



**RISE KRISHNA SAI PRAKASAM
GROUP OF INSTITUTIONS :: ONGOLE
(AUTONOMOUS)**



(APPROVED BY AICTE-NEW DELHI, AFFILIATED TO JNTUK KAKINADA)

Accredited by "NBA" for B.Tech in Civil, EEE, Mechanical, ECE & CSE

ELECOMM **2K23**

**DEPARTMENT OF
ELECTRONICS AND
COMMUNICATION ENGINEERING
A.Y:2023-24**



RISE Krishna Sai Prakasam Group of Institutions
(AUTONOMOUS)

Department of Electronics and Communication Engineering

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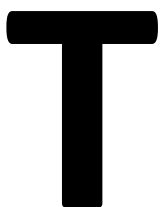
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RISE | 2023-24



1. About Our Institution -

N

2. Chairman's Message

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3. President's Message

E

6. ECE Doctoral Faculty

-

4. Principal's Message

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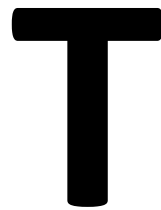
7. ECE Faculty in Research

-

5. HOD's Message

-
8. ECE Faculty

-



10. Vision and Mission

-
9. Magazine Committee

-
11. PEOs, POs & PSOs

-
13. Department Laboratories

-
**12. A Glimpse into Our ECE
Department**

-

N

14. Library

-

15. Activities Summary

-
16. Activities Photos

-
17. Industrial Visits

-
**18. Faculty Development
Program**

-

O

**19. Faculty Certifications
Summary**

-
20. Faculty Publications

-
21. Internships Summary

-
22. List of MOUs

-

C

23. Placements & Higher Education

-
24. Non Curriculum Activities

-
25. Sports

-
**26. Student Articles &
Presentations**

-
**1
2**

2	10-11 12
3	13-16 17
4	18
5	19-25 26-29 30
6	31-38 39-40 41
7	42
8	43
9	44-45 46-47 48-58

27. Festive Celebrations

&Patriotic Events - -
30. Lines

59-67

28. ART Section

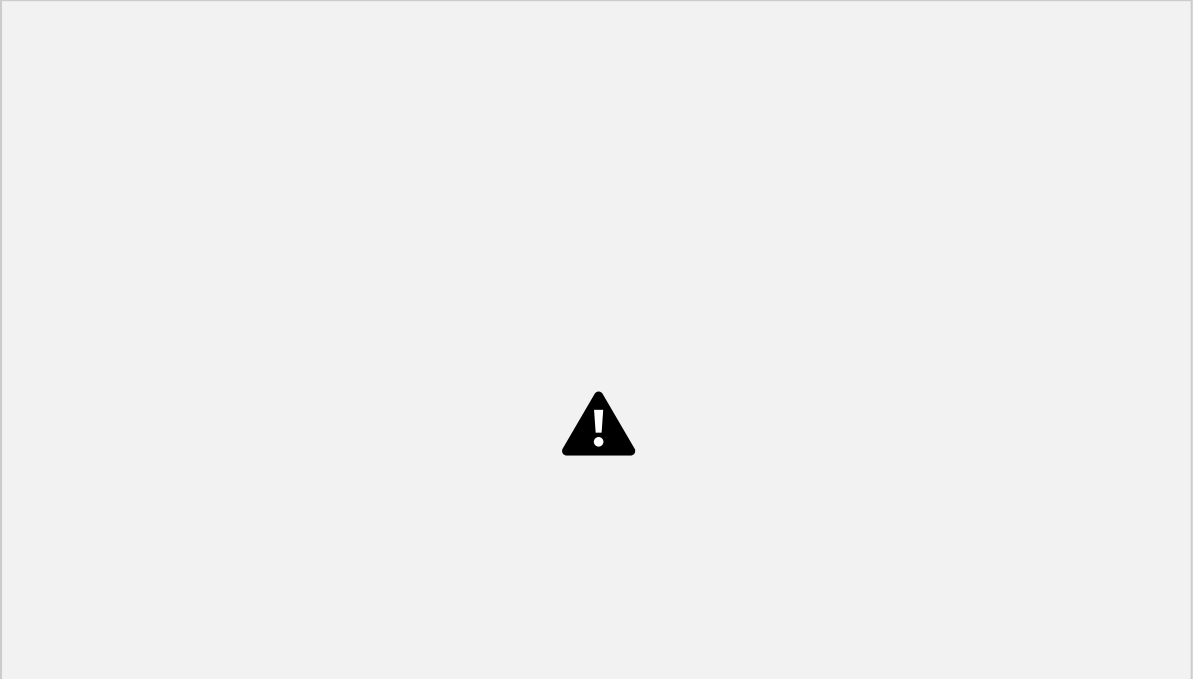
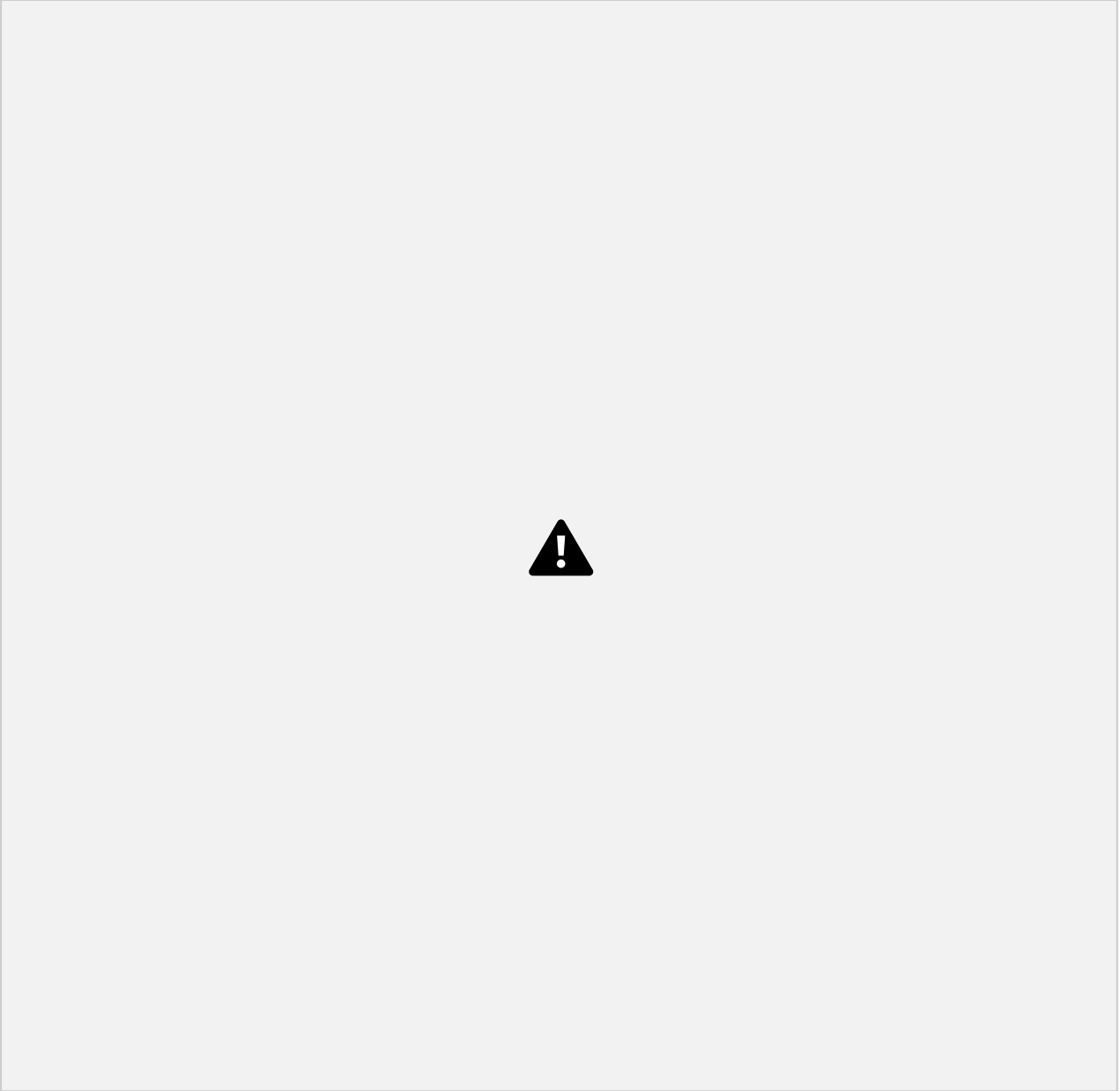
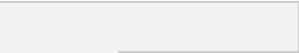
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29. Photography

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68-71 73-74 75-78

RISE | 2023-24





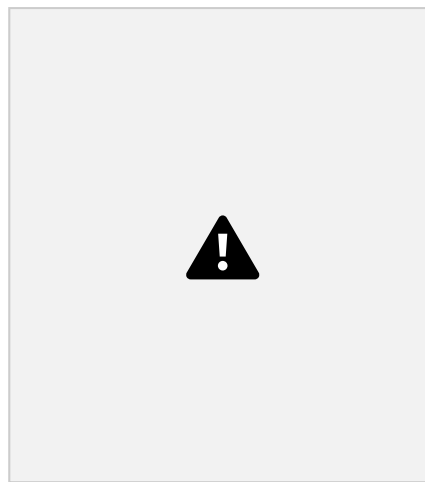
About Our Institution



RISE Krishna Sai Group of Institutions focuses on imparting skills on cutting – edge technologies and shaping the students into disciplined young citizens of good character and lays emphasis on practical experience so as to enable them to secure employment in industry thereby to become entrepreneurs. The courses are so structured which leads to a linear growth and progressive insight into the engineering subjects as well as training in soft skills. Since

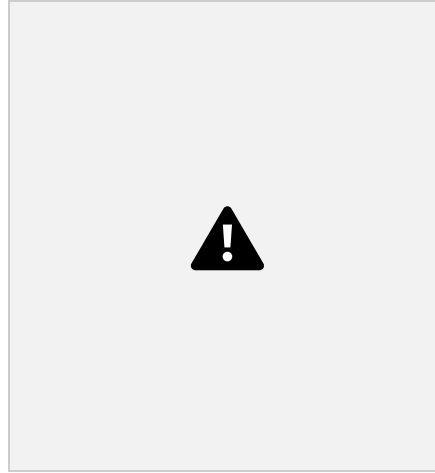
inception in 2001, in its quest to offer quality education, our college has become a temple of knowledge and produced hundreds of eminent and skillfull graduate engineers, who are successful in their careers, serving all over the world.

RISE | 2023-24



**Mr. I.C. Rangamannar,
Hon'ble Chairman,
The RISE Krishna Sai Groups of Institutions**

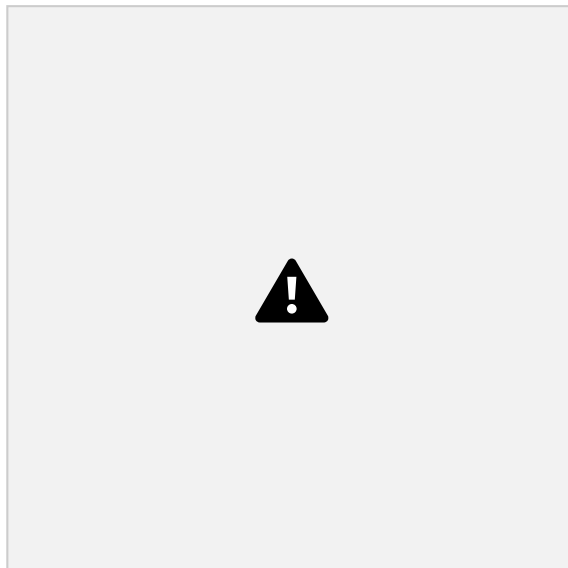
It is my pleasure to acknowledge the students of the Elections and Communication Engineering Department. These graduating students have been demonstrating excellence in the areas of problem solving, analytical methods and teamwork skills, and have immense potential for leadership and life-long learning. I congratulate each of you for your dedication and hard work, and we welcome your future endeavours and support of the Electronics and Communication Engineering Department



**Mr. Sidda Venkateswara Rao,
Hon'ble President,
The RISE Krishna Sai Groups of Institutions**

If information alone is education, today's students require no assistance at all to make strides in their fields. Technological devices can be their best source of learning. But there is a lot to learn on the part of student besides academic information. Character building ought to be one of the cardinal objectives of education. I give importance to education based on character.

**From Principal's
Desk:**



ISE | 2023-24



Prof. Dr. A. V. Bhaskara Rao

M.Tech (RECW), Ph.D. (IIT Bombay)



PDF (Univ.of Toronto, Canada, MISTE, MASET)

"As we embark on a new academic year, I encourage each of you to explore the vast possibilities in the field of ECE. Let us strive for excellence and make our department a hub of innovation."

To my dear students and faculty, I wish you a year filled with learning, growth, and success. Let us work together to achieve greatness in ECE."

A warm welcome to all our new and returning students, faculty, and staff! I am excited to see the amazing things we will accomplish together in the ECE department this year."



As we begin a new semester, I extend a hearty welcome to our ECE community. Let us come together to create a supportive and inclusive environment that fosters academic excellence."

As ECE students and professionals, we have the power to shape the future of technology. Let us be driven by curiosity, creativity, and a passion for innovation."

"To succeed in ECE, we must be willing to take risks, learn from failures, and persevere through challenges. I have faith in each of you to achieve great things."

As we celebrate the achievements of our ECE students and faculty, I am reminded of the importance of teamwork, collaboration, and mutual support.

RISE | 2023-24

From HOD's Desk:



Dr.CHALLA VENUGOPAL REDDY

Professor& HoD

The field of ECE stands at the forefront of innovation, integrating advanced electronics, cutting-edge communication systems, and emerging technologies such as AI, IoT, and 5G. Our department is committed to nurturing a vibrant academic environment that fosters creativity, critical thinking, and a spirit of inquiry.

We take pride in our dedicated faculty, state-of-the-art infrastructure, and industry-aligned curriculum designed to equip students with both technical expertise and soft skills essential for a successful career. Through collaborations with industry leaders and research institutions, we provide our students with opportunities to engage in real-world challenges, projects, and internships.

At the ECE department, we believe in holistic development and encourage students to actively participate in technical competitions, workshops, and co-curricular activities. Our alumni, who are excelling in various domains globally, are a testament to our commitment to excellence.

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ECE Doctoral Faculty





Dr.Ch. Venugopal Reddy
M.Tech, PhD

Dr. V.T.Venketeswarlu
M.Tech, PhD



Dr.Rakesh Mutukuru
M.Tech, PhD
RISE | 2023-24



ECE Faculty in Research



Mr.P.Surya

Mr.D.Syamb
abu

Mr.K.Suresh Babu	Dr.Syed.Shanava Zuddin,Assistant Professor,	Visakhapatnam for 5G Applications	Visakhapatnam, Andhra Pradesh 530003 & 01/09/2020	Pursuing
Mr. P.V.M Vijay Bhaskar	Dr.V.Vijayalakshmi, Professor,	NITP,Patna, Patna, Bihar 800005 Bioacoustic Signal processing using Machine Learning	NITP,Patna, Patna, Bihar 800005 & 21/07/2022	Pursuing
Dr.C.Arunachala perumal Professor & HoD-ECE, Raco Institute of Technology,Tamil Nadu	P.T.U,Puducherry , East Coast Road, Pillaichavadi, Puducherry 605014	DR detection & Grading using Hybrid deep learning Models	P.T.U, Puducherry, East Coast Road, Pillaichavadi, Puducherry 605014 & 20/09/2023	Pursuing
Dr.S.Krishnaveni Professor (PhD on Antenna Arrays specialization) at	Design of Low power and area efficient parallel pipelined FFT Architecture	Anna University, Guindy, Chennai, Tamil Nadu 600025 & 01/07/2017		
Andhra University,	Design of Antenna Array	Andhra University,		Pursuing

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ECE

S.NO NAME



Faculty

Designation Qualification 1

Dr.CHALLA VENU GOPALREDDY PROF & HOD M.Tech,PhD. 2 Mr.SAI KIRAN
OGIRALA ASST. PROF M.Tech 3 Mr.SAIMAN KAMBAMPATI ASST. PROF M.Tech
4 Ms.AVULA VIJAYA LAKSHMI ASST. PROF M.Tech 5 Mr.SURESH BABU
KOSURI ASST. PROF M.Tech (PhD) 6 Mr.SYAM BABUDARSI ASST. PROF M.Tech
(PhD) 7 Mrs.LAKSHMI SAI KUMARI

UPPALURI ASST. PROF M.Tech 8 Mr..SAYANA BRAHMANAIDU ASST. PROF
M.Tech

9 Ms.VENKATA SUPRAJA POGULA ASST. PROF M.Tech 10 Mr.SATISH KUMAR
MADDULA

VENKATA ASST. PROF M.Tech 11 Mr.GOUTHAM VENKATA KASARLA ASST.
PROF M.Tech

12 Ms.SUJANA ACHAKALA ASST. PROF M.Tech 13 Mr.NAGARAJU BATTULA
ASST. PROF M.Tech 14 Ms.RAJYAM KRISTIPATI ASST. PROF M.Tech 15
Ms.HEMA PURNA PEDAPATI

CHANDRIKA ASST. PROF M.Tech 16 Ms.DARSINI SOWJANYA PRIYA

MUTLURI ASST. PROF M.Tech 17 Ms.RADHIKA PERLA ASST. PROF M.Tech 18

Mr.VENKATA HAREESHKOLLA ASST. PROF M.Tech 19 Ms.SUNEETHA
SUDDAPALLI ASST. PROF M.Tech 20 Ms.RAJYALAKSHMI KRISTIPATI ASST.
PROF M.Tech 21 Mr..CHUNDURI SRINIVASA RAO ASST. PROF M.Tech
22 Mr.PIDUGU SREENIVASA REDDY ASST. PROF M.Tech 23 Mr.ARUN
PRAKASHCHALLA ASST. PROF M.Tech

24 Mr. VENKATA MARUTHI VIJAYA

BHASKAR POLAMRAJU ASST. PROF M.Tech (PhD) 25 Dr.RAKESHMUTUKURU ASST. PROF M.Tech,PhD.

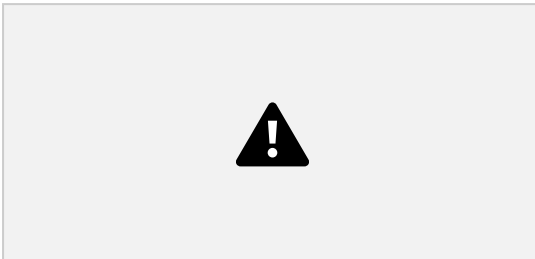
26 Mrs..BANDI RAJANI ASST. PROF M.Tech 27 Mr.MALYADRIPADUCHURI ASST. PROF M.Tech

28 Mr.DARIYA SAHEBSHAIK ASST. PROF M.Tech

29 Mr.PRASADSURYA ASST. PROF M.Tech (PhD) 30 Dr.VENKATESWARLU THIRUMALA

VULAVALA ASST. PROF M.Tech, PhD.

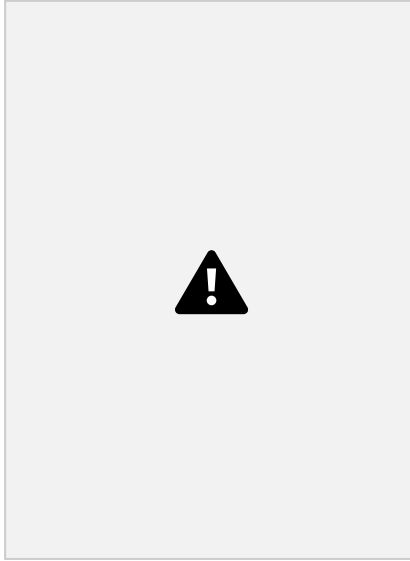
31 Mr.MADHU BABU MANNAM ASST. PROF M.Tech **RISE | 2023-24**



It is with great excitement that I present "RISE 2023-24," the magazine of our department. This edition is a reflection of the dedication and creativity of our students and faculty, capturing the essence of our vibrant community.

I am deeply grateful to everyone who contributed their talents and efforts to make this publication a reality. Your support has made our inaugural edition truly special.





Happy reading!

Name : G V S MOHAN REDDY
Roll No : 218A1A04A6
Dept. of ECE-II 3rd Year
MAGAZINE EDITOR

It is with great pride that I present RISE 2023-24, the inaugural edition of our department magazine. As the editor, I am excited to showcase the creativity, dedication, and hard work of our students and faculty. This magazine highlights the diverse talents

within our community.

Name : S. YASASWINI

Roll No : 218A1A0487

**Dept. of ECE-II 3rd Year
MAGAZINE SECRETORY**

2023-24

RISE |

RISE Krishna Sai
Prakasam Group Of
Institution?

VISION

To become a center
of
excellence in



Electronics and Communication Engineering to meet the global technological and industrial requirements

Globally
Quality
Education to
Competitive
Engineers.
Develop
Enhancing

Imparting

Creativity, Innovation and Promoting Lifelong Provide modern technical knowledge, professional skills and attitude to meet industry and society needs Promote innovations through professional training and development Develop a team with professional ethics and social responsibility

RISE | 2023-24

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1:

Core Skills Intensive and extensive engineering knowledge and skill to understand, analyze, design and create novel products and solutions in the field of Electronics and Communication Engineering.

