# Kandula Srinivasa Reddy Memorial College of Engineering (Autonomous) Kadapa-516003. AP

(Approved by AICTE, Affiliated to JNTUA, Ananthapuramu, Accredited by NAAC)

(An ISO 9001-2008 Certified Institution)

Department of Electronics and Communication Engineering



Certification Course

On

"PCB Design"

Resource Person : Dr. P Lokeswara Reddy

Course Coordinator: Smt. T. Uma Maheswari

Duration : 18-04-2022 to 29-04-2022



(UGC - AUTONOMOUS) Kadapa, Andhra Pradesh, India - 516003



Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

An ISO 14001:2004 & 9001: 2015 Certified Institution

Lr./KSRMCE/ (Department of ECE)/2020-21

Date: 11-04-2022

To The Principal KSRM College of Engineering Kadapa, AP.

Sub: KSRMCE - (Department of ECE) - Permission to conduct a certification course on "PCB Design" -Request-reg.

\_\_\_\*\*\*\_\_\_

Respected Sir,

With reference to the cited, the Department of ECE is planning to conduct a certification course on "PCB Design" for All B.Tech IV SEM students from 18-04-2022 to 29-04-2022. In this regard, I kindly request you to grant us permission to conduct a certification course. This is submitted for your kind perusal.

forwarded to the principal sir by

Thanking you sir,

Yours Faithfully,

Coordinator

Smt.T. Uma Maheswari

Cc:

To The Director for Information

To All Deans/HODs

Pen, ITEd

V. S. S. NW/Y

PRINCIPAL GINEERING

PRINCIPAL GINEERING

A.P.)

K.S.R.M. COLLEGE OF ENGINEERING

K.S.R.M. COLLEGE OF ENGINEERING

K.S.R.M. COLLEGE OF ENGINEERING

K.S.R.M. COLLEGE OF ENGINEERING

(H) /ksrmce.ac.in

Follow Us: 🔄 📵 💓 /ksrmceofficial



(UGC - AUTONOMOUS) Kadapa, Andhra Pradesh, India - 516003



Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

An ISO 14001:2004 & 9001: 2015 Certified Institution

Date: 12-04-2022

### Circular

All the B.Tech III SEM students are hereby informed that the Department of ECE is going to conduct certification course on "PCB Design" from 18/04/2022 to 29/04/2022. Interested students may register their names with respective faculty members on or before 16/04/2022.

For any queries contact,

Coordinator

Smt.T. Uma Maheswari, Assistant Professor, ECE Dept.,

HOD

Professor & H.O.D. Department of E.C.E. K.S.R.M. College of Engineering KADAPA - 516 003

Cc to:

