$ Fahrenheit) using 8086
- ASCII Table Generation using 8086
- Conversion of Lowercase Letters to Uppercase using 8086 (EMU8086)

Students analyzed the given problems, developed algorithms, implemented coding solutions, and executed them in the respective simulation environments. The activity enhanced logical thinking, programming skills, debugging ability, and practical understanding of microprocessor and microcontroller architecture.

Overall, the activity successfully strengthened students' hands-on experience and bridged theoretical concepts with real-time implementation.

Objective: • To enhance hands-on programming skills in **8086 microprocessor** and **8051 microcontroller**. • To strengthen understanding of architecture, instruction sets, timers, and I/O operations.

Photos:



Course: Microprocessors & Microcontrollers Laboratory
Assignment: MPMC Lab Activity
View all submissions

ANU BANOTH
23wh1a0205@bvrithyderabad.edu.in
Due date: 26 November 2025, 12:00 AM

Page 1 of 4

MPMC LAB Report

Title: ASCII Table Generator

Aim:
To write and execute an Assembly Language Program using EMU8086 to display the ASCII characters and their corresponding decimal values.

Apparatus and Description:
Software Used: EMU8086 Microprocessor Emulator
Processor: Intel 8086

The ASCII Table Generator program is designed to display all printable ASCII characters along with their corresponding decimal values using the EMU8086 microprocessor emulator. ASCII, which stands for American Standard Code for Information Interchange, assigns numeric values to characters that computers use to represent text. This program helps in understanding how microprocessors handle character encoding and data display using assembly language instructions.

In this experiment, the 8086 assembly language is used to generate characters sequentially from ASCII value 32 (space) to 126 (-). The program uses looping and subroutine (procedure) concepts to efficiently generate and display the ASCII table.

Submitted for grading
Not graded
Assignment was submitted 3 hours 48 mins early
Student can edit this submission

23wh1a0205.pdf
23 November 2025, 6:11 PM

Comments (0)

Grade

Grade out of 100

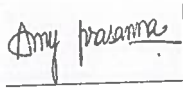
Correct grade in gradebook

Feedback comments

Notify students ☐ Save the grade Save and view text Revert

BVRIT		PM					
☐	RENUKA KANCHARAFU	23wh1a0201@bvrithyderabad.edu.in	Submitted for grading	Grade	Edit	Tuesday, 25 November 2025, 6:21 PM	
☐	MEENAKSHI BANOTH	23wh1a0203@bvrithyderabad.edu.in	Submitted for grading	Grade	Edit	Tuesday, 25 November 2025, 6:55 PM	
☐	MISHRITHA REDDY ALUGUMETLA	23wh1a0204@bvrithyderabad.edu.in	Submitted for grading	Grade	Edit	Thursday, 20 November 2025, 6:37 PM	
☐	ANU BANOTH	23wh1a0205@bvrithyderabad.edu.in	Submitted for grading	Grade	Edit	Tuesday, 25 November 2025, 6:11 PM	
☐	AMALA BHAVIKA LAKSHMI ANKEM	23wh1a0206@bvrithyderabad.edu.in	Submitted for grading	Grade	Edit	Tuesday, 25 November 2025, 6:38 PM	
☐	HRUTHIKA KALIDINDI	23wh1a0207@bvrithyderabad.edu.in	Submitted for grading	Grade	Edit	Tuesday, 25 November 2025, 6:23 PM	

For any Queries contact: prasanna.tella@bvrithyderabad.edu.in

Signature: 

Faculty Name: Mr.P.Rajeshkumar

Class / Semester: IV CSE B I Semester

Academic Year: 2025-26

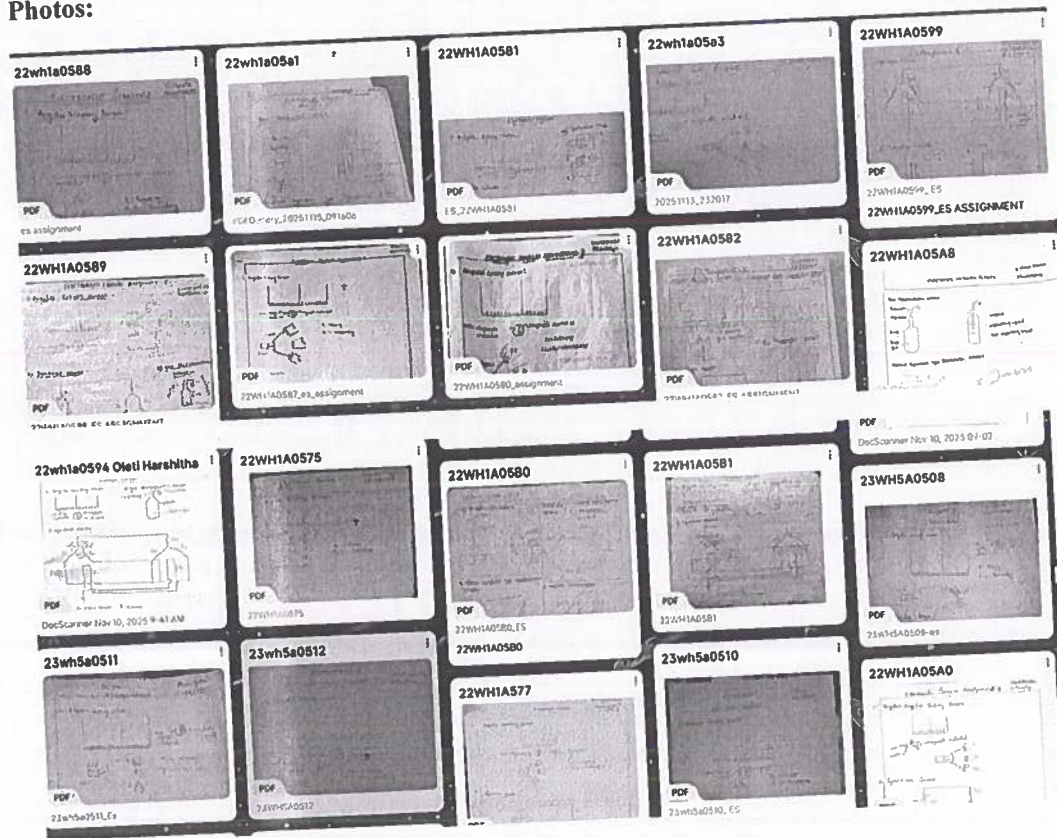
Subject Name: Electronic Sensors

Topic: Thermal Sensors

Brief Write – Up In this activity, students are given various sensor topics and are asked to draw the diagrams of various sensors related to the topic. The drawn figures are taken picture using mobile phone. Then, students will log into the Padlet website using the link shared through email. After logging into padlet the students will upload their images with their names using the add button. The added images can be seen by all the students

Objective: To make students aware of various Thermal Sensors

Photos:



For any Queries contact: rajeshkumar.p@bvrithyderabad.edu.in

Signature:

Rajesh Kumar P.

Activity: Padlet

Faculty Name: Mr.P.Rajeshkumar

Class / Semester: IV CSE B I Semester

Academic Year: 2025-26

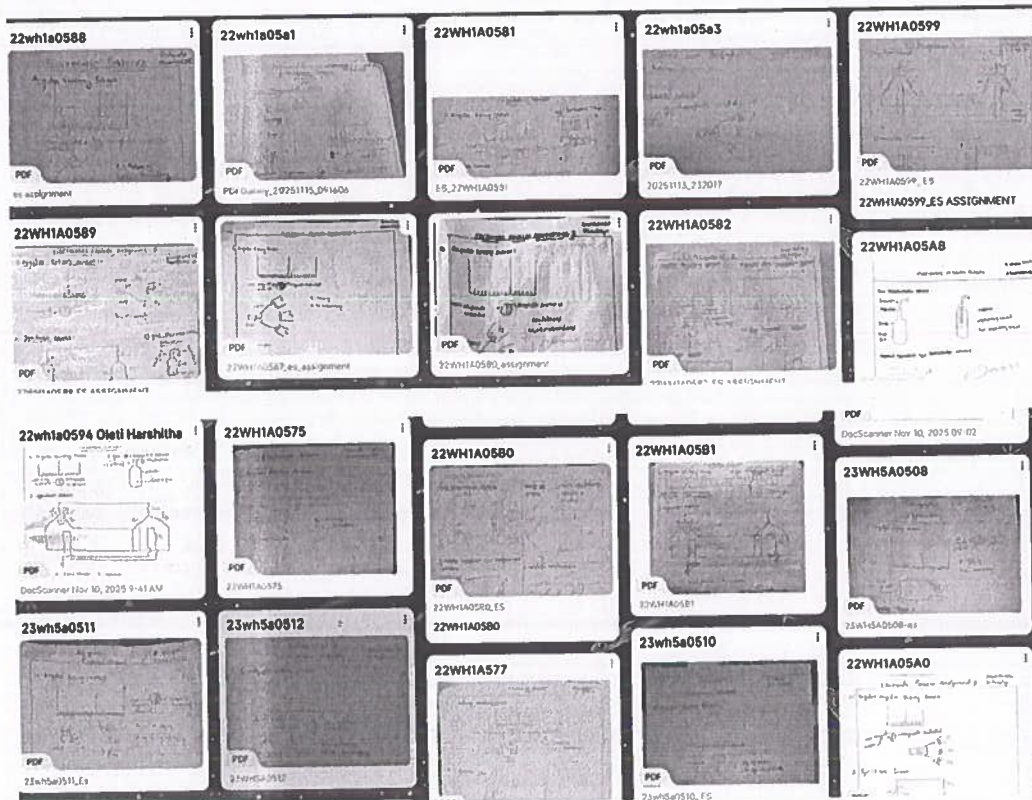
Subject Name: Electronic Sensors

Topic: Thermal Sensors

Brief Write – Up In this activity, students are given various sensor topics and are asked to draw the diagrams of various sensors related to the topic. The drawn figures are taken picture using mobile phone. Then, students will log into the Padlet website using the link shared through email. After logging into padlet the students will upload their images with their names using the add button. The added images can be seen by all the students

Objective: To make students aware of various Thermal Sensors

Photos:



For any Queries contact: rajeshkumar.p@bvrithyderabad.edu.in

Signature:

Rajesh Kumar P.