PEO2:

Problem solving & Lifelong learning Capability to pursue career in industry or higher studies with continuous learning.

PEO3:

Entrepreneurship Skills Leadership qualities, team spirit, multi disciplinary approach, character molding and lifelong learning for a successful professional career. PEO4: Professionalism Professional and ethical attitude, effective communication skills, and sense of responsibility towards society.

PROGRAM OUTCOMES (POs)

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an

engineering specialization to the solution of complex engineering problems.

2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural science and engineering sciences. **3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal and environmental considerations. **4. Conduct investigations of complex problems:** Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

-

5. Modern tool usage: create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. **7. Environment**

sustainability: Understand the impact of the professional engineering solutions in the societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. **8. Ethics:** Apply ethical principles and commit to professional ethics, responsibilities, and norms of the engineering practice.

9. Individual and teamwork: Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings. **10. Communication:** communicate

effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Lifelong learning: recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broader context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1:

Design and implementation of complex systems by applying basic concepts in Electronics & Communication Engineering to Electronics, Communications, Signal processing, VLSI, Embedded Systems (Core Skills).

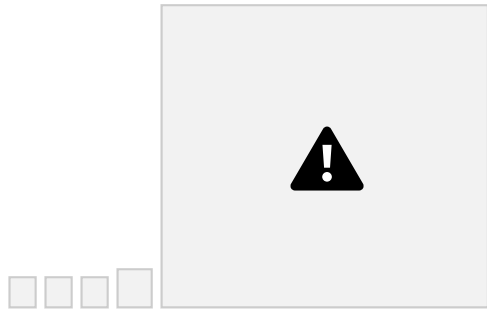
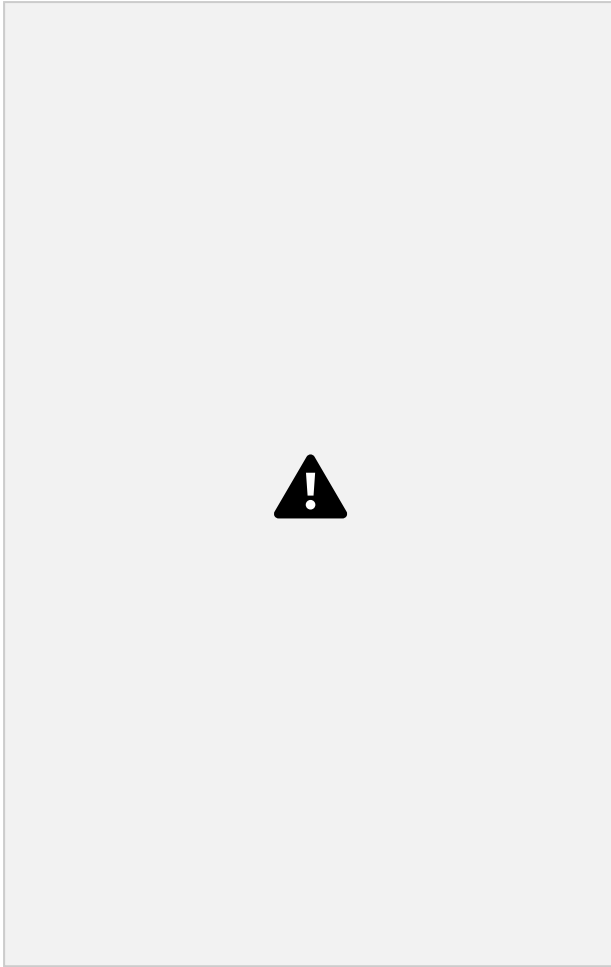
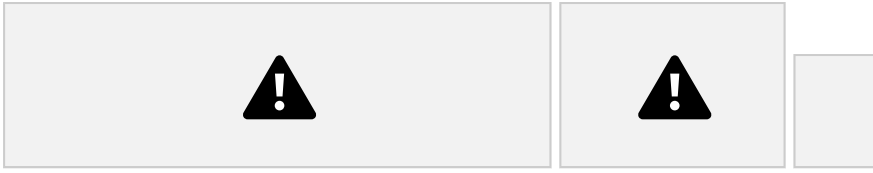
PSO2:

Solve complex Electronics and Communication Engineering problems, using hardware and software tools, along with analytical skills to arrive cost effective and appropriate solutions relevant to the society. (Problem-Solving Skills).

PSO3:

Quality in technical subjects for successful higher studies and employment (Professional Career).





✓ Electronics and

Communication



Laboratories:

1. Simulation Lab I



2. Simulation Lab II
3. Project lab
4. Microwave Lab
5. IC Applications Lab
6. Communication Lab
7. Circuits Lab
8. R&D Lab

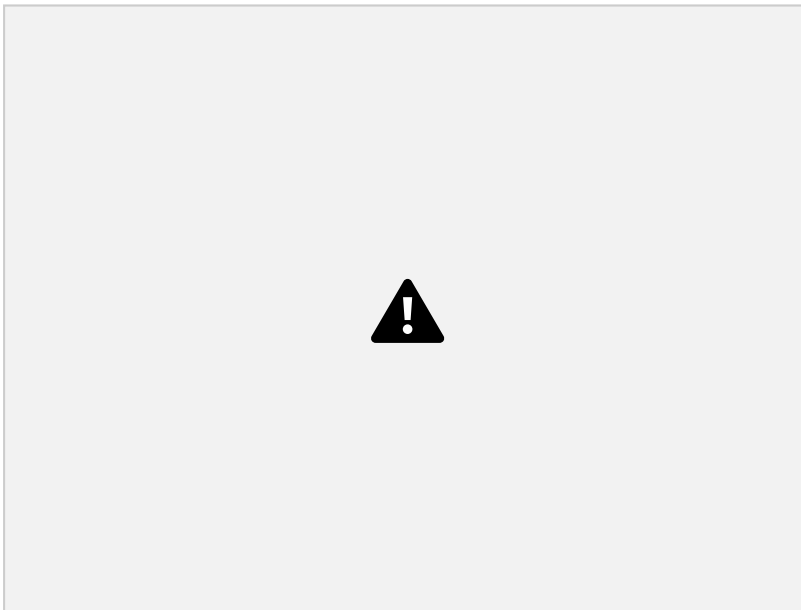
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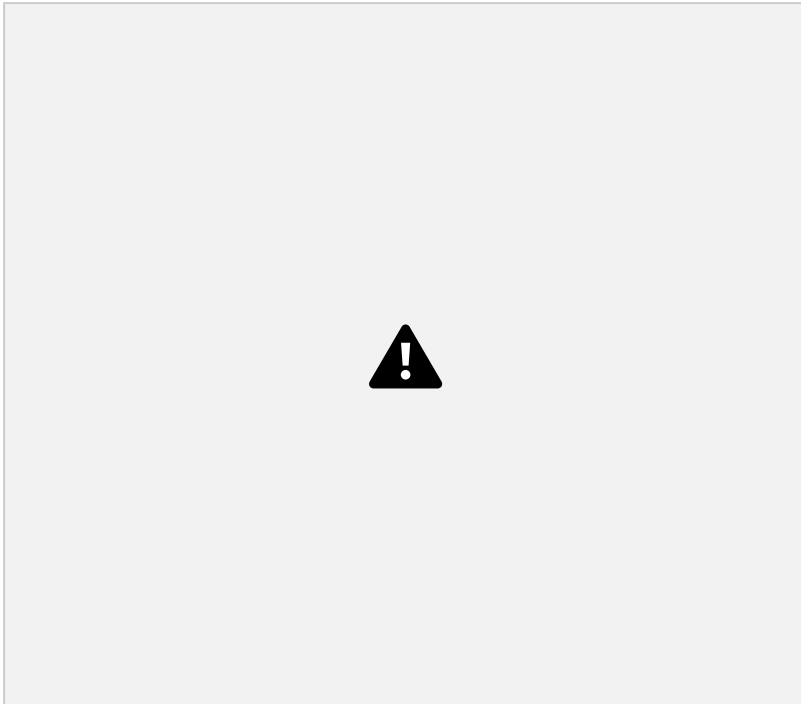
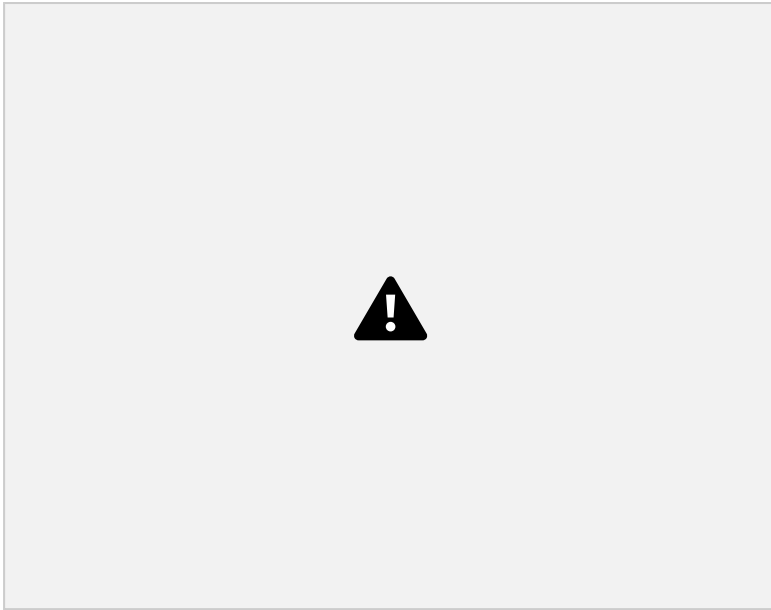
SIMULATION LAB - I

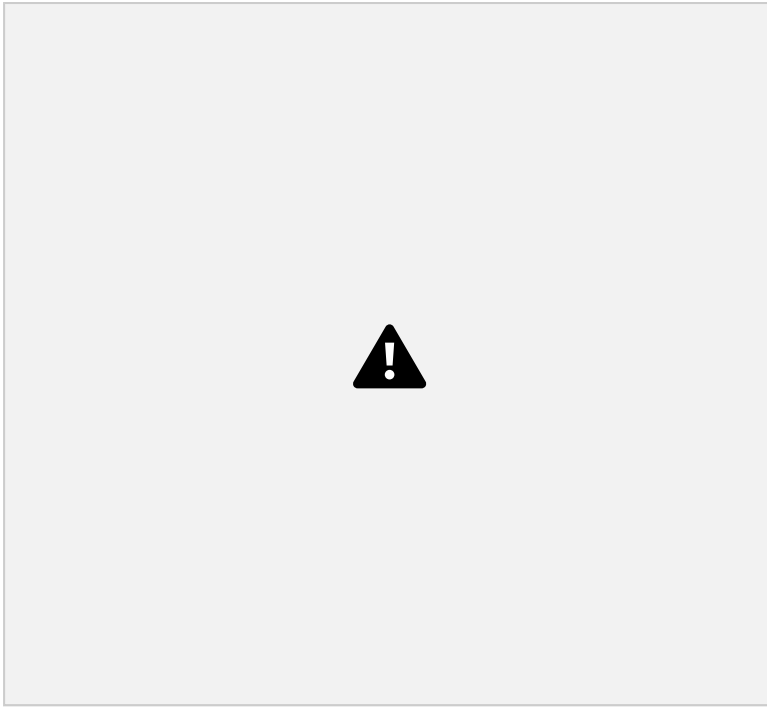
SIMULATION LAB - II

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PROJECT LAB







RISE | 2023-24

COMMUNICATION

LAB IC APPLICATION LAB

CIRCUITS LAB

MICROWAVE LAB





LIBRARY

Our college library occupies a prominent position and it is an important and integral part of the teaching programme. It is not merely a depository of books, but an active workshop instrument in the production of or original thinking. The aim of college education and college libraries in inter-related. College library extends opportunities for self-education to the deserving and enthusiastic students without any distinction. These libraries develop in each student a sense of responsibility in the pursuit of knowledge. College library stimulates the students to obtain, evaluate and recognize knowledge and to familiarize themselves with the trends of knowledge for further education and learning new Disciplines.



RISE | 2023-24

WORKSHOPS / GUEST
LECTURES SEMINARS / VALUE
ADDED COURSES

S.N 0	Activity Name
1	Value Added Course on ITC Infotech Training
2	Value Added Course on APTITUDE
3	Value Added Course on C Language Programming
4	A One Day Guest Lecture on Radar systems and it's Applications
5	A One Day Guest Lecture on Digital Communication Principles and Techniques
6	A Three-Day Workshop on Advanced IOT Applications

7	A Short-Term Course On ARDUINO
8	A Three-Day Workshop on PCB Designing
9	Webinar on Antenna Design using HFSS tool
10	A One Day Seminar on Recent Trends in Digital Image Processing Applications
11	A One Day Seminar on Special Techniques used in Satellite Communication
12	A One Day Seminar on Recent Trends in Linear IC Applications
13	Value Added Course on APTITUDE
14	Value Added Course on C Language Programming
15	A Five-Day Workshop on Signal Processing using Cortex M4 DSP
16	A Five-Day Workshop on Introduction to MATLAB And Its Applications
17	A Five-Day Workshop on Embedded Systems
18	A Five-Day Workshop on Communication systems using MATLAB
19	A One Day Guest Lecture on Recent Trends in VLSI Design
20	A One Day Guest Lecture on Digital IC design & Its Applications
21	A One Day Guest Lecture on Satellite Communications and Applications
22	A One Day Guest Lecture on ASIC Design From RTL To GDSII
23	A Three day Workshop on ARDUINO
24	A Three day Workshop on VLSI Design and Verification
25	A Five Week FDP on “C-Programming: Theory, Practice and Hands-on”

Arduino Workshop



"Spark Your Creativity: Arduino Workshop at RISE Krishna Sai Prakasam Group Of Institutions"

Introduction

On 12-10-2023, the RISE Krishna Sai Prakasam Group Of Institutions community came together to explore the fascinating world of microcontrollers at an Arduino workshop. Organized by Dept. of ECE, the event aimed to introduce students to the basics of Arduino programming and hardware integration.

What is Arduino?

Arduino is an open-source electronics platform that enables users to create interactive projects by combining hardware and software components. From robotics and home automation to wearable technology and art installations, Arduino's versatility has made it a favorite among makers, hobbyists, and professionals alike.





RISE | 2023-24





Workshop Highlights

The workshop was led by Naresh Technologies, who guided participants through the basics of Arduino programming and hardware integration. Students learned how to: 1. Program Arduino: Write and upload code to control LEDs, sensors, and actuators. 2. Build Circuits: Connect and configure hardware components to create interactive projects.

3. Troubleshoot: Identify and resolve common errors and issues.

Hands-on Projects

Participants worked on various projects, including:

1. Traffic Light Simulator: Created a traffic light system using LEDs and Arduino. 2. Home Automation: Designed a smart home automation system using sensors and actuators.

3. Robotics: Built a simple robot using Arduino and motor controllers.

Conclusion

The Arduino workshop at [College Name] was a huge success, sparking creativity and inspiring students to explore the world of microcontrollers.

We hope to see more innovative projects and ideas emerge from our community in the future!

Upcoming Events

Stay tuned for more workshops and events organized by Dept. of ECE!

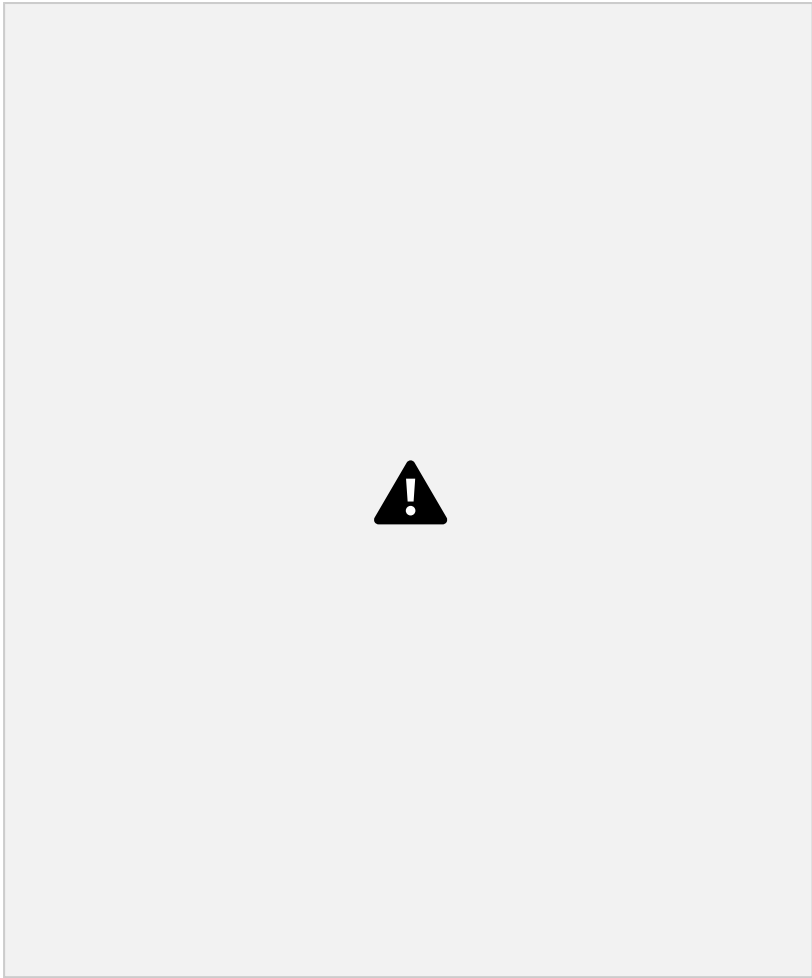
Join the Conversation

Share your thoughts and experiences with Arduino on our social media channels using #ArduinoAt Dept. of ECE.

RISE | 2023-24

Arduino Workshop





21 RISE |

2023-24

22 RISE | 2023-24



Guest Lecture on

Satellite Communication





23 RISE | 2023-24

24 RISE | 2023-24

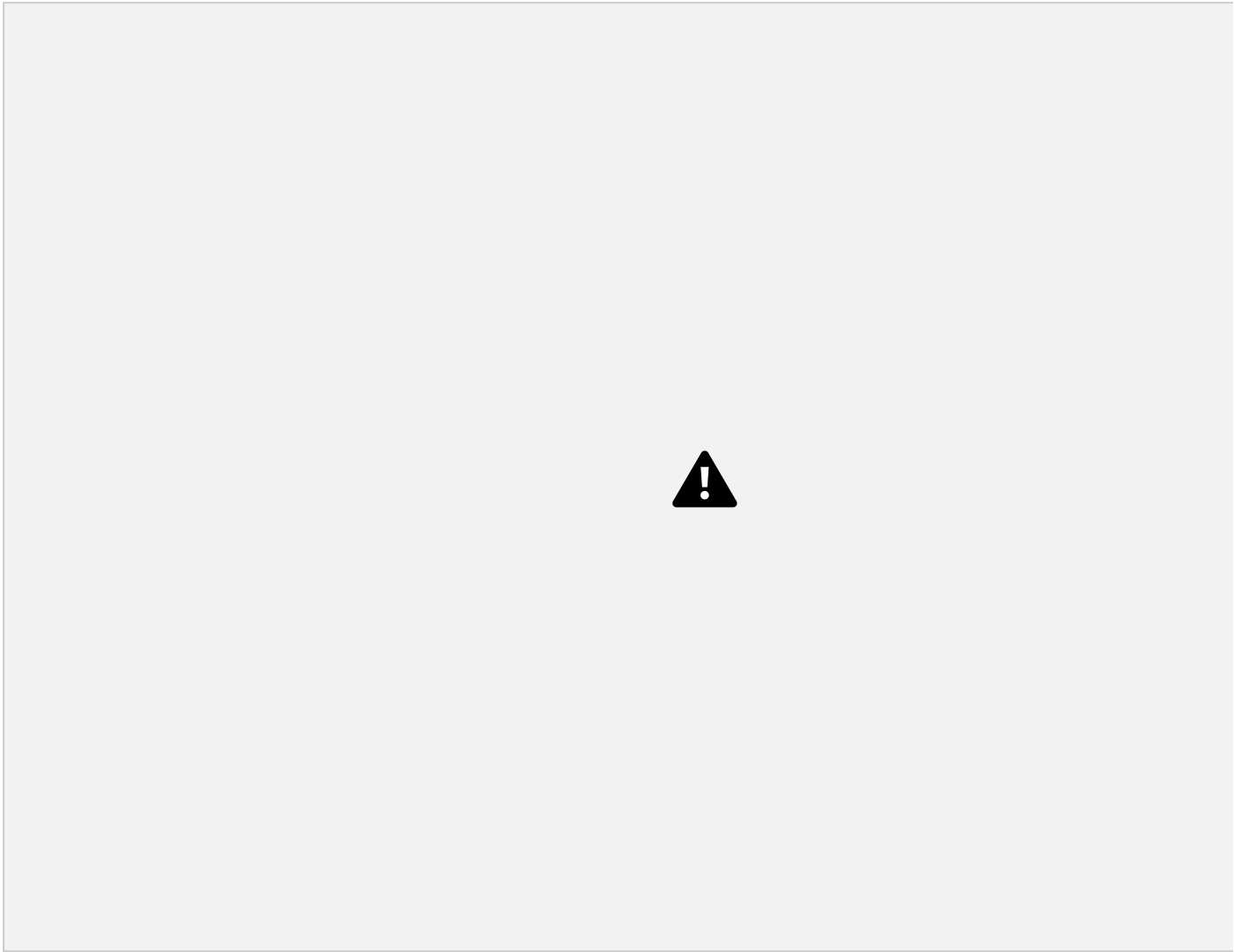
25 RISE | 2023-24

Efftronics Industrial Visit

Efftronics Industrial Visit

Efftronics Industrial Visit

ISRO-SHAR Industrial Visit



Faculty Development

Program ³⁰ RISE | 2023-24

Faculty Development Programmes (FDP), Workshops, Seminars, Guest Lectures, Awards/Appreciation certificates