The Management /Director / All Deans / All HODS/Staff / Students for information

The IQAC Cell for Documentation

# KSRM College of Engineering(Autonomous) PCB Design Attendance Sheet Date: 18422

		NAME OF THE CTUDENT	Sign	nature
s.no.	H.T.No.	NAME OF THE STUDENT	FN	AN
1	209Y1A0406	B MANASWITHA (W)	B. Marascoitha	B. Manawitta
2	209Y1A0411	BANGASH SHAFIKHA (W)	B. Shafikha	R. Chatikha
3	209Y1A0416	BIJINEPALLI RAJYALAKSHMI (W)	e-laigalakshmi	R. Rajyalakani
4	209Y1A0417	BOGEM SANGEETHA (W)	R. Singcetha	R. Sangacha
5	209Y1A0421	ABDULLAH	c-s. Abdullah	es Abdullah
6	209Y1A0426	CHAVALI ROHITHA YADAV (W)	C. Ropertrayoda	C-ROLLETTION polar
7	209Y1A0428	CHEMIKELA KAVYANJALI (W)		C. Kan younjoul
8	209Y1A0433	CHINTHA HARIPRIYA (W)	C. Haril Priya	C. Harilviya
9	209Y1A0436	DANDE BHARGAV	D. Rhangell	
10	209Y1A0441	DEVAGANI SWETHA (W)	D. swetha	D-swetha
11	209Y1A0447	ELLURU NITHYA SREE (W)	E. Mithya stee	Enlithyasree
12	209Y1A0454	GODLAVETI SAI PRATHAP	G. Sai Prathai	
13	209Y1A0465	JETTI NAGAMANI (W)	J. Nagomani	J- Naganber
14	209Y1A0471	KASETTI RAMYA SREE (W)	K. Ramya sile	K. Ramyasiec
15	209Y1A0472	(W) KETHIREDDY BHAGNA LAKSHMI	K. Bhagyal John	K. Thegya Lakshn
16	209Y1A0473	KONERU DEEPA ASRITHA (W)	K. Doepa A stithe	K. Deeps Asoth
17	209Y1A0474	KOVVURU LAVANYA (W)	K. Lavanya	K-randanka
18	209Y1A0478	LAKSHMIGARI POOJITHA (W)	L. Poojitha	L. Rojitha
19	209Y1A0482	MADDEPALLI SUJITHA RANI (W)	M-suff	rf. Suis
20	209Y1A0486	(W)MANNORU. VENKAJA PRECIHI		M. V Priethi
21	209Y1A0488	MAREPALLI SUSHMITHA (W)	M. Susbmitha	Hisushmeth a
22	209Y1A0491	MOOLE SAI SWARUPA (W)	m. Sai Swaret	a misaismany
23	209Y1A0495	MUTHUKURU BHAVITHA (W)	M.Bhaveho	
24	209Y1A0496	NAGAYAPALLE GEETHA (W)	N. Geetly	a N. Geet
25	209Y1A0499	NALLANI NAVYA (W)	N. Alduya	Minlarya
26	209Y1A04A1	NARPALA VIJAYALAKSHMI (W)		i N. Vijayalakohn
27	209Y1A04A2	NEELAKANTHAM PRIYA (W)	N. Priya	N. Priya
28	209Y1A04A3	NEELOLLA HARATHI (W)	N. Hagathe	N. Hayatthe
29	209Y1A04A6	PALLENNAGARI BHUMIKA (W)	P. Bhumilsa	6. Brownika
30	209Y1A04A7	PANDILLAPALLE NANDINI (W)	P. Nandini	P. nadhini
31	209Y1A04B0	PATUKURI MOUNIKA (W)	Pounika	P. Mounika.
32	209Y1A04B2	PENDEM USHA RANI (W)	Wha Pari	who Roni
33	209Y1A04B7	RAMIREDDY GARI BHARATHI (W)		R.B. Gragoiti
34	209Y1A04B8	RANGANI JYOTHIPRIYA (W)	e Tyothiprit	a p. Tyothiprix
35	209Y1A04C1	SABBASANI PRIYA (W)	S. Priyor	s. Priye?
36	209Y1A04C2	SANA YASHWANTH	5. Yashwant	
37	209Y1A04C5			S. Ayesha
38	209Y1A04C9		B. med Tayyor	
39	209Y1A04D		5. Sai	So Cari
40	209Y1A04D	SUDHA SUMANTH REDDY	5-SunardhRed	
41	209Y1A04D		A	ins.md. Fareduc
42	209Y1A04F0	VADUGURU ARUN KUMAR	Vegrun	Ve Freg

43	209Y1A04F2	VANGITI VARSHINI (W)	V. Varshini	V. Varshine
44	209Y1A04F8	YARRAKALVA MAHESWAR REDDY	Y. Maheswas Rath	
45	219Y5A0402	B.PALLAVI	B. pallavi	Bipallavi
46	219Y5A0403	B.PARIMALA	B. Parimala	B. Parimala
47	219Y5A0405	G.KAVYA	-G Kalupa	- Kauya
48	219Y5A0408	G.MAINA	GIMaina	G. maina
49	219Y5A0409	K.RAGHAVENDRA	k. Raghavendra	K.Raghaventra
50	219Y5A0411	M.MOUNIKA	M. Mounik	a M. Mounika
51	219Y5A0415	SANE ARUN KUMAR	S-Aron From	S. Ann tomas

Coordinator

G. HOD

Professor & H.O.D.

Department of E.C.E.

N.S.R.M. College of Engineering

KADAPA - 618 083.

#### **UNIT-I**

**Introduction to PCB:** Definition and Need of PCB, Background and History of PCB, Types of PCB, Classes of PCB Design, Terminology in PCB Design, Different Electronic design automation (EDA) tools and comparison.

### **UNIT-II**

Introduction to PCB tools: Introduction of PCB, LIVE WIRE & PCB WIZARD software installation.

Live wire software: Explanation of each and every component of PCB and some basic circuits in Live wire software, Button interfacing with LED circuit, Power circuit, LDR interfacing with LED circuit, Potentiometer interfacing with LED circuit in Livewire software. Button interfacing with motor circuit, 555 timer using LED blinking, fire alarm circuit, police siren circuit, 4026 decade counter circuit in Livewire software.

