



K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY

**(Accredited by NAAC with “A+” grade,
ISO 9001:2015 certified institution)**

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING**

ELEKTRA TIMES



ABOUT THE DEPARTMENT:

The Electrical and Electronics Engineering department of **K.Ramakrishnan college of Technology** was established in the year 2010. The young and energetic team of faculties and the dynamism shared by the students of the department have helped in lifting our pride and honor as best among the college. The department is providing a four year full time Under Graduate course of Bachelor of Engineering in Electrical and Electronics Engineering and a two year full time Post Graduate course of Master of Engineering in Power Electronics and Drives.

The well talented faculties specialized in Power Electronics and Drives, Power systems and Applied Electronics are available with us to equip the blooming minds of young engineers. The department has a total of six well developed laboratories such as

- Electrical Machines Lab
- Power Electronics & Drives Lab
- Electrical Circuits Lab
- Engineering practices lab
- Control Systems Lab
- Measurements and Instrumentation Lab
- Power System Simulation Lab
- Research and development lab
- Project lab



With the enthusiasm and smartness exhibit by the department and the hearty support given by the management, the days are not so far to reach our vision of being the pioneer in the global arena.

MISSION :

1. To recommend quality education in electrical and electronic engineering and prepare the student for careers development and higher studies.
2. To support excellence in research activities through research lab and promotional activities with industries.
3. To build moral and ethical values along with academics to serve the society.

VISION :

“To develop globally competent electrical engineers with excel in education in education and research thereby contribute values to the society.”

ELEKTRA TIMES :

Our Department Association “ELEKTRA” has started its monthly Newsletter “ELEKTRA TIMES” in the month of August 2013 and it paves way for the students to publish their innovative ideas, creative artworks and thoughts in it. We feel immense pleasure in releasing the 6th issue of this newsletter through this magazine.

WORDS OF DIGNITARIES....!

HOD'S DESK :-



Dr. A Rajkumar, Ph.D

HOD/EEE

I am very grateful to the Management, Executive Director & Principal for their continuous support in encouraging our students through this newsletter **ELEKTRA TIMES**. Also I extend my hearty thanks to our department faculties and student volunteers for their hard work in releasing this newsletter in time.

This newsletter focuses on publishing the Innovative Ideas & skills of our student's ability and to honor the achievers of our department. The main goal is to motivate every student to come up with innovative ideas & other talents they possess. I congratulate my team of students for their creativity in designing this magazine to the expected standards. My best wishes to all our students who come out with their colorful ideas to join with us through this newsletter.

CHIEF EDITOR'S NOTE:-



A.T.Sankara Subramanian, M.E,(Ph.D)

A.HOD /EEE

This is yet another accomplishment as a teamwork. Yes..!!! We are really delighted in releasing our Seventh Newsletter in this month of September. We thank our HOD for his constant support and help to bring out this newly renovated "**ELEKTRA TIMES**" Newsletter. Creative thinkers and artists have decorated this ELEKTRA TIMES into an interesting newsletter.

We thank our Staff members who dedicatedly worked along with us and remain as a backbone for this ELEKTRA TIMES. It's our privilege to honor our ELEKTRA members and students who actively involved in publishing this newsletter. If you look at history, innovation doesn't come just from giving people incentives; it comes from creating environments where their ideas can connect. Here we are having such a positive environment.

PILLARS OF OUR DEPARTMENT.....!

TEACHING FACULTIES:

1. Dr. A Rajkumar, Ph.D, Prof & Head/ EEE
2. Mr.A.T.Sankara Subramanian,M.E, (Ph.D), Asst. Prof & Asst. Head / EEE
3. Mr.M.D.Udayakumar, M.E, (Ph.D), Asst. Prof &Asst. Head/ EEE
4. Mr.R.Ram Kumar, M.E,(Ph.D), Asst. Prof / EEE
5. Mr.A.AntonAmala Praveen, M.E, Asst. Prof /EEE
6. Mr.T.Ram Kumar, B.E, (M.E), Lecturer / EEE
7. Mrs.C.Kalavalli, M.Tech, (Ph.D), Asst. Prof / EEE
8. Mr.B.Karthikeyan, M.E, (Ph.D), Asst. Prof / EEE
9. Mr.L.Nagarajan, M.E, (Ph.D), Asst. Prof / EEE
10. Mr.P.Sabarish, M.E, (Ph.D), Asst. Prof / EEE
11. Mr.R.Jai Ganesh M.E, (Ph.D), Asst. Prof/EEE
12. Mr.J.Muru Gesan M.E, (Ph.D), Asst. Prof/EEE
13. Mr.T.Vishnu Kumar M.E, Asst. Prof/EEE
14. Mr.V.Sureshkumar M.E, Asst. Prof/EEE
15. Mrs.S Vijayalakshmi M.E,Asst.Prof/EEE
16. Mrs.S.R.Paveethra, M.E, Asst. Prof/EEE

NON – TEACHING FACULTIES:

1. Mrs.K.Bhaghya Lakshmi, D.EEE, B.Com, Lab Tech / EEE
2. Mr.R.Arya Rajan, D.EEE, Lab Tech / EEE
3. Mr.Aliyar D.EEE, Lab Tech / EEE
4. Mr.P.Govindaraj, Attender/EEE

ELEKTRA ASSOCIATION MEMBERS....!

PRESIDENT



Arko Biswas

SECRETARY



Rubiya Begam R

TREASURER



AlwynJoelraj A

VICE PRESIENT



N.Srivathsan

JOINT SECRETARY



Poonguzhali

JOINT TREASURER



R.Harsini

OFFICE BEARERS



Pavithra M



Arokia Christu Raja A



SarathyE



Salman Khan S



Anu Keerthika



Jagadeesan



Rama lakshmi



Pragadeesh



Prakash R



Muhilvasan S



Lavanya J



Ranjani S

ASSOCIATION ACTIVITIES (2018 – 2019)...

Inauguration :

ELEKTRA Association Inaugurated last year on 30-08-2018.

INTERNATIONAL CONFERENCE :

Association ELEKTRA conducted its international Conference on Newer Engineering Concept & Technology-2K19 (ICONNECT-2K19) on 15-03-18 and 16-03-18 & the Chief guest was Dr. P Raja from National institute of technology, Trichy. A total of 47 Papers were presented in different topics.

Guest Lectures :

- Dr. P Raja – Dept of EEE,NIT Trichy for Electrical Machines II.
- Dr. S Moorthi – dept of EEE,NIT Trichy for Digital Logic Circuits.

EVENTS ORGANISED

S.NO	NAME OF THE EVENTS	DATE OF THE EVENTS	NAME OF THE COORDINATOR	NUMBER OF PARTICIPANTS	NAME OF THE RESOURCE PERSON
1	One day Workshop on Filter Design and THD Analysis for AC-DC Converter using MATLAB	26-07-2018	Mr.P.Sabarish AP/EEE	66	Mr.A.T.Sankar subramanian AP/EEE
2	One day Workshop on Modelling of Special Electrical Machines Using MATLAB	21-08-2018	Mr.T.Vishnu Kumar AP/EEE	55	Mr.A.T.Sankarsubramanian AP/EEE
3	One day Workshop on Proteus software for Power converter & Controller and Embedded system design	07-09-2018	Mr.S.Koodeswaran AP/EEE	62	Mr.R.Jai Ganesh AP/EEE Mr.S.Koodeswaran AP/EEE
4	One day Workshop on Industrial Energy Audit and Design of Solar Power Plant	14-09-2018	Mr.R.Ramkumar AP/EEE	128	Mr.T.Sivakumar Manager, M/S Green Solar Technology, Madurai.
5	One day Workshop on Simulation and Design of PCB using Proteus	01-02-2019	Mr.L.Nagarajan AP/EEE	93	Mr.L.Nagarajan AP/EEE
6	A hands on training in Power Quality in Renewable Energy Systems	08-02-2019	Mr.L.Nagarajan AP/EEE	40	Mr.L.Nagarajan AP/EEE

MOU signed:

- An MOU Signed with Galwin Technology as one of the Training partner on 21.11.18

STUDENT ACTIVITIES

Workshop

SL.NO	NAME OF THE STUDENT	YEAR/DEPT	NAME OF THE INSTITUTION	ATTENDED DATE	POSITION WON/PARTICIPATION
1	JOSHUA SMITH S	IV/EEE	RAJALAKSHMI ENGINEERING COLLEGE	29.09.2018	PARTICIPATION
2	PRUSOTH R J	IV/EEE	RAJALAKSHMI ENGINEERING COLLEGE	29.09.2018	PARTICIPATION
3	JAYANTHI S	III/EEE	SASTRA UNIVERSITY	23.09.2018	PARTICIPATION
4	FAYAZ AHAMED S	IV/EEE	GOVT. COLLEGE OF ENGINEERING-SRIRANGAM	19.09.2018 20.09.2018	PARTICIPATION
5	ARUNKUMAR K	IV/EEE	GOVT. COLLEGE OF ENGINEERING-SRIRANGAM	19.09.2018 20.09.2018	PARTICIPATION
6	KALIDOSS S	IV/EEE	GOVT. COLLEGE OF ENGINEERING-SRIRANGAM	19.09.2018 20.09.2018	PARTICIPATION
7	KAJENDIRAN G	IV/EEE	GOVT. COLLEGE OF ENGINEERING-SRIRANGAM	19.09.2018 20.09.2018	PARTICIPATION
8	ABDUL WASHIM A	IV/EEE	GOVT. COLLEGE OF ENGINEERING-SRIRANGAM	19.09.2018 20.09.2018	PARTICIPATION
9	SOWMIYA S	III/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	19.09.2018	PARTICIPATION
10	VAISHNAVI K	III/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	19.09.2018	PARTICIPATION
11	SUKEERTHI L	III/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	19.09.2018	PARTICIPATION
12	VIJLR	II/EEE	K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY	4.09.2018	PARTICIPATION
13	DEEPIKA P	IV/EEE	EXCEL COLLEGE OF ENGINEERING & TECHNOLOGY	31.08.2018	PARTICIPATION