Activity: QUIZ

Faculty Name: Ms. Rajidi Sahithi

Class / Semester: I/I

Academic Year: 2025-26

Subject Name: Fundamentals of Electronics Engineering

Topic: MOSFET and JFET

Brief Write - Up

An online quiz activity was conducted for I CSE C & E sections through the institutional LMS portal. The quiz was designed to assess students' understanding of the specified topic and to reinforce conceptual learning.

The quiz consisted of multiple-choice questions (MCQs), The LMS platform automatically evaluated objective-type questions and generated performance analytics for student assessment.

Students actively participated in the activity, and the LMS system ensured transparency, accuracy, and time-bound evaluation. The activity helped in identifying learning gaps and improving student engagement.

Objective:

- To assess students' conceptual understanding of the topic.
- To encourage continuous learning through digital platforms.

Photos:

Download table data as Comma separated values (.csv) Download

	First name / Surname	Email address	Status	Started on	Completed	Time taken	Grade/10.00	Q.1 /1.00	Q.2 /1.00	Q.3 /1.00
☐	 PRIYA SINGH Review attempt	25whla05e8@bvrithyderabad.edu.in	Finished	19 December 2025 12:21 PM	19 December 2025 12:29 PM	8 mins 59 secs	9.00	✓ 1.00	✓ 1.00	✓ 1.00
☐	 RECHINTALA NAINIKA Review attempt	25whla05j0@bvrithyderabad.edu.in	Finished	19 December 2025 12:21 PM	19 December 2025 12:28 PM	6 mins 51 secs	9.00	✓ 1.00	✓ 1.00	✓ 1.00
☐	 DONTHALA HAASINI Review attempt	25whla05i2@bvrithyderabad.edu.in	Finished	19 December 2025 12:21 PM	19 December 2025 12:33 PM	12 mins	10.00	✓ 1.00	✓ 1.00	✓ 1.00
☐	 DAREDOY TANUSREE Review attempt	25whla05f6@bvrithyderabad.edu.in	Finished	19 December 2025 12:21 PM	19 December 2025 12:24 PM	3 mins 49 secs	10.00	✓ 1.00	✓ 1.00	✓ 1.00
☐	 GURRAM BABY NAVYA Review attempt	25whla05k2@bvrithyderabad.edu.in	Finished	19 December 2025 12:21 PM	19 December 2025 12:27 PM	6 mins 41 secs	8.00	✓ 1.00	✗ 0.00	✓ 1.00

	First name / Surname	Email address	Status	Started on	Completed	Time taken	Grade/10.00	Q.1 /1.00	Q.2 /1.00	Q.3 /1.00	Q.4 /1.00
☐	CHAVANAAGA AKSHARA Review attempt	25whla05w0@bvrithyderabad.edu.in	Finished	18 December 2025 1:48 PM	18 December 2025 1:54 PM	6 mins 4 secs	10.00	✓ 1.00	✓ 1.00	✓ 1.00	✓
☐	CHIGULLAREVU CHAITRA LAKSHMI Review attempt	25whla05w6@bvrithyderabad.edu.in	Finished	18 December 2025 1:50 PM	18 December 2025 2:02 PM	12 mins 15 secs	7.00	✓ 1.00	✓ 1.00	✓ 1.00	✓
☐	R SAI SREEJA Review attempt	25whla05x2@bvrithyderabad.edu.in	Finished	18 December 2025 1:51 PM	18 December 2025 1:55 PM	3 mins 58 secs	10.00	✓ 1.00	✓ 1.00	✓ 1.00	✓
☐	VADTHYA ANUSHA Review attempt	25whla05u4@bvrithyderabad.edu.in	Finished	18 December 2025 1:55 PM	18 December 2025 2:08 PM	13 mins 9 secs	10.00	✓ 1.00	✓ 1.00	✓ 1.00	✓
☐	CHERLAKOLA HARSHITHA	25whla05u3@bvrithyderabad.edu.in	Finished	18 December	18 December	10 mins	10.00	✓ 1.00	✓ 1.00	✓ 1.00	✓

For any Queries contact: sahithi.r@bvrithyderabad.edu.in

Sahithi

Signature:

Activity: Quiz on LMS Portal

Faculty Name: Ms. T. Amy Prasanna

Class / Semester: EEE/ III-I

Academic Year: 2025-26

Subject Name: MICROPROCESSORS & MICROCONTROLLERS

Topic: 8086 MICROPROCESSOR

Brief Write – Up

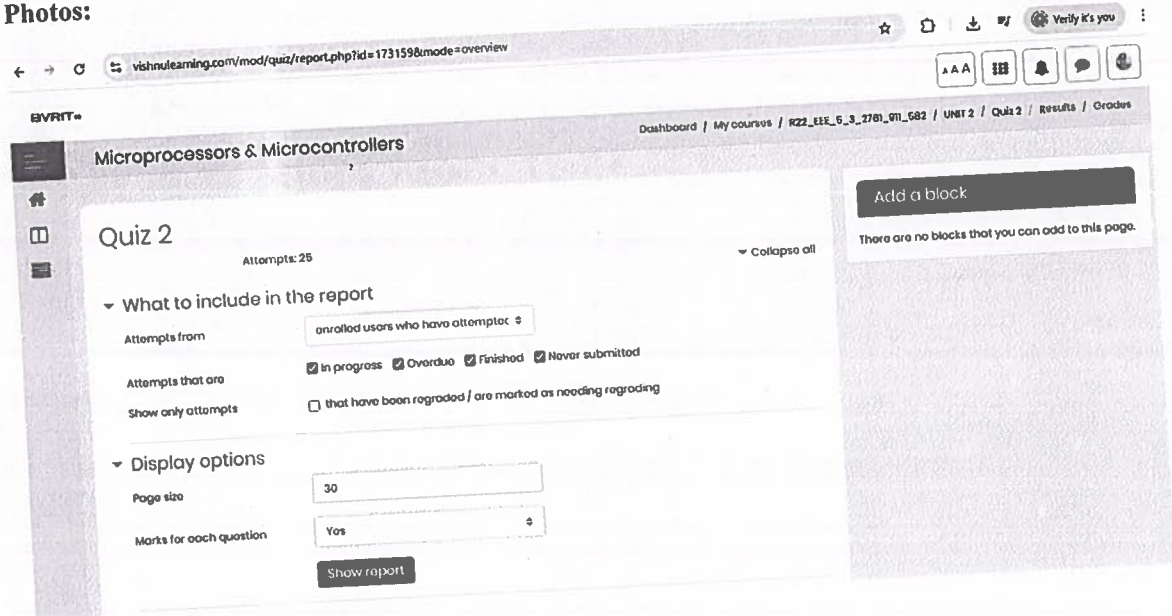
A quiz on the **8086 Microprocessor** was conducted through the institutional Learning Management System (LMS) portal as part of continuous assessment. The quiz covered key topics including architecture (EU & BIU), register organization, segmentation, addressing modes, instruction set, and interrupt structure.

The quiz was designed in multiple-choice and short-answer formats to evaluate students' conceptual understanding and problem-solving ability. The LMS platform enabled smooth conduct of the assessment, automated evaluation, and immediate feedback to students.

Objective: • To assess students' understanding of 8086 architecture and working principles.

- To reinforce key concepts such as segmentation and addressing modes.
- To encourage self-learning through online assessment.