#### **UNIT-III**

PCB WIZARD: Introduction of PCB WIZARD software, Explanation of each and every components and basic PCB circuits in PCB WIZARD software. Button interfacing with LED using PCB designing, LDR interfacing with LED using PCB designing, Potentiometer interfacing with LED using PCB designing. 555 timer using LED blinking designing(Astable and Bistable), fire alarm circuit designing, traffic lights circuit designing, explanation of manual routing and auto routing designing in PCB wizard software.

### **UNIT-IV**

**EASYEDA:** Introduction of EASYEDA software, Explanation of each and every components and Explanation of basic PCB circuits LED, button, LDR, panic alarm, brightness control, Ac adapter, audio amplifier, common emitter IR sensor circuit, Astable and Bistable multivibrator using 555 timer circuit in EASYEDA software. Traffic lights circuit, motor circuit, explanation of 3D view, manual routing and auto routing designing in EASYEDA software.

### **UNIT-V**

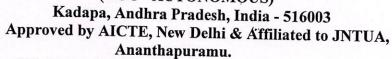
**EAGLE:** Introduction of EAGLE software, Explanation about circuit components, Basic Circuits explanation, explanation about auto routing and manual routing Astable and bistable circuit designing.

#### **Text Books:**

- 1. Walter Bosshart, "Printed Circuit Boards: Design and Technology", McGraw Hill Education.
- 2. Michael Dsouza, "PCB Design: Printed Circuit Board", Kindle Edition.



(UGC - AUTONOMOUS)



An ISO 14001:2004 & 9001: 2015 Certified Institution



## **Department of Electronics & Communication Engineering**

## **Certificate Course on PCB Design (18/04/2022 - 29/04/2022)**

### Schedule

S.No	Date	Time	Faculty	Topic
1	18/04/2022	3 PM to 4 PM		Inauguration
			Mr. ANUDEEP	Introduction to PCB Concepts
			Mr. JAYA SHANKAR	- Concepts
2	18/04/2022	4 PM to 5 PM	Mr. JAYA SHANKAR	Introduction to PCB Concepts
			Mr. ANUDEEP**	la de la concepta
3	19/04/2022	3 PM to 4 PM	Mr. ANUDEEP	Introduction to PCB Fabrication
			Mr. JAYA SHANKAR	and the second s
4	19/04/2022	4 PM to 5 PM	Mr. ANUDEEP	PCB Fabrication Methods
			Mr. JAYA SHANKAR	
5	20/04/2022	3 PM to 4 PM	Mr. ANUDEEP	Different IC 555
			Mr. JAYA SHANKAR	
6	20/04/2022	4 PM to 5 PM	Mr. ANUDEEP	Basic Circuits design using
			Mr. JAYA SHANKAR	LIVE WIRE
7	21/04/2022	3 PM to 4 PM	Mr .ANUDEEP	Different IC 555 Basic Circuits
			Mr. JAYA SHANKAR	design using LIVE WIRE
8	21/04/2022	4 PM to 5 PM	Mr .ANUDEEP	Different IC 555 Basic Circuits
			Mr. JAYA SHANKAR	design using LIVE WIRE
9	22/04/2022	9 AM to 12	Mr .ANUDEEP	Different IC 555 Basic Circuits
		Noon	Mr. JAYA SHANKAR	design using PCB Wizard
10	22/04/2022	1 PM to 4 PM	Mr. ANUDEEP ···	Different IC 555 Basic Circuits
			Mr. JAYA SHANKAR	design using PCB Wizard
11	24/04/2022	9 AM to 12	Mr. ANUDEEP	Different IC 555 Basic Circuits
		Noon	Mr. JAYA SHANKAR	design using PCB Wizard
12	25/04/2022	1 PM to 4 PM	Mr. ANUDEEP	Different IC 555 Basic Circuits
			Mr. JAYA SHANKAR	design using Easy EDA
13	26/04/2022	9 AM to 12	Mr. ANUDEEP"	Different IC 555 Basic Circuits
4.1		Noon	Mr. JAYA SHANKAR	design using Easy EDA
14	27/04/2022	1 PM to 4 PM	Mr. ANUDEEP	PCB Layout and etching process
			Mr. JAYA SHANKAR	. Sprans

15	28/04/2022	9 AM to 12 Noon	Mr. ANUDEEP Mr. JAYA SHANKAR	PCB Layout and etching process
16	29/04/2022	1 PM to 4 PM	Mr. ANUDEEP	PCB Layout and etching process
			Mr. JAYA SHANKAR	Valedictory

. ...