S.N O	Faculty Name	Title of the program
1	BATTULA NAGARAJ U	Innovation and Intellectual Property Rights (IPR) Awareness Programs Organized CSIR-IMMT as part of National Intellectual Property Festival (NIPF-2023)

2	Mr.SYAMB A BU DARSI	One Week Online FDP on "Antennas for 5G Communications & Beyond" Organized by Dept of ECE, Aditya Engineering College (A), Surampalem
3	Dr.V.T.Venka t eswarlu	A 5 Day Workshop on VLSI to System Design: SilicontoEnd Application Approach organized by AICTE ArmEducation and STMicroelectronics
4	Mr.Syambab u Darsi	A 5 Day Workshop on VLSI to System Design: SilicontoEnd Application Approach organized by AICTE ArmEducation and STMicroelectronics
5	Dr.RAKES H MUTUKUR U	One Week National Level FDP on Cloud Infrastructure(AWS) Organized by Dept.of CSE ,JNTUK UniversityCollege of Engineering Narasaraopet, Andhrapradesh Incollaboration with Brainovision Solutions India Pvt Ltdand AICTE
6	Dr.M.Rakesh	A One Week National Level FDP On Recent Advances inElectronics and communication Engineering-an approachThrough AI & ML
7	Mr. O.V.Sai Kiran	A One Week National Level FDP On Recent Advances inElectronics and communication Engineering-an approachThrough AI & ML
8	Mr. S. Brahma Naidu	A One Week National Level FDP On Recent Advances inElectronics and communication Engineering-an approachThrough AI & ML
9	Mr. M.V. Satish Kumar	A One Week National Level FDP On Recent Advances inElectronics and communication Engineering-an approachThrough AI & ML
10	Mr. P. Sreenivasa Reddy	A One Week National Level FDP On Recent Advances inElectronics and communication Engineering-an approachThrough AI & ML

31 ~~RISE | 2023-24~~

**Faculty Development Programmes (FDP), Workshops, Seminars,
Guest Lectures, Awards/Appreciation certificates**

S.N O	Faculty Name	Title of the program
11	Ch. Srinivasa Rao	A One Week National Level FDP On Recent Advances in Electronics and communication Engineering-an approach Through AI & ML
12	Mr.Paduchuri Malyadri	One Week Online FDP On the topic "Satellite Communication: Design Prospective and Applications" Organized by Annant Gyan Knowledge and Skill Pvt.Ltd
13	Mr.SYAMBA B U DARSI	NITTTR-Chandigarh-AICTE-One Week Online FDP Antenna Design Techniques and Tools
14	Dr.M.Rakesh	NIELIT-5Day/5hours-Course on VLSI For Beginners

15	K SURESH BABU	8 Weeks NPTEL-Course -AICTE-FDP On Introduction toMachine Learning
16	K SAIMAN	8 Weeks NPTEL-Course -AICTE-FDP On Introduction toMachine Learning
17	Mr. P. Surya	12 Weeks NPTEL-Course -AICTE-FDP On Introduction toIndustry 4.0 and Industrial Internet of Thing
18	Mr.SYAMBA B U DARSI	12 Weeks NPTEL-Course -AICTE-FDP On Introduction toIndustry 4.0 and Industrial Internet of Thing
19	Mr.K.Saiman	NIELIT-5Day/5hours-Course on Embedded For Beginners
20	Mr. DARSI SYAMBABU	Five Day Workshop on Outcome Based Education GVPCDPG(A)-Visakhapatnam

32 RISE | 2023-24

**Faculty Development Programmes (FDP), Workshops, Seminars,
Guest Lectures, Awards/Appreciation certificates**

Faculty Name	Title of the program
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21	Dr.M.Rakesh	Three Day National Level FDP On Emerging Trends in VLSI Device,circuits & System design-A Practical Approach-Held at R,V,R,&J.C College of Engineering & Technology
22	Mr. P. Surya	Three Day National Level FDP On Emerging Trends in VLSI Device,circuits & System design-A Practical Approach-Held at R,V,R,&J.C College of Engineering & Technology
23	Mr.SYAMBAB U DARSI	Three Day National Level FDP On Emerging Trends in VLSI Device,circuits & System design-A Practical Approach-Held at R,V,R,&J.C College of Engineering & Technology
24	Miss.M.Sowjanya Priyadarsini	Three Day National Level FDP On Emerging Trends in VLSI Device,circuits & System design-A Practical Approach-Held at R,V,R,&J.C College of Engineering & Technology
25	Mrs.K.Rajyam	Three Day National Level FDP On Emerging Trends in VLSI Device,circuits & System design-A Practical Approach-Held at R,V,R,&J.C College of Engineering & Technology
26	Mrs.B.Rajani	Three Day National Level FDP On Emerging Trends in VLSI Device,circuits & System design-A Practical Approach-Held at R,V,R,&J.C College of Engineering & Technology
27	Mrs. U.S.R.L. Saikumari	Three Day National Level FDP On Emerging Trends in VLSI Device,circuits & System design-A Practical Approach-Held at R,V,R,&J.C College of Engineering & Technology
28	Mrs. P.V. Supraja	Three Day National Level FDP On Emerging Trends in VLSI Device,circuits & System design-A Practical Approach-Held at R,V,R,&J.C College of Engineering & Technology

29	Mrs. A. Sujana	Three Day National Level FDP On Emerging Trends in VLSI Device, circuits & System design-A Practical Approach-Held at R, V, R, & J.C College of Engineering & Technology
30	K. Rajyalakshmi	Three Day National Level FDP On Emerging Trends in VLSI Device, circuits & System design-A Practical Approach-Held at R, V, R, & J.C College of Engineering & Technology RISE 2023-24

**Faculty Development Programmes (FDP), Workshops, Seminars,
Guest Lectures, Awards/Appreciation certificates**

	Faculty Name	Title of the program
31	Dr.Ch.Venugopal Reddy	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole
32	Dr.M.Rakesh	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole

33	Mr.K.Suresh Babu	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole
34	Mr.KAMBAMP A TI SAIMAN	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole
35	Mr. P. Surya	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole
36	Mr.P.Malyadri	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole
37	Mr.SYAMBAB U DARSI	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole
38	Mr. P.V.M Vijay Bhaskar	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole
39	Mr.M.Madhu Babu	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole
40	Mr.K.V.Goutham	AICTE-ATAL- FDP On -Emerging Research Area in Advance VLSISystem Design & Challenges : Semiconductor-to-End Application –Approach at PACE INSTITUTE OF TECHNOLOGY ANDSCIENCES -Valluru-ongole

**Faculty Development Programmes (FDP), Workshops, Seminars,
Guest Lectures, Awards/Appreciation certificates**

S.NO	Faculty Name	Title of the program
41	Mr. Ch. Arun Prakash	AICTE-ATAL- FDP On -Emerging Research Area in AdvanceVLSI System Design & Challenges : Semiconductor-to-EndApplication – Approach at PACE INSTITUTE OFTECHNOLOGY AND SCIENCES -Valluru-ongole
42	Mrs.B.Rajani	AICTE-ATAL- FDP On -Emerging Research Area in AdvanceVLSI System Design & Challenges : Semiconductor-to-EndApplication – Approach at PACE INSTITUTE OFTECHNOLOGY AND SCIENCES -Valluru-ongole
43	Mrs.K.Rajyam	AICTE-ATAL- FDP On -Emerging Research Area in AdvanceVLSI System Design & Challenges : Semiconductor-to-EndApplication – Approach at PACE INSTITUTE OFTECHNOLOGY AND SCIENCES -Valluru-ongole
44	Mr.Paduchuri Malyadri	One Week Online FDP On the topic "Signals &Systems:Simulation Analysis & Applications(SSSA-2023)"Organized by Annant Gyan Knowledge and Skill Pvt.Ltd

45	Mr.SURYA P	AICTE Training And Learning (ATAL) Academy FacultyDevelopment Program on Trends in 5G Networks-Applications inBiomedical Engineering at RAMCO INSTITUTE OFTECHNOLOGY
46	Mr. P.V.M Vijay Bhaskar	AICTE Training And Learning (ATAL) Academy FacultyDevelopment Program on Recent Trends in Signal & ImageProcessing at AUSISANKARA COLLEGE OF ENGINEERING& TECHNOLOGY
47	M.Sowjanya Priyadarsini	Six Days Online FDP on "VLSI Design-Modelling &Simulation"Organized by Dept of ECE in Association with"Chipsmart Technologies Pvt .Ltd,Malineni Lakshmaiah Women'sEngineering College
48	Mr. P. Surya	5 Days "AICTE approved face to face Faculty DevelopmentProgram on Universal Human Values-II" Conducted from 23 rd to27th January 2024 at Sri Sai ram Engineering Colleage,WestTambaram,Chennai,Tamil nadu
49	Mr.D.Syambabu	5 Days "AICTE approved face to face Faculty DevelopmentProgram on Universal Human Values-II" Conducted from 23 rd to27th January 2024 at Sri Sai ram Engineering Colleage,WestTambaram,Chennai,Tamil nadu
50	Mr.B.NagaRaju	5 Days "AICTE approved face to face Faculty DevelopmentProgram on Universal Human Values-II" Conducted from 23 rd to27th January 2024 at Sri Sai ram Engineering Colleage,WestTambaram,Chennai,Tamil nadu

**Faculty Development Programmes (FDP), Workshops, Seminars,
Guest Lectures, Awards/Appreciation certificates**

	Faculty Name	Title of the program
51	Dr.M.Rakesh	AICTE Training And Learning (ATAL) Academy FacultyDevelopment Program on Tuning electric and dielectricproperties of nano thin film devices through material scienceengineering at KKR & KSR INSTITUTE OF TECHNOLOGYAND SCIENCES
52	Mr. P.V.M Vijay Bhaskar	AICTE Training And Learning (ATAL) Academy FacultyDevelopment Program on Tuning electric and dielectricproperties of nano thin film devices through material scienceengineering at KKR & KSR INSTITUTE OF TECHNOLOGYAND SCIENCES
53	Mr. DARSISYAMBA B U	NITTTR-Chandigarh-AICTE-One Week Online FDP-ArduinoBased system design using Tinker CAD Free Simulator-05-02-2024 to 09-02-2024
54	Mr.SURYA P	6 Day online FDP ON -Generative AI With Large LanguageModels
55	Mr. DARSISYAMBA B U	NITTTR-Chandigarh-AICTE-One Week Online FDP-AI/MlandData Science for Industry 4.0(Advanced Level)
56	Mr.SURYA P	8 Weeks NPTEL-Course -AICTE-FDP On Data Science forEngineers

57	Mr. DARSISYAMBA B U	8 Weeks NPTEL-Course -AICTE-FDP On Data Science forEngineers
58	SYAMBABU DARSI	Five Day Virtual FDP on 'Future Challenges in 6G' Organized byDepartment of Wireless Communications,SIMATS Engineering,SIMATS,Thandalam,Chennai
59	SYAMBABU DARSI	The SERB Sponsored International Workshop on"AntennaDesign Techniques for WirelessPower Transfer:CurrentTrends and Future Prospects" Organized by The Dept of ECE SriKrishna College of Technology,Coimbatore
60	Mr.K.Saiman	5 Days Online "AICTE approved Faculty DevelopmentProgram on Universal Human Values-I" Conducted from 11thMARCH to 15th MARCH 2024
61	Mr.K.V.Goutham	5 Days Online "AICTE approved Faculty DevelopmentProgram on Universal Human Values-I" Conducted from 11thMARCH to 15th MARCH 2024
62	Mr. DARSISYAMBA B U	A Two Day Online Workshop on "Hands on Training on e-ToolsFor Research Organized by KSR Institute for Engineering andTechnology,chennai

Guest Lectures, Awards/Appreciation certificates

S.NO	Faculty Name	Title of the program
63	Mr.B.NagaRaju	5-Day Online Faculty Development Program on “Outcome Based Education (Use of AI Tools in Teaching and Learning)” held on 22-26 April, 2024 organised by Academic Staff College, Dr.M.G.R. Educational and Research Institute.
64	Mr.Rambabu Nusullapalli	6 Days "AICTE approved Faculty Development Program on Universal Human Values-II"
65	Dr.Ch.Venugopal Reddy	5-Day Online FDP on “Inculcating Universal Human Values in Technical Education” organized by All India Council for Technical Education (AICTE) from 13th May to 17th May 2024.
66	Mr.K.Saiman	12 Weeks NPTEL-Course -AICTE-FDP On Cloud Computing
67	Mr.SURYA P	12 Weeks NPTEL-Course -AICTE-FDP On Cloud Computing
68	Mr. DARSISYAMBAB U	12 Weeks NPTEL-Course -AICTE-FDP On Cloud Computing
69	Mr.K.Saiman	12 Weeks NPTEL-Course -AICTE-FDP On Introduction to Internet of Things
70	Mr.P.Malyadri	12 Weeks NPTEL-Course -AICTE- On Introduction to Internet of Things
71	Mr.P.Malyadri	12 Weeks NPTEL-Course -AICTE- On Switching circuits and Logic Design
72	Mr. DARSISYAMBAB U	8 Weeks NPTEL-Course -AICTE-FDP On Data Science For Engineers

73	SYAMBABU DARSI	Certification of Appreciation Computer Science And Engineering For Being recognized as NPTEL DISCIPLINE STAR JAN-APR2024
74	Mr. DARSI SYAMBABU	One Week FDP On Recent Trends in Bioelectromagnetic Research and Applications -Organized by School of Electronics Engineering (SENSE) and Technically sponsored by VIT AP IEEE SB,MTT SBC at VIT-AP University, Amaravati, India during 17-04-2024 TO 23-04-2024
75	Mr. DARSI SYAMBABU	5-Day Online Faculty Development Program on : "AI -Insights: Predictive Power of ML,DL,& NLP, Organized by AI & ML Department, Spoorthy Engineering College during 14-05-2024 to 18-05-2024 37 RISE 2023-24







LIST OF PUBLICATIONS

12T MEMORY CELL
FOR

AEROSPACE APPLICATIONS IN
NANO SCALE CMOS
TECHNOLOGY

Dr.Ch.Venu

Gopal Reddy IJASEM 2024 ISSN: 2454- 9940

Tele

A SECURE INTERNET OF
THINGS MODEL USING
BLOCKCHAIN WITH
INTEGRATED POWER
OPTIMIZATION

Dr.V.T.Venkat eswarlu
Engineering
Communicati ons and
Radio
2024 ISSN:1943- 6009

SYSTEM USING RASPBERRY PI Mr. K. Saiman

ADVANCED PARKING SLOT
AVAILABILITY CHECKING SYSTEM USING
RASPBERRY-Pi

IJASEM 2024 AUTOMATED HAND WHEEL

ISSN: 2454- 9940

Dr. M. Rakesh IJASEM 2024 ISSN: 2454- 9940

ADVANCED SECURITY

CHAIR FOR DISABLED
PEOPLE
USING

AIR QUALITY
MONITORING SYSTEM
USING LORA

Mr. D. Syam
Babu IJASEM 2024

MEMS TECHNOLOGY
Mr.

AD-BLOCKING USING
RASPBERRY PI-HOLE

Mr.K.Suresh
IJASEM 2024
Babu

B.Nagaraju IJASEM 2024
ISSN: 2454- 9940

AMBULANCE AWARE

Mr.K.V.Gouth

Automatic Traffic E Challan
Generation using Deep learning

EFFICIENT TRAFFIC

Mr. CH. Arun

ISSN: 2454- 9940

Prakash IJASEM 2024

ISSN: 2454- 9940

ISSN: 2454- 9940

MANAGEMENT SYSTEM USING IOT

amIJMECE 2024 ISSN: 2321- 2152

39 -

LIST OF PUBLICATIONS

SCAN-CHAIN ORDERING: A
NOVEL TECHNIQUE FOR
PEAK AND

AVERAGE-POWER

REDUCTION IN SCAN-BASED
BIST

2024 ISSN: 2321-
BabuIJMECE
Mr. M. Madhu

Mr.K.V.Haree

AN APPROACH TO LUT
BASED MULTIPLIER FOR
SHORT WORD LENGTH DSP
SYSTEMS

shIJMECE 2024 ISSN: 2321-
2152

BIT-SWAPPING LFSR AND

2152

AIR AND NOISE POLLUTION

MONITORING SYSTEM

Mr.P.Malyadri IJOBAAR

2024ISSN 2249- 3352

AGRII ROBOT FOR

AND PLUGHING)

2249- 3352

MULTIPURPOSE

AN INTELLIGENT WALKING

APPLICATIONS (PUMPING

Mr.P.Surya IJOBAAR

2024ISSN Mr. Mr.

VISUALLY

ALERT

STICK FOR

CHALLENGED

P.V.M Vijay Bhaskar

IJMECE

PEOPLE WITH VOICE

2024ISSN2321- 2152

40 RISE | 2023-24

Summary of Internships

	MICROCHIP in Association with EduSkills	4.
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	India Edu Program Google for Developers in Association with EduSkills	3
	AWS Academy in Association with EduSkills	3
	SS&C blueprism in Association with EduSkills	1
	JUNIPER Networks in Association with EduSkills	4
	Paloalto Networks in Association with EduSkills	8
	ALTAIR in Association with EduSkills	1
	ZSCaler in Association with EduSkills	1
	Ansys in Association with EduSkills	1
	FORTINET in Association with EduSkills	3
	Intern Certify in Association with EduSkills	3
	EduSkills Academy	1
	ASSISTIVE INFOTECH PRIVATE LIMITED	6
	Sri Shasha Prayathi Technologies Pvt Ltd	6
	APPLY VOLT	3
	Naresh Technologies	5
	modak academy	1
	arm Education	1

41 ~~RISE | 2023-24~~**List of MOUs**

	Apply Volt, Vijayawada
	Krinydi Technologies Pvt Ltd, Hyderabad
	Sri Shasha Prayathi Technologies Pvt Ltd
	Silicon Techno Solutions
	Naresh Technologies Consultancy Services, Guntur
	Sai Technologies, Hyderabad

42 RISE | 2023-24



Placements and Higher education endeavors of



ECE students

1	ZF WEBCO	18
2	FACE PREP	13
3	ALLSE TECHNOLOGIES	3
4	ITC INFOTECH	3
5	KODENEST	2
6	LUMINA DATAMATICS	3
7	QSPIDERS	3
8	SEOYON E-HWA	4
9	STAR HEALTH	4
10	SUTHERLAND	3

11	TVS SUNDARAM	2
12	CONSENSUS	1
13	DESTINATION	1

S.No	Name of Student	Institution Joined	Program Admitted
	Amerneni Sravani	Swansea University	International Business Management
	D. Sireesha	PACE Institute of Technology and Sciences	VLSI & Embedded Systems

S.No	Name of Student	Exam Name
	Sri Lakshmi Kalyani Divi	GRE Qualified
	Sri Lakshmi Kalyani Divi	TOEFL Qualified

43 ~~RISE | 2023-24~~

Non Curriculum Activities

S. No

BLOOD DONATION

VOTER AWARENESS

BHARATIYA SANSKRITIKA VAIBHAVAM

BLOOD DONATION

IMPORTANCE OF MEDITATION

EYE CAMP

CANCER AWARENESS

BLOOD DONATION

VIGILANCE AWARENESS PROGRAM

MEDETETION

VOTERS PLEDGE

HEALTH & HYGIENE

POLLUTION CONTROL

SVEEP AWARENESS FOR ELECTION

KOUSHAL VIKAS YOJANA

DACHURI MEDICALCAMP

ROAD SAFETY AWARENESS PROGRAM

VIKSIT BHARAT

ESSAY WRITING

REPUBLIC DAY

BLOOD DONATION

WORLD CANCER DAY

ENADU VOTERS AWARENESS PROGRAMME

DEWORMING

ROAD SAFETY

YOGA DAY

WORLD HAPPINESS DAY
BLOOD DONATION

NSS Camp

The NSS (National Service Scheme) Service Camp is a wonderful initiative that aims to foster community service, social responsibility, and youth empowerment. Here are some key aspects of the NSS Service Camp:

Objectives

1. **Community Service:** To provide opportunities for students to engage in community service and contribute to the betterment of society.

Activities

1. **Rural Development:** NSS volunteers work on rural development projects, such as construction of toilets, renovation of schools, and provision of healthcare services.

2. **Environmental Conservation:** Volunteers participate in environmental conservation activities, like tree planting, waste management, and cleanliness drives.

3. **Health and Hygiene:** NSS teams organize



health camps, blood donation drives, and hygiene awareness programs.

4. Education and Literacy: Volunteers conduct literacy programs, educational workshops, and vocational training sessions.