Photos:



		First name / Surname	Email address	State	Started on	Completed	Time taken	Grade/10.00	Q.1 /1.00
☐		VISHALA GUDEM Review attempt	23wh1a0252@bvrithyderabad.edu.in	Finished	9 August 2025 6:34 PM	9 August 2025 6:44 PM	10 mins 1 sec	7.00	✓ 1.00
☐		NITHISHA DEVI CHEKURI Review attempt	23wh1a0254@bvrithyderabad.edu.in	Finished	9 August 2025 7:41 PM	9 August 2025 7:44 PM	3 mins 11 secs	8.00	✓ 1.00
☐		GEETHA PRAJWALA RAYALA Review attempt	24wh5a0203@bvrithyderabad.edu.in	Finished	9 August 2025 9:43 PM	9 August 2025 9:53 PM	9 mins 47 secs	8.00	✓ 1.00
☐		SHIVANI PANDULA Review attempt	23wh1a0232@bvrithyderabad.edu.in	Finished	13 August 2025 4:24 PM	13 August 2025 4:35 PM	11 mins 2 secs	0.00	✗ -
☐		TEJASWINI MYSA Review attempt	24wh5a0207@bvrithyderabad.edu.in	Finished	13 August 2025 5:47 PM	13 August 2025 5:59 PM	11 mins 21 secs	0.00	✗ -
☐		RAMYASAI KOTHUR Review attempt	24wh5a0204@bvrithyderabad.edu.in	Finished	13 August 2025 7:01 PM	13 August 2025 7:07 PM	6 mins 8 secs	8.00	✓ 1.00

For any Queries contact: prasanna.tella@bvrithyderabad.edu.in

Signature: 

Activity: Skit, Story Telling and Singing

Faculty Name: Ms. Rajidi Sahithi

Class / Semester: I/I

Academic Year: 2025-26

Subject Name: Fundamentals of Electronics Engineering

Topic: For complete syllabus

Brief Write - Up

An integrated creative learning activity comprising **Skit, Storytelling, and Educational Song Presentation** was conducted for I CSE C & E sections to enhance students' understanding of the given topic through innovative and expressive methods. Students were divided into groups and assigned subtopics, which they presented through short skits, concept-based storytelling, and subject-related song compositions.

Through role-play, narrative techniques, and musical expression, students demonstrated real-time applications, problem-solving scenarios, key definitions, and theoretical concepts in an engaging manner. Storytelling helped simplify complex ideas using relatable examples, while song generation reinforced important concepts through rhythm and repetition.

The activity fostered teamwork, creativity, communication skills, and deeper conceptual clarity. It created an interactive and student-centered learning environment, significantly improving participation and engagement beyond traditional lecture-based teaching methods.

Objective:

- To simplify complex concepts using narrative techniques.
- To enhance conceptual clarity and imagination.
- To improve verbal communication skills.
- To promote active and student-centered learning.

Photos:





For any Queries contact: sahithi.r@bvrithyderabad.edu.in

Sahithi

Signature:

Activity: Team-Based Learning (TBL) Activity

Faculty Name: Dr. Y Alekhya

Class / Semester: III-I

Academic Year: 2025-26

Subject Name: Data Communications & Computer Networks

Topic: Data Communications Concepts & Physical Layer

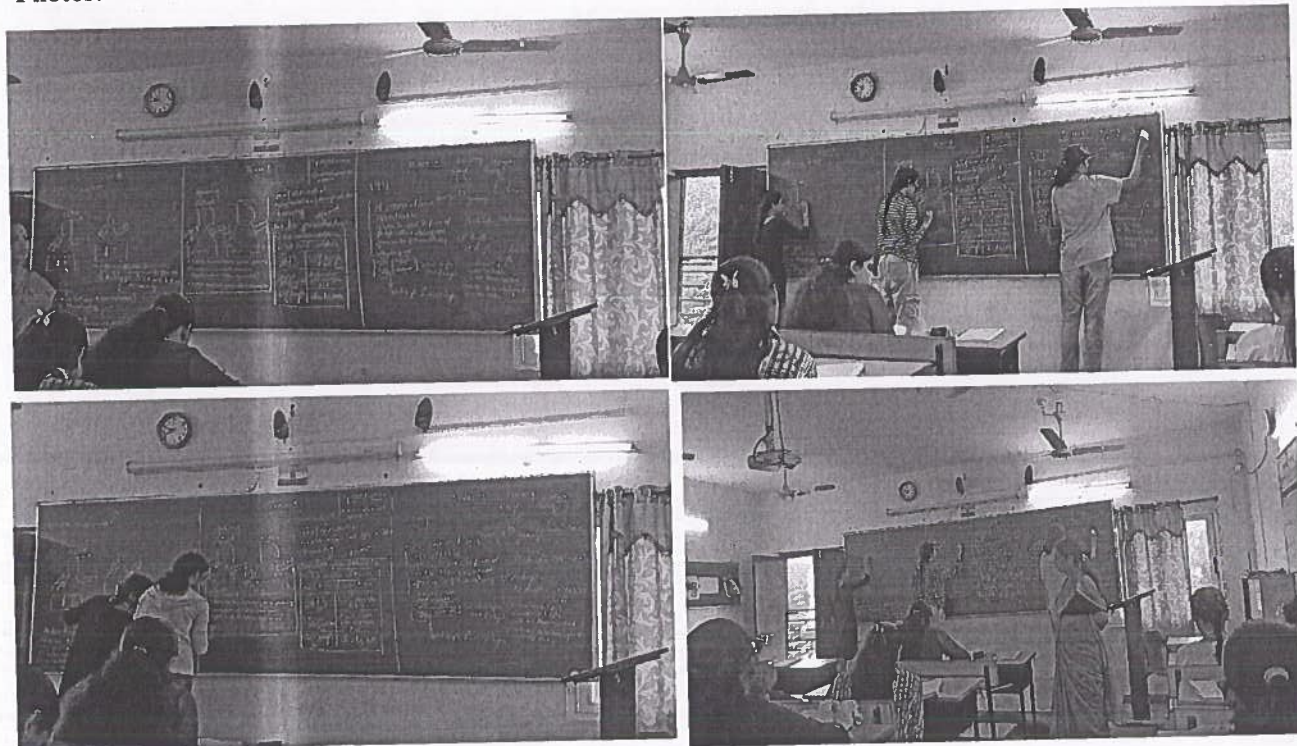
Brief Write – Up

Students were divided into three teams and asked to write key points about previously learned topics on separate sections of the board. Each team member added additional relevant points to enhance what their teammates had written, promoting collaborative learning and active recall. The session concluded with a facilitator summary to consolidate understanding and clarify concepts.

Objective:

- To promote collaborative learning by encouraging students to build upon each other's ideas.
- To enhance critical thinking skills by adding meaningful points to existing responses.
- To improve communication and presentation skills through team-based participation.
- To encourage active classroom engagement and equal participation among students.

Photos:



For any Queries contact: alekhya.yalla@bvrithyderabad.edu.in



Signature: Dr. Y Alekhya

BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering
Activity: Report on Methods of Defining Conditioning Events

Faculty Name: Dr J Naga Vishnu Vardhan

Class: II – II / ECE –B

Academic Year: 2025-26

Subject Name: Probability Theory and Stochastic Processes

Topic: Methods of Defining Conditioning Events

Date: 22-01-26

Brief Write - Up

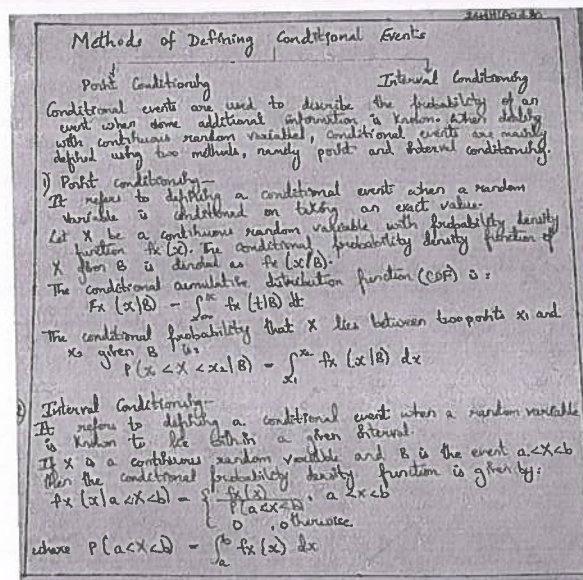
Students were asked to prepare a report which is Simple to Understand, Innovative way of writing the report by referring different resources, necessary equations and one Example

Impact:

This makes the student to

1. Understand the topic on their own
2. Refer to various sources
3. Prepare the report

Photos:




Dr J Naga Vishnu Vardhan

For any further details, please contact vishnu.j@bvrithyderabad.edu.in

BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering

Activity: Technical Seminars

Faculty Name: Dr J Naga Vishnu Vardhan

Class: II – II / ECE –B

Academic Year: 2025-26

Subject Name: Probability Theory and Stochastic Processes

Topic: Random Variables

Date: 29-01-26

Brief Write – Up

Students were allotted few topics and asked them to deliver seminar covering certain points for sure

Impact:

This makes the student to

1. Understand the topic on their own
2. Refer to various sources
3. Develop Speaking and Presentation Skills

S. No	Name of the Activity	Date of Conduction	No. of Students	Remarks
1	Seminar on Gaussian Random Variable by Ms. Mahathi (LE-410)	29-01-2026	60	Brief Introduction on Various Random Variables was given in the class and interested students are asked to deliver the seminar on one type of Random Variable covering PDF, pdf with respective graphs and one application atleast
	Seminar on Uniform Random Variable by Ms. Madhu Lalitha (471)			
	Seminar on Uniform Random Variable by Ms. Udaya Sri (LE – 412)			
2	Seminar on Poisson Random Variable by Ms. Sripada (476)	31-01-2026	56	
	Seminar on Binomial Random Variable by Ms. Indu (472)			

Photos:



Seminar on Gaussian Random Variable by Ms. Mahathi (LE-10)



Seminar on Uniform Random Variable by Ms. Madhu Lalitha (471)



Seminar on Exponential Random Variable by Ms. Udaya Sri (LE-12)



Seminar on Binomial Random Variable by Ms. Indu (472)



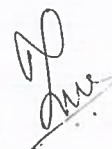
Seminar on Poisson Random Variable by Ms. Sripada (476)

Evaluation

To Evaluate the Seminars, following rubrics were taken into consideration (rated from 1 to 3)

S. No	Name of the Student and Roll. No	Topic	Preparation	Relevance of the Content	Presenting Skills	Remarks
1	Ms. D Mahathi (25WH1A0410)	Gaussian Random Variable	2	1	2	Though she prepared well and presented, the content is not relevant to subject point of view. She explained with statistics point of view – Hence the topic was re-explained by teacher
2	Ms. B Sri Sai Madhu Lalitha (24WH1A0471)	Uniform Random Variable	3	2.5	3	The way she explained the concept and correlating the equations with graphs is clear and very easy to understand. She also explained the how previous concepts are applied to the present topic. Suggested to take some real examples
3	Ms. T Udaya Sri (25WH5A0412)	Exponential Random Variable	2	2	1	She prepared the content relevant to the topic and guidelines given. However she felt little nervous while delivering and might have explained with some examples Gaps were covered by the teacher
4	Ms. Indu (24WH1A0472)	Binomial Random Variable	3	2.5	2	She Prepared the content relevant to the topic and guidelines given. She explained the problem with some relevant examples. However she might have explored some more points

5	Ms. Sripada (24WH1A0472)	Poisson Random Variable	2	2	2	She Prepared the content relevant to the topic and guidelines given. However it might be if she has explained using some relevant problems and with more points
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Dr J Naga Vishnu Vardhan

For any further details, please contact vishnu.j@bvrithyderabad.edu.in



BVRIT HYDERABAD College of Engineering for Women
Department of Electronics and Communication Engineering

Activity: Visit to Library

Faculty Name: Dr J Naga Vishnu Vardhan

Class: II – II / ECE –B

Academic Year: 2025-26

Subject Name: Probability Theory and Stochastic Processes

Topic: PTSP – Resources Available in the Library and Problem Solving

Date: 31-01-26

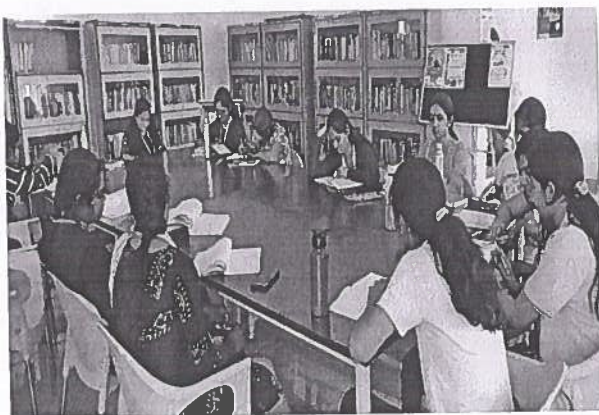
Brief Write – Up

Students were familiar with the concepts of the course and asked them to search for various resources available relevant to the course and also discussed to solve few problems

Impact:

This makes the student to

1. Know different resources (text books and journals) available in the library
2. To solve the problems by discussing among themselves so that it helps in understanding and solving the problem on own correlating to concepts covered



Dr J Naga Vishnu Vardhan

Activity: Team-Based Learning (TBL) Activity

Faculty Name: Dr. Y Alekhya

Class / Semester: III-II CSE

Academic Year: 2025-26

Subject Name: Fundamentals of IoT

Topic: Smart Irrigation System

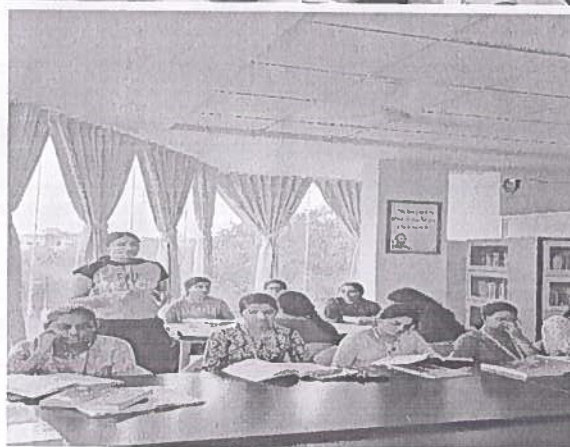
Brief Write – Up

The Smart Irrigation System is an advanced agricultural solution designed to optimize water usage through automation and sensor-based monitoring. This case study was explored as part of a library activity to understand the integration of embedded systems, IoT technologies, and sustainable farming practices.

Objective:

- To enhance students' knowledge beyond classroom learning.
- To support academic excellence and project-based learning.
- To encourage collaborative learning and participation in educational activities.
- To improve communication, presentation, and documentation skills.
- To motivate students toward innovative and technology-oriented learning approaches.

Photos:



For any Queries contact: alekhya.yalla@bvrithyderabad.edu.in

A handwritten signature in black ink, appearing to read 'Alekhya', is shown within a rectangular border.

Signature: Dr. Y Alekhya

Faculty Name: Dr Y Alekhya

Class: III – II / CSE (AI & ML)

Academic Year: 2025-26

Subject Name: Fundamentals of IoT

Topic: Actuators and their types

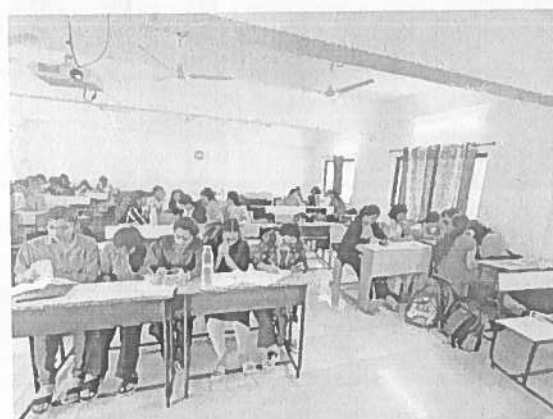
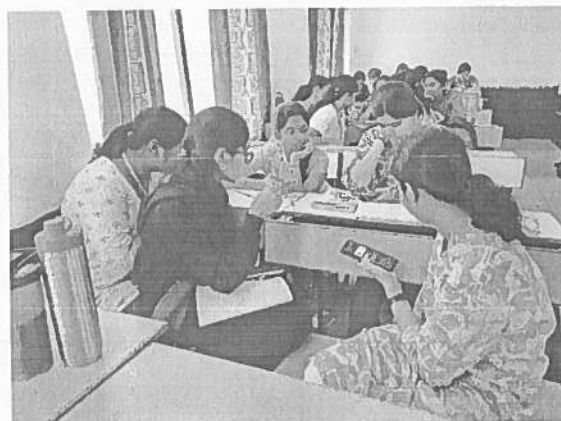
Date: 2-01-26

Brief Write - Up

Flipped Classroom activity was conducted on the Topic – Actuators

Students were given few resources and also asked them to gather info from any other resources and come for activity in the class – Explaining the working and principle which ever student was picked.

Photo(s):



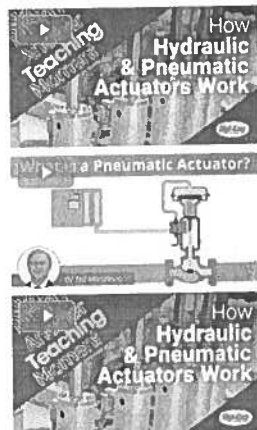
Video Material Shared with Students (Evidence of Video Sharing)

The video links were shared with students through:

- WhatsApp Class Group
- Learning Management System (LMS)

Sample Evidence:

219 APPLICATIONS AND CASE STUDIES FOR FLIPPED-CLASSROOM ACTIVITY



Conclusion

The Flipped Classroom method created an active and engaging learning environment for students. Sharing video content before class improved student preparedness and increased classroom interaction. The implementation of quizzes, discussions, and collaborative activities enhanced conceptual understanding and student participation effectively. The activity successfully demonstrated the benefits of technology-enabled active learning in engineering education.

For any Queries contact: alekhya.yalla@bvrithyderabad.edu.in

A handwritten signature in black ink, appearing to read 'Alekhya', is shown on a light-colored background.