14	KAVIYA BHARATHI P	IV/EEE	EXCEL COLLEGE OF ENGINEERING & TECHNOLOGY	31.08.2018	PARTICIPATION
15	ARUNOTHAYA R	IV/EEE	EXCEL COLLEGE OF ENGINEERING & TECHNOLOGY	31.08.2018	PARTICIPATION
16	ARUNA P	IV/EEE	EXCEL COLLEGE OF ENGINEERING & TECHNOLOGY	31.08.2018	PARTICIPATION
17	SHACHIN U	III/EEE	SNS COLLEGE OF TECHNOLOGY	24.08.2018	PARTICIPATION
18	SIVASHANKAR U	III/EEE	SNS COLLEGE OF TECHNOLOGY	24.08.2018	PARTICIPATION
19	PAGURUDEEN N	III/EEE	SNS COLLEGE OF TECHNOLOGY	24.08.2018	PARTICIPATION
20	K.VAISHNAVI	III/EEE	KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY	18.08.2018	PARTICIPATION
21	NIVETHA PRIYAI R S	IV/EEE	KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY	18.08.2018	PARTICIPATION
22	RAXSANA J	IV/EEE	KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY	18.08.2018	PARTICIPATION
23	SOWNDARYA S	IV/EEE	KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY	18.08.2018	PARTICIPATION
24	SUDHA M	IV/EEE	KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY	18.08.2018	PARTICIPATION
25	VASANTHA KUMAR S	II/EEE	VIT UNIVERSITY VELLORE	03.08.2018 04.08.2018	PARTICIPATION
26	THRIVIKRAM M	II/EEE	VIT UNIVERSITY VELLORE	03.08.2018 04.08.2018	PARTICIPATION
27	VASIM AHAMED P	II/EEE	VIT UNIVERSITY VELLORE	03.08.2018 04.08.2018	PARTICIPATION
28	PRAGADEESH.P	II/EEE	VIT UNIVERSITY VELLORE	03.08.2018 04.08.2018	PARTICIPATION
29	VAISHNAVI.K	III/EEE	K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY	26.07.2018	PARTICIPATION
30	PREM EDWIN RAJ	II/EEE	SRM TRP ENGINEERING COLLEGE	20.07.2018	PARTICIPATION
31	NAGESHWARAN	II/EEE	SRM TRP ENGINEERING COLLEGE	20.07.2018	PARTICIPATION
32	J.K.PRAVEEN KUMAR	II/EEE	SRM TRP ENGINEERING COLLEGE	20.07.2018	PARTICIPATION

33	A.SARATHY	II/EEE	SRM TRP ENGINEERING COLLEGE	20.07.2018	PARTICIPATION
34	NAYAKAR PRAVEEN	II/EEE	SRM TRP ENGINEERING COLLEGE	20.07.2018	PARTICIPATION
35	VASIM AHAMED P	II/EEE	IIT MADRAS RESEARCH PARK	15.07.2018	PARTICIPATION
36	VASANTHA KUMAR S	II/EEE	IIT MADRAS RESEARCH PARK	15.07.2018	PARTICIPATION
37	SINDUJA R	II/EEE	IIT MADRAS RESEARCH PARK	15.07.2018	PARTICIPATION
38	SWATHI A	II/EEE	IIT MADRAS RESEARCH PARK	15.07.2018	PARTICIPATION
39	VARSHA S	II/EEE	IIT MADRAS RESEARCH PARK	15.07.2018	PARTICIPATION
40	K.G.HEMA	II/EEE	SUVC	19.12.2018 - 20.12.2018	PARTICIPATION
41	R.NITHISH KUMAR	III/EEE	SUVC	19.12.2018 - 20.12.2018	PARTICIPATION
42	S.DEVA DHARSHINI	II/EEE	SUVC	19.12.2018 - 20.12.2018	PARTICIPATION
43	S.SALMAN KAHAN	III/EEE	SUVC	19.12.2018 - 20.12.2018	PARTICIPATION
44	D.AKSHAYAA	II/EEE	SUVC	19.12.2018 - 20.12.2018	PARTICIPATION
45	SIVASHANKAR U	III/EEE	SUVC	19.12.2018 - 20.12.2018	PARTICIPATION
46	SANTHOSH DEVA M	III/EEE	SUVC	19.12.2018 - 20.12.2018	PARTICIPATION
47	JAYASRI KANMANI D	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	20.12.2018- 22.12.2018	PARTICIPATION
48	EZHIL MANJARI V	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	20.12.2018- 22.12.2018	PARTICIPATION
49	MADHUVANTHI S	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	20.12.2018- 22.12.2018	PARTICIPATION
50	ANUKEERTHIKA T	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	20.12.2018- 22.12.2018	PARTICIPATION
51	APARNA S	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	20.12.2018- 22.12.2018	PARTICIPATION
52	SUKEERTHI L	III/EEE	SRM TRP ENGINEERING COLLEGE	22.12.2018	PARTICIPATION
53	R.SUMITHA	III/EEE	SRM TRP ENGINEERING COLLEGE	22.12.2018	PARTICIPATION
54	S.JAYANTHI	III/EEE	SRM TRP ENGINEERING COLLEGE	22.12.2018	PARTICIPATION

55	NANDHINI S	III/EEE	SRM TRP ENGINEERING COLLEGE	22.12.2018	PARTICIPATION
56	R.AKILANDESWARI	III/EEE	SRM TRP ENGINEERING COLLEGE	22.12.2018	PARTICIPATION
57	S.PRIYADHARSHINI	III/EEE	SRM TRP ENGINEERING COLLEGE	22.12.2018	PARTICIPATION
58	K.VAISHNAVI	III/EEE	SRM TRP ENGINEERING COLLEGE	22.12.2018	PARTICIPATION
59	S.SOWMIYA	III/EEE	SRM TRP ENGINEERING COLLEGE	22.12.2018	PARTICIPATION
60	R.SUMITHA	III/EEE	KONGUNADU COLLEGE OF ENGINEERING	11.01.2019	PARTICIPATION
61	S.VAISHNAVI	III/EEE	KONGUNADU COLLEGE OF ENGINEERING	11.01.2019	PARTICIPATION
62	K.VAISHNAVI	III/EEE	KONGUNADU COLLEGE OF ENGINEERING	11.01.2019	PARTICIPATION
63	C.SWETHA	III/EEE	KONGUNADU COLLEGE OF ENGINEERING	11.01.2019	PARTICIPATION
64	S.SOWMIYA	III/EEE	KONGUNADU COLLEGE OF ENGINEERING	11.01.2019	PARTICIPATION
65	L.SUKEERTHI	III/EEE	KONGUNADU COLLEGE OF ENGINEERING	11.01.2019	PARTICIPATION
66	P.THAMARAISELVI	III/EEE	KONGUNADU COLLEGE OF ENGINEERING	11.01.2019	PARTICIPATION
67	HEMA KG	II/EEE	IIT MADRAS	12.01.2019-13.01.2019	PARTICIPATION

TECHNICAL & NON-TECHNICAL EVENTS

S.NO	NAME	YEAR/DEPT	NAME OF THE INSTITUTION	EVENT NAME	ATTENDED DATE	POSITION WON/PARTICIPATION
1	VISWANATHAN S	IV/EEE	K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY	IEI	28.08.2018	FIRST
2	SHAMSUL QUDAM	IV/EEE	K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY	IEI	28.08.2018	FIRST
3	RAMAMOOTRHY B	IV/EEE	K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY	IEI	28.08.2018	FIRST

SYMPOSIUM

S.NO	NAME	YEAR/DEPT	NAME OF THE INSTITUTION	ATTENDED DATE
1	SURENDRAN J R	II/EEE	DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE	07.09.2018
2	VASIM AHAMED P	II/EEE	DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE	07.09.2018
3	PRIYADHARSHINI S	III/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
4	SWETHA C	III/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
5	SUMITHA R	III/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
6	TAMARAISELVI P	III/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
7	RAMALAKSHMI E	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
8	DURGADEVI	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
9	VARSHA S	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
10	DEVADHARSHINI S	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
11	AMULANTONY Y	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
12	AMARESH S	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
13	LENIN P	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
14	HARICHARAN	II/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
15	AJAIMANI V	III/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018
16	AROKIA CHRISTHU RAJA A	III/EEE	K.RAMAKRISHNAN COLLEGE OF ENGINEERING	02.08.2018

17	HEME.K.G	II/EEE	M.KUMARASAMY COLLEGE OF ENGINEERING	08.02.2019
18	EZHIL MANJARI.V	II/EEE	M.KUMARASAMY COLLEGE OF ENGINEERING	08.02.2019

EXTRA CURRICULAR_(SPORTS)

S.NO	NAME	YEAR/D EPT	NAME OF THE INSTITUTION	EVENT NAME	POSITION WON/ PARTICIPATION
1	M.SUDHA	IV/EEE	K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY	KHO-KHO	RUNNER
2	M.SUDHA	IV/EEE	K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY	BASKET BALL	WINNER
3	M.SUDHA	IV/EEE	JAYARAM COLLEGE OF ENGINEERING	HAMMER THROW	SECOND
4	M.SUDHA	IV/EEE	JAYARAM COLLEGE OF ENGINEERING	DISCUS THROW	FIRST

PLACEMENT RECORD (BATCH 2014 – 18)

I am very delighted to share our strong placement record of our Fourth batch Engineers. On behalf of our placed students, I thank our Management, Executive Director, Principal, Trainers of Placement department, HOD & faculties of our department for their great support & Guidance. Also I congratulate all the students who got placed in various companies for their bright future



