2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences.

One of the major strength of our college is the teaching and learning process. Students receive a right blend of traditional and modern methods to make learning student centric and to give a rewarding experience. Experimental learning, participative learning and problem solving methodologies are adopted to ensure the overall development of students.

1. Experiential Learning

Students are encouraged to take up project work involving latest technologies and use of latest software. Different problems are investigated to a reasonable level by the final year students under the guidance of project guides, within the time frame of theUniversity.

For Real time exposure students are encouraged to participate in inter-collegiate and state level paper presentation and other competitions.

Field visits and Surveys are arranged in academically significant areas.

Industrial visits are organized to academically significant industries to provide exposure to industrial work culture.

Guest lecture by eminent experts from industry and academics are organized to supplement the teaching process and provide experiential learning.

2. Participative Learning

Students are encouraged to participate in professional societal activities like IEEE, ISTE, IETE, etc.,

The college organizes activities to promote (i) the spirit of Team work through NSS camps, (ii) social responsibility through Red Cross, village Adoption, Tree plantation, Swatch Bharat and Health awareness camp, to help the students learn to lead life as a team for Social and community welfare.

Students are encouraged to take MOOCs (Massive Open Online Courses) offered by premier institutions of the country. They include online lectures, demonstration and interaction through web sessions.

Lab work and workshops are conducted as individual and group work under the supervision of the faculty members.

3. Problem solving Methodology

To develop logical thinking and practical knowledge among the students, case study method is adopted in teaching learning process. This will enhance problem solving ability.

3.2. All questions in the internal tests are based on analysis and reasoning. Free internet access in the library and WI-FI facilities in campus promotes the habit ofself-learning and discussion.

Assignments and Quizzes are given at the end of each unit.

Students are involved in the Research activities; product design and development conducted in each Department under the guidance of research scholars, to get knowledge about emerging area and help them to develop research orientation.

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A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli
Bangalore - 560 074

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E-mail: info@acsce.edu.in, principal@acsce.edu.in

www.acsce.edu.in

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY
Indian Institute of Science campus, Bengaluru

FORMAT FOR STUDENT PROJECT PROPOSAL FOR THE
44th SERIES OF STUDENT PROJECT PROGRAMME

1.	Name of the College : ACS College of engineering
2.	Project Title : Social Distancing Detection and Monitoring using YOLO v3
3.	Branch : Electronics and Communication Engineering
4.	Theme (as per KSCST poster) : Technologies relevant in the aftermath of covid-19

5.	Name(s) of project guide(s) :
	   1. Name: Mr. Harish L
	      Email id :harishacs.ece@gmail.com
	      Contact No. :6360124824

6.	Name of Team Members (Strictly not more than four students in a batch):
	   Name: Manoj Kumar B M
	   USN No.:1AH16EC008
	   Email id: manojkumarman875@gmail.com
	   Mobile No: 9900492034
	
	   Name: Yashpal Gowda
	   USN No.:1AH16EC046
	   Email id:yashpalgowda29@gmail.com
	   Mobile No.:9113607931
	
	   Name: Prajwal C N
	   USN No.:1AH16EC035
	   Email id:prajwalpnr1236@gmail.com
	   Mobile No.:7975067490

7.	Team Leader of the Project :
	   Name: Prajwal C N
	   USN No. :1AH16EC035
	   Email id :prajwalpnr1236@gmail.com
	   Mobile No. :975067490

Principal
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Kambipura, Mysore Road, Kengeri Hobli,
Bangalore - 560 074