Signature: Dr. Y Alekhya

Department of Electronics and Communication Engineering

Activity: Report on Exit Ticket Activity

Faculty Name: Dr. G Purnachandrarao

Class: I – II / ECE – A & B Academic Year: 2025-26

Subject Name: Electronic Devices and Circuits

Topic: Field Effect Transistor (FET)

Date: 06/05/2026

Brief Write - Up

Students were assigned an Exit Ticket activity on the topic Field Effect Transistor (FET) to reinforce their understanding. They prepared a concise report by referring to multiple learning resources, incorporating key concepts, relevant equations, and a suitable example in an innovative and easy-to-understand format.

Impact:

This makes the student to

1. Enhanced students' conceptual understanding of FET.
2. Encouraged self-learning and independent research.
3. Improved technical writing and presentation skills.
4. Promoted the effective use of multiple academic resources.

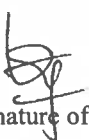
Photos:



Evaluation: Students were evaluated using a rubric (rated on a scale of 1–3) based on the following criteria:

Conceptual understanding, Content accuracy, Organization and presentation, Innovation and creativity
Use of equations and examples, Overall quality of the report.

Overall Outcome: The Exit Ticket activity effectively reinforced the learning objectives, increased student engagement, and demonstrated improved comprehension of the topic through well-structured and innovative reports.


Signature of the faculty:

Department of Electronics and Communication Engineering

Activity: Report on Crossword Activity

Faculty Name: Dr. G Purnachandrarao

Class: I – II / ECE – A & B **Academic Year:** 2025-26

Subject Name: Electronic Devices and Circuits

Topic: Bipolar Junction Transistor (BJT)

Date: 07/05/2026

Brief Write - Up

Students participated in a Crossword Activity on the topic Bipolar Junction Transistor (BJT) to reinforce key concepts and technical terminology. The activity encouraged students to recall definitions, principles, characteristics, and applications of BJTs in an engaging and interactive manner.

Impact:

This makes the student to

1. Strengthened conceptual understanding of BJT.
2. Improved recall of technical terms and definitions.
3. Enhanced critical thinking and problem-solving skills.
4. Increased student engagement through interactive learning.

Photos:



Evaluation: Students were evaluated using a rubric (rated on a scale of 1–3) based on the following criteria: Conceptual understanding, Accuracy of responses, Completion of the crossword, Logical thinking and problem-solving, Participation and time management

Overall Outcome: The Crossword Activity effectively reinforced BJT concepts in an interactive manner, promoted active participation, and improved students' retention and recall of fundamental electronic device concepts..



Signature of the Faculty:

Peer Learning Activity

Faculty Name: Dr.M.Kalpana Chowdary

Class / Semester: II-I ECE -B

Academic Year: 2025-26

Subject Name: Analog and Digital Communications

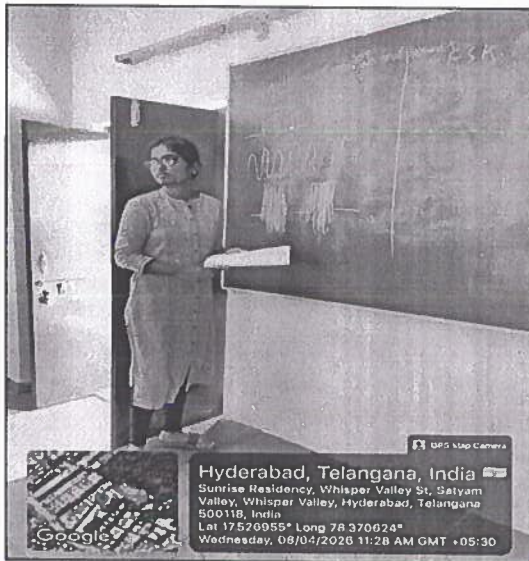
Topic:

Brief Write – Up: Students actively participated in the peer learning activity by writing answers on the board, explaining solutions, and discussing them with classmates. Students interacted with each other, clarified doubts, and corrected mistakes through discussion. The activity created an interactive learning environment and encouraged active participation in the classroom.

Objectives:

- To improve student participation in the classroom.
- To encourage students to learn from each other.
- To improve understanding through discussion and explanation.

Photos:



For any Queries contact: kalpanachowdary.m@bvrithyderabad.edu.in

Signature:

kalpana

Faculty Name: Dr.M.Kalpana Chowdary

Class / Semester: II-I ECE -A

Academic Year: 2025-26

Subject Name: Analog and Digital Communications

Topic: Amplitude Modulation, AM Transmitters

Brief Write – Up: The class is divided into three groups. The board is divided into three sections. One student from each group writes the solution simultaneously. After writing, each group discusses and adds additional points or corrections. This promotes peer learning and active participation.

Objectives:

1. To encourage active participation of students in solving and presenting answers.
2. To promote collaborative learning and teamwork among students.
3. To improve understanding of the concept through peer discussion and feedback.

Photos:



For any Queries contact: kalpanachowdary.m@bvrithyderabad.edu.in

Signature: 



BVRIT HYDERABAD College of Engineering for Women

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)
(NBA Accredited – EEE, ECE & CSE | Accredited by NAAC with 'A' Grade)

Nizampet Road, Bachupally, Hyderabad-500 090

Department of Electronics and Communication Engineering

Activity: Report on Think-Pair-Share

Faculty Name: Mr.P.Rajesh Kumar

Class: II – II / ECE –A

Academic Year: 2025-26

Subject Name: Linear and Digital IC Applications

Topic: 555 Timer IC

Date: 08-04-26

Brief Write - Up

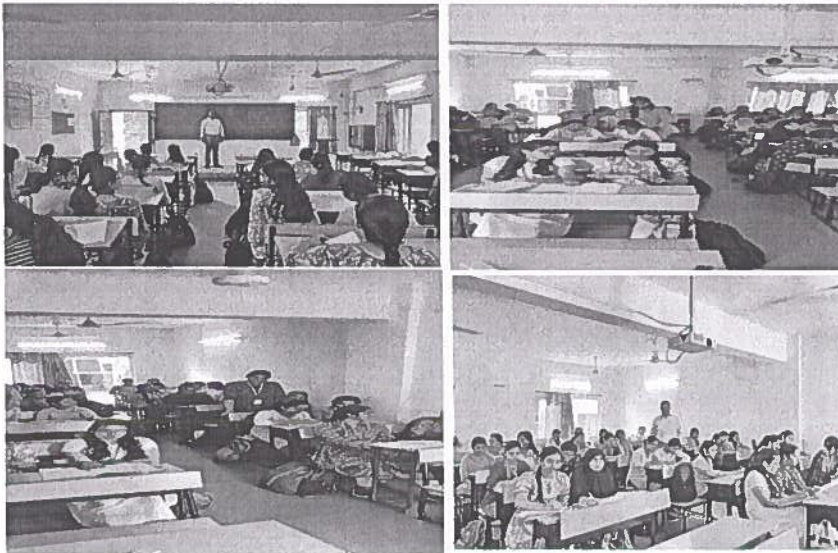
Students were given some questions related to applications of 555 Timer IC ,students are paired with each other and discussed the solutions for those questions and shared their solution to all students.

Impact:

This makes the student to

1. Improves thinking capability
2. Refer to various sources
3. Finding solutions for the problems

Photos:



For any Queries contact: rajeshkumar.p@bvrithyderabad.edu.in

Signature: 

Activity: Match the Sensor to Application

Faculty Name: Rama Lakshmi Gali

Class / Semester: III/II

Academic Year: 2025-26

Subject Name: IoT A&P

Topic: IoT sensor to application

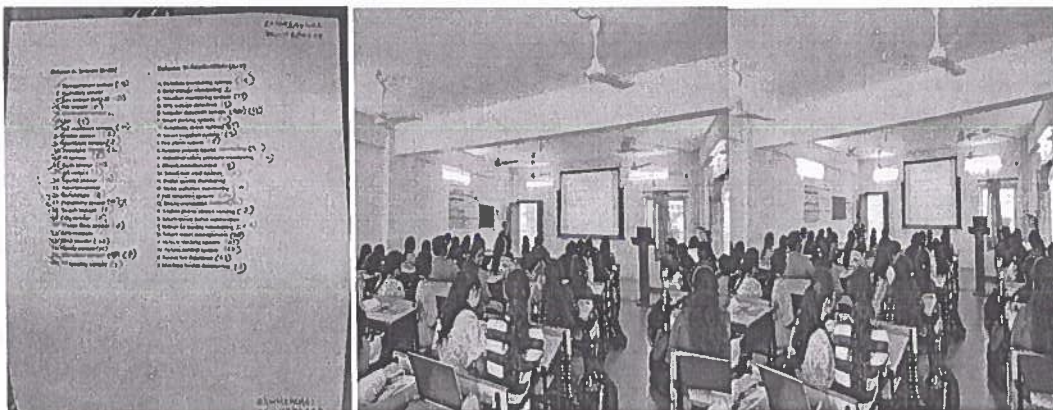
Brief Write - Up

In Internet of Things (IoT) systems, sensors play a vital role in collecting data from the physical environment. Each sensor is designed to measure a specific parameter such as temperature, humidity, light, motion, gas, or pressure. These sensed values are then transmitted to controllers or cloud platforms for processing and decision-making. The "Match the Sensor to Application" activity encourages students to associate each sensor with its suitable application.