-Mr.A.Anton Amala Praveen M.E

Placement in charge / EEE

S.NO	COMPANY	CATEGORY	SALARY	NO OF OFFERS
1	TCS-CODEVITA & NINJA	SOFTWARE	Rs.3,36,825	2
2	WIPRO	SOFTWARE	Rs.3,50,000	3
3	MALLOW TECHNOLOGIES	SOFTWARE	Rs.2,40,000-Rs.3,00,000	1
4	INFOSYS	SOFTWARE	Rs.3,05,000	5
5	TECH MAHINDRA	SOFTWARE	Rs.3,25,000	2
6	INSTITUTE OF LANGUAGE MANAGEMENT	OTHERS	Rs.1,92,000-Rs.2,04,000	3
7	VERNALIS	SOFTWARE	Rs.2,50,000	1
8	SHREE ABIRAMI ELECTRICALS	EEE CORE	Rs.1,50,000-Rs.2,50,000	1
9	CMS IT SERVICES	SOFTWARE	Rs.1,20,000-Rs.1,44,000	6
10	CTS	SOFTWARE	Rs.3,25,000	1
11	AMAZON	BPO	Rs.1,62,000-1,72,000	1
12	FUTURE GENERALI	MBA CORE	Rs.1,81,000-4,15,000	2
13	IDBI FEDERAL LIFE INSURANCE	MBA CORE	Rs.3,50,000	2
14	CIGNA TTK	MBA CORE	Rs.3,00,000	1
15	WINDCARE INDIA PVT LTD	EEE CORE	Rs.1,20,000	1
16	FACE	OTHERS	Rs.2,88,000	1
17	SUTHRELAND	BPO	Rs.1,85,000-Rs.2,50,000	1
18	VAGUS TECHNOLOGIES	OTHERS	Rs.1,26,000-Rs.1,80,000	2
19	TECH MAHINDRA	BPO	Rs.1,20,000	1
SINGLE OFFER				20
DUAL OFFER				5
TRIPLE OFFER				1
FOUR OFFERS				1
TOTAL OFFERS				37
TOTAL PLACED(STUDENTS)				27
INTERESTED				30
NON PLACED				3
STRENGTH				101
PLACED %				90.00

STUDENTWISE PLACEMENT STATISTICS

S.No	NAME	COMPANY PLACED 1	COMPANY PLACED 2	COMPANY PLACED 3	COMPANY PLACED 4
1	ADAMS.V	FUTURE GENERALI			
2	ARUNKUMAR.K	CMS IT SERVICES			
3	ATHI RSHTALAKSHMI.S	INFOSYS			
4	BHARATHI PRIYA .R	WIPRO			
5	BHASKAR.L	TCS NINJA			
6	DINESH.U.K	VERNALIS			
7	EZHILMATHI.M	INFOSYS			

8	GOKUL.S	CMS IT SERVICES	CIGNA TTK	SUTHERLAND	VAGUS
9	GOKULA KRISHNAN.T	MALLOW TECHNOLOGIES			
10	JANCY AISHWARYA.A	WIPRO			
11	KISHOR KUMAR.R	CMS IT SERVICES			
12	NANDHITHA .T	ILM	CTS		
13	NAVANEETH .R	TECH MAHINDRA			
14	PRAVEEN FERNANDES	INFOSYS			
15	RAGAVAN D	TCS NINJA			
16	RAJKUMAR M	SHRI ABIRAMI			
17	RAMALAKSHMI .M	WIPRO			
18	RAMANACHIAPPAN M	CMS IT SERVICES			
19	SARAH BLESSY	CMS IT SERVICES	AMAZON		
20	SNEHA .R	TECH MAHINDRA	FACE		
21	SOORIYA PRIYA DHARSHINI.R	INFOSYS			
22	SURYA R	ILM	VAGUS		
23	SWETHA.M	FUTURE GENERALI			
24	THILAK .S	INFOSYS			
25	VIJAYALAKSHMI G	ILM	IDBI	TECH MAHINDRA	
26	VIJAYAN U	CMS IT SERVICES	WINDCARE		
27	VIVEKDEV V	IDBI			

FACULTIES CO – CURRICULAR ACTIVITIES (2018– 2019):

ACADEMIC YEAR 2018-19 - ODD SEMESTER

WORKSHOP & SEMINAR

S.No	Faculty Name	Title of Workshop/Seminar	Attended Date		Venue
			From	To	
1	T.Vishnu Kumar	Seminar on Smart Sensors in Healthcare Applications	30/08/18	31/08/18	Kongu Engineering College
2	S.Murugesan	Soft Computing Techniques for Problem Solving	08-03-18	08-04-18	Vellore Institute of Technology
3	B.karthikeyan	Recent Advancement in Green Energy for Sustainable Environment	20/07/18	21/07/18	Kongu Engineering College
4	Dr.A.Rajkumar	Workshop on Approval Process 2019-20	17/07/18	17/07/18	Anna University, Chennai

FDP

S.No	Faculty Name	Title of FDP	Attended Date		Venue
			From	To	
1	M.D.Udayakumar	Smart Grid	31/10/18	31/10/18	Velammal College of Engg & Tech
2	A.Arun vikram	Smart Grid	31/10/18	31/10/18	Velammal College of Engg & Tech
3	R.Ramkumar	Microgrid and Grid Integration issues od Distributed Generation	25/07/18	27/07/18	SRM Institute of Science & Technology

INTERNATIONAL CONFERENCE

S.No	Faculty Name	Title of Conference	Attended Date		Venue
			From	To	
1	R.Jaiganesh	Waste, Energy and Environment	09-05-18	09-05-18	Sathyabama Institute of Science and Technology
2	T.Ramkumar	Waste, Energy and Environment	09-05-18	09-05-18	Sathyabama Institute of Science and Technology
3	S.Kodeeswaran	Waste, Energy and Environment	09-05-18	09-05-18	Sathyabama Institute of Science and Technology
4	P.Sabarish	Waste, Energy and Environment	09-05-18	09-05-18	Sathyabama Institute of Science and Technology
5	S.Murugesan	Internation Conference on Engineering & Technology	31/8/18	31/8/18	Rathinam Technical Campus
6	A.Anton Amala Praveen	Internation Conference on Engineering & Technology	31/8/18	31/8/18	Rathinam Technical Campus
7	S.Vijaya Lakshmi	Internation Conference on Engineering & Technology	31/8/18	31/8/18	Rathinam Technical Campus
8	C.Kalavalli	Internation Conference on Engineering & Technology	31/8/18	31/8/18	Rathinam Technical Campus
9	Dr.A.Rajkumar	Internation Conference on Engineering & Technology	31/8/18	31/8/18	Rathinam Technical Campus
10	R.Ramkumar	Internation Conference on Engineering & Technology	31/8/18	31/8/18	Rathinam Technical Campus

ACADEMIC YEAR 2018-19 - EVEN SEMESTER**FDP**

S.No	Faculty Name	Title of FDP	Attended Date		Venue
			From	To	
1	Dr.A.Rajkumar	Modern Trends in Image Processing	21/02/2019	22/02/2019	K.Ramakrishnan College of Technology
2	T.Vishnu Kumar	Modern Trends in Image Processing	21/02/2019	22/02/2019	K.Ramakrishnan College of Technology
3	A.Anton Amala Praveen	Modern Trends in Image Processing	21/02/2019	22/02/2019	K.Ramakrishnan College of Technology

4	P.Sabarish	Modern Trends in Image Processing	21/02/2019	22/02/2019	K.Ramakrishnan College of Technology
5	A.T.Sankara Subramanian	Modern Trends in Image Processing	21/02/2019	22/02/2019	K.Ramakrishnan College of Technology

WORKSHOP & SEMINAR

S.No	Faculty Name	Title of Workshop/Seminar	Attended Date		Venue
			From	To	
1	Dr.A.Rajkumar	Seminar on "Ranking process"	02-02-2019	02-02-2019	M.Kumarasamy College of Engineering
2	Dr.A.Rajkumar	Stakeholders workshop on AICTE approval process	31/1/2019	31/1/2019	Anna University Chennai
3	B.Karthikeyan	Cultivating Research Mindset	01-11-2019	01-12-2019	M.Kumarasamy College of Engineering
4	Dr.A.Rajkumar	Energy Management & Auditing with Hands on Training using Power Quality Analyzer	20/12/2018	21/12/2018	K.Ramakrishnan College of Engineering

INTERNATIONAL CONFERENCE

S.No	Faculty Name	Title of Conference	Attended Date		Venue
			From	To	
1	A.Arunvikram	Design of discrete PID controller for ZETA converter based applications	08.02.2019	09.02.2019	Srikrishna college of Engineering & Technology
2	R.Ramkumar	Design of discrete PID controller for ZETA converter based applications	08.02.2019	09.02.2019	Srikrishna college of Engineering & Technology
3	Dr.A.Rajkumar	Design of discrete PID controller for ZETA converter based applications	08.02.2019	09.02.2019	Srikrishna college of Engineering & Technology
4	S.Kodeeswaran	Artificial Intelligence, smart grid and smart city applications	04.01.2019	05.01.2019	PSG College of Technology
5	T.Ramkumar	Artificial Intelligence, smart grid and smart city applications	04.01.2019	05.01.2019	PSG College of Technology

PATENT DETAILS

DETAILS OF PATENTS	APPLICATION DETAILS	FACULTY NAME
System for Irrigating soil using a Renewable energy based Water pump	Provisional Application Number 20184101559 Dated 24.04.18	A.T.Sankara Subramanian R.Jai ganesh AP/EEE

AWARDS AND ACHIEVEMENTS

NAME OF THE AWARD	STUDENT/FACULTY	RECEIVER'S NAME	DATE
RULA International Awards 2018 (Awarded by International Journal for Research Under Literal Access)	Faculty	R.Jaiganesh AP/EEE	15.08.2018
Gold Medal in National level Handball Tournament at Goa	Student	S.Naveen Kumar IV - EEE	16/06/2018
Silver Medal in International level Handball Tournament at Nepal	Students	S.Naveen Kumar IV-EEE	11/07/2018

.ACADEMIC ACHIEVEMENTS

FACULTY PRODUCED 100% RESULTS IN NOV-DEC 2018 EXAMS

S.NO	YEAR/SEC	STAFF NAME	SUB HANDLED
1	IV/A	Dr.A.Rajkumar	Flexible AC Transmission Systems
2	IV/A	Mr.A.T.Sankara Subramanian	Special Electrical Machines
3	IV/A	Mr.S.Kodeeswaran	Protection and Switch gear
4	IV/A	Mr.A.Anton Amala Praveen	Principles of Management
5	IV/A	Mr.R.Jaiganesh	Micro Electro mechanical Systems

FACULTY PRODUCED 100% RESULTS IN APR/MAY 2018 EXAMS

S.NO	YEAR/SEC	STAFF NAME	SUB HANDLED
1	II/B	Mr.B.Karthikeyan	Digital Signal Processing