Demand Draft No. : 502411

Date : 04/02/2021

Bank name : Canara Bank

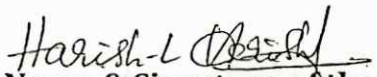| 9.	Date of commencement of the Project : 10/10/2020
10.	Probable date of completion of the project : 21/04/2021
11.	**Scope / Objectives of the project:** **Objectives-** 1.To detect the human traffic and social distancing norms using Deep learning techniques and YOLO Version 3 algorithm. 2.To Alert the operator if the model encounters violation of social distancing policies. 3.Keep record of all the data in the database for further analysis. 4. To visualize the data to indicate and predict the COVID-19 outrage based on the social distance violations.
12.	**Methodology:** The video/image/live feed is given as an input to the YOLO image classification and detection model. The YOLO model will use imagenet architecture to process the image with 156 layers. The model will calculate the Euclidian distance between two points i.e., two persons to measure the distance between them. If the distance is under 2m or 6 feet, it will indicate them as violations and if not, they will be indicated in green color. The model will keep the violation counts, locations of the locality for the further analysis and visualizations.
13.	**Expected Outcome of the project:** The final YOLO model should be accurately (99.5% accuracy) able to Detect the moving human objects and measure the safe / min distance (2 meter or 6 feet) between them. The model is expected to store the data along with locations to visualize the danger, safe zones on the visual online maps to predict / control the COVID outrage in the localities.
14.	Is the project proposed relevant to the Industry / Society or Institution? : Yes / No :No

Ref: ACSCE-Blr/Admin/2019-20/016   Date: 04.02.2021

ENDORSEMENT

This is to certify that **1. Mr. Manoj Kumar B M (1AH16EC008), 2. Mr. Yashpal Gowda (1AH16EC046), 3. Mr. Prajwal C N (1AH16EC035)** are the bonafide students of **Department of ELECTRONICS & COMMUNICATION ENGINEERING**, in the degree program of our institution. If the project proposal submitted by these students under the 43rd series of Student Project Programme is selected by KSCST, we will provide the requisite laboratory / Computer / Infrastructure support in our college / Institution. Further we also take necessary steps to see that the project team will exhibit / demonstrate their project in the nodal centre and in the State Level Seminar and Exhibition (if selected). If the student team fails to send the completed project report or fails to attend the evaluation in nodal centre or fails to attend the State Level Seminar and Exhibition, the supported project amount will be returned back to KSCST.

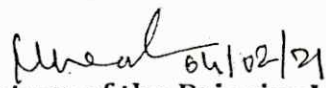**Name & Signature of the Project Guide with seal**
Mr. Harish L .

Email ID: harishacs.ece@g.mail.com

Contact No. +916360124824

Signature of HOD with seal

Dr. H B Bhuvaneswari
HOD
Dept. of ECE
ACS College of Engineering
Bangalore - 560 074
Email ID: hbbhuvana@gmail.com

Contact No. +919448793156
+917022028815

Signature of the Principal with seal

. Dr. M S Murali
Principal
A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli,
Bengalore - 560 074
Email ID: principal.acsce@gmail.com

Contact No. +919900028024

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ACS College of Engineering
Approved by AICTE New Delhi, Affiliated to VTU, Belagavi
(A Unit of RajaRajeswari Group of Institutions)

NAAC 'A' Accredited

STUDENT'S ACHIEVEMENTS
Academic Year-2019-20 (ODD)
V Semester

Sl.no	Name of the Student	Certificates	Venue	Date	Yes/No
1	Hita suresh	Certificate of participation for one day workshop	Techfortune technologies	25/08/2019	✓
2	Chandan gowda K R	Certificate of participation for NECSES	National engineering college,tamilnadu	21/09/2019 to 22/09/2019	✓
3	Chandan gowda K R	Certificate of participation for Texas instruments&DST	Texas instruments india	Aug-2019	✓
4	Chandan gowda K R	Certificate of Appreciation for demonstration of project	Dr. AIT, Bangalore	13/04/2019	✓
5	Chandan gowda K R	Certificate of participation for demonstration of project Jnana-Vijnana-Tantrajnana Mela-2019	Jnana-Vijnana-Tantrajnana Mela-2019, Sri Kshetra Adichunchanagiri	19, 20, Jan 2019	✓
6	Chandan gowda K R	Certificate awarded for First prize,in National Conference	Amruta Institute of Engineering & Management Sciences, Bangalore	29, 30 March 2019	✓
7	Chandan gowda K R	Paper Presentation Certificate on E-waste Resources Conservation & Recycling at 3rd National Conference	ACS College of Engineering, Bangalore	21/05/2019	✓
8	Chandan gowda K R	Certificate of Appreciation at Anveshana-2019, Innovative Project Exhibition	ACS College of Engineering, Bangalore	08/05/2019	✓
9	Ashwini. M	Certificate of Appreciation at Anveshana-2019, Innovative Project Exhibition	ACS College of Engineering, Bangalore	08/05/2019	✓
10	Chetan Kumar. L	Certificate of Appreciation for demonstration of project	Dr. AIT, Bangalore	13/04/2019	✓