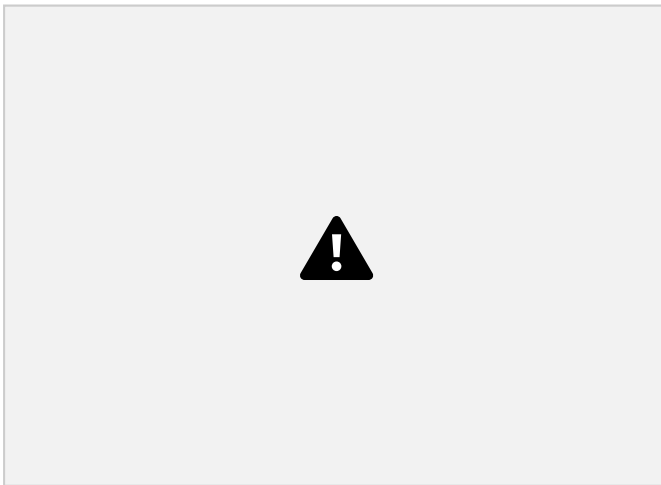
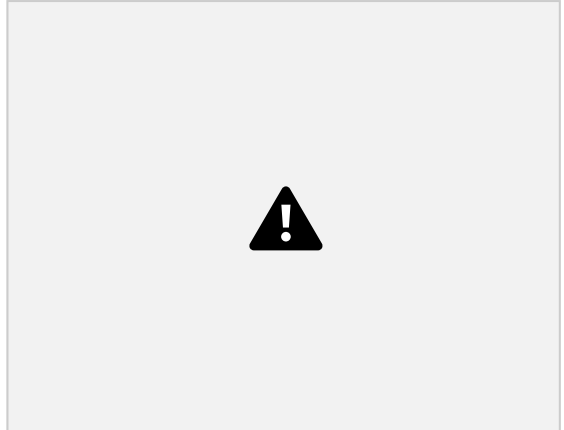
Benefits

1. Develops Social Skills: NSS Service Camps help students develop essential social skills, like communication, teamwork, and leadership.

2. Fosters Empathy and Compassion: By engaging with marginalized communities, students develop empathy and compassion, becoming more socially responsible individuals.

45 **RISE | 2023-24**

Girl's Sports Competitions





"Raiding the Scene: Kabaddi's Rise to Glory"

Kabaddi:

The Raid Revolution Kabaddi is a contact team sport that requires strategy, strength, and agility. Our college Kabaddi team has been making waves, with their

lightning-fast raids and impressive tagging skills, the ECE department's very own Kabaddi enthusiasts. **Shot Put:** The Power Play Shot Put is a track and field event that demands raw power, technique, and focus. Our college Shot Put team has been consistently impressive, with several members breaking college records, the ECE department's very own Shot Put enthusiasts.





Boy's Sports Competitions





"ECE Shines: Sports Achievements and Prizes Galore"

Introduction

The ECE department has always been known for its academic excellence, but our students have also been making waves in the sports arena. In this article, we'll highlight our department's achievements in Kabaddi, Volleyball, Hockey, and the prizes we've won. **Kabaddi:** Raiding the Competition
Our ECE Kabaddi team has been on a



roll, winning several inter-college tournaments. Their impressive raids, strategic teamwork, and sheer determination have made them a force to be reckoned with.

Volleyball: Spiking to Success

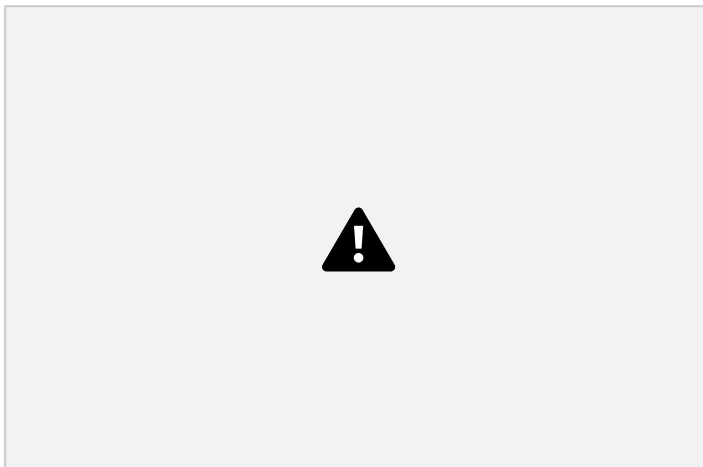
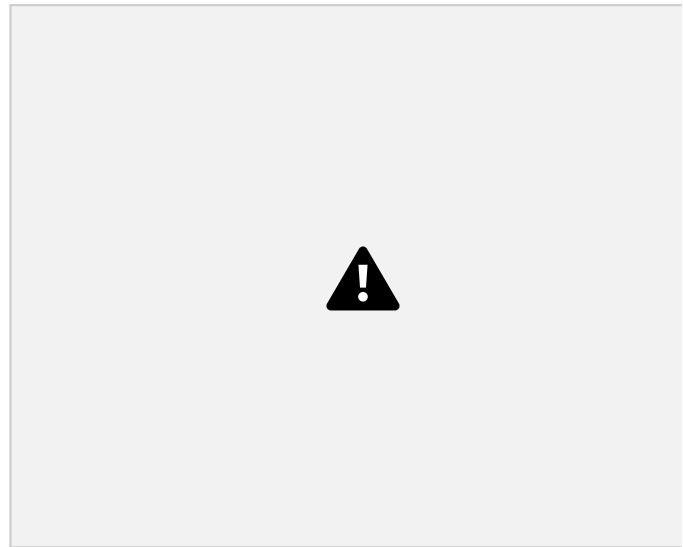
The ECE Volleyball team has also been performing exceptionally well, with several wins in inter-college and university-level tournaments. Their impressive spikes, blocks, and serves have earned them a reputation as one of the top teams in the college.

Hockey: Sticking to Excellence

Our ECE Hockey team has been sticking to their goals, winning several matches in the college hockey league. Their skillful stick work, strategic teamwork, and passion for the game have made them a formidable opponent.

Prizes and Recognition

Our ECE students have won several prizes and recognition for their sports achievements.



Campus Life: A Journey of Discovery

Campus life is a transformative experience that offers a unique blend of academic rigor, extracurricular activities, and personal growth. It's a time to explore new interests, develop new skills, and make lifelong connections.

From attending lectures and seminars to participating in research projects and internships, students can



engage with their academic interests in a hands-on and meaningful way. Outside the classroom, students can join clubs, teams, and organizations that align with their passions and interests. Campus life is also a time to develop important life skills, such as time management, teamwork, and problem-solving. With access to state-of-the-art facilities, cutting-edge technology, and experienced faculty, students have the resources they need to succeed. Ultimately, campus life is a journey of discovery – a chance to explore new possibilities, challenge oneself, and become the best version of oneself.

CH V L S TEJASWI
218A1A0468
ECE-II 3rd Year

49 RISE | 2023-24

The Art Of Saying No

Saying no is an essential life skill that can be incredibly empowering. By learning to say no,

***you're able to set healthy boundaries, prioritize your own needs, and build confidence in yourself.
Why Saying No is Important***



Prevents Overcommitting: Saying no helps you avoid taking on too much and maintain a healthy work-life balance.

Reduces Stress and Burnout: By setting boundaries, you can reduce feelings of overwhelm and exhaustion. Fosters Healthy Relationships: Saying no respectfully can actually strengthen relationships by promoting mutual respect and understanding.

How to Say No with Confidence

Be Direct and Clear: Use a simple and direct "no" without feeling obligated to justify or explain.

Use "I" Statements: Instead of saying "you're asking too much," say "I feel overwhelmed when I have too much on my plate."

Offer Alternatives: If possible, suggest alternative solutions or options that work better for you.

Remember, saying no is not selfish; it's essential for taking care of yourself and creating a healthier, happier life. By prioritizing your own needs and setting boundaries, you'll become more confident, resilient, and empowered to live life on your own terms.

D. MANI HARSHINI
218A1A0415
ECE-II 3rd Year

50 RISE | 2023-24
GRATITUDE

The Power of Gratitude

Gratitude is a powerful emotion that can have a



profound impact on our lives. By focusing on what we're thankful for, we can improve our mental health, relationships, resilience, and even physical health.

**** Practice gratitude daily through journaling, mindfulness, or sharing with others***

**** Express gratitude to others to strengthen relationships and build community***

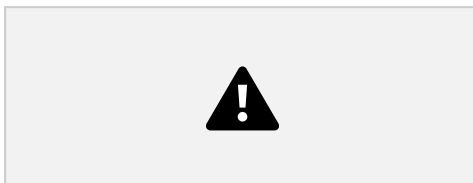
**** Focus on the present moment and appreciate the small things in life***

Gratitude is a simple yet transformative practice that can bring joy, positivity, and fulfillment to our lives. By incorporating gratitude into our daily lives, we can cultivate a more optimistic outlook, stronger

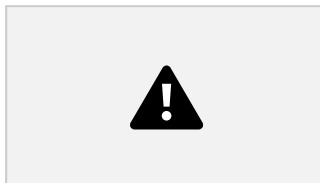
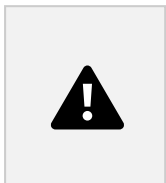
relationships, and a greater appreciation for the world around us

**S YASASWINI
218A1A0487
ECE-II 3rd Year**

51 **RISE | 2023-24**



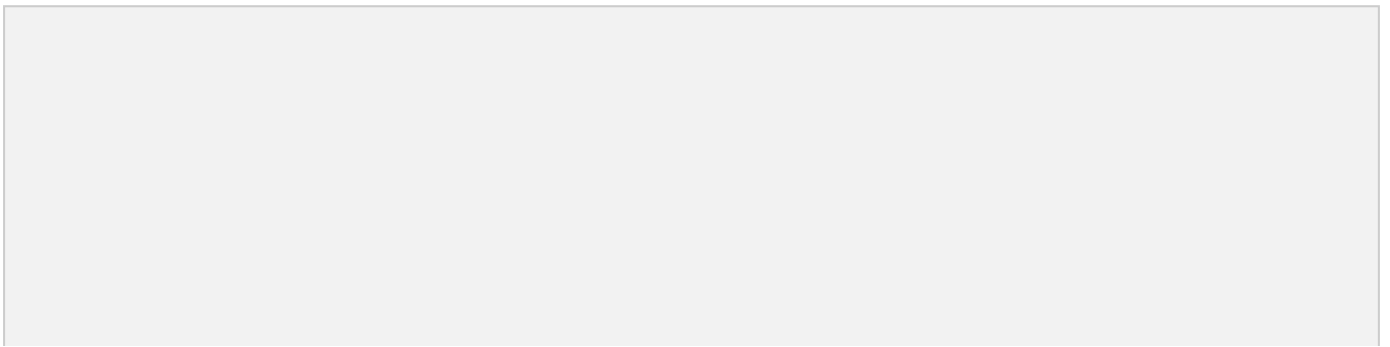
Technical Articles



Generative AI

O. MANI KANTA , III-ECE II, Roll No: 218A1A04B4

Generative AI is a type of artificial intelligence technology that can produce various types of content, including text, imagery,



audio, and synthetic data. This technology has been around since the 1960s, but recent advances have made it more accessible and powerful ¹.

Key Features of Generative AI:

Can produce multiple types of content: Generative AI can create text, images, audio, and synthetic data.

Uses neural networks: Generative AI relies on neural networks to learn patterns in data and generate new content.

Can be fine-tuned: Generative AI models can be fine-tuned for specific use cases and applications.

Applications of Generative AI:

Chatbots and customer service: Generative AI can be used to create chatbots that can respond to customer inquiries.

Content creation: Generative AI can be used to generate text, images, and audio for various applications.

Design and prototyping: Generative AI can be used to generate design concepts and prototypes.

Concerns and Limitations:

Accuracy and bias: Generative AI models can perpetuate biases and inaccuracies present in the training data.

Misuse and abuse: Generative AI can be used to create fake news, deepfakes, and other malicious content.

Job displacement: Generative AI may displace jobs that involve repetitive or creative tasks.

Future of Generative AI:

Increased adoption: Generative AI is expected to become more widely adopted across various industries.

- Improved accuracy and transparency: Researchers are working to improve the accuracy and transparency of generative AI models.

- New applications and use cases:

Generative AI is expected to enable new applications and use cases that we cannot yet imagine.

Analysis and Design of an Embedded System for Industrial Automation

Industrial automation has become an essential part of modern manufacturing, enabling efficient and precise control of machinery and processes. Embedded systems play a crucial role in industrial automation, providing real-time control and monitoring of industrial processes. This article analyzes and designs an embedded system for industrial automation, discussing its advantages and performance.

Introduction

Industrial automation involves the use of automated systems to control and monitor industrial processes. Embedded systems are widely used in industrial automation due to their reliability, flexibility, and real-time control capabilities. The design of an embedded system for industrial automation requires careful consideration of several factors, including hardware and software requirements, communication protocols, and safety considerations.



System Requirements

The embedded system for industrial automation is required to perform the following functions:

- 1. Real-time control: The system must be able to control industrial processes in real-time, responding to changes in the process and making adjustments as necessary.***
- 2. Monitoring and diagnostics: The system must be able to monitor the industrial process and provide diagnostic information in case of faults or errors.***
- 3. Communication: The system must be able to communicate with other systems and devices, such as sensors, actuators, and other embedded systems.***
- 4. Safety: The system must be designed with safety considerations in mind, ensuring that the industrial process is operated safely and efficiently.***

Hardware Design
The hardware design of the embedded system for industrial automation consists of the following components:

- 1. Microcontroller: A microcontroller is used as the central processing unit of the system, providing real-time control and monitoring capabilities.***
- 2. Sensors and actuators: Sensors and actuators are used to monitor and control the industrial***

process, providing feedback to the microcontroller. 3. Communication interfaces: Communication interfaces, such as RS-232, RS-485, and Ethernet, are used to communicate with other systems and devices. 4. Power supply: A power supply is used to provide power to the system, ensuring reliable operation.

54 **RISE | 2023-24**

Software Design

The software design of the embedded system for industrial automation consists of the following components:



- 1. Real-time operating system: A real-time operating system is used to provide real-time control and monitoring capabilities.**
- 2. Application software: Application software is used to implement the control and monitoring algorithms, providing real-time control and diagnostics.**
- 3. Communication protocols: Communication protocols, such as Modbus and Profibus, are used to communicate with other systems and devices.**

Advantages and Performance

The embedded system for industrial automation provides several advantages, including:

- 1. Improved efficiency: The system provides real-time control and monitoring, improving efficiency and reducing downtime.**
- 2. Increased productivity: The system provides automated control and monitoring, increasing productivity and reducing labor costs.**
- 3. Enhanced safety: The system provides safety features, such as emergency shutdown and alarm systems, enhancing safety and reducing the risk of accidents.**

The performance of the system is evaluated based on several parameters, including:

- 1. Response time: The response time of the system is evaluated, ensuring that the system responds quickly to changes in the process.**
- 2. Accuracy: The accuracy of the system is evaluated, ensuring that the system provides accurate control and monitoring.**
- 3. Reliability: The reliability of the system is evaluated, ensuring that the system operates reliably and consistently.**

Conclusion

The embedded system for industrial automation provides a reliable and efficient solution for controlling and monitoring industrial processes. The system provides real-time control and monitoring, improving efficiency and reducing downtime. The system also provides safety features, such as emergency shutdown and alarm systems, enhancing safety and reducing the risk of accidents. The performance of the system is evaluated based on several parameters, including response time, accuracy, and reliability.

G V S MOHAN REDDY, III-ECE II, Roll No: 218A1A04A6

Advanced semiconductor processes have revolutionized the field of microelectronics, enabling the creation of smaller, faster, and more powerful devices. The latest technologies, such as FinFET and Gate-All Around (GAA), have replaced traditional planar transistors, offering higher performance, lower power consumption, and increased functionality ¹.



The semiconductor industry has witnessed significant advancements in recent years, with the introduction of new materials, technologies, and manufacturing processes. These advancements have enabled the development of complex systems-on-chip (SoCs), which integrate multiple functions, such as processing, memory, and input/output interfaces, onto a single chip.

Some of the key benefits of advanced semiconductor processes

include: - Increased Transistor Density: Allowing for more transistors to be packed into a smaller area, enabling faster and more powerful devices. - Improved Power Efficiency: Reducing power consumption, heat generation, and energy costs.

- Enhanced Performance: Enabling faster switching speeds, higher clock frequencies, and improved overall system performance.

- Reduced Costs: Through increased yields, reduced material consumption, and improved manufacturing efficiency.

However, as semiconductor processes continue to advance, they also pose significant challenges, such as:

- Increased Complexity: Requiring more sophisticated design and manufacturing techniques.

- Higher Development Costs: Due to the need for specialized equipment, software, and expertise.

- Environmental Concerns: Related to the use of hazardous materials, energy consumption, and waste generation.

In conclusion, advanced semiconductor processes have transformed the field of microelectronics, enabling the development of smaller, faster, and more powerful devices. While these advancements pose significant challenges, they also offer tremendous opportunities for innovation and growth in the semiconductor industry .

55 **RISE | 2023-24**

A Novel Wireless Sensor Network (WSN) using Microcontrollers

SHAIK AZHAR , III-ECE II, Roll No: 218A1A04C0

***A Novel Wireless Sensor Network (WSN) using Microcontrollers
Wireless Sensor Networks (WSNs) have become an essential part of modern technology, enabling real-time monitoring and control of***

various physical parameters. Microcontrollers have played a crucial role in the development of WSNs, providing a compact and efficient platform for sensor node

implementation. This article proposes a novel WSN architecture using microcontrollers, discussing its design, implementation, and performance. Introduction

WSNs consist of spatially distributed sensor nodes that collect and transmit data to a central node or base station. Microcontrollers are widely used in WSNs due to their low power consumption, small size, and ease of programming. The proposed WSN architecture uses a microcontroller-based sensor node that integrates sensing, processing, and communication capabilities.

System Architecture

The proposed WSN architecture consists of the following components: 1.

1. Sensor Node: The sensor node is based on a microcontroller that integrates sensing, processing, and communication capabilities. The node consists of sensors, a microcontroller, and a wireless transceiver.

2. Base Station: The base station is a central node that collects data from sensor nodes and performs data analysis and processing.

3. Wireless Communication: Wireless communication is used to transmit data between sensor nodes and the base station.

Microcontroller-Based Sensor Node

The microcontroller-based sensor node is designed to be compact, efficient, and low-power. The node consists of:

1. Microcontroller: A low-power microcontroller is used to process sensor data and control the wireless transceiver.

2. Sensors: Various sensors can be integrated with the node, such as temperature, humidity, and pressure sensors.

3. Wireless Transceiver: A low-power wireless transceiver is used to transmit data to the base station.

Implementation and Results

The proposed WSN architecture is implemented using a microcontroller-based sensor node and a base station. The sensor node is programmed using a low power wireless communication protocol, and the base station is implemented using a data analysis and processing software.

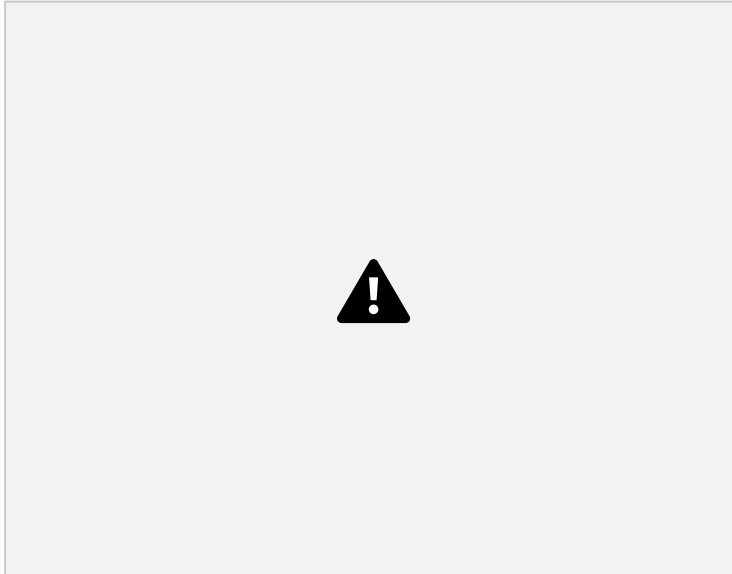
- 1. Low Power Consumption: The sensor node consumes low power, making it suitable for battery-powered applications.***
- 2. High Accuracy: The sensor node provides high accuracy and reliability in sensing and transmitting data.***
- 3. Real-Time Data Transmission: The wireless transceiver enables real-time data transmission between the sensor node and the base station.***

Conclusion

The proposed WSN architecture using microcontrollers provides a compact, efficient, and low-power solution for real-time monitoring and control applications. The microcontroller-based sensor node integrates sensing, processing, and communication capabilities, making it suitable for a wide range of applications. The results show that the proposed architecture provides low power consumption, high accuracy, and real-time data transmission

57 RISE | 2023-24

POSTER PRESENTATIONS



U.SIREESHA

218A1A0494

ECE-II 3rd Year

OLED Technology: Revolutionizing Displays

Introduction

Organic Light-Emitting Diode (OLED) technology has been gaining significant attention in recent years due to its potential to revolutionize the display industry. OLEDs offer several advantages over traditional display technologies, including higher contrast ratios, faster response times, and lower power consumption. What is OLED?

An OLED is a type of display technology that uses an organic compound to produce light when an electric current is passed through it. OLEDs consist of several layers, including an anode, a cathode, and an organic layer.

How OLED Works?

1. Electrical Current: An electrical current is passed through the OLED.
2. Excitation: The organic layer is excited, causing it to emit light.
3. Emission: The light is emitted through the anode and cathode.