8. JOURNAL PUBLICATION (2018-19)**EVEN SEM 2018-19**

S.NO	FACULTY NAME	Title of Journal/text book	Published Date	Indexing	Category
1	Dr.A.RAJKUMAR	International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN(P): 2249-6890; ISSN(E): 2249-8001 Vol. 9, Special Issue 1, Jan 2019, 562-570	January-2019	Crossref Indexed(DOI), Scopus Indexed(IJMPERD) with ISSN & Impact Factor(JCC)	International journal
2	R.JAI GANESH	International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN(P): 2249-6890; ISSN(E): 2249-8001 Vol. 9, Special Issue 1, Jan 2019, 562-570	January-2019	Crossref Indexed(DOI), Scopus Indexed(IJMPERD) with ISSN & Impact Factor(JCC)	International journal

ODD SEM 2018-19

S.NO	Faculty Name	Title of Journal/text book	Published Date	Indexing	Category
1	A.ANTON AMALA PRAVEEN	Proceedings of 4th International Conference on advances in Electrical , Electronics, Information, Communication and Bio-Informatics(AEEICB-18)	Sep-18	Google scholar, ORCID, Thomson Reuters endnote, Scribd, Elsevier SSRN, Advanced science index	Conference Paper
2	S.MURUGESAN	Proceedings of 4th International Conference on advances in Electrical , Electronics, Information, Communication and Bio-Informatics(AEEICB-18)	Sep-18	Google scholar, ORCID, Thomson Reuters endnote, Scribd, Elsevier SSRN, Advanced science index	Conference Paper
3	V.SURESH KUMAR	Proceedings of International Conference on Intelligent Sustainable Systems(ICISS-17)	Aug-18	Google scholar, ORCID, Thomson Reuters endnote, Scribd, Elsevier SSRN, Advanced science index	Conference Paper
4	S.ARUNRAJ	Proceedings of International Conference on Intelligent Sustainable Systems(ICISS-17)	Aug-18	Google scholar, ORCID, Thomson Reuters endnote, Scribd, Elsevier SSRN, Advanced science index	Conference Paper
5	R.JAI GANESH	International journal for Modern trends in Science and Technology, ISSN 2455-3778, Volume:4, Issue no: 09, page:23-27,September 2018	Sep-18	Google scholar, ORCID, Thomson Reuters endnote, Scribd, Elsevier SSRN, Advanced science index	International journal
6	R.JAI GANESH	International journal for Modern trends in Science and Technology, ISSN 2455-3778, Volume:4, Issue no: 08, page:60-62,August 2018	Aug-18	Google scholar, ORCID, Thomson Reuters endnote, Scribd, Elsevier SSRN, Advanced science index	International journal

7	C.KALAVALLI	International journal for Modern trends in Science and Technology, ISSN 2455-3778, Volume:4, Issue no: 08, page:60-62, August 2018	Aug-18	Google scholar, ORCID, Thomson Reuters endnote, Scribd, Elsevier SSRN, Advanced science index	International journal
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9. EVENTS ORGANISED BY THE DEPARTMENT

S.NO	NAME OF THE EVENTS	DATE OF THE EVENTS	NAME OF THE COORDINATOR	NUMBER OF PARTICIPANTS	NAME OF THE RESOURCE PERSON
1	One day Workshop on Filter Design and THD Analysis for AC-DC Converter using MATLAB	26-07-2018	Mr.P.Sabarish AP/EEE	66	Mr.A.T.Sankar subramanian AP/EEE
2	One day Workshop on Modelling of Special Electrical Machines Using MATLAB	21-08-2018	Mr.T.Vishnu Kumar AP/EEE	55	Mr.A.T.Sankar subramanian AP/EEE
3	One day Workshop on Proteus software for Power converter & Controller and Embedded system design	07-09-2018	Mr.S.Koodeswaran AP/EEE	62	Mr.R.Jai Ganesh AP/EEE Mr.S.Koodeswaran AP/EEE
4	One day Workshop on Industrial Energy Audit and Design of Solar Power Plant	14-09-2018	Mr.R.Ramkumar AP/EEE	128	Mr.T.Sivakumar Manager, M/S Green Solar Technology, Madurai.
5	One day Workshop on Simulation and Design of PCB using Proteus	01-02-2019	Mr.L.Nagarajan AP/EEE	93	Mr.L.Nagarajan AP/EEE
6	A hands on training in Power Quality in Renewable Energy Systems	08-02-2019	Mr.L.Nagarajan AP/EEE	40	Mr.L.Nagarajan AP/EEE

PROJECTS UNDERGONE: (APART FROM CURRICULUM)

Solar Car Designed by a team of 24 students from EEE & ECE departments bagged overall 4th position in the SUVC Solar car Race event conducted

NPTEL ONLINE COURSE CERTIFICATION:

FACULTIES

SL.NO	NAME OF THE FACULTY	COURSE NAME
1	P.Sabarish	Design Of Photovoltaic Systems
2	A.T.Sankara Subramanian	Design Of Photovoltaic Systems
3	C.Kalavalli	Design Of Photovoltaic Systems
4	M.D.Udayakumar	Design Of Photovoltaic Systems
5	S.Murugesan	Design Of Photovoltaic Systems
6	R.Ramkumar	Design Of Photovoltaic Systems
7	S.Vijayalakshmi	Design Of Photovoltaic Systems

STUDENTS

SL.NO	NAME OF THE STUDENT	COURSE NAME
1	L.Bhaskar	Design Of Photovoltaic Systems
2	T.Gokulakrishnan	Design Of Photovoltaic Systems

PROFESSIONAL BODY MEMBERSHIPS/STUDENT CHAPTERS:

NAME OF THE PROFESSIONAL BODY	NO OF STUDENT MEMBERS
Institute Of Engineers - India	105
Energy Conservation Society	176
IEEE	47
IAENG (Indian Association for Engineers)	94

IAENG membership

The International Association of Engineers (IAENG) is a non-profit international association for the engineers and the computer scientists. IAENG was founded by a group of engineers and computer scientists in 1968, originally as a private club network for its founding members. Later, with the efforts from its members, IAENG membership became open to all the members in the engineering and computer science community. Nowadays, the IAENG members include research center heads, faculty deans, department heads, professors, research scientists/engineers, experienced software development directors and engineers, and university postgraduate and undergraduate students etc., from over one hundred different countries.

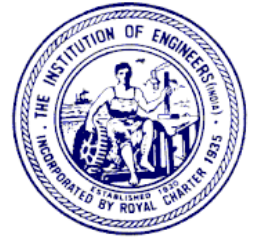
94 students from our department are members of IAENG.

IEEE

The Institute of Electrical and Electronics Engineers (IEEE) is a professional association. Its objectives are the educational and technical advancement of electrical and electronic engineering, telecommunications, computer engineering and allied disciplines. The IEEE provides learning opportunities within the engineering sciences, research, and technology.

The Institution of Engineers

The Institution of Engineers (India) is an organization of engineers in India and was incorporated by Royal Charter in 1935. It is currently headquartered in Kolkata. It has claimed to have more than one million members in 15 engineering disciplines in 120 centers or chapters in India and overseas. Over 176 student members are in IEI in our dept.



Students Club



Innovation centre

It is a student organized club maintained in department of EEE. The main motive of Innovation centre is to bring out various talents of students and make them realize the difference between academics and reality in industries. It also brings out the leadership qualities from students so that they can shine in unique way.

Almost 85 students actively take part in innovation centre. We have few sub teams namely

- Core team
- Placement club
- Event team
- Project team

Organised and Event titled FUNZEE 2k18 on 08/08/18 in association with IEI.



ENERGY CONSERVATION SOCIETY

Energy Conservation Society (ECS) is a premier non governmental voluntary organization committed to the cause of promoting Energy Conservation Environment Protection and Sustainable Development in the country. ECS was formed on July 8 1992 at Thiruvananthapuram Kerala and has now more than 3000 nos. of life Members from among the people of all walks of life, all over India more than 10,000 nos., of student members as volunteers. Almost 174 students actively take part in Energy Conservation Society.

ELEKTRA DYNAMO

A team was formed in the year 2017 consisting of 30 members from our department for participating in solar events like NSVC, ISVC, SUVC, ESVC. In these events students work together in creating a solar powered vehicle with the guidance of Asst. Prof L.Nagarajan, M.E,(Ph.D).



ELEKTRA
DYNAMO

OBJECTIVES:

- To create an economical vehicle operating completely on solar power.
- To achieve mobility without dependency on fossil fuels.
- To provide an effective solution to the global warming and increased pollution levels



STUDENTS CORNER

TECHNICAL ARTICLES

LASER SECURITY ALARM.

Required Electronic Components

S No	Components	Range	Quantity
1	Buzzer	-	1
2	DC voltage supply	9v	1
3	Resistor	100 ohm	3
4	Light emitting diode (LED)	-	1
5	LDR	-	1
6	Transistor	BC548	2
7	Laser Diode	-	1

Circuit Diagram & Construction

The components were connected as per the diagram at the particular ranges and the DC (9v) supply is given to the circuit, The LIGHT DEPENDENT RESISTOR (LDR) is used to absorb the light signal from the LASER DIOD.

The LDR is connected to the base of the BC547 Transistor with a resistance and other end is connected with the DC supply, the anode of the L.E.D is connected to the resistor and the cathode connected to the collector of the transistor.

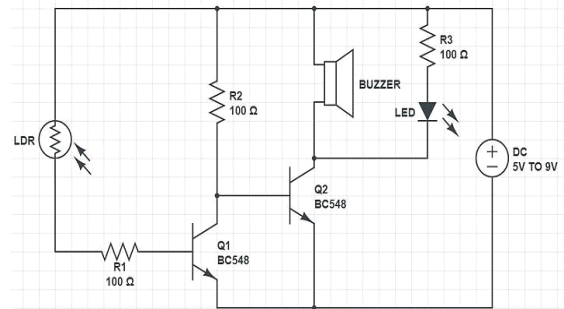
The buzzer is connected in the same way of the LED connection and the positive terminal of the DC supply is connected with the resistors, buzzer and LDR then the negative terminal is connected with the Emitter of BC548 transistor and the LDR continuously absorbs the light signal from the laser diode.

The BUZZER and the LED will not react while the LDR absorbs the light signal which means the circuit is in open state, if the light signal is disconnected by any disturbance the LED will start glowing and the BUZZER start to react by producing sound which means the circuit is in closed state.

Security system

This circuit is used as a security system, it can be a security for jewelries in shops and it can be used in restricted areas for security alarm facilities and also it can be use in many ways in many areas.