Odd Sem.
T. Sem. NIL

FACULTY INCHARGE

HOD, ECE

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TakeitEasy_Engineers

TECH FORTUNE
we stand for excellence

CERTIFICATE
Of Participation

THIS CERTIFICATE IS PROUDLY PRESENTED TO

HITNA . SURESH

attended

One Day Workshop On Python with Machine Learning

organized by

TakeitEasy_Engineers in assosiation with Techfortune Technologies

On 28th August 2019

TECH FORTUNE TECHNOLOGIES
#18, 22ND MAIN, SUBANNA GARDEN,
VIJAYANAGAR, BANGALORE - 560040
Ph: 8317 35 5535 | 9591 68 7143

TechFortune Technologies

TakeitEasy_E

Principal

DEPARTMENT
OF
ELECTRONICS & COMMUNICATION ENGINEERING

SL. NO.	DETAILS OF THE EVENT	
1.	TITLE OF THE EVENT	INDUSTRIAL VISIT
2.	YEAR / ODD –EVEN SEMESTER	2019/ODD
3.	DAY AND DATE	Monday,14.10.2019
4.	VENUE	DiFACTO Robotics and Automation
5.	ORGANISED BY	ECE
6.	CO-ORDINATED BY	Dr.H.B.Bhuvaneshwari,Professor & HOD,ECE
7.	FACULTY INCHARGE	Mrs.Vijaya D and Mr.Prajith Prakash Nair
8.	PARTICIPANTS	III year ECE students and IV year ECE Students
9.	BRIEF SUMMARY OF THE EVENT	Enclosed Report
10.	PHOTOS	Photos also enclosed.

Prajith Nair

Name of the Co-Ordinator

HOD,ECE

HOD
Dept. of ECE
College of Engineering
lore - 560 074.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report On "Industrial Visit to DiFACTO Robotics and Automation "

The students of Vth semester and VIIth semester of the department of electronics and communication engineering were taken to DiFACTO Robotics and Automation for an industrial visit on 14/10/2019.This visit was conducted as a part of industry interaction where 2 faculty members accompanied the students. The students assembled in the college premises at 9:30 am for boarding the bus arranged as part of transportation from the college and departed for the industrial visit at 10:00 am and arrived at the destination at 11:00 am.

The students were given a brief introduction about robotics and automations and the various types of robots used in industries.The introduction gave the students a brief scope of roboticsa and automation in industrial applications.The seminar also gave an introduction to the various areas where the company operates.The organisation basically offers turnkey industrial automation systems and industrial solution with robots.It has also established partnership with various companies around the globe.

After the brief introduction the students were taken to the various laboratory present in the company for explaining about automation. The students were introduced to two main types of industrial robots used in the industries ABB and FANUC and were shown live working of these robots which included both human machine interphase and programmable logic.

The Various Tools and Equipment shown were

[1] Design Software used for solid works

[2] Assembly and Inspection Tools such as Height gauge,Vernier Callipers,FARO arm

Facilities available and shown to the students:

[1] 12,000 sq.ft of intergration shop floor area

[2] Compressed air supply

[3] 100 KVA power supply

[4] BIW robotic lines

[5] Geometric and Respot fixtures

[6] Automation model change over systems.