Objective:

The objective of this activity is to help students understand the relationship between different types of sensors and their real-time IoT applications. It aims to improve knowledge about how sensors are selected and used in various practical systems such as healthcare, agriculture, security, and environmental monitoring.

Photos:



For any Queries contact: ramalakshmi.g@bvrithyderabad.edu.in

Signature: 

Activity: Minute Paper

Faculty Name: Rama Lakshmi Gali

Class / Semester: III/I

Academic Year: 2025-26

Subject Name: IoT A&P

Topic: IoT application

Brief Write - Up

The Internet of Things (IoT) refers to a network of interconnected devices that collect, process, and exchange data through the internet. IoT applications are widely used in various domains such as smart homes, healthcare, agriculture, industrial automation, transportation, and environmental monitoring. These applications help in improving efficiency, reducing human effort, and enabling real-time decision-making.

Objective:

The objective of this minute paper is to understand the importance of Internet of Things (IoT) applications and the role of communication protocols in enabling efficient data exchange between connected devices. It aims to highlight how IoT systems are used in real-life scenarios and how protocols support reliable, secure, and scalable communication.

Photos:

- Activity-3**
Minute paper - "Is it IoT or Not?" - 25 Devices
3. Calculator
 2. Smartwatch
 1. Basic mobile phone (no internet)
 4. Smartphone
 5. Washing machine (Internet)
 6. Smart washing machine (Wi-Fi enabled)
 7. Smart refrigerator
 8. Conventional refrigerator
 9. Smart TV
 10. LED TV (no internet)
 11. CCTV camera (IP-based)
 12. Analog CCTV camera
 13. Smart electricity meter
 14. Traditional electricity meter
 15. Smart door lock
 16. Mechanical door lock
 17. Fitness band
 18. Digital thermometer
 19. Smart air conditioner
 20. Remote controlled fan
 21. GPS vehicle tracker
 22. Bluetooth speaker
 23. Smart street light
 24. Automatic hand sanitizer dispenser
 25. Smart irrigation system



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Signature: 

Activity: Role Play

Faculty Name: Rama Lakshmi Gali

Class / Semester: III/I

Academic Year: 2025-26

Subject Name: IoT A&P

Topic: Session Layer Protocols

Brief Write - Up

In this activity, students are assigned different roles such as IoT devices, servers (brokers), and users. Additional roles represent session layer protocols like AMQP and XMPP. The role play simulates a real-world scenario where devices communicate through a network, and session protocols manage connection establishment, authentication, message exchange, and session termination.

Students acting as protocols demonstrate how sessions are created, maintained, and closed, while ensuring data integrity and proper sequencing. For example, one student may initiate a session, another maintains message flow, and another handles session termination.

Objective:

The objective of this role play is to help students understand how session layer protocols establish, manage, and terminate communication sessions in IoT systems. It enables learners to visualize real-time interaction between devices, servers, and users while ensuring synchronization and reliable data exchange.

Photos:



For any Queries contact: ramalakshmi.g@bvrithyderabad.edu.in

Signature: 

Section 2: Active Learning Strategies Adopted



BVRIT HYDERABAD College of Engineering for Women

Department of Electronics and Communication Engineering

Name of the Activity: Reverse Engineering Challenge

Faculty Name: Mr. R. Priyakanth

Class: II – II / ECE – A

Academic Year: 2025–26

Subject Name: Electromagnetic Fields and Transmission Lines

Topic: Smith Chart for Solving Transmission Line Problems

Date: 23-04-2026

Brief Write-Up

This activity is designed to help students develop a deeper understanding of transmission line analysis using the Smith chart by working backward from given input conditions to determine unknown load parameters.

In this Reverse Engineering Challenge, students work as a team of two and are provided with transmission line parameters such as characteristic impedance and input impedance at a given distance. Together, they are required to determine the unknown load impedance and related quantities using the Smith Chart. This activity promotes teamwork, analytical thinking, and strengthens understanding of impedance transformation along the line.

For this activity, the questions posed are:

1. Given the input impedance at a certain distance from the load, how can the load impedance be determined using the Smith Chart?
2. How can the VSWR and reflection coefficient be found from the plotted point?

Team Discussion and Problem Solving for 30 min

- Students formed into teams of two.
- Each team analyzed the given problem together.
- Normalized the impedance values and plotted on the Smith Chart.
- Discussed and finalized the movement direction and calculations collaboratively.

Class-Wide Interaction – 20 min

Each team shared their approach and solution with the class. As an Instructor I facilitated:

- Comparison of multiple solution methods used by different teams.
- Clarification of common mistakes in normalization and movement along the chart.
- Demonstration of the correct procedure to determine load impedance, VSWR, and reflection coefficient.

Learning Outcome:

Students clearly understood the practical use of the Smith Chart in reverse analysis of transmission line problems, including:

- Determining unknown load impedance from known input conditions,
- Finding VSWR and reflection coefficient graphically,
- Enhancing teamwork and collaborative problem-solving skills.

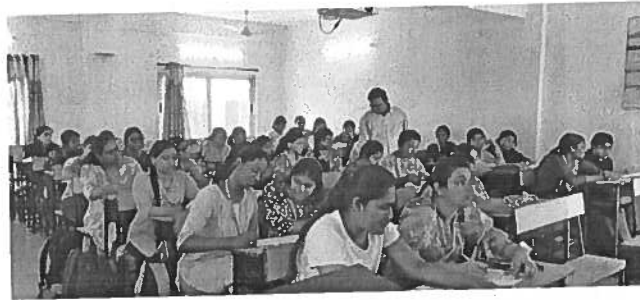
Assessment Method:

The assessment is made based on the correctness of the solution submitted by each team of two, including:

- Proper plotting on the Smith chart
- Correct determination of load impedance
- Correct calculation of VSWR and reflection coefficient
- Participation during class discussion

No. of Students Participated: 34

Photos:



Facilitating Students as the course coordinator



Students discussing with teams

Impact: The activity helped students understand the practical application of the Smith chart in solving transmission line problems through analytical thinking, teamwork, and graphical interpretation of impedance, VSWR, and reflection coefficient.

CO-PO Attainment

- PO1 – Engineering Knowledge
- PO2 – Problem Analysis
- PO9 – Individual and Team Work

R.PRIYAKANTH

Activity: Chart Preparation

Faculty Name: T. Amy Prasanna

Class / Semester: I/II

Academic Year: 2025-26

Subject Name: Analog Electronics

Topic: Diode Applications (Unit-I)

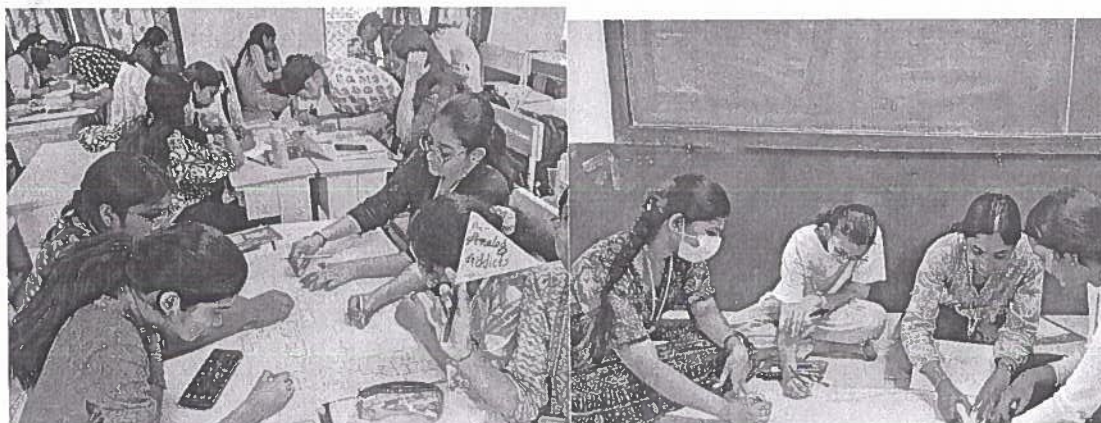
Brief Write - Up

A Chart Preparation activity was conducted on the topics Rectifiers, Clippers, and Clampers to promote visual learning and collaborative understanding. Students prepared informative charts illustrating circuit diagrams, waveforms, working principles, and applications of each circuit. The charts were presented in the classroom, followed by a brief discussion to reinforce the concepts.

Objective:

- To enhance conceptual understanding of rectifiers, clippers, and clampers through visual representation.
- To develop students' presentation, teamwork, and communication skills.
- To encourage active learning and improve retention of circuit concepts.