JEGADEESWARAN.R (III EEE A)



Multi-Power Supply Using 4 Different Sources For No Break Power Supply

The project is designed to automatically supply continuous power to a load through one of the four sources of supply that are: solar, mains, generator, and inverter when any one of them is unavailable. Four switches are used for four respective sources. These are connected to a microcontroller of 8051 family that provides input signals to it. Whenever a switch is pressed it shows the absence of that particular source. A relay driver is used that receives microcontroller generated output and switches that particular relay to provide continuous power supply. A lamp is used as a load for demonstration purpose which draws power from main. When main fails to supply power, automatically next available source is used say inverter. If inverter fails then the next one is used and so on. An LCD is also used to display which source is being currently used for power supply.

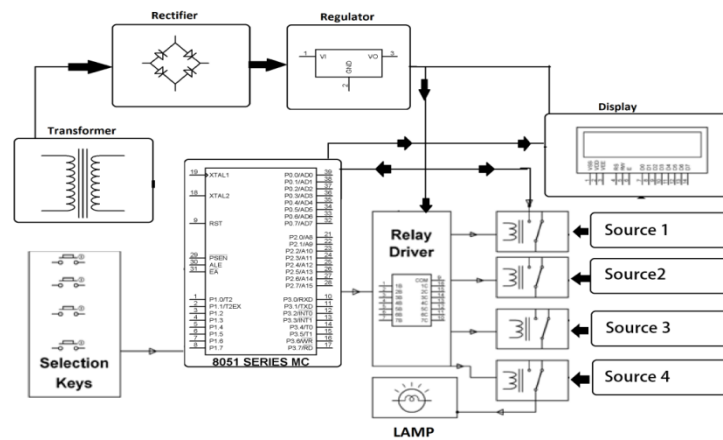
Therefore, this project provides an effective solution to provide an alternative power supply during frequent power cuts.

Hardware Specifications:

AT89S52(8051 Microcontroller)

BLOCK DIAGRAM:

- Relay
- Crystal oscillator
- Voltage regulator IC
- Relay driver IC
- Resistor
- Capacitor
- Transistor
- Diode
- Cables and connectors
- PCB
- LED'S
- Transformer
- Push button
- Lamp



Software Specifications:

- Keil μ Vision ID
- MC programming language embedded:C

R.POONGUZI

IV EEE A

Virtual Reality

Virtual reality draws on multiple disciplines, but in terms of providing a sensory experience that maps effectively to “real life,” electrical engineering is crucial. The earliest VR technologies consisted of a headset with gloves as an input device, rendering the user mostly stationary. Positional tracking is now making VR more interactive.



What differentiates VR from an ordinary computer experience (using your PC to write an essay or play games) is the nature of the input and output. Where an ordinary computer uses things like a keyboard, mouse, or (more exotically) speech recognition for input, VR uses sensors that detect how your body is moving. And where a PC displays output on a screen (or a printer), VR uses two screens (one for each eye), stereo or surround-sound speakers.

S.Priyanka

IV EEE B

GRAPHANE

The next wonder material

There is a new wonder material in town that might change our future. Imagine a coffee cup that streams the day’s headlines in real time. Or a cooking pot that can detect the presence of *E. coli* bacteria that could make you sick. Or a television screen that is as flexible and thin as a piece of paper. All of these applications could be a reality if the wonder material, named graphene, lives up to its hype.

Chicken wire made of carbon

Graphane rocked the world of chemistry in 2004 when scientists discovered that it had remarkable properties: It conducted electricity better than any other common substance, it was the thinnest known material—only one-atom thick—and it was stronger than steel!

After all, carbon is one of the most common and most familiar of the known chemical elements, so scientists were surprised to find that this new form of carbon had such amazing properties.

Carbon comes in many crystalline forms, called allotropes, the most well-known being diamond and graphite. Allotropes are different forms of the same element with different bonding arrangements

between atoms, resulting in structures that have different chemical and physical properties. The way atoms are connected to each other in solid materials has a huge impact on their overall properties.

A diamond and a piece of coal are so different that you would never guess that they are both made of the same element—carbon. Diamond is a hard and transparent mineral that is ejected to the surface from deep within the Earth's interior through volcanic eruptions, while graphite is a black and lightweight material extracted from coal.

In diamond, each carbon atom is connected to four other carbons. This is a very strong arrangement that makes diamond one of the hardest known materials. In graphite, each atom is linked to three others in layers of hexagonal (six-sided) shapes that look like chicken wire. The bonds within the hexagonal sheets are strong, but each layer is only weakly attracted to the next, which allows the layers to slip by one another.

In 2004, Andre Geim and Konstantin Novoselov, two chemists at the University of Manchester, United Kingdom, used this property to produce samples of graphene and discover its remarkable properties. They used sticky tape to separate the layers of carbon in graphite. To get an idea of how their technique worked, think of pressing sticky tape onto a piece of graphite and pulling it away, leaving the sticky surface covered with graphite flakes. Then, press the sticky tape to itself and pull it apart. Repeat, and after a few rounds of this, some flakes on the tape will be only a single one-atom thick layer pure graphene.

Sticky tape can be used to peel off powdered graphite, leaving a single layer of graphene. The initial samples of graphene were very small only a couple of square millimeters in size each but large enough to test. Because graphene is only one-atom thick, it is considered to be a two-dimensional material, the first example of such a thing in the real world. Despite being the thinnest material known to exist, it is also the strongest material ever tested 100 times stronger than steel.

Even more amazing: Electrons do not scatter as much when they move as they do in other materials, such as silicon. This led researchers to make graphene-based transistors that are twice as fast as traditional silicon transistors, which could make computers run much faster.

Flexible solar panels

Graphene has sparked the interest of engineers who are trying to make new, lightweight, and flexible solar panels that could be used to cover the outside surface of a building, in addition to the roof which is already being used.

A new type of solar cell that consists of a photovoltaic cell sandwiched between two sheets of graphene. When light crosses the graphene and is absorbed by the silicon, the photons that make up the light excite electrons in the silicon, which migrate to the graphene sheet at the negative contact and move through the graphene structure toward an external circuit that produces electricity.

Graphene is nearly transparent to light not only to visible light but also to other forms of electromagnetic radiation, including ultraviolet and infrared light. Graphene absorbs only 2% of the light falling on it, whether it

is ultraviolet, infrared, or all of the wavelengths in between. Combine this with graphene's ability to conduct electricity, and you have very efficient, electrical conductors that are transparent, thin, flexible, and cheap.

This new type of solar panel is currently under development and consists of organic photovoltaic cells sandwiched between sheets of graphene. A photovoltaic cell is a small device that converts the sun's energy into electricity.

When a photovoltaic cell is sandwiched between two sheets of graphene, light crosses the sheets of graphene and hits the photovoltaic cell. As a result, the photovoltaic cell generates electricity, which is carried by the sheets of graphene.

These lightweight and flexible solar panels could be molded to fit an automobile body or be wrapped around furniture or clothing. When added to any surface, they could collect light and produce electricity.

Solar panels on these backpacks can charge your mobile phone or iPod. In the future, flexible solar panels may even charge your laptop.

Foldable cell phones

Until recently, most electronic devices were controlled by pushing buttons, typing on a keyboard, or using a mouse. Today, most cell phones and tablet PCs have touch screens that allow the user to make selections by touching icons or letters directly on the display screen.

The basic idea of how most of these devices work is simple. A layer that **stores electrical charge** is placed on the glass panel of the screen. When a user touches the screen with his or her finger, or with a stylus pen, some of the charge is transferred to the user, so the charge on the layer decreases. This decrease is measured by sensors located at each corner of the screen, and this information is relayed to a processor inside the device, which determines what kind of action to take.

All of this is possible because these devices use screens that have thin and transparent coatings that are conductive and can hold a charge. Most portable devices today have screens that are coated with a conductive layer made of indium tin oxide. But this material is brittle, so it is layered on glass to protect and support it. This leads to thick and inflexible displays.

Touch screens made with graphene as their conductive element could be printed on thin plastic instead of glass, so they would be light and flexible, which could make cell phones as thin as a piece of paper and foldable enough to slip into a pocket. Also, because of graphene's incredible strength, these cell phones would be nearly unbreakable. Scientists expect that this type of touch screen will be the first graphene product to appear in the marketplace.

In another method, the graphite is dissolved in a solvent and then sprayed in thin layers using inkjet-type printers. The solvent evaporates, and the graphene remains.

But none of these methods have been perfected,

As yet. The race is on to be the first to show whether this wonder material can live up to its potential!

PRAKASH (II EEE)

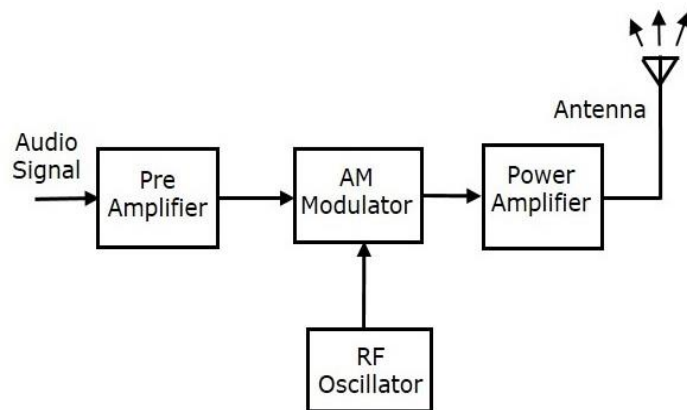


FM TRANSMITTER

What is an FM Transmitter?

- The FM transmitter is a low power transmitter and it uses FM waves for transmitting the sound, this transmitter transmits the audio signals through the carrier wave by the difference of frequency.
- The FM transmitter is a single transistor circuit. In the telecommunication, the *frequency modulation (FM)* transfers the information by varying the frequency of carrier wave according to the message signal.
- Generally, the FM transmitter uses VHF radio frequencies of 87.5 to 108.0 MHz to transmit & receive the FM signal.
- This transmitter accomplishes the most excellent range with less power. The performance and working of the wireless audio transmitter circuit is depends on the induction coil & variable capacitor. This article will explain about the working of the FM transmitter circuit with its applications.