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ACS COLLEGE OF ENGINEERING

Kambipura, Mysore road, Bangalore-74

Indian Institute of Science

Open Day Visit March 5, 2016

1. **Type of Event:** IISc Visit for First year Students

2. **Event Duration:** Open Day (05/03/2016)

3. **Venue:** Indian Institute of Science, Bangalore

4. **Outcome of the Program:**

The first year students of all branches of Engineering and the basic science faculties visited IISc on 05/03/2016, open day. The Research activities of all the departments were displayed. The students and the faculties had a good interaction with the researchers. They were able to know the recent research works being conducted in all departments. The students found greater interest in the field of nano science and its applications especially the mechanism of dust free particles in the room. The other interesting application was the unmanned aero vehicle.

The students were very enthusiastic and the visit was motivational for their further study and research.

HOD

Report On Site Visit

Department of Civil Engineering had organized a Site Visit on September 26th, 2019, at 11.30 AM to RRGI Studio apartment at kambipura. The Tech -- talk was delivered by Mr. Bharani, Site Engineer. This visit was coordinated by Prof. Vishal B V.

SUMMARY:

Site visiting a real time construction project or design office allows you to develop a greater understanding of how civil engineering theory is put into practice. A clear understanding was made so as to how the constructions have to be made with respect to Building norms and Environmental norms..

Site visit which involve a presentation from the site team, a safety briefing and importance of the project. Many of the concepts were discussed on construction, detailing and design and many more It will give students personal experience of a construction site and exposure to the technical language used at construction site. A complete understanding was made on the Project/Construction with respect to technical specifications.
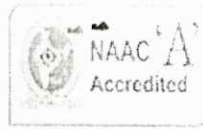

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Bangalore - 560 074

DEPARTMENT
OF
ELECTRONICS & COMMUNICATION ENGINEERING

SL. NO.	DETAILS OF THE EVENT	
1.	TITLE OF THE EVENT	Seminar / Webinar
2.	YEAR / ODD –EVEN SEMESTER	2020/ODD
3.	DAY AND DATE	Monday & 23/11/2020
4.	VENUE	ONLINE (Zoom App)
5.	DURATION	3 Hours
6.	Resource Person	Mr. Yash NN, Global Marketing leader Aruba & HP.
8.	ORGANIZED BY	ECE
9.	CO-ORDINATED BY	Dr. H.B. Bhuvaneswari, Professor& HOD,ECE
10.	FACULTY INCHARGE	Mr.Prajith Prakash Nair
11.	PARTICIPANTS	VII Sem ECE
12.	BRIEF SUMMARY OF THE EVENT	Enclosed Report
13.	PHOTOS	Photos also enclosed.

Prajith Prakash Nair
Name of the Co-Ordinator

HOD,ECE

Principal
A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli,
Bangalore - 560 074