Photos :



Impact of the Activity:

The activity improved students' understanding of rectifier, clipper, and clamper circuits by encouraging them to organize and present concepts visually. It enhanced creativity, teamwork, and confidence while strengthening their ability to differentiate between the circuits and explain their working and applications effectively.

For any Queries contact: prasanna.tella@bvrithyderabad.edu.in Signature:



Activity: Exit Ticket

Faculty Name: T. Amy Prasanna

Class / Semester: I/II

Academic Year: 2025-26

Subject Name: Analog Electronics

Topic: Op-amp (Unit-V)

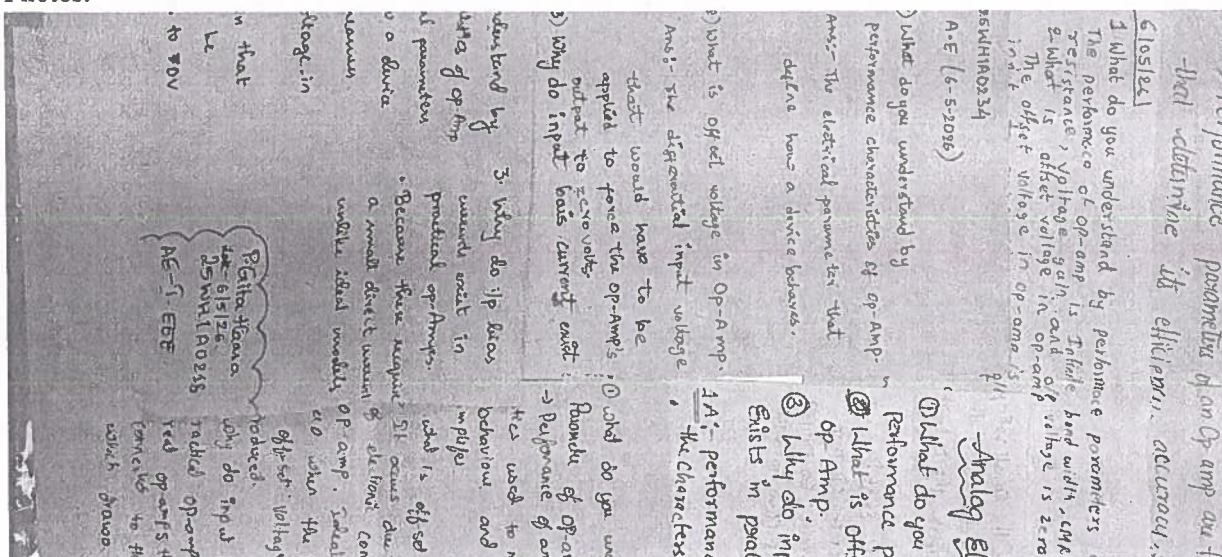
Brief Write - Up

An Exit Ticket Activity was conducted at the end of the unit on Operational Amplifiers (Op-Amps) to assess students' understanding of key concepts. Students answered a few short questions related to Op-Amp characteristics, configurations, applications, and circuits before leaving the class. The activity provided immediate feedback on students' learning and helped identify areas requiring further clarification.

Objective:

- To assess students' understanding of Op-Amp concepts at the end of the unit.
- To encourage reflection on key learning outcomes.
- To identify misconceptions and learning gaps for timely feedback.

Photos:



Impact of the Activity:

The activity helped students consolidate their understanding of Op-Amp concepts and encouraged active reflection on their learning. It enabled the instructor to quickly evaluate student comprehension, address misconceptions, and improve overall learning effectiveness.

For any Queries contact: prasanna.tella@bvrithyderabad.edu.in Signature:

Amy Prasanna

Activity: Crossword Puzzle

Faculty Name: T. Amy Prasanna

Class / Semester: I/II

Academic Year: 2025-26

Subject Name: Analog Electronics

Topic: Bipolar Junction Transistor (Unit-II)

Brief Write - Up

A crossword puzzle activity was conducted on the topic Bipolar Junction Transistor (BJT) to reinforce students' understanding of key concepts and terminology. Students solved clues related to BJT construction, operation, configurations, biasing, and applications, making the revision process interactive, engaging, and effective.

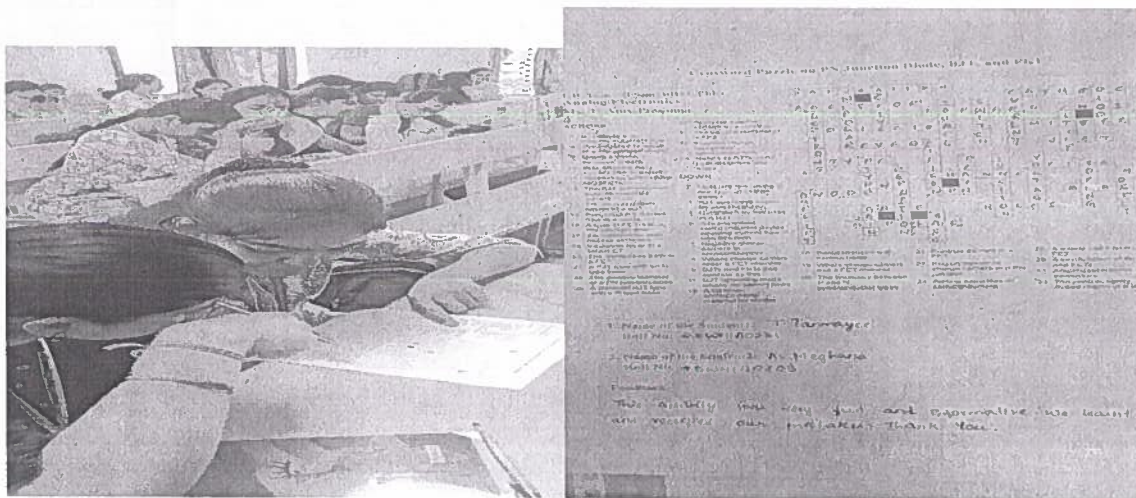
Objective:

To reinforce fundamental concepts and terminology of BJT.

To improve students' conceptual understanding through an interactive learning activity.

To enhance critical thinking, recall ability, and active participation.

Photos :



Impact of the Activity:

The crossword puzzle activity enhanced students' understanding and retention of BJT concepts by making learning interactive and engaging. It improved recall of technical terminology, encouraged active participation and collaborative learning, and increased students' confidence in applying BJT concepts during discussions and assessments.

For any Queries contact: prasanna.tella@bvrithyderabad.edu.in Signature:

Amy prasanna

Activity: Flipped Classroom**Faculty Name: T. Amy Prasanna****Class / Semester: III/II****Academic Year: 2025-26****Subject Name: IoT A&P****Topic: Network Layer Protocols****Brief Write - Up**

A flipped classroom session on Network Layer Protocols was conducted to help students understand both conventional Internet protocols and IoT-specific routing protocols. Students studied pre-class resources covering IPv4, IPv6, 6LoWPAN, 6TiSCH, Neighbor Discovery (ND), DHCP, ICMP, RPL, CORPL, and CARP. During the classroom session, students presented the features, working principles, and applications of each protocol, followed by group discussions and problem-solving activities. Comparative analysis between IPv4 and IPv6, as well as routing protocols used in Low-Power and Lossy Networks (LLNs), enabled students to relate theoretical concepts to real-world IoT and networking applications. Interactive quizzes and case studies reinforced learning and promoted active participation.

Objective:

To understand the functions and significance of Network Layer protocols in communication and compare IPv4 and IPv6 and their applications in modern networks. To explain the role of IoT protocols such as 6LoWPAN, 6TiSCH, RPL, CORPL, and CARP and to enhance students' understanding through active learning, discussions, and collaborative activities.

Photos:

Impact of the Activity : The role play activity provided students with an interactive learning experience to understand the functioning of session layer protocols in IoT environments. By enacting the roles of IoT devices, brokers, users, and session protocols such as AMQP and XMPP, students gained practical insight into session establishment, authentication, synchronization, message exchange, and session termination. The activity enhanced communication skills, teamwork, problem-solving abilities, and conceptual understanding of protocol operations in real-time IoT communication systems. Students were able to visualize how reliable and secure data exchange is achieved through session management mechanisms.

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Activity: Minute Paper

Faculty Name: T.Amy Prasanna

Class / Semester: III/II

Academic Year: 2025-26

Subject Name: IoT A&P

Topic: IoT application

Brief Write - Up

The Internet of Things (IoT) refers to a network of interconnected devices that collect, process, and exchange data through the internet. IoT applications are widely used in various domains such as smart homes, healthcare, agriculture, industrial automation, transportation, and environmental monitoring. These applications help in improving efficiency, reducing human effort, and enabling real-time decision-making.