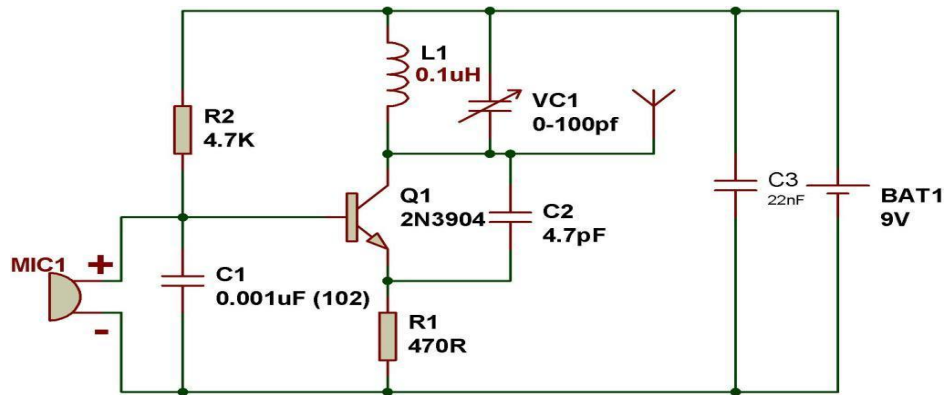
Block diagram



- The following image shows the block diagram of the FM transmitter and the required parts of the FM transmitter are; audio signal, pre amplifier, AM modulator, RF oscillator, power amplifier and antenna.
- There are two frequencies in the FM signal, first one is carrier frequency and the other one is audio frequency. The audio frequency is used to modulate the carrier frequency. The FM signal is obtained by

differing the carrier frequency by allowing the AF. The FM transmitter consists of oscillator to produce the RF signal.

Circuit Diagram



Working of FM Transmitter Circuit

- The following circuit diagram shows the FM transmitter circuit and the required electronic components for this circuit is the power supply of 9V, resistor, capacitor, trimmer capacitor, inductor, mic, transmitter, and antenna.
- Let us consider the microphone to understand the sound signals and inside the mic there is a presence of capacitive sensor. It produces according to the vibration to the change of air pressure and the AC signal.
- The formation of the oscillating tank circuit can be done through the transistor of 2N3904 by using the inductor and variable capacitor. The transistor used in this circuit is an NPN transistor used for general purpose amplification.
- If the current is passed at the inductor L1 and variable capacitor then the tank circuit will oscillate at the resonant carrier frequency of the FM modulation. The negative feedback will be the capacitor C2 to the oscillating tank circuit.
- The tank circuit is derived from the LC circuit to store the energy for oscillations. The input audio signal from the mic penetrated to the base of the transistor, which **modulates the LC tank circuit** carrier frequency in FM format.
- The variable capacitor is used to change the resonant frequency for fine modification to the FM frequency band. The modulated signal from the antenna is radiated as radio waves at the FM frequency band and the antenna is nothing but copper wire of 20cm long and 24 gauge.
- In this circuit the length of the antenna should be significant and here you can use the 25-27 inches long copper wire of the antenna.

Application of Fm Transmitter

- The FM transmitters are used in the homes like sound systems in halls to fill the sound with the audio source.
- These are also used in the cars and fitness centers.
- The correctional facilities have used in the FM transmitters to reduce the prison noise in common areas.

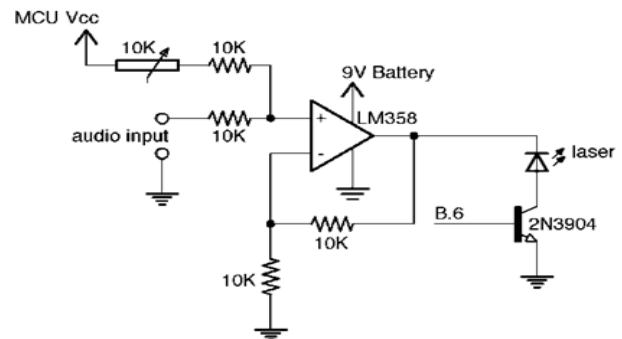
LAVANYA
II EEE

Laser Audio Transmitter

- A mono-axial transmitter/receiver setup that converts an analog audio signal, via standard 3.5mm jack, and transmits it via a laser to a receiver, which converts the signal back into audio.
- The end result is a wireless audio signal that cannot be overheard by other devices.

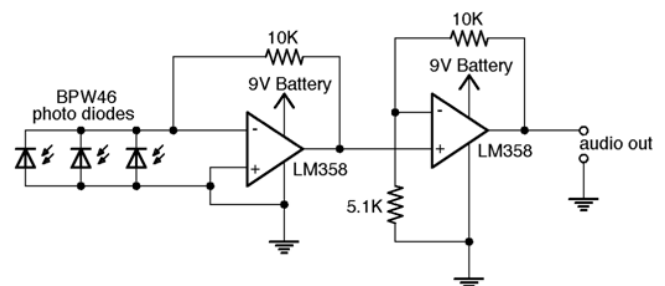
Circuit Diagram

- This transmitter works by modulating the amplitude of the laser based on the amplitude of the audio signal that we are trying to transmit
- The audio, which is fed to the circuit through a standard 3.5mm audio jack, is sent to an adder circuit. The adder, shown below, consists of two inputs and a negative feedback resistor that will be summed together.
- The two connections to the non-inverting input of the op-amp are the audio signal and a DC bias signal that is generally kept at around 3V. This voltage can be modified by adjusting a potentiometer.
- The signal to the inverting input of the op-amp is half that of the output, which is obtained by using a voltage divider of two equal resistors.
- This feedback allows the op-amp to follow the amplitude of the non-inverting input as it attempts to equate the voltages at the two inputs.
- The output of the op-amp is sent directly to the laser. The amplitude of the laser is proportional to the voltage that is applied to it. The amplitude linearly follows the voltage up to roughly 4V, at which point the response is more exponential. We are taking advantage of the linear region of the response to send a mostly unmodified audio signal to the receiver for playback.
- The laser needs to be turned off while the transmitter is scanning for the receiver, mainly for safety and power reasons. To achieve this, the 9V supply to the op-amp is controlled by an NPN transistor, which can act as a switch controlled by the microcontroller.



Receiver

- The receiver circuit somewhat resembles the transmitter circuit. Rather than a single



phototransistor, however, it instead uses three photodiodes, which have much larger sensitive areas compared to the transistor. Since the response of the diodes directly affects the audio quality, a more complex circuit is called for.

- The diodes themselves are placed between the two terminals of an op-amp, whose output voltage is determined by the current that flows through the diodes. Using an op-amp instead of biasing the diodes allows us to utilize a near-ideal short-circuit current. With three diodes in parallel, we effectively triple the area upon which we can receive a signal.
- After amplifying the signal with a second op-amp, the result is then fed directly to an audio jack, where the signal can be heard using any compatible device.

MUHILVASAN
II EEE

PEER TO PEER ELECTRONIC CASH SYSTEM

Cryptocurrency is the side product of digital cash. It's based on the peer to peer network like Torrents, It's completely decentralized with no server or central authority in fact no government has control over cryptocurrencies. I hope many of us heard of Bitcoins in late 2017 it's the first cryptocurrency invented by Satoshi Nakamoto in the year 2009, He is still unknown to the world. You may think without a server or authority how this network works. It works on the principle of blockchain network. If a person sends some bitcoins to other person the transaction is sent to the blockchain network (interconnected computers working together). where the blocks are verified by using different algorithms of computer in the network, These computer hardware is known as ASIC Miners. By verifying the blocks the Miner receives a small amount of revenue in bitcoins,

As the popularity and network expanded the algorithm also keeps on getting difficult. As of now in August 2018 the bitcoin price is around 4.4 Lakhs. But 2017 was the historic year for Bitcoin, Because on December 2017 1 Bitcoin price was around 20000\$ which is like 14 Lakhs in INR. Now you got an idea about Blockchain Network. Bitcoins are mostly used in Deepweb and Darkwebs for making anonymous transactions. In India many traders invested in Bitcoins in early 2017 and sold it back when the price reached the highest number. But now the Bitcoin bubble has burst and it's crashed to very low numbers. The future of Bitcoin is not that bright in 2018. What you guys think?

PRAVIN NAYAKAR (III EEE B)

III EEE B

Li-Fi

Introduction

Li-Fi is a technology for wireless communication between devices using light to transmit data and position. In its present state only LED lamps can be used for the transmission of visible light. In technical terms, Li-Fi is a visible light communications system that is capable of transmitting data at high speeds over the visible light spectrum, ultraviolet and infrared radiation. It is similar to Wi-Fi. The key technical difference is that Wi-Fi uses radio frequency to transmit data. Using light to transmit data allows Li-Fi to offer several advantages like working across higher bandwidth, working in areas susceptible to electromagnetic interference (e.g. aircraft cabins, hospitals) and offering higher transmission speeds.

The technology is actively being developed by several organizations across the globe.

Working of LiFi

A VLC light source could comprise of a fluorescent or light emitting diode (LED) bulb. Since a robust Li-Fi system requires extremely high rates of light output, LED bulbs are most ideal for implementing Li-Fi. LED is a semiconductor light source, which implies that LED light bulbs can amplify light intensity and switch rapidly. Therefore, LED cells can modulate thousands of signals without the human eye ever noticing. In turn, the changes in light intensity from the LED light source are interpreted and converted as electrical current by the receiving photodiode device. Once the electronic signal is demodulated, it is converted into a continuous stream of binary data comprising of audio, video, web, and application information to be consumed by any Internet-enabled device.

By interchanging visible light and infrared light from a photo detector, a mobile device connected to that photo detector can send data back to the light source for uplink. Also, multi-colored RGB (Red/Green/Blue) LED's at retina size could be engineered to send and receive a wider range of signals than single-colored phosphor-coated white LED's.

**-PRAGADEESH.P
III EEE B**

ARDUINO

Arduino is an open source computer hardware and software company, project, and user community that designs and manufactures single-board microcontrollers and microcontroller kits for building digital devices and interactive objects that can sense and control objects in the physical and digital world. It helps us in building up our own projects easily and coming up with creative thoughts.

Arduino board designs use a variety of microprocessors and controllers. The boards are equipped with sets of digital and analog input/output (I/O) pins that may be interfaced to various expansion boards or breadboards (shields) and other circuits. The boards feature serial communications interfaces, including Universal Serial Bus (USB) on some models, which are also used for loading programs from personal computers.