Resource Person: Mr.Yash N N

Global Technical Marketing Leader

ARUBA & HP Enterprise Company

The speaker of the seminar talk was Mr.Yash N.N and he was introduced by Mrs.Bharathi Gururaj, Asst. professor in ECE department, ACSCE. Mr.Yash is a Global Technical Marketing leader in Aruba and H.P Enterprise Company. His role on TME team focuses on campus switching, network security, network management, network design reference architecture. Aruba Enterprise solution & Digital Industry 3.0 and Industry 4.0 transformation .Prior to joining the TME team he was Aruba engineering section manager in the network test lab. He was responsible for leading qualification, flagship, switching product line, end-to-end to-multivendor solution across networking operating system. He received H.P President Quality award and Enterprise award .He worked for Cisco systems before Aruba.
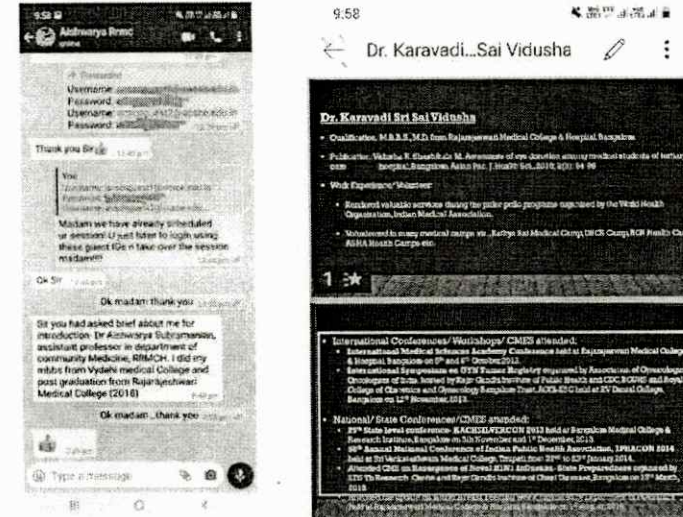
The main goal of Mr.Yash's speech was about the current scenario in digital transformation and its impact on our life all the way from industries 1.0, 2.0, 3.0 and what's going to be the future of industry 4.0.He gave lot of real time examples to understand the situation better. He gave a brief explanation on industrial revolution .The speaker talked about how the computer simulation which will change the future as it is more affordable and takes less time. Industries changes or modifies as it transit into new era. Mr.Yash explained about how the technologies are evolving with respect to industry 4.0.He showed statistical representation of the level of connectivity and how much progress is occurring in each countries compared to the countries that don't have a high amount of connectivity. The impact of 3.0 is so strong that the devices like iphone,android,ipad,kindle,4G,oculus,uber,snapchat and many more came into existence after 2007.

Day 4:

Session Title	**Physical Health and its related activities** **Awareness on COVID 19 and SOP to be followed**
Date & Time	06/05/2021 FN/AN Time: 10.00-11.30 AM
Name of the Resource Person (attach. one Page resume)	Dr. K. Vidusha Dr. Aishwarya S
Key Points Delivered	Dr. K. Vidusha madam has delivered her talk on the topic Physical Health. A person who has good physical health is likely to have bodily functions and processes working at their peak. This is not only due not only to an absence of disease. Regular exercise, balanced nutrition, and adequate rest all contribute to good health. People receive medical treatment to maintain the balance, when necessary. Physical well-being involves pursuing a healthful lifestyle to decrease the risk of disease. Maintaining physical fitness, for example, can protect and develop the endurance of a person's breathing and heart function, muscular strength, flexibility, and body composition. Looking after physical health and well-being also involves reducing the risk of an injury or health issue, such as: - minimizing hazards in the workplace - using contraception when having sex - practicing effective hygiene - avoiding the use of tobacco, alcohol, or illegal drugs - taking the recommended vaccines for a specific condition or country when traveling Good physical health can work in tandem with mental health to improve a person's overall quality of life. Dr. Dr. Aishwarya S has delivered her talk on Covid-19 Awareness and SOP to be followed. In her talk she stressed on the concepts below. 1. COVID-19 is the disease caused by a new coronavirus called SARS-CoV-2. WHO first learned of this new virus on 31 December 2019, following a report of a cluster of cases of 'viral

Department of
Electronics and Communication Engineering

Report
on
IETE Student Forum Inauguration Function

Date: 20-02-2017   Venue: Seminar Hall-1   Time: 10:30 am

The ISF Inauguration function was presided by the **Chief Guest Prof H S Bhatia, Hon. Secretary, IETE Bangalore Center**. He expressed his willingness to help student members in any field of Electronics and Communication.

The program began with an invocation song followed by the address by the **Principal Dr. M S Murali**, wherein he asked student members to actively participate in all the events. He also requested faculty to register for IETE Membership.