Advantages of OLED

1. Higher Contrast Ratio: OLEDs offer higher contrast ratios than traditional displays.
2. Faster Response Time: OLEDs have faster response times than traditional displays.
3. Lower Power Consumption: OLEDs consume less power than traditional displays.
4. Wider Viewing Angle: OLEDs offer wider viewing angles than traditional displays.

Applications of OLED

1. Smartphones: OLEDs are widely used in smartphones due to their high contrast ratio and fast response time.
2. TVs: OLED TVs offer superior picture quality and wider viewing angles.

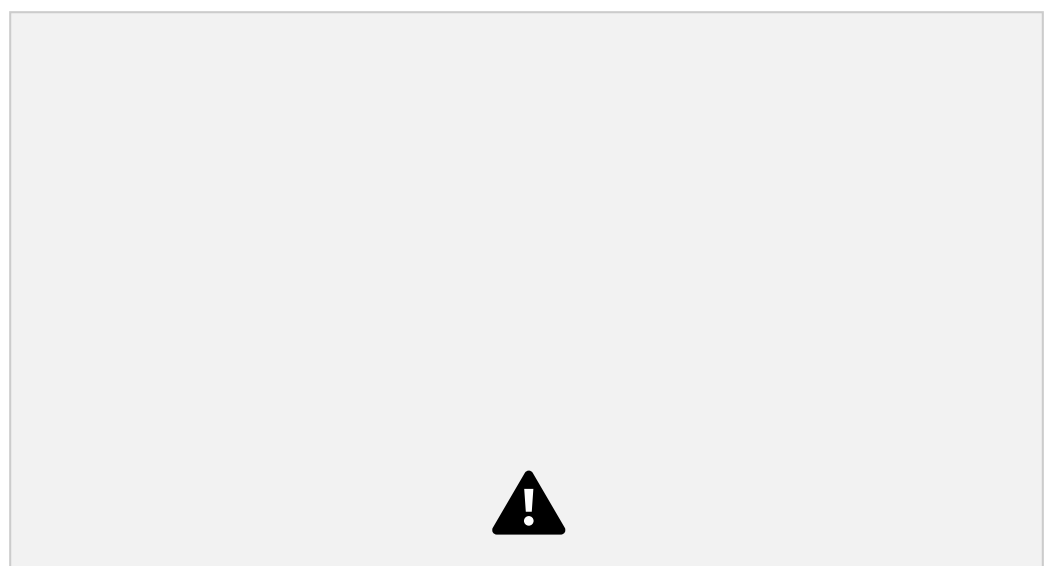
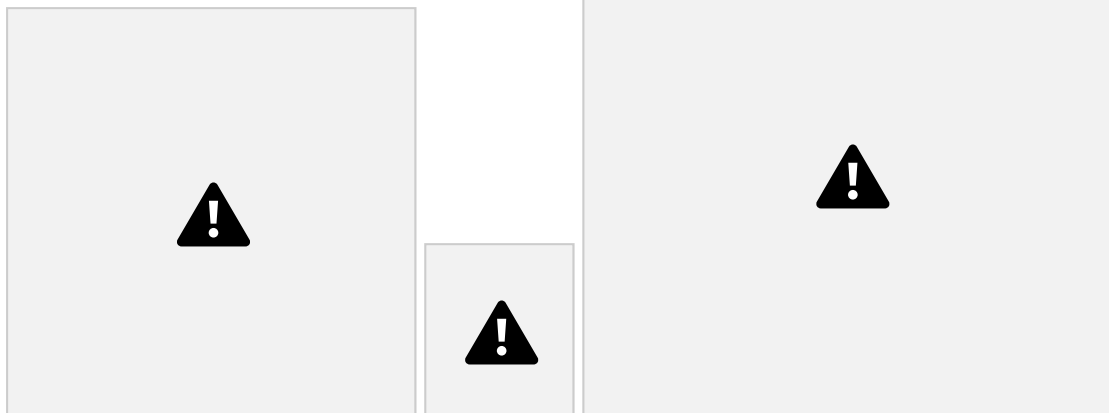
3. Wearables: OLEDs are used in wearables such as smartwatches and fitness trackers.

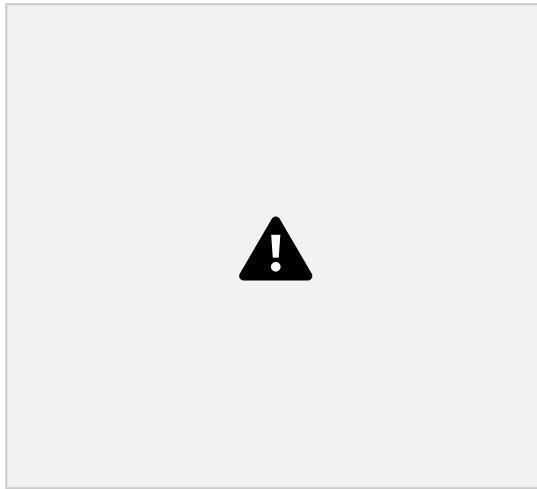
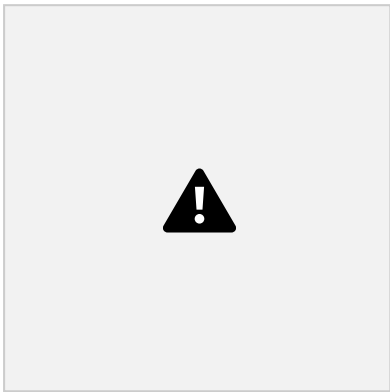
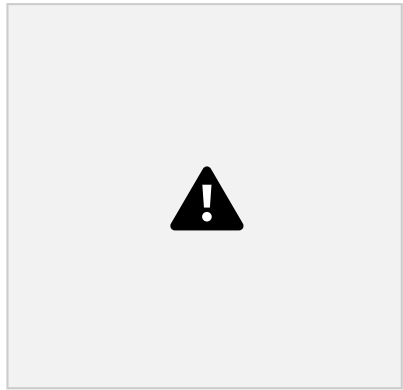
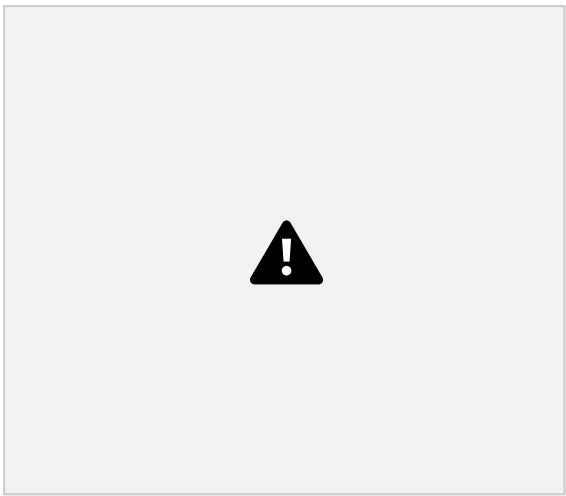
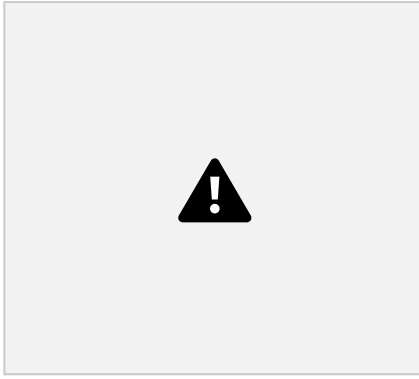
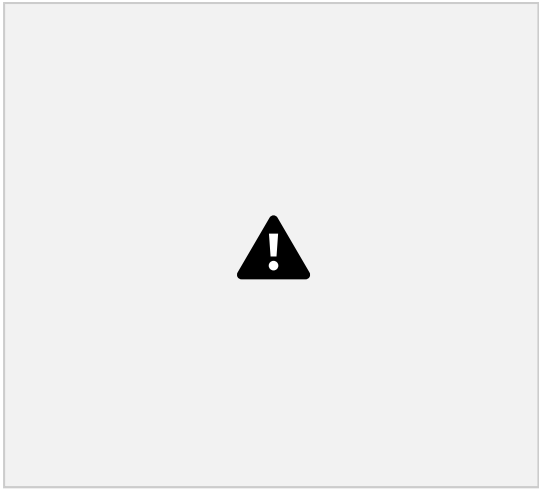
4. Automotive: OLEDs are used in automotive displays such as dashboards and infotainment systems.

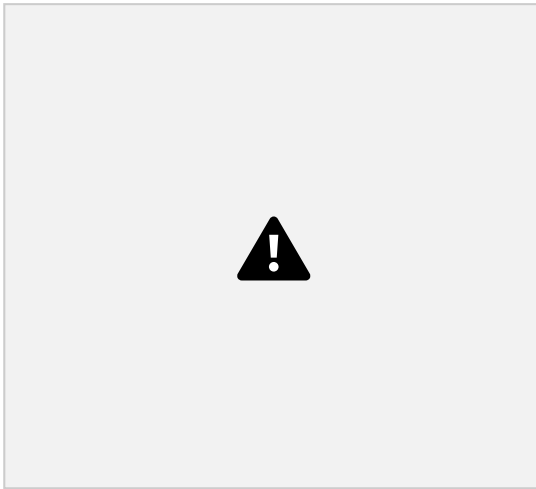
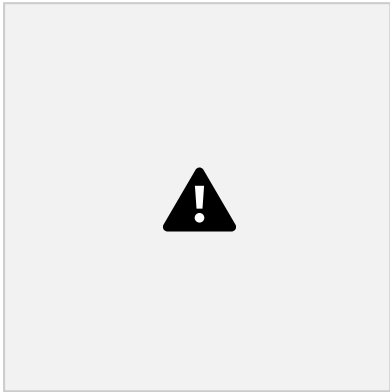
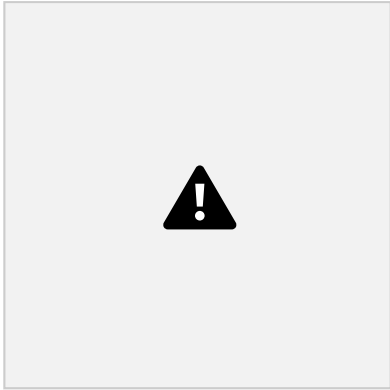
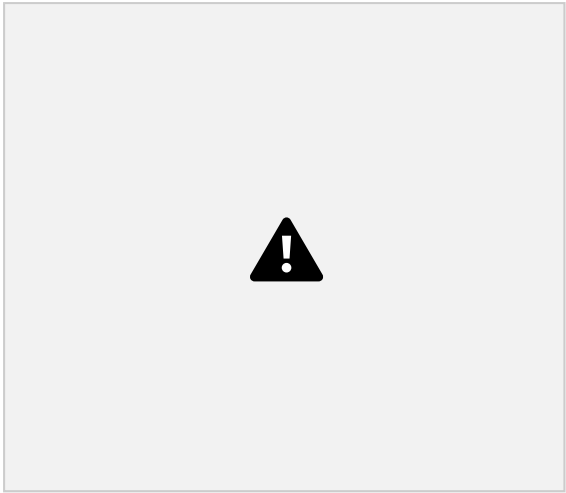
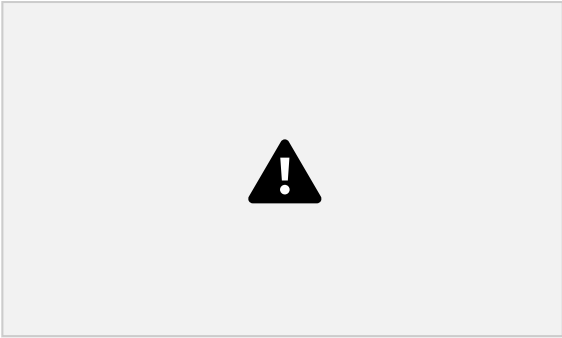
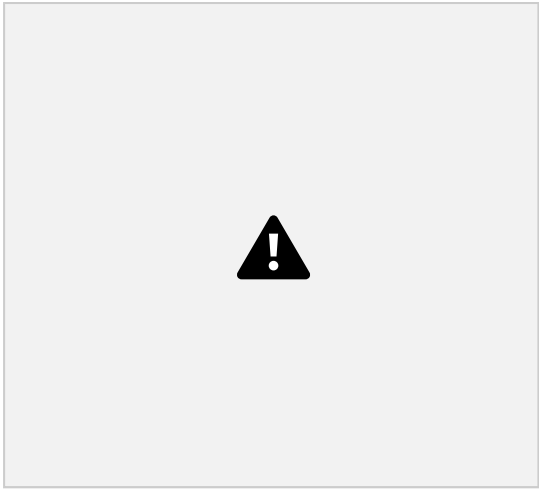
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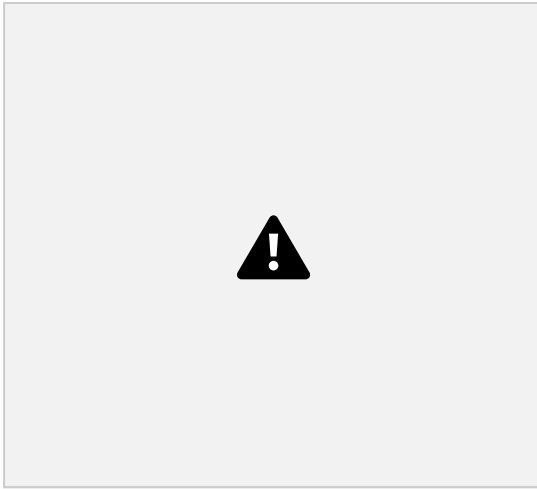
INDEPENDANCE

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59 RISE | 2023-24

Janmastami Celebrations

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Janmashtami celebrations are vibrant and joyful, honoring the birth of Lord

Krishna. Students perform puja (worship) ceremonies at home and in temples,

offering flowers, fruits, and sweets to Lord Krishna. In Maharashtra and Gujarat,

teams of young men form human pyramids to break a clay pot filled with curd and butter, symbolizing Lord Krishna's childhood mischief. Colorful processions (yatra)

with decorated floats, music, and dance are taken out in cities and towns. AUGUS

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Special sweets like pedha, laddu, and jalebi are prepared and distributed among family and friends.

Significance and Mythology

1. Birth of Lord Krishna: According to Hindu mythology, Lord Krishna was born to Devaki and Vasudeva in Mathura, India, around 3,200 BCE.

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2. Divine Incarnation: Lord Krishna is considered the eighth avatar of Lord 4 Vishnu, one of the principal deities in Hinduism.

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3. Spiritual Significance: Janmashtami is celebrated to commemorate the divine incarnation of Lord Krishna, who is revered for his wisdom, courage, and spiritual



guidance.

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Regional Variations

1. Mathura and Vrindavan: These cities in Uttar Pradesh, India, are considered sacred sites for Lord Krishna's birth and childhood.
2. Gujarat and Maharashtra: These states in western India have unique traditions and customs for celebrating Janmashtami, such as the Dahi Handi ritual.
3. Southern India: In states like Tamil Nadu and Karnataka, Janmashtami is celebrated with traditional dances, music, and puja ceremonies.

Cultural Impact

1. **Music and Dance:** Janmashtami is celebrated with traditional music and dance forms, such as the Ras Leela in Mathura and Vrindavan.
2. **Theater and Drama:** The life and teachings of Lord Krishna are depicted in

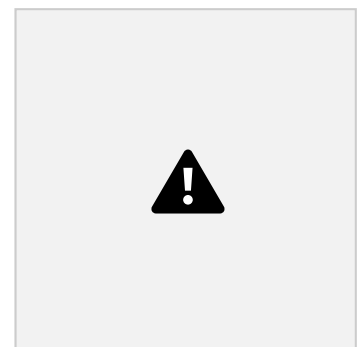
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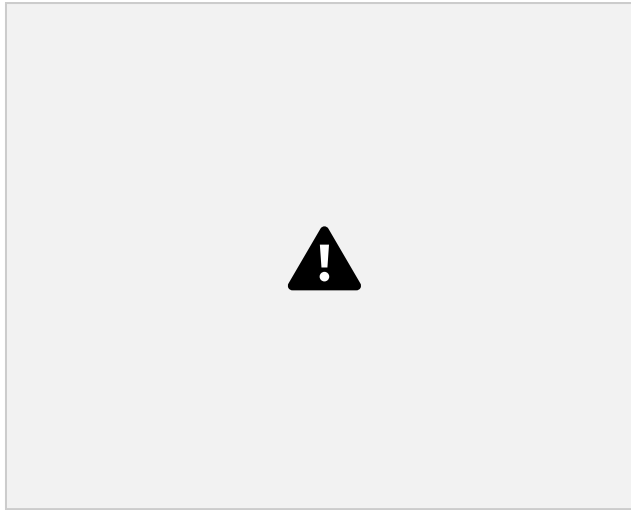
traditional theater and drama performances, such as the Ramlila.

3. **Food and Cuisine:** Traditional sweets and dishes, like pedha, laddu, and jalebi, are prepared and shared among family and friends during Janmashtami celebrations.

60 RISE | 2023-24

Vinayaka Chaturthi Celebrations





Y Vinayaka Chaturthi, also known as Ganesh Chaturthi, is a significant Hindu festival that honors the birth of Lord Ganesha, the remover of obstacles and

A the god of wisdom. Here are the importance and celebrations of Vinayaka Chaturthi:

1. Birth of Lord Ganesha: Vinayaka Chaturthi commemorates the birth of

Lord **D**

Ganesha, who is considered the god of wisdom, prosperity, and good fortune.

2. Remover of Obstacles: Lord Ganesha is revered as the remover of obstacles, and devotees seek his blessings to overcome challenges and

L
difficulties.

3. Symbol of Wisdom: Ganesha is considered a symbol of wisdom, knowledge, and intellect, and is often invoked at the beginning of new

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ventures and endeavors.
Celebrations

1. Idol Installation: Clay idols of Lord Ganesha are installed in homes and public pandals, and are worshiped with great devotion.
2. Puja and Worship: Devotees perform puja (worship) ceremonies, offering

RADITI⁰

flowers, fruits, and sweets to Lord Ganesha.

3. Modak Offering: Modaks, sweet dumplings filled with coconut and jaggery, are offered to Lord Ganesha, as they are his favorite food.

4. Processions and Immersion: After 10-11 days of worship, the idols are taken out in grand processions and immersed in water bodies, symbolizing the cycle of life and death.

Traditional Practices

1. Fasting and Vrat: Devotees observe a day-long fast or vrat, abstaining from food and drink.

2. Ganesha Mantra: Devotees chant the Ganesha mantra, "Om Ganeshaya Namaha," to invoke Lord Ganesha's blessings.

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3. Decorations and Lighting: Homes and public spaces are decorated with colorful lights, flowers, and rangoli designs.

61 RISE | 2023-24

Teacher's Day



Teachers' Day is a significant event that recognizes the hard work, dedication,

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and contributions of teachers to education and society. Here are some reasons why Teachers' Day is important:

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Honoring Teachers' Contributions

1. Recognizing dedication: Teachers' Day acknowledges the tireless efforts and dedication of teachers in shaping young minds and futures.

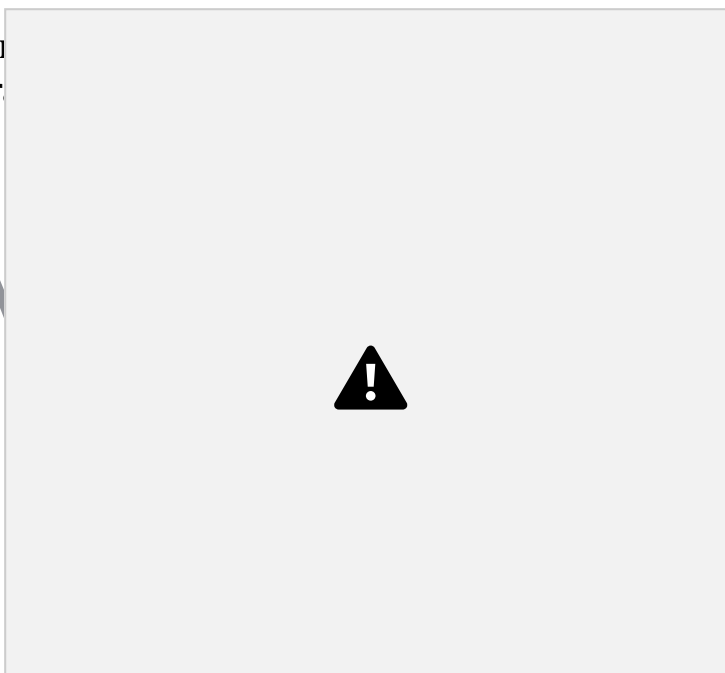
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2. Appl
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students.
**Inspiring
Students**



Teachers and

1. Motivating teachers: Teachers' Day motivates teachers to continue their good work and strive for excellence in education.
2. Encouraging students: The day encourages students to appreciate and respect their teachers, fostering a positive and supportive learning environment.

Promoting Education and Learning

1. Emphasizing education: Teachers' Day highlights the importance of education and learning in society, encouraging individuals to value knowledge and skills.
2. Fostering innovation: The day promotes innovation and creativity in education, inspiring teachers and students to explore new ideas and approaches.

Building Teacher-Student Relationships

1. Strengthening bonds: Teachers' Day helps strengthen the bonds between teachers and students, promoting mutual respect, trust, and understanding.
2. Encouraging mentorship: The day encourages teachers to mentor and guide students, providing them with valuable advice, support, and guidance.