The most beneficial advantages are:-

- Arduboy, a handheld game console based on Arduino.
- Arduino Motion Control Rig.
- ArduinoPhone, a do-it-yourself cellphone.
- Ardupilot, drone software and hardware.
- DC motor control using Arduino and H-Bridge.
- Gameduino, an Arduino shield to create retro 2D video games.
- Homemade CNC using Arduino and DC motors with close loop control by Homofaciens.
- Xoscillo, an open-source oscilloscope.

**P.VASIM AHAMED
III EEE B**

Electrical and Electronics Engineering

Introduction

Electrical and Electronics engineering is about the generation of electricity from oil, coal, gas and nuclear power, as well as the design, development and manufacture of products that use electricity. In general, electrical engineers design and develop products that use relatively high levels of electricity, such as heating and lighting systems. They also work on the generation and distribution of electricity. Electronics engineers design and develop products that use low levels of electricity and microprocessor technology. They work on a wide variety of products, including computers, telecommunications technology, televisions, and audio and video equipment.

Some of the careers in this area

Electrical And Electronics Assembler

Electrical And Electronics assemblers put together electronic or electrical products, such as computers, televisions and CD players. There are two main types of work: mass production and batch production. In mass production, assemblers usually work on an assembly line. They sit near a moving conveyor belt that carries the items to be worked on. As each board passes in front of them, they insert a particular number of parts into the correct positions. In batch production, assemblers usually work at a bench. A supervisor gives the assembler a number of parts and special instructions, which may include a parts list and a diagram or technical drawing. They then work to finish the batch within a target time. There are no formal academic entry requirements. However, many employers look for GCSEs in English, Maths and a science, technology or engineering subject.

Electronics engineers design, develop, operate and maintain products that use electronics, for example, telecommunications systems, electronic imaging devices and computer-controlled systems (from satellite tracking systems to washing machines). Electrical engineers are involved in the generation and supply of electricity for the industrial, commercial and public sectors, as well as for domestic use. The usual requirement for this career is a relevant degree or HND, such as electronics/electrical engineering.

Electrical And Electronics Engineering Technician

Electronics engineering technicians support electronics engineers in the design, development, maintenance and testing of electronic products, including personal computers, digital television, control systems for heating, cooking and washing, games machines and multimedia information systems. Electrical engineering technicians are involved in the generation and distribution of the electricity used to heat and light homes, and power industries. Engineering technicians work in areas such as research and development, design and technical drawing (draughtswork), maintenance and quality assurance (testing products to make sure they are safe and of high quality). Entry into a trainee technician post is usually with at least four GCSEs at grade C or above, including English, Maths and a science, technology or engineering subject.

Engineering Draughts person

Engineering draughtspeople produce detailed drawings and instructions, which production workers use to make electrical/electronic products and equipment. There are two main types of draughtsperson: design and detail.

Traditionally, a draughtsperson would use a drawing board and technical drawing equipment such as stencils. These days, they'll usually have computer-aided design (CAD) technology. Design draughtspeople examine designs. They calculate the number, size and weight of the required parts. They then produce a 'scheme' (a general outline) drawing. Detail draughtspeople produce the final accurate drawing for use by the production workers. They break the drawing down into a series of smaller drawings for each stage of the production process. Both detail and design draughtspeople use mathematical calculations, and need to be comfortable working with calculators and computers. Entry into a trainee technician post is usually with four GCSEs at grade C or above, which should include English, Maths and a science, technology or engineering subject.

Conclusion

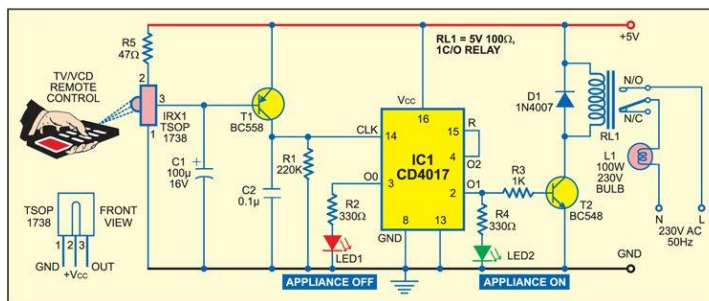
As a nutshell of this article electronic engineering is about design and development of products that use electricity. As a conclusion electrical engineers design and develop products that use relatively high levels of electricity, such as heating and lighting systems generally. They also work on the generation and distribution of electricity. Also Electronics engineers design and develop products that use low levels of electricity and microprocessor technology in the modern world with the help of technological improvement. Electronics engineering plays a major role in various sectors they work on a wide variety of products, including computers, telecommunications technology, televisions, and audio and video equipment.

-RAMALAKSHMI.E

III EEE B

CONTROL HOME APPLIANCES USING IR REMOTE

Circuit diagram:



Components:

- ❖ Ic cd4017
- ❖ Resistors
- ❖ Transistor
- ❖ Remote
- ❖ Capacitor
- ❖ Diode
- ❖ led

Circuit working:

Working of the circuit is simple. Initially, when no IR beam is falling on sensor photo-transistor T1, the DC voltage appearing at the input of the window comparator is nearly zero. The window output remains low. Transistor T5 is cut-off and the relay remains de-energised.

When switch S1 is pressed momentarily, the IR beam falls on the photo-transistor for this short period of time and a positive-going pulse appears at the input of the window comparator. The output of the comparator goes low, which toggles the flip-flop (IC4) and transistor T5 conducts. Relay RL1 energises to switch on bulb B1.

Assemble both the circuits on separate PCBs and house in suitable cabinets. In the transmitter unit, fix IR LED1 on the front side and switch S1 on the back side of the cabinet. Keep the 9V battery inside the cabinet.

Similarly, in the receiver unit, fix the photo-transistor (L14F) on the rear side such that the IR beam falls on it. To avoid circuit malfunction, cover the phototransistor (T1) with a suitable contraption so that the phototransistor is not exposed to unwanted light sources. Fix switch S2 on the front panel and the relay on the back side. Keep the 9V battery inside the cabinet.

N.SOWMIYA

IV EEE B

RASPBERRY PI

The Raspberry Pi is a low cost, credit-card sized computer that plugs into a computer monitor or TV, and uses a standard keyboard and mouse. It is a capable little device that enables people of all ages to explore computing, and to learn how to program in languages like Scratch and Python. It's capable of doing everything you'd expect a desktop computer to do, from browsing the internet and playing high-definition video, to making spreadsheets, word-processing, and playing games. What's more, the Raspberry Pi has the ability to interact with the outside world, and has been used in a wide array of digital maker projects, from music machines and parent detectors to weather stations and tweeting birdhouses with infra-red cameras. We want to see the Raspberry Pi being used by kids all over the world to learn to program and understand how computers work.

The Raspberry Pi ships as just the single-board minicomputer. There are a few additional components you will need before you can get started. So, when making your purchase, keep in mind that you'll need the following extras. The Raspberry Pi is a mini computer that was specifically created to make tech learning easier. It has a lot

of components for computer-based projects, like USB ports, an ethernet port, an SD card slot, Wi-Fi antenna ports, and more. It does not come with peripherals, like cables, a keyboard, a mouse, or a monitor. It is great for learning program languages, like Python, Scratch, and Wolfram. Most Raspberry Pi enthusiasts like making single-process builds to show off their do-it-yourself talents.

Surendran.J.R
III EEE-B

GENERATE ELECTRICITY FROM YOUR WINDOWS USING SOLAR GAPS BLINDS

If solar panels on the roof offend your aesthetic sensibilities and Tesla's sun-soaking roof tiles aren't quite in your budget, then maybe the roof isn't the right place for you to harvest the sun. Solar Gaps allows you to do that from the window instead. A set of window blinds equipped with solar panels, the rig allows you to harvest sunlight at home without complicated roof installations, so you can supplement your connection to the grid with sustainably-generated power. Since these are just window blinds, there are no permanent installations, making it a straightforward plug-and-play solution that you can set up and remove at any time.

Each Solar Gap looks no different than traditional window blinds from afar, although you will notice the presence of photovoltaic cells once you start inspecting up close. Each 10-square foot window area covered by the blinds can generate as much **150W** of power, which should be enough to power all the lights in your home, as well as three MacBooks all running at the same time.

S.PRIYADHARSHINI

III EEE B

Out of box thinking

Teaching!

If there is any sacred profession then I would say it is being a teacher. A teacher is the one who mould our thoughts, the thoughts of our future generation.

“Do not destroy the faith of any man. If you can, give him something better but do not destroy what he has” -
Swami Vivekananda

Giving something without destroying what one has is an art of teaching, which not all possess. Everyone wants to be the best, for which they even seek the best. Every individual is in search of the best teacher, the best educator, but not many want to be one.

Most of them want their children to have the best quality education but least did they bother to be a teacher when they have chance to, after their graduation. This is exactly why we don't have adequate amount of dedicated teachers today. And we know that without dedicated teachers our system would never strengthen.

The only solution is to be one. This could be a progressive profession, if the present generation who have passion towards teaching profession persevere until there is a visibility of better tomorrow.

“Matha Pitha Guru Deivam”

Teaching is such a profession which is kept even above the almighty.

Drishya.R
IV EEE A

Importance of your inner beauty

Nowadays people give importance to their external beauty, outward appearance and looks. The whole world is turning towards this mess. You can stay beautiful and smart while you are young, but it won't last forever. Don't go to parlour and waste your time and money on your perishing beauty and looks. Start working on your inner beauty, tune your soul. Your Inner personality counts more than your outer appearance.

Start loving people for their inner personality, it lasts longer. You did not look at your mom's appearance to love her. You see the inner beauty of her, adore and love her for that. That's why your love on your mother lasts forever. So, start building your character, inner personality and nurture your soul.

"It's not what is outside of you that takes you to the top, but that is inside you."

The main reason for broken families and more divorce in our societies is because people lack to develop the inner personality and soul.

" Start loving souls, you will never be disappointed"

PERIYASAMY

IV EEE A

SHERLOCK HOLMES RIDDLES

- Sherlock, A detective who was mere days from cracking an international smuggling ring has suddenly gone missing. While inspecting his last-known location, you find a note:

710 57735 34 5508 51 7718

currently, there are 3 suspects: Bill, John, and Todd. Can you break the detective's code

and find the criminal's name?