The key note address was delivered by **Prof. C Murali, Vice President, IETE, New Delhi**. Professor spoke on **"Emerging trends in E & C for better tomorrow"**, where he stressed on present and future technologies like IoT and 5G, their features and applications. The program was concluded with vote of thanks.

Participants   :   ECE Students and staff

No. of participants :   120

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Bangalore - 560 074

ACS COLLEGE OF ENGINEERING
Kambipura, Mysore Road, Bangalore-74

NSS, YRC and Unnath Bharat Abhiyaan

Chief Patrons

Dr. A.C. Shanmugam
Chairman,
RajaRajeswari Group of Institutions
Sri. A.C.S. Arunkumar
Vice-Chairman,
RajaRajeswari Group of Institutions
Patrons
Dr. S. Vijayanand
Executive Director,
RajaRajeswari Group of Institutions
Sri C.N. Seetharam IAS (Rtd)
Chief Executive Officer,
RajaRajeswari Group of Institutions
Dr. S. Jeyabalan
Special Officer,
RajaRajeswari Group of Institutions
Chair
Dr. M.S Murali
Principal,
ACS College of Engineering

NSS Programme Officer
Dr. M.S. Shivakumar
Associate Professor
Dept. of Chemistry

YRC Programme Officer
Dr. Pradeepa S M
Assistant Professor
Dept. of Chemistry

UBA Coordinator
Dr. Suresh P M
Professor
Dept. of ME

Organizing Committee

Dr. Selvanandan S
Prof., Dept of Physics,

Dr. Veena B H
Prof., Dept of Mathematics

Dr. Raghavendra K
Asst.Prof, Dept of Mathematics,

Mr. Krishna Kumar
Asst. Prof. Dept of CSE

Mr. Adipathi
Estate Officer ACSCE,

Mr. Hemanth Kumar
Asst.Prof, Dept of BME

Technical Staff
Mr. Purushotam
Instructor, Dept of EEE,

Ref. No: ACSCE/NSS & YRC/2020-21/

CLEAN INDIA
programme on account of
SWATANTRA AMRUTHA MAHOTSAVA
75 @ INDIA

By

National Service Scheme (NSS), Youth Red Cross (YRC) and Unnath Bharath Abhiyaan Unit, ACSCE, Bangalore-74

on

Date: 25th October, 2021
Venue: ACSCE Campus
Time: 1.30 PM – 3.00 PM

To

....

....

....
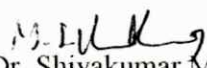
Dear Sir/Madam,

Subject: Invitation for **CLEAN INDIA** programme on account of **SWATANTRA AMRUTHA MAHOTSAVA 75 @ INDIA -Reg.**

We are pleased to inform that the NSS, YRC and Unnath Bharath Abhiyaan Unit of ACSCE is organizing the **CLEAN INDIA programme on account of SWATANTRA AMRUTHA MAHOTSAVA 75 @ INDIA** on **25th** October 2021 @ 1.30 PM onwards.