Objective:

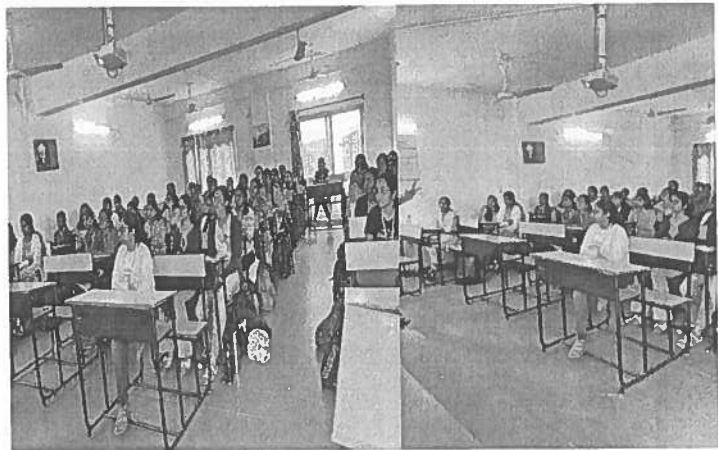
The objective of this minute paper is to understand the importance of Internet of Things (IoT) applications and the role of communication protocols in enabling efficient data exchange between connected devices. It aims to highlight how IoT systems are used in real-life scenarios and how protocols support reliable, secure, and scalable communication.

Photos:

Activity-8

Minute paper - "Is it IoT or Not?" - 25 Devices

1. Calculator
2. Smartwatch
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4. Smartphone
5. Washing machine (manual)
6. Smart washing machine (Wi-Fi enabled)
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17. Fitness band
18. Digital thermometer
19. Smart air conditioner
20. Remote controlled fan
21. GPS vehicle tracker
22. Bluetooth speaker
23. Smart street light
24. Automatic hand sanitizer dispenser
25. Smart irrigation system



Impact of the Activity: The minute paper activity enhanced students' understanding of various IoT applications used in real-world domains such as smart homes, healthcare, agriculture, transportation, and industrial automation. Students were able to identify the significance of communication protocols in facilitating reliable and secure data exchange among interconnected devices. The activity encouraged active participation, critical thinking, and knowledge retention by allowing students to summarize key concepts in a concise manner. It also improved their ability to relate theoretical concepts to practical IoT implementations.

For any Queries contact: prasanna.tella@bvrithyderabad.edu.in Signature:

Amy prasanna

Activity: Match the Sensor to Application

Faculty Name: T.Amy Prasanna

Class / Semester: III/II

Academic Year: 2025-26

Subject Name: IoT A&P

Topic: IoT sensor to application

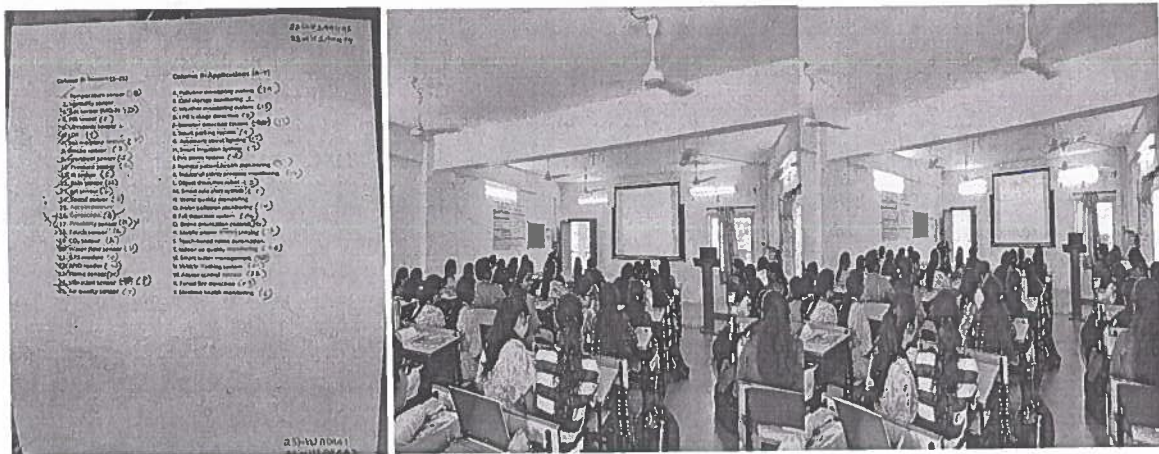
Brief Write - Up

In Internet of Things (IoT) systems, sensors play a vital role in collecting data from the physical environment. Each sensor is designed to measure a specific parameter such as temperature, humidity, light, motion, gas, or pressure. These sensed values are then transmitted to controllers or cloud platforms for processing and decision-making. The "Match the Sensor to Application" activity encourages students to associate each sensor with its suitable application.

Objective:

The objective of this activity is to help students understand the relationship between different types of sensors and their real-time IoT applications. It aims to improve knowledge about how sensors are selected and used in various practical systems such as healthcare, agriculture, security, and environmental monitoring.

Photos:



Impact of the Activity: The "Match the Sensor to Application" activity enabled students to develop a clear understanding of various IoT sensors and their practical applications in real-world environments. By matching sensors such as temperature, humidity, light, motion, gas, and pressure sensors with suitable applications, students gained insight into sensor selection and deployment in IoT systems. The activity enhanced analytical thinking, application-oriented learning, and decision-making skills while strengthening their understanding of how sensing technologies support smart healthcare, agriculture, environmental monitoring, home automation, and industrial IoT solutions.

For any Queries contact: prasanna.tella@bvrithyderabad.edu.in

Signature:

Amy prasanna

Activity: “Digital Wave: A Rapid-Fire Online DSP Challenge”

Faculty Name: Dr. V. Hindumathi

Class / Semester: III / II

Academic Year: 2025-26

Subject Name: Digital Signal Processing

Topic: Digital Filters

Brief Write – Up:

As part of an engaging and interactive student evaluation, a fast-paced gamified quiz called **"Digital Wave: A Rapid-Fire Online DSP Challenge"** was carried out. The main goal of this activity was to improve students' ability to think quickly and recall information in the field of Digital Signal Processing by placing them in a high-pressure, digital learning environment.

Throughout the event, the classroom transformed into a lively digital competition. Students eagerly accessed the quiz using their own devices to tackle a challenging 11-question online module. With a strict 30-second timer for each question, students had to quickly process information and answer complex questions covering key areas of DSP, such as the features of Butterworth and Chebyshev filters, the advantages of FIR over IIR filter designs, Bilinear Transformation, and the conversion of sampling rates.

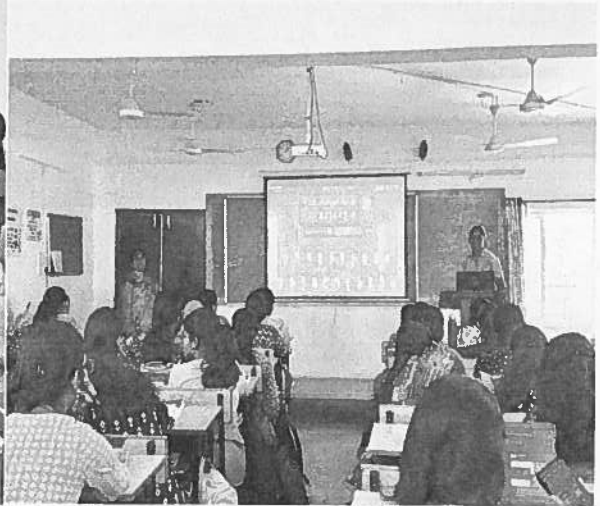
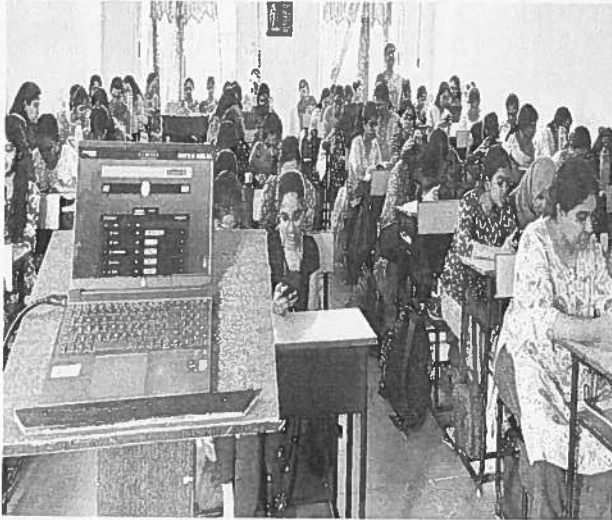
Students really thrived in this gamified setting. They actively tracked their progress, and the instant feedback created a competitive yet collaborative learning environment. The tight time limits forced participants to trust their immediate instincts and deep knowledge of the subject, which reduced hesitation and encouraged active involvement.

Overall, the students showed great excitement towards the digital challenge. The activity went beyond traditional assessment methods, offering a thrilling and enjoyable way for students to demonstrate their knowledge, quick problem-solving skills, and enthusiasm for the subject.

Objective:

- To promote interactive and engaging learning through gamification
- To enhance students' quick thinking and knowledge recall abilities
- To encourage active participation and healthy competition
- To develop a fun learning environment beyond traditional methods
- To stimulate quick thinking under a strict time limit.

Photos:



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Signature: 