62 RISE | 2023-24

15 SEPTEMBER 2023

| 2024-25

ENGINEERS DAY 2023

CELEBRATING THE INNOVATORS OF TOMORROW

Honoring Engineering Excellence

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NOVEMBER

Every year on September 15th, we celebrate Engineer's Day in India to honor the birth anniversary of Sir Mokshagundam Visvesvaraya, one of the most eminent engineers of our country. This day is a tribute to the engineering community, whose innovations and inventions have made a profound impact on society.

Sir M. Visvesvaraya: A Legacy of Innovation

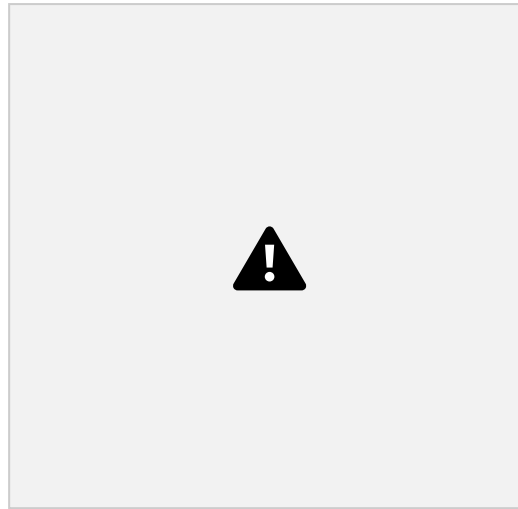
Sir M. Visvesvaraya, born in 1860,

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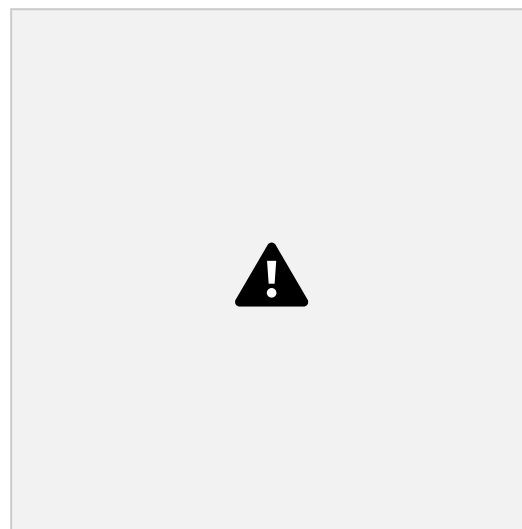
which remains a marvel of engineering even today.

■ DAY

was a pioneer in the field of engineering and an architect of modern India. His contributions to water resource management, infrastructure development, and public welfare have left an indelible mark on the nation's progress. He was



instrumental in the construction of several dams, including the Krishna Raja Sagara dam in Mysore,





Fresher's Day

Celebrations

Pre-Event Preparations:

1. Formation of Organizing Committee:

A team of students and faculty members will be formed to plan and execute the event.



2. Theme



Selection: The committee will decide on a theme for the event, such as "A New Beginning" or "Rise to Shine".

3. Invitations: Design and distribute invitations to all freshers, faculty members, and staff.

4. Venue Decoration: Decorate the venue with balloons, streamers, and banners to create a festive atmosphere.

Cultural Events (12:00 pm - 2:00 pm)

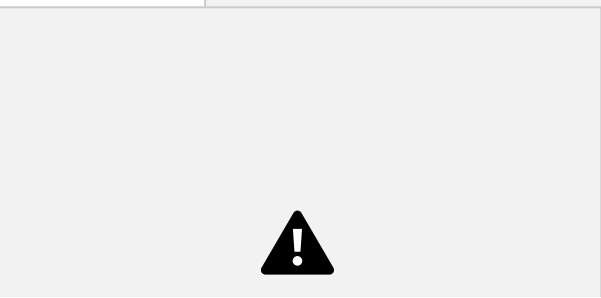
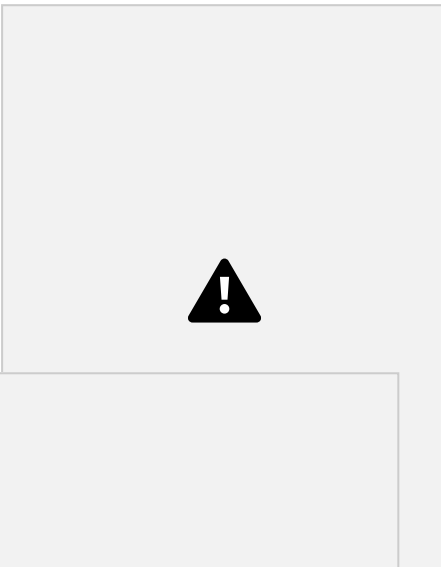
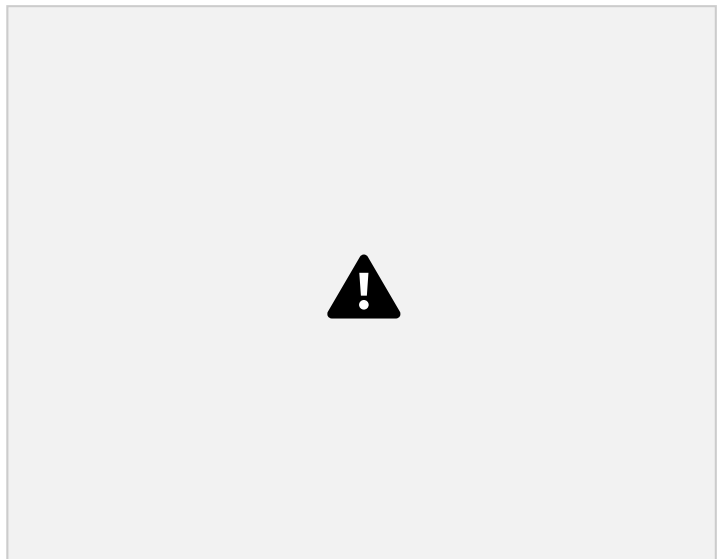
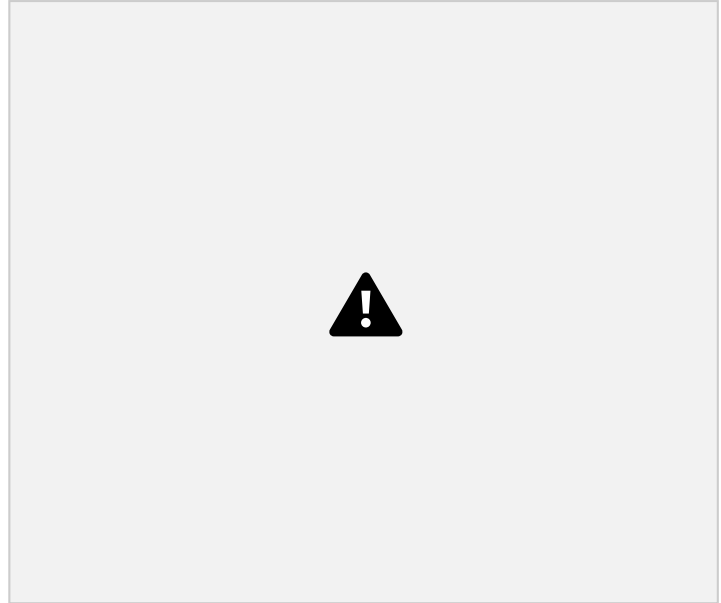
1. Cultural Performances: Music, dance, and drama performances by students and faculty members.

2. Fashion Show: Freshers showcase their talent and creativity through a fashion show.

Games and Activities (2:00 pm - 4:00 pm)

1. Team-Building Games: Freshers participate in team-building games, promoting bonding and collaboration.

2. Quiz Competition: Freshers compete in a quiz competition, testing their



knowledge and skills.

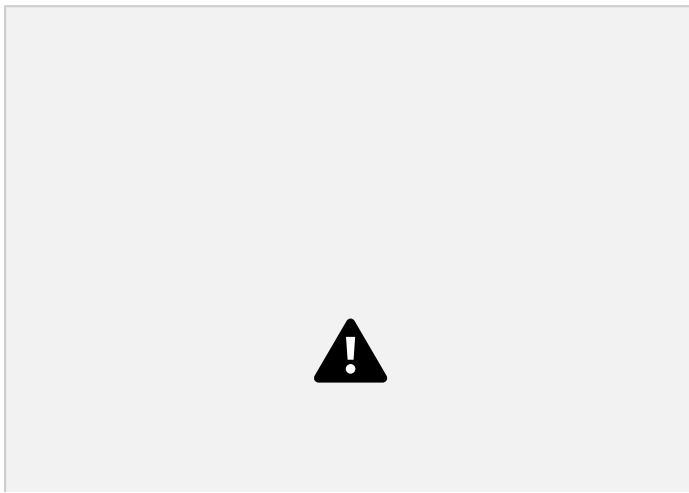
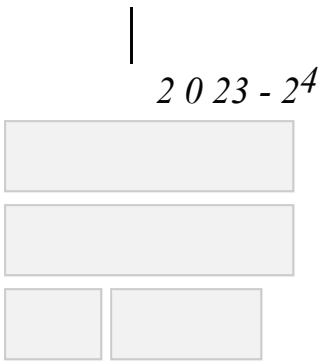
Evening Session (4:00 pm - 6:00 pm)

1. Senior-Junior Interaction: Seniors share their experiences, tips, and advice with freshers.

2. Prize awarded to winners of various competitions and events.



64 RISE | 2023-24





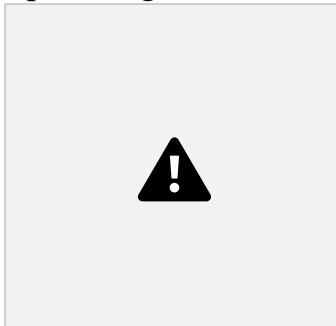
Sambaraalu

“ECE Shines: Sports Achievements and Prizes Galore”

The ECE department has always been known for its academic excellence, but our students have also been making waves in the sports arena. In this article, we'll highlight our department's achievements in Kabaddi, Volleyball, Hockey, and the prizes we've won. The ECE department's sports achievements are

a testament to our students' hard work, dedication, and passion for sports. We're proud of our students who have won prizes and recognition for their achievements, and we look forward to seeing more successes in the future.

Upcoming Events

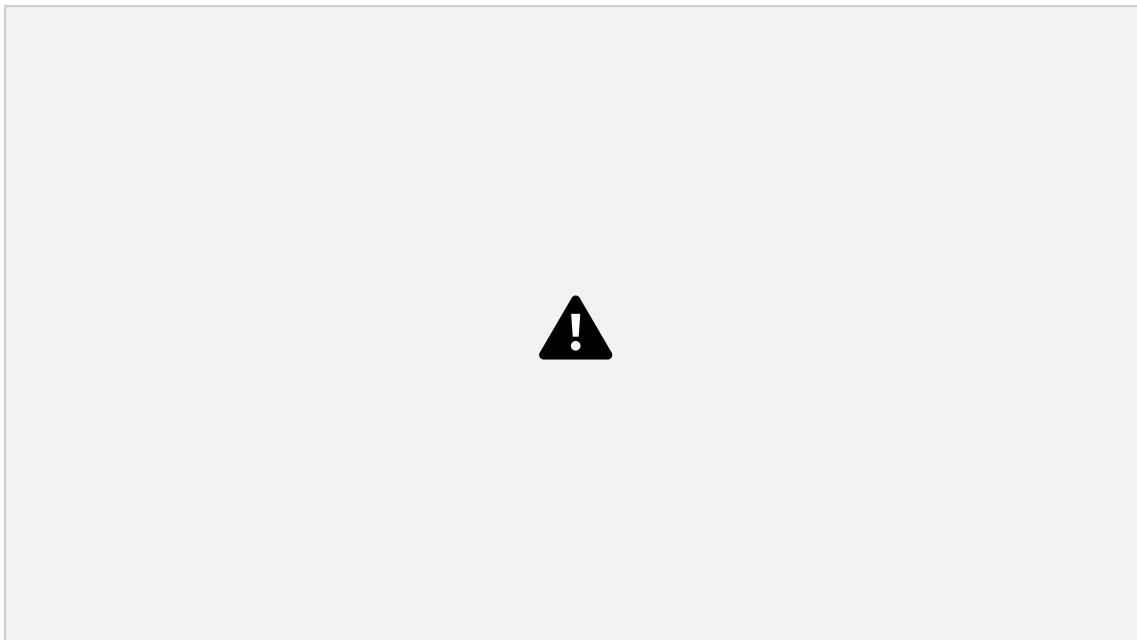
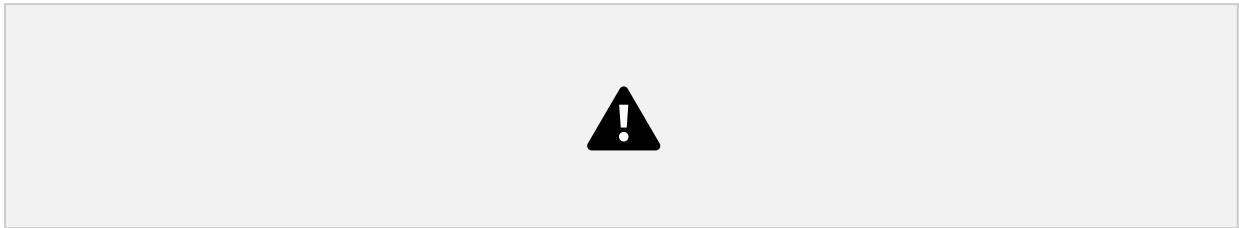


Stay tuned for upcoming sports events, including the Inter-College Sports Meet and the University Hockey Tournament!

Join the Conversation

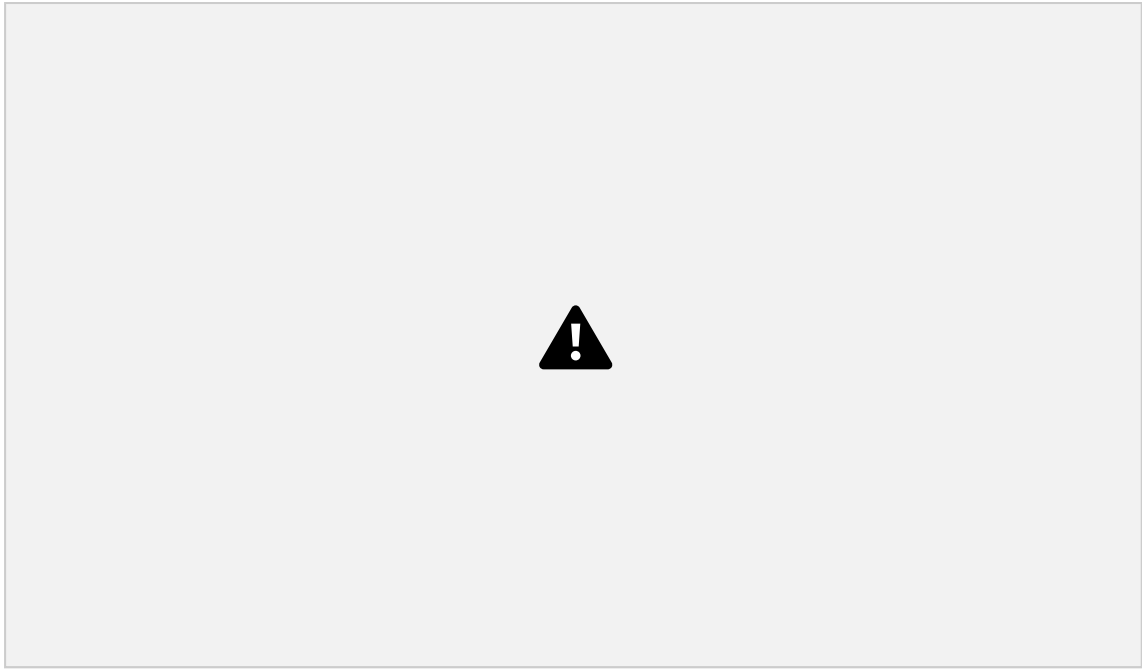
Share your sports experiences and achievements with us on social media using #ECEsports!

65 RISE | 2023-24









RISE | 2023-24

national heroes and freedom

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⁴ *“A historic day to remember our
202
fighters, who fought to give*

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us a Republic nation”. T

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The college celebrated the country's 78th
Republic Day on 26th January 2024. The

celebration began with our Principal,
hoisting the Tricolor flag, accompanied
by the college staff and the

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Gymkhana Secretaries, This was

followed by the singing of the

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National Anthem, instilling a sense of patriotism and unity

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among all present.

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Sweets were distributed to all those present, and the program 6

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came to a close, leaving everyone with a sense of pride and

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unity. The 78th Republic Day

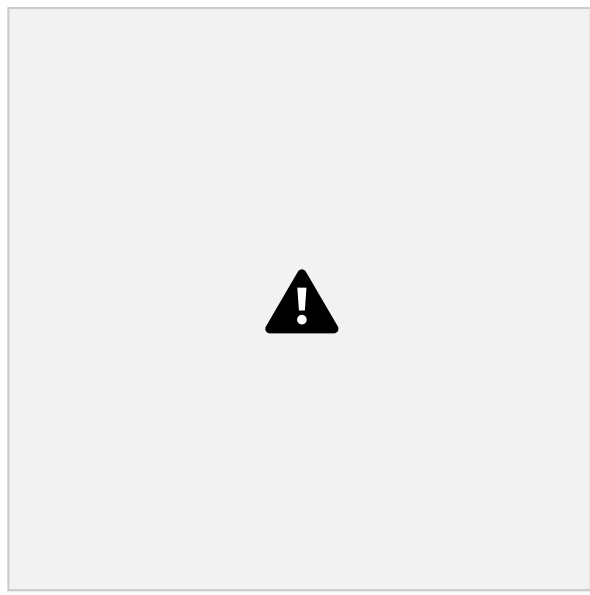
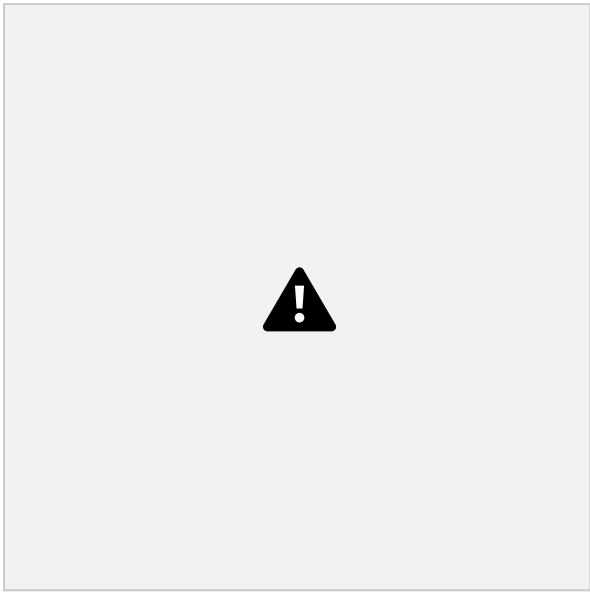
Celebration at our college were a
tribute to our nation's legacy and an
inspiration for us all to

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contribute towards a

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progressive India.