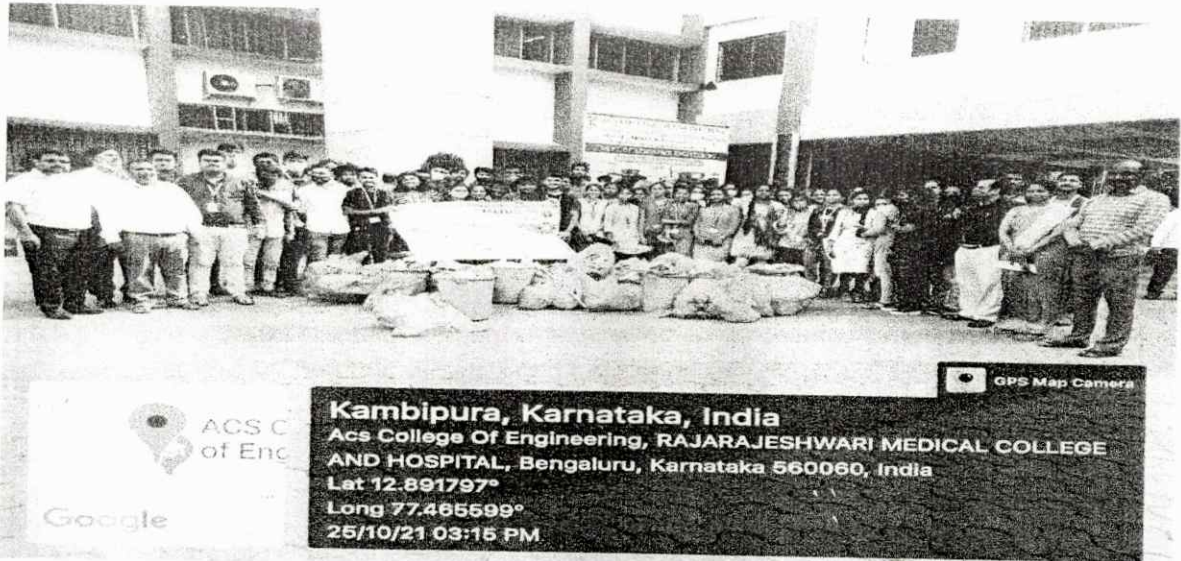We request you to encourage your faculty and students to attend the Event.

Thanking You

Dr. Pradeepa S M
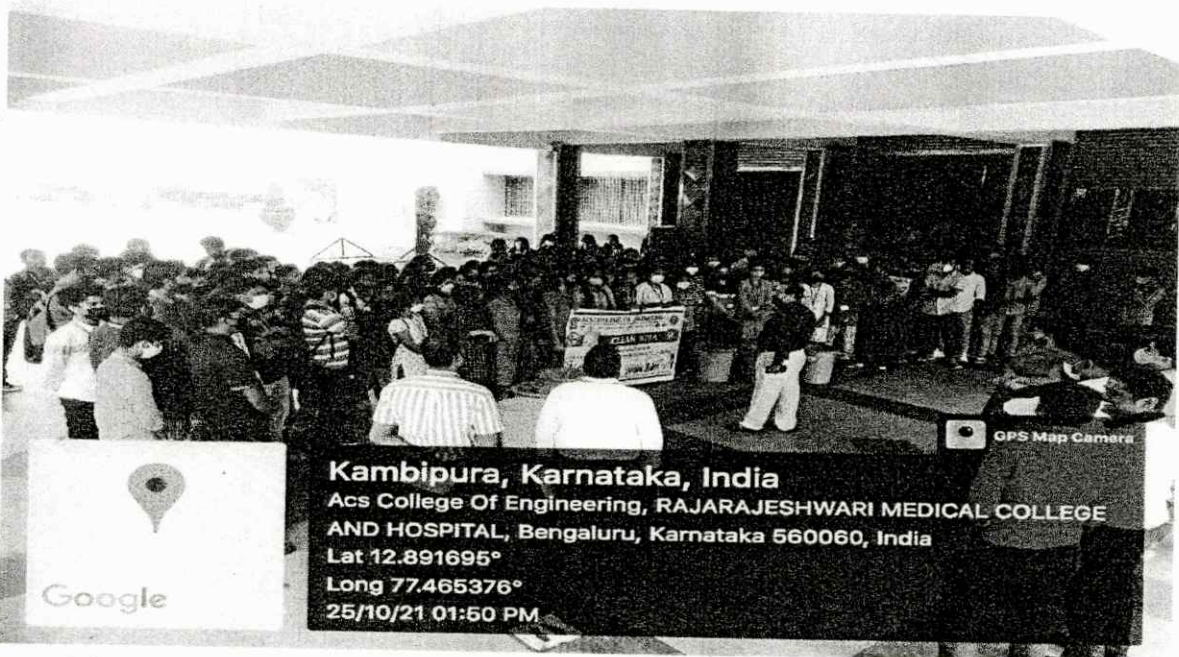YRC Programme Officer

Dr. Shivakumar M S
NSS Programme Officer

Principal
A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli,
Bangalore - 560 074