Ans:

Bill. If you read the message upside down, you'll notice that the numbers resemble letters and that those letters form legible sentences. The message is 'Bill is boss. He sells oil.'

- A woman was in her hotel room when suddenly there's a knock on the door. She opened the door to see a man whom she had never seen before. He said, "I'm sorry, I have made a mistake, I thought this was my room." He then went down the corridor and in the elevator. The woman went back into her room and phoned security. Why was the woman so suspicious?

Ans:

Because the woman suspected that if he really thought it was his room then he wouldn't have knocked at the door.

The man might have an intention to break in, in order to steal something, if no one was in the room. He knocked to make sure that no one was in there.

- A man was found dead with cassette recorder in one hand and a gun in other. when the police came in they immediately pressed the play button on the cassette. He said " I have nothing else to live for. i can't go on." then the sound of the gunshot. After listening to the tape police immediately found that it was not a suicide but a homicide. how?

Ans:

If the man shot himself while he was recording , how did he rewind the tape?.

- It was a dark stormy night and a couple were in a car racing madly through a foreign city. The car broke down and the husband had to go get help from someone who spoke his language. He was afraid to leave his wife alone in the car so he pulled up the windows and locked the car before leaving. When he came back, the car was in the same state as he had left it but his wife was dead, there was blood on the floor and there was a stranger in the car. What happened?

Ans:

The wife was about to have a baby. They were driving to the hospital. The baby was born, And the wife didn't survive the birth

- A couple went on for a climbing trip. But only the husband returned from the vacation and said that his wife slipped off while climbing and died. On investigating, the local sheriff arrested him saying, 'Your travel agent called. You murdered your wife.'

The man did not inform anyone about the trip. Then how did the agent was so sure that it is a murder?

Ans:

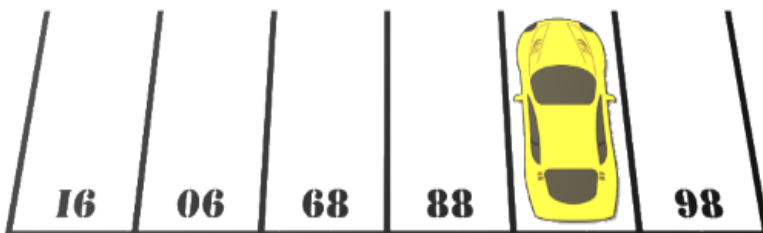
The man bought only one way ticket for his wife whereas he bought two way ticket for himself. It means that he was sure that he will be returning alone.

ANUSIYA

IV EEE A

Puzzles

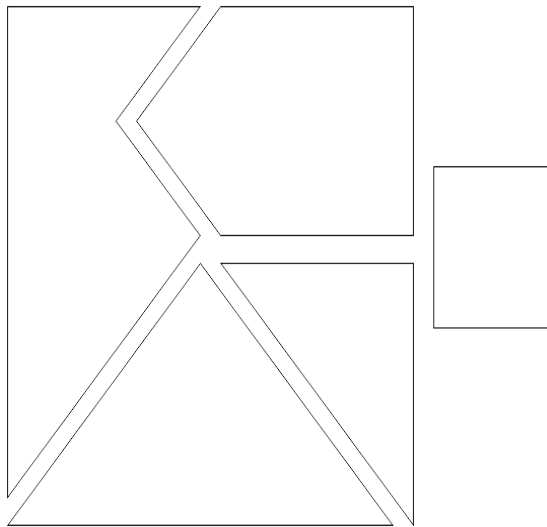
1. What parking spot number is the car parked in?



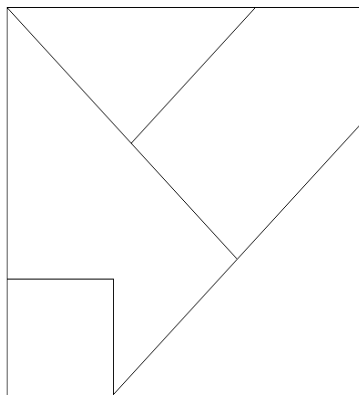
ANSWER:

87 (view the image upside down).

2. The five pieces shown below must be put together to a square.

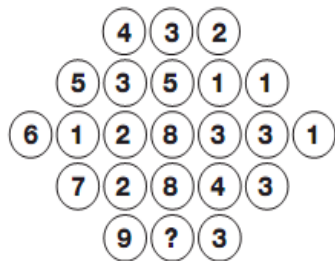


Answer



3.

What number comes inside the circle?



ANSWER: 6

Explanation: Looking at the diagram in rows, the centre circle equals the sum of the numbers in the other circle to the left and right of the centre.

VAISHNAVLS

IV EEE B

Treasure of My Life

Some people come into our lives
just like a 'Guardian Angel'
to give us a strong shoulder
to lie on

And make us feel more comfortable
at times of grief....
They are the GIFTS FROM THE HEAVEN
to save our fading heart....

The courage they provide us
is not enough to move out
the rocks in the life's path....

People who echo everything within us
into a 'mirror' that has striking of us, always.....
And those Angels are 'MY FRIENDS'.....
who have been the Light house of my life!!!!

**-RUBIYA BEGUM
IV EEE-B**

GRADUATION IN LIFE!!!

Keep Moving!..
You graduate in your life!
Some of you Graduate more!!
Some may fall in love, some don't..
Everything makes little sense where you are!
You cannot connect the dots by looking backward,
But you can connect them by looking forward!!!
Find the friend that someone can hold you high and free!
Someone can have you back,
Someone let you to be yourself and accepts what you are!!!
Above all,
Be the home that everyone can return to.....

**SARATHY
IV EEE B**

KINDNESS CHANGES EVERYTHING!!!

Life!!! A Kind of Bliss!!!!

Time change....
People change....
Life changes....
Path changes, situation changes....
But the only constant is 'You'....
And if you can change and if the change is better
like everything else, then appreciation for yourself,
for completed a Milestone of your life....

Let time act better than before,
People around you be the best versioning!
Your life a wonderful experience,
The path you're travelling
is the most adventurous one
and the situation are all 'Sweet Memories'
Exist for the reason
You have been put on this earth....

Let's Discover the Unseen Magic Within Us!!!!

- **N.SOUNDARYA**
IV EEE B

MIRROR:

"Our deepest fear is not that we are inadequate. Our deepest fear is that we are powerful beyond measure.

It is our light, not our darkness that most frightens us. We ask ourselves, 'Who am I to be brilliant, gorgeous, talented, fabulous?'

Actually, Who are you not to be? You are a child of God. Your playing small does not serve the world.

There is nothing enlightened about shrinking so that other people won't feel insecure around you. We are all meant to shine, as children do.

And as we let our own light shine, We unconsciously give other people permission to do the same. As we liberated from our own fear,

our presence automatically liberates others".

K. Padmashree

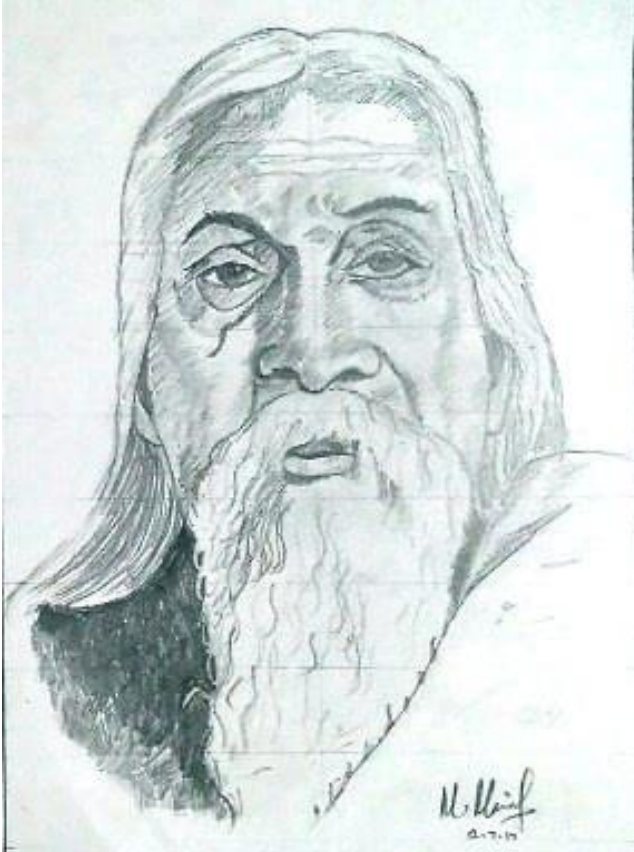
IV EEE B

BELIEVE IT OR NOT:

- 1) THE human body contains enough carbondioxide to provide "lead" for about 9,000 pencils.
- 2) Bee Stings are acidic while wasp stings are alkaline.
- 3) Some lipstick contains lead acetate or sugar of lead.This toxic lead component makes the lipstick taste sweet.
- 4) Mars is red because is surface contains a lot of iron oxide or rust.
- 5) pearls , bones and teeth will dissolve in vinegar, which contains weak acetic acid.
- 6) Light from earth takes just 1.2555 seconds to reach the moon.
- 7) The focussing muscles of the eyes move around 10,000 times a day.
- 8) A plastic cup can take 50-80 years to compose.
- 9) Most cows give more milk, when they listen to music.
- 10)Losbster blood is colourless, when it is exposed to air it appears blue.

-Ishwaryalakshmi.S

IV EEE A



MANIKANDAN (IV EEE A)



உயிரில் கலந்த
உறவு!
அப்பா

ART BY
M.N. DEEPIKA
16.06.2019

PHOTOS FOR REMEMBRANCE



A Workshop on “SIMULATION AND DESIGN OF PCB USING PROTEUS” conducted on 01-02-2019



A Workshop on “PROTEUS SOFTWARE FOR POWER CONVERTER, CONTROLLER AND EMBEDDED SYSTEM DESIGN” conducted on 07-09-2018



A Workshop on “MODELLING OF SPECIAL ELECTRICAL MACHINES USING MATLAB” conducted on 04-09-2018



A Workshop on “FILTER DESIGN AND THD ANALYSIS FOR AC-DC CONVERTER USING MATLAB” conducted on 26-07-2018