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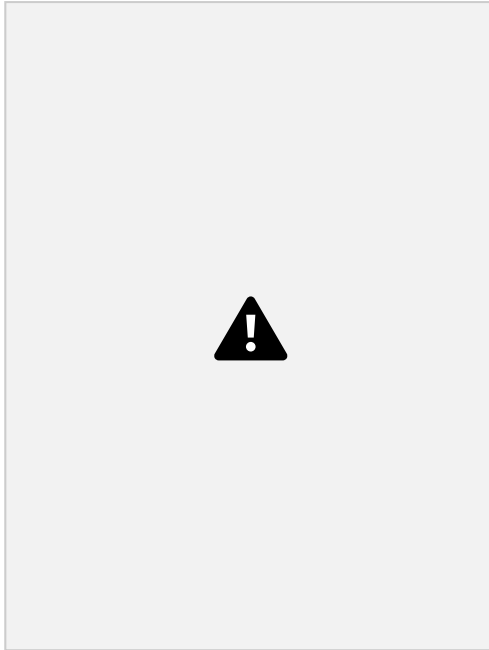
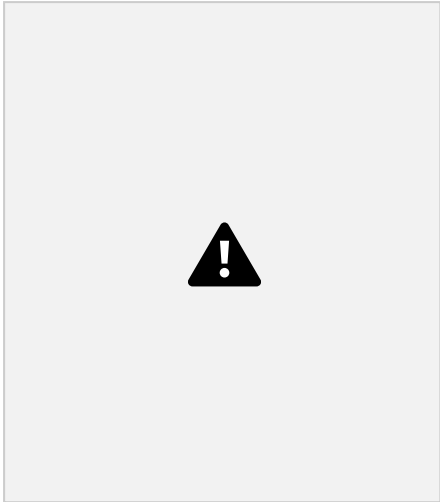
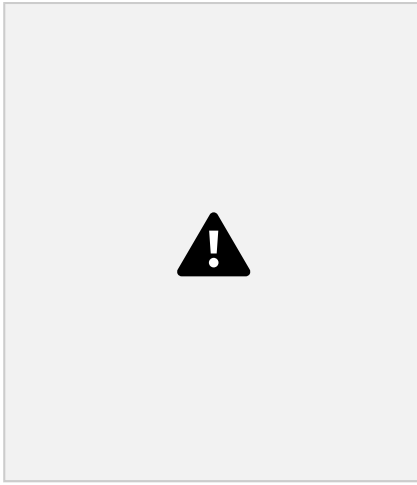
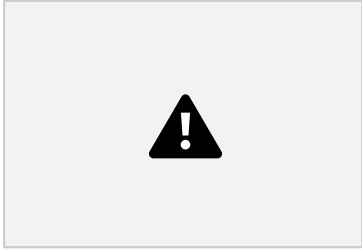
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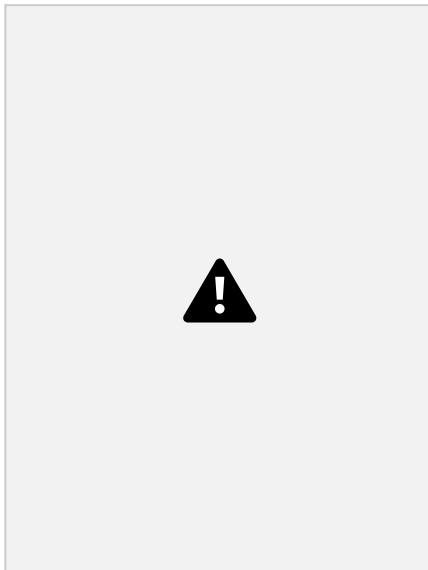
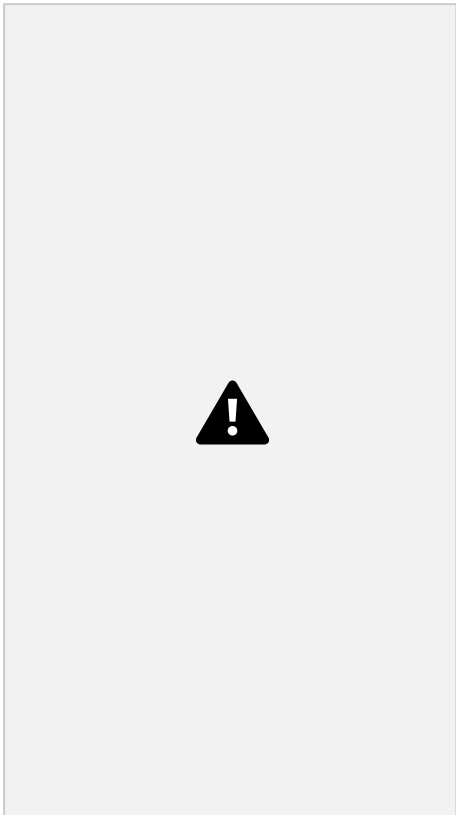
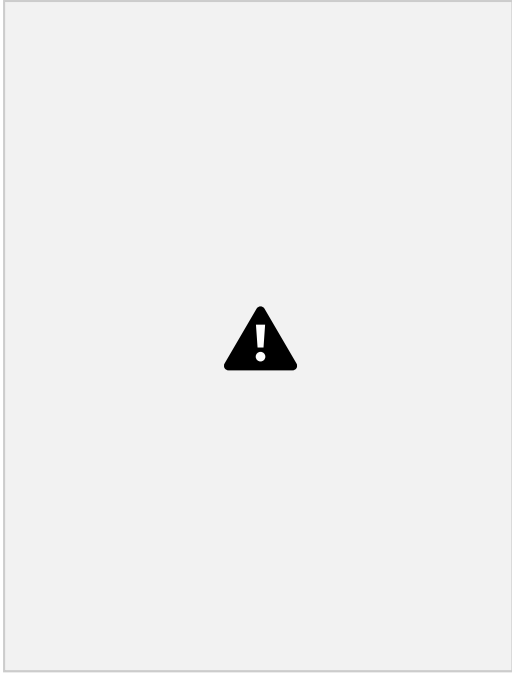
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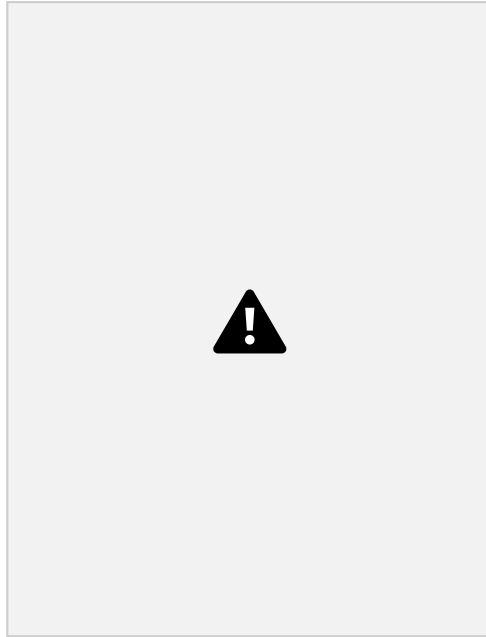
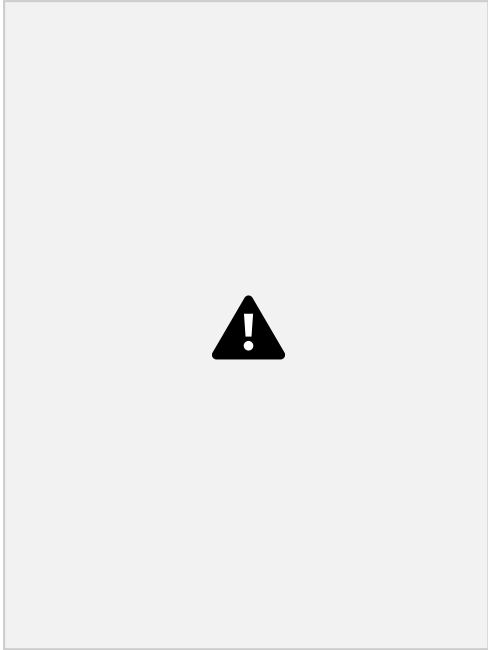
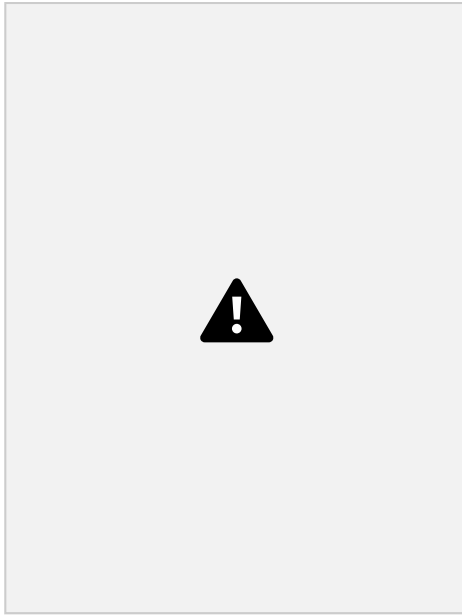
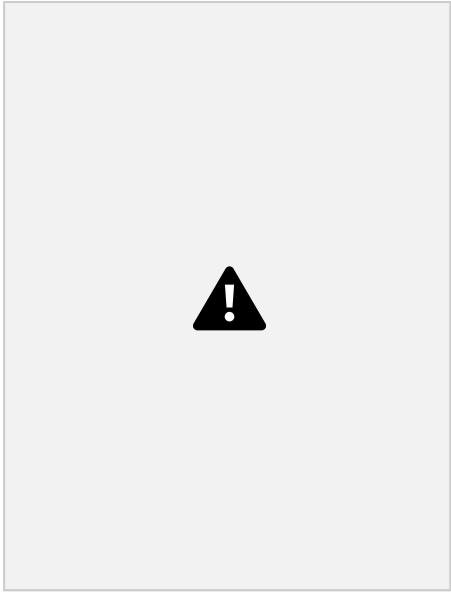
RISE Krishna Sai Prakasam Group Of Institutions

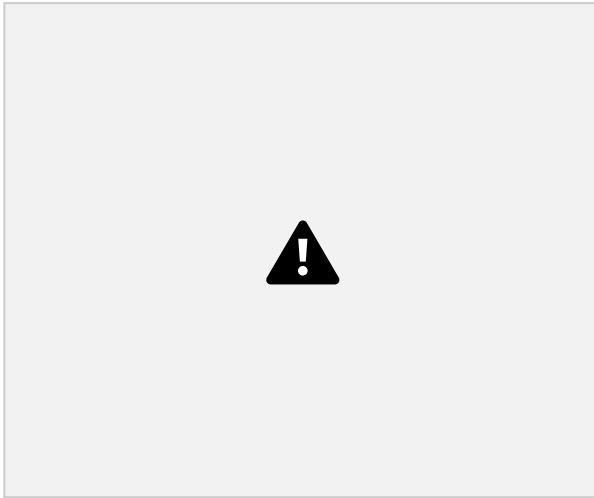
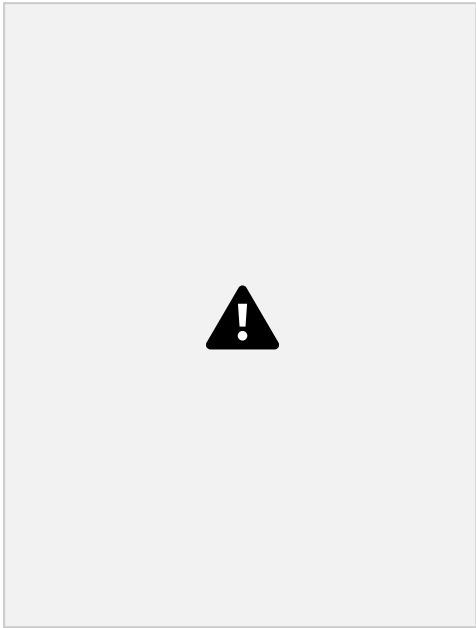
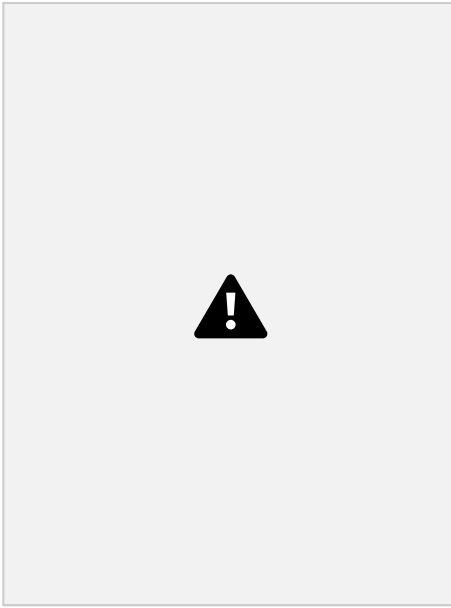
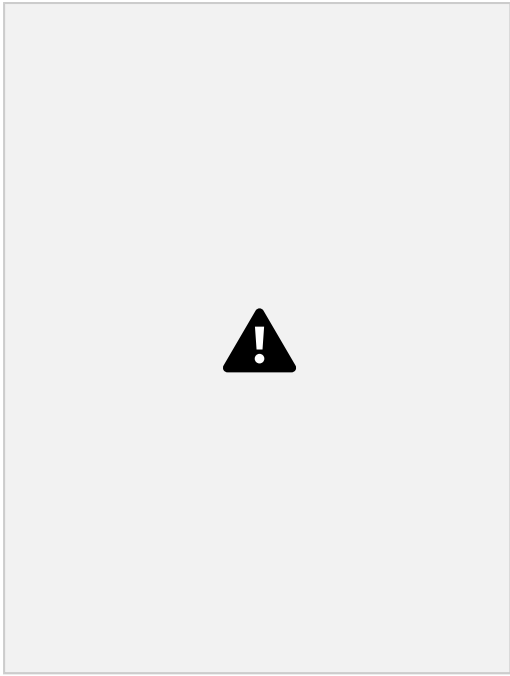
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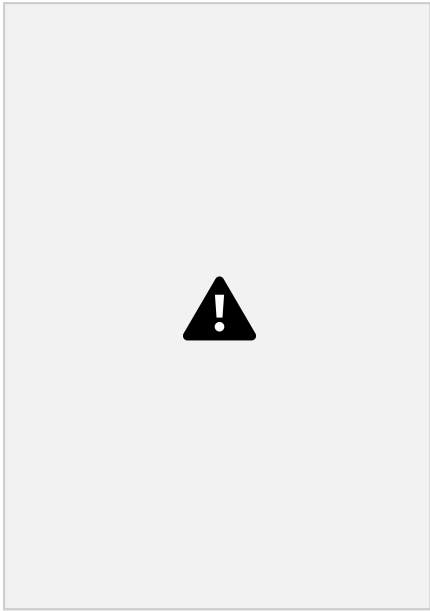
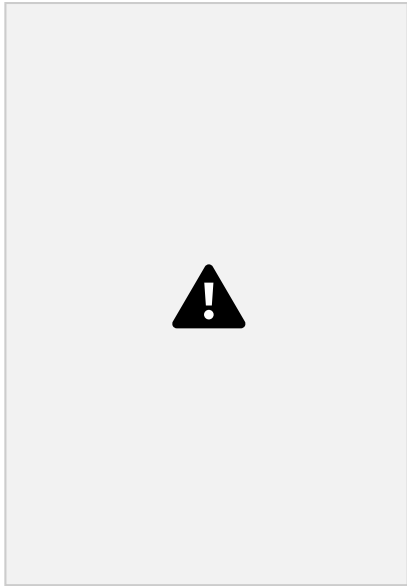
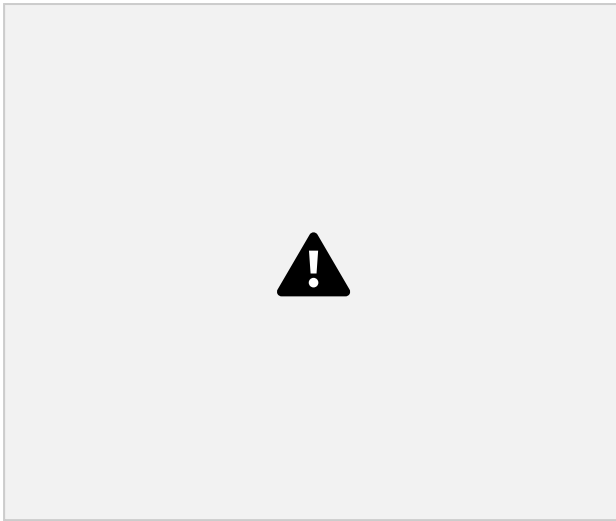








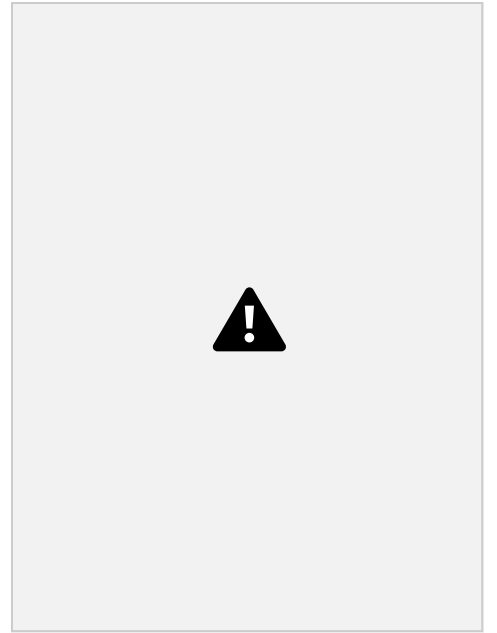




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| 2023-24





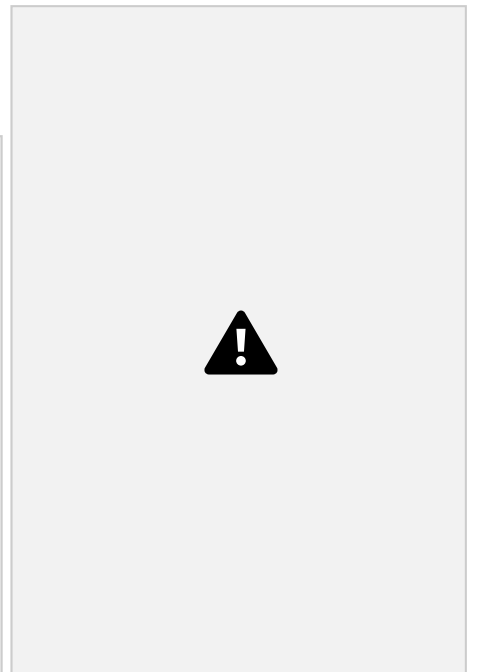
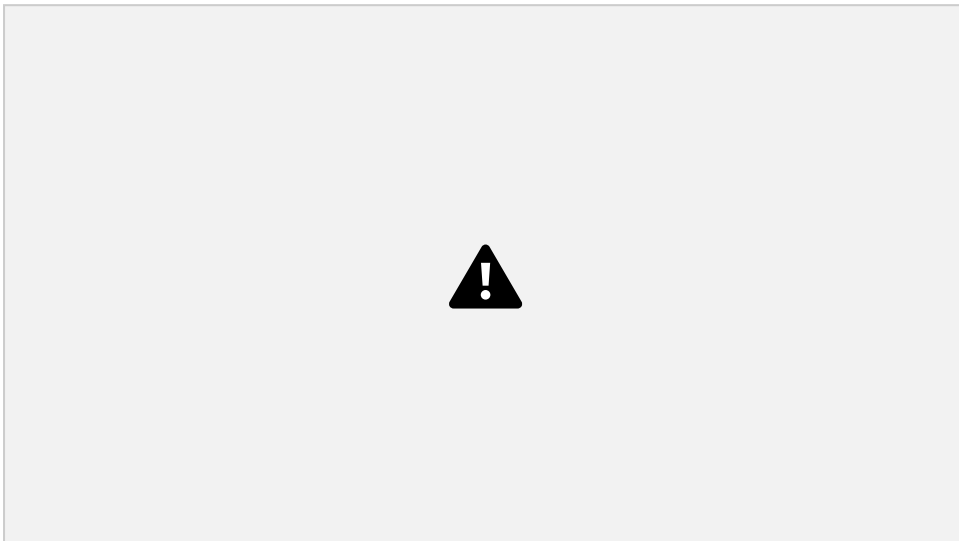
Art By:

K.Malathi

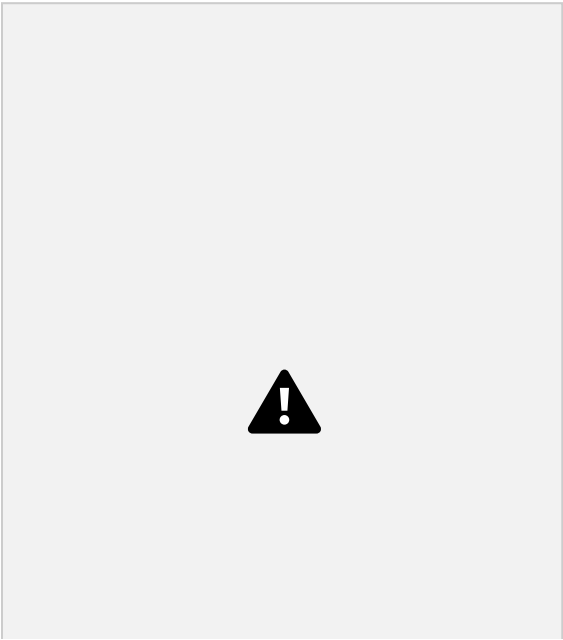
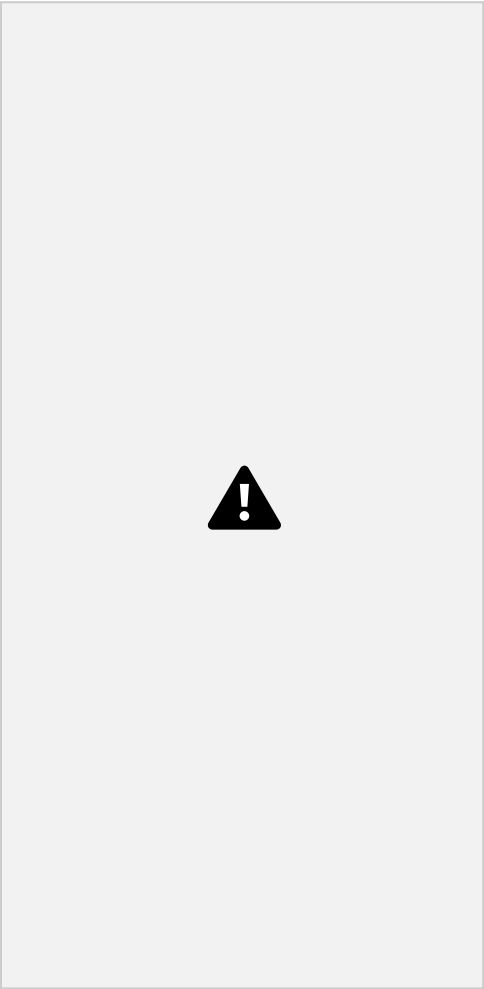
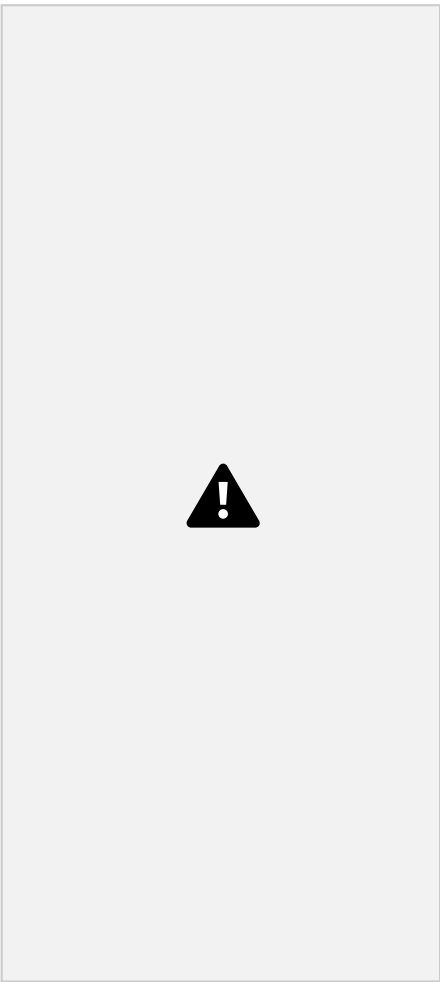
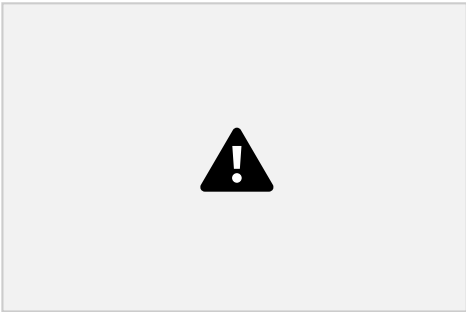
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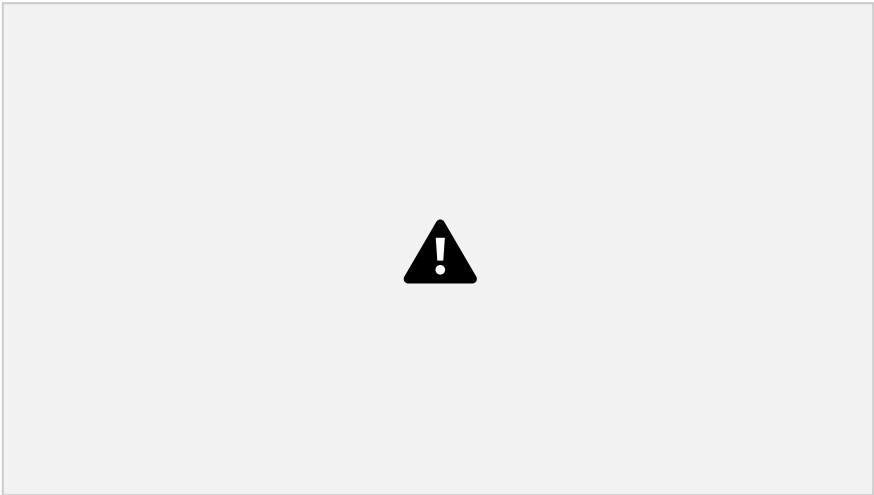
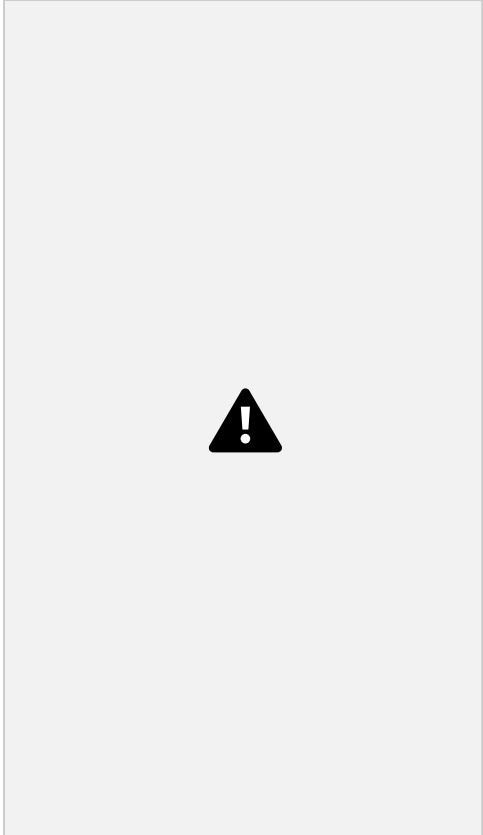
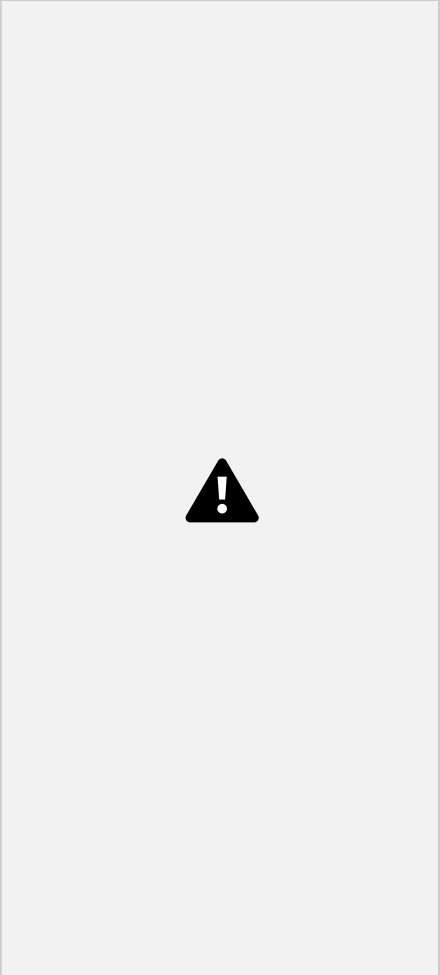
B.S.V.Mounish

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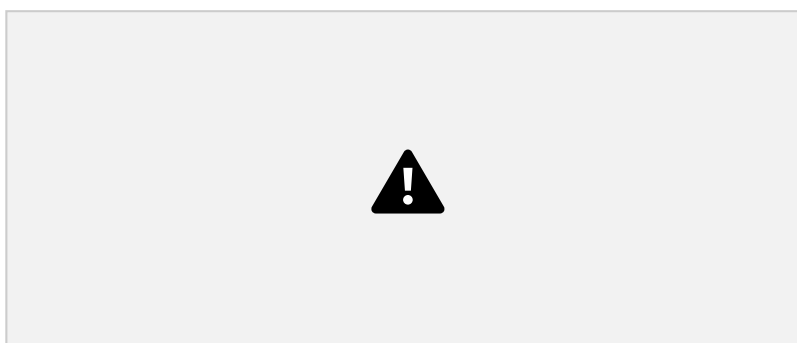
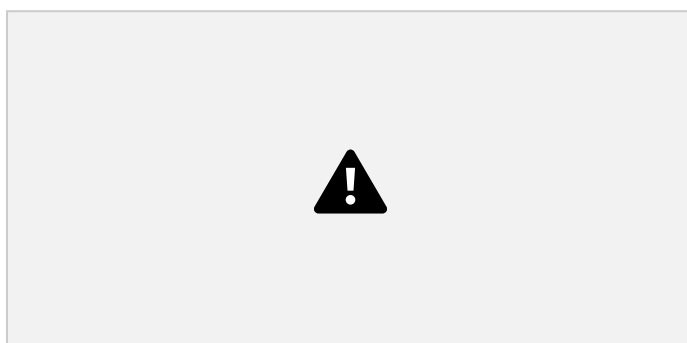
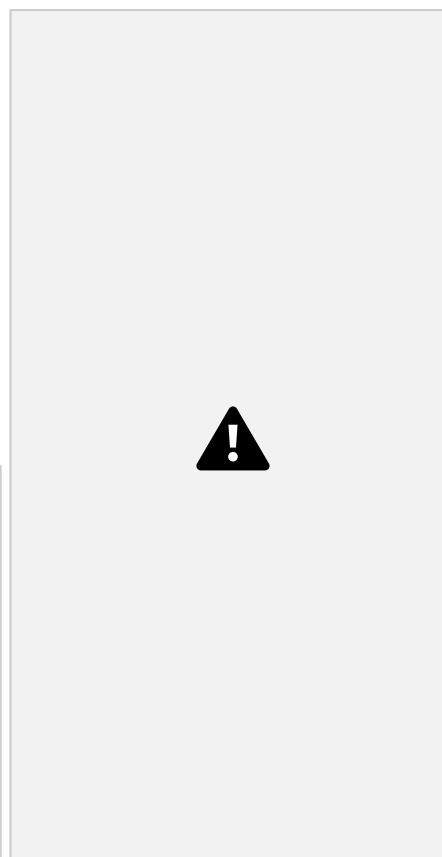
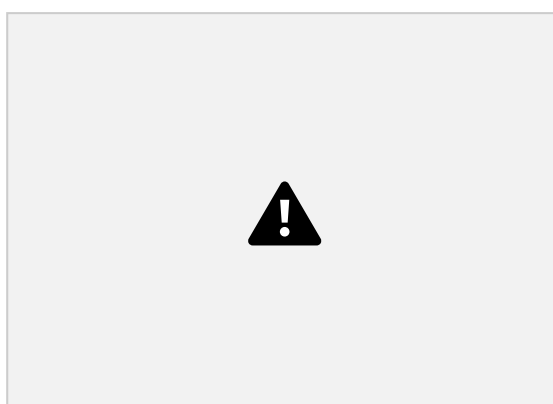
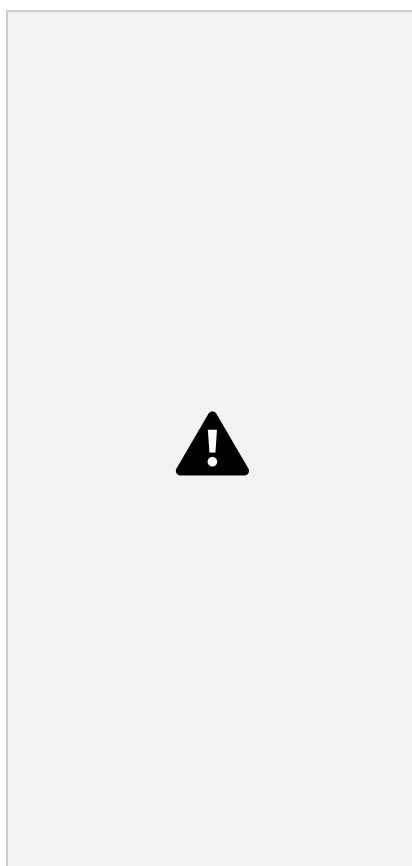
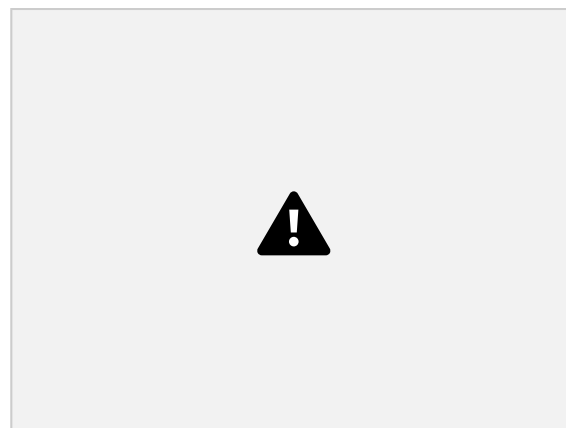




Photography By:
G V S Mohan Reddy
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Photography By:

Pavan Adithya M

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3-24

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20²



Father



No Way,



*Baba, we had to live for you,
why*



*didn't
we
know*

the pain behind your



smiling face? Your dream was destroyed when it was supposed to be, the pearl called father was lost in the [redacted] sound of picking

stones

With the passage of time, you changed, your dream remained that dream. We saw the dream in a different way. We didn't understand

your situation

Baba, you had to embrace the pain, we didn't know the name of the father, we alienated you from the full family, you fought alone like Karna

your whole life

We traveled the whole world for love, we didn't get selfless love like the father, we saw you as a wish fulfillment, Baba, we had to live for

you... A.SAHAJA

*218A1A0466
ECE-II 3rd Year*

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2023-24



BOOKS



THIS GIFT, WHICH IS

FILLED WITH THE
ORNAMENTS OF KNOWLEDGE,
THIS PRICELESS GIFT, IS THE
GIFT OF GOD, OUR SOULMATE
AND
ARTIST



THE DNYANESHWARI OF
SAINT

DNVANESHWAR AND THE SAGA
OF TUKARAM, THE SAME GIVER
WHO REVIVES ANCIENT THINGS

THE
PROWESS OF SHIVARAYA

AND THE BRAVERY OF

LAKSHMIBAI ARE
PRESERVED IN HISTORY, THE CORE
OF
EVERYTHING.

ONLY BECAUSE OF THESE
GIVERS, INDIAN CULTURE
SURVIVED, AND THE TEACHINGS
OF THE SAINTS REACHED
EVERYONE'S HOMES.

SO, WE CONSIDER BOOKS AS OUR
FRIENDS AND GURUS, TELL ME,

FRIENDS, HOW CAN WE FORGET
THIS GIFT OF THE GURU.....

218A1A0424

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The Moon:



A Celestial Gift



The moon, a glowing orb of gentle light,



A beacon in the darkness of night,



A constant



*companion, a
guiding force,*

A symbol of hope, a celestial course.



The moon's soft



rays, a soothing balm,

Illuminate the path, dispel alarm,



A reassuring



*presence, a steady
friend,*

A source of comfort, till the very end.



*The moon's phases,
a reminder of life's
tide,*



Ebbing and



*flowing, in
constant stride,*

*From new to full, a
journey of growth,*



*A symbol of transformation, in every
birth.*

*The moon's beauty, a gift to behold,
A treasure to
cherish, a story to
unfold,*

A source of inspiration, for dreamers

*and poets,
A celestial muse, that forever promotes.*

*So let us cherish,
this gift from
above,*

*The moon, a symbol, of celestial love,
A reminder of wonder, a source of
delight,*

*A guiding force,
that shines through
the*

night. B.PRAVEEN KUMAAR 218A1A0499
ECE-II 3rd Year


 **Li
mi**
tless





Expression...



**Nothinghavetohid
e, By**



thelotofsense,



**Faulttobeapopenwi
de, Don't**

**have any to lose here
ance.**



**Causes some's got that
at,**



**Limiting to be sure,
Sight is pure.**



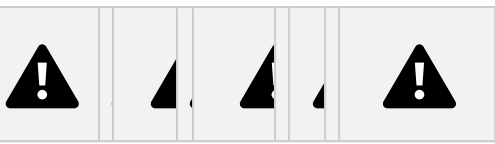
**the only fact,
Savage as a**



**Playing off the mood
, Freer**



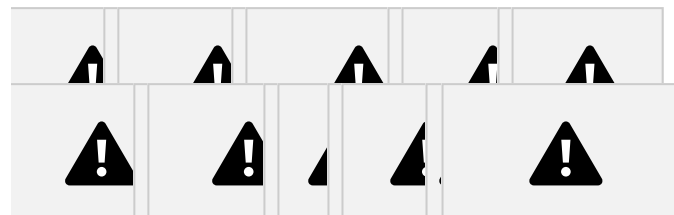
**more than anyone,
Thoughts of
bad or good,
Isn't it for that**



**Individual also fever
ygreed,**



**Damn as like as film
s.**



someone?

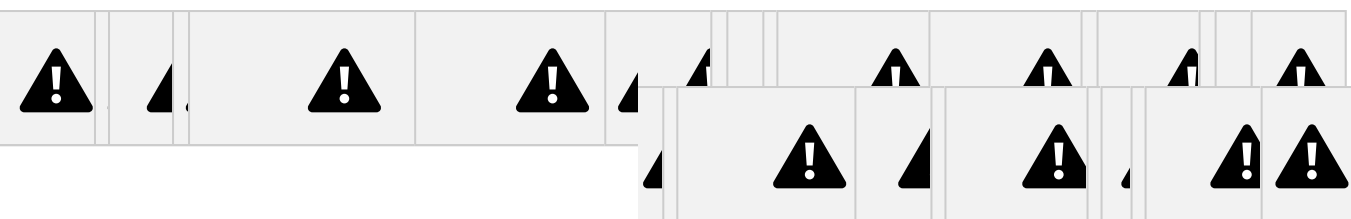
**Through the way ca
lled path,**



**Simpling the way of
it, Whatever ygeezer
says by,**



**Ridiculous that it se "Brat, don't be like t
ems, hat"**



**Beyond the tolerating,
Limiting
vibe of mouth,
Things need to
be gettin',
Just letting it pass!**

Yelling on all helie.



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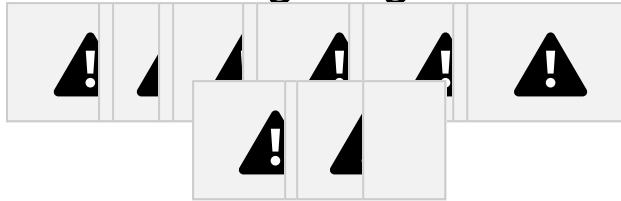
Afterlife.....



Maybe in the afterlife



We will begin again



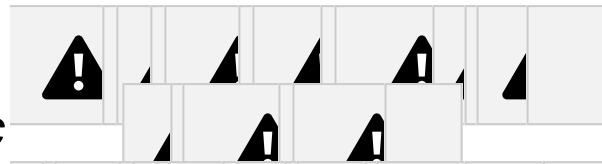
*With the same night
a light*

Same bike



But this time by

your side.....



Maybe

*we won't feud
again*

*I will
not clutter again
But only if you*



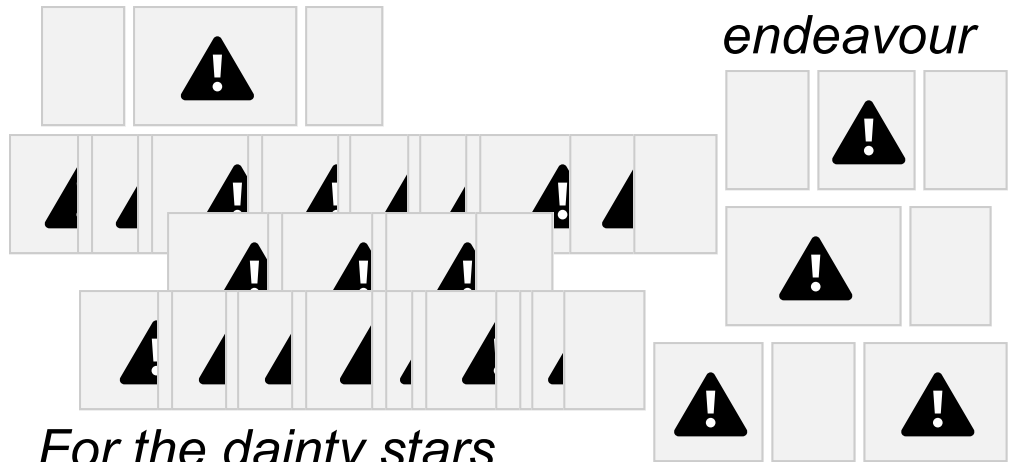
*not walk away My
dear this time*



*It will
not happen*

again







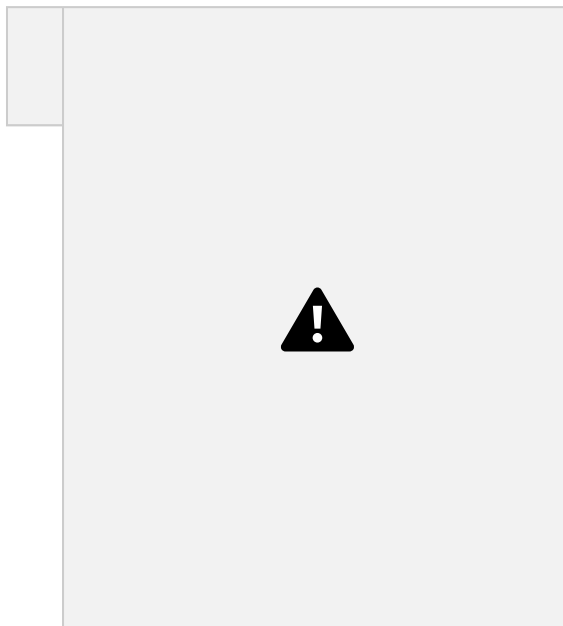





endeavour

*For the dainty stars
and the moonc We
alwaystalked aboutc
Will you ever cometo
sayc if I*

 *leave.*



  *Only*
inmymusec we'll



 
abideeternal.
   
But  *If*
you ever feelsoc
Maybec in
afterlife.....

 *Justto*
remindmethatcl

PAVAN ADITHYA MANDA
218A1A04A8
ECE-II 3rd Year







Freedom



*When will this thirst
for
freedom slake? When will our
love of slavery die? When will
our Mother's fetters break?
When will our tribulations
cease?*

*Wasn't there another Bharat
Reared by our noble Aryan
race? Lead us, Aryan, to
victory! Is't right we remain
slaves?*

*Are famine and disease alone
our share? For whom, then, are
the laurels and fruits? Will you
abandon us, your suppliants?
Can the mother cast her child
aside?*



***Brave warrior! Aryan Lord!
Thou destroyer of the demon
race, Where is your dharma?
Isn't yours the duty To revive
us, and chase Fear away?***

**S. YASASWINI
218A1A0487
ECE-II 3rd Year**

RISE | 2023-24