Kambipura, Karnataka, India
Acs College Of Engineering, RAJARAJESHWARI MEDICAL COLLEGE
AND HOSPITAL, Bengaluru, Karnataka 560060, India
Lat 12.891797°
Long 77.465599°
25/10/21 03:15 PM

Kambipura, Karnataka, India
Acs College Of Engineering, RAJARAJESHWARI MEDICAL COLLEGE
AND HOSPITAL, Bengaluru, Karnataka 560060, India
Lat 12.891695°
Long 77.465376°
25/10/21 01:50 PM

ACS COLLEGE OF ENGINEERING
Department of Civil Engineering

Plastic Free Campus

Pledge together,
- We will stop the use of plastic bags and will use reusable bags only.
- We will educate our community people to save our environment.
- We will share the possible solution of plastic pollution with community people

I _____ pledge that I am committed to reduce single use plastic at ACSCE campus from now and in the future.

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Bangalore - 560 074

Principal
A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli

USN

ACS COLLEGE OF ENGINEERING, BENGALURU
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
THIRD INTERNAL ASSESSMENT TEST

Max. Marks: 30
Duration   : 01 Hr.
Date   : 29/11/2019

SEM: V
Sub. Code: 15EC563/17EC563
Subject: 8051 Microcontroller

Note: 1) Answer all Full Questions, selecting at least one questions from each PART
     2) Write neat sketches wherever required.

Question No.		Third Internal Assessment Questions	MARKS	CO's	RBTL
Part A					
1	a	Briefly explain the differences between interrupts and polling.	5	CO [5]	L1, L2, L3
	b	Write a program to generate square wave of 5KHz frequency at P1.3 using interrupts in timer0 mode2. Assume XTAL = 22MHz	5	CO [5]	L1, L2, L3
OR					
2		Show an interface of 8051 with a stepper motor drive circuit and write an ALP to rotate it counter clockwise.	10	CO [6]	L1, L2, L3
Part B					
3		Interface ADC 0804 to 8051 and write an ALP to read analog data and display the converted data on port1	10	CO [6]	L1, L2, L3
OR					
4	a	Explain interrupt priority register of 8051 microcontroller.	4	CO [5]	L1, L2, L3
	b	Write a C program to serially transmit the message **"HELLO"** continuously at a baud rate of 9600 using timer1.	6	CO [5]	L1, L2, L3
Part C					
5		With neat interfacing diagram of 8051 to LCD write an c program to send letters 'N' and 'O' to the LCD using time delay.	10	CO [6]	L1, L2, L3
OR					
6		A switch is connected to pin 2.7 and stepper motor to port 1 write an ALP to monitor the status of switching and i)If SW = 0 Stepper motor should rotate in clockwise direction ii)If SW = 1 Stepper motor should rotate in anticlockwise direction	10	CO [6]	L1, L2, L3

---ALL THE BEST---

Name & Signature of the Staff:
[Mr. Harish L]

Principal
A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli,
Bangalore - 560 074

HOD, ECE

Sl. No.	Course Outcomes
1.	Explain the difference between Microprocessors & Microcontrollers, Architecture of 8051 Microcontroller, Interfacing of 8051 to external memory and Instruction set of 8051.
2.	Write 8051 Assembly level programs using 8051 instruction set.
3.	Explain the Interrupt system, operation of Timers/Counters and Serial port of 8051.
4.	Write 8051 Assembly language program to generate timings and waveforms using 8051 timers, to send & receive serial data using 8051 serial port and to generate an external interrupt using a switch.
5.	Write 8051 C programs to generate square wave on 8051 I/O port pin using interrupt and to send & receive serial data using 8051 serial port.
6.	Interface simple switches, simple LEDs, ADC 0804, LCD and Stepper Motor to 8051 using 8051 I/O ports.