Coordinator(s)

. #

HOD

Professor & M.O.D.
Department of E.C.E.
K.S.R.M. College of Engineering
KADAPA - 516 003



### (UGC - AUTONOMOUS)

Kadapa, Andhra Pradesh, India - 516003 Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu. An ISO 14001:2004 & 9001: 2015 Certified Institution

### **Department of Electronics & Communication Engineering**

### **Certificate Course on PCB Design**

### **Attendance Sheet**

S. No	Roll Num	Name of the Student	18 /0 4/ 20 22	19 /0 4/ 20 22	20 /0 4/ 20 22	21 /0 4/ 20 22	22 /0 4/ 20 22	23 /0 4/ 20 22	25/ 04/ 20 22	26 /0 4/ 20 22	27 /0 4/ 20 22	28 /0 4/ 20 22	29/ 04/ 20 22
1	209Y1A0406	B MANA\$WITHA (W)	P	P	: A	P	P	P	P	P	· P	P	P
2	209Y1A0411	BANGASH SHAFIKHA (W)	P	P	P	P	P	P	P	P	A	P	P
3	209Y1A0416	BIJINEPALLI RAJYALAKSHMI (W)	P	P	P	P	P	A	P	P	P	8	P
4	209Y1A0417	BOGEM SANGEETHA (W)	P	p	A	P	P	P	P	P	P	P	R
5	209Y1A0421	CHABUKSAWAR SHAIK ABDULLAH	P	P	0	P	P	P	P	A	P	P	R
6	209Y1A0426	CHAVALI ROHITHA YADAV (W)	8	P	P	P	P	P	P	P	P	P	P
7	209Y1A0428	CHEMIKELA KAVYANJALI (W)	P	P	A	P	P	P	A	P	P	P	P
8	209Y1A0433	CHINTHA HARIPRIYA (W)	P	1	p	P	P	P	P	P	P	P	P
9	209Y1A0436	DANDE BHARGAV	P	P	P	P	9	P	P	P	P	P	ρ

								der Land					
10	209Y1A0441	DEVAGANI SWETHA (W)	P	P	P	P	A	P	P	A	P	P	P
11	209Y1A0447	ELLURU NITHYA SREE (W)	P	P	P	P	P	P	P	P	P	P	P
12	209Y1A0454	GODLAVETI SAI PRATHAP	P	P	P	D	P	P	A	P	P	P	P
13	209Y1A0465	JETTI NAGAMANI (W)	P	P	P	A	P	P	P	P	P	A	P
14	209Y1A0471	KASETTI RAMYA SREE (W)	P	P	P	P	A	1	P	P	P	P	P
15	209Y1A0472	KETHIREDDY BHAGYA LAKSHMI (W)	P	P	A	P	P	P	P	P	P	P	P
16	209Y1A0473	KONERU DEEPA ASRITHA (W)	P	P	P	P	P	A	P	A	P	A	P
17	209Y1A0474	KOVVURU LAVANYA (W)	P	A	P	P	P	P	P	P	P	P	P
18	209Y1A0478	LAKSHMIGARI POOJITHA (W)	P	P	P	P	P	P	P	P	A	P	P
19	209Y1A0482	MADDEPALLI SUJITHA RANI (W)	P	P	P	P	P	P	P	P	P	P	P
20	209Y1A0486	MANNURU VENKATA PREETHI (W)	P	P	P	P	P	P	P	P	P	P	P
21	209Y1A0488	MAREPALLI SUSHMITHA (W)	P	P	P	P	P	P	ρ	P	P	P	P
22	209Y1A0491	MOOLE SAI SWARUPA (W)	P	P	P	P	P	P	P	P	P	P	P
23	209Y1A0495	MUTHUKURU BHAVITHA (W)	P	P	P	P	P	P	P	P	P	P	P
24	209Y1A0496	NAGAYAPALLE GEETHA (W)	P	P	P	P	P	P	P	P	P	P	P
25	209Y1A0499	NALLANI NAVYA (W)	P	P	P	P	P	P	P	A	P	P	P
26	209Y1A04A1	NARPALA VIJAYALAKSHMI (W)	P	P	P	P	P	P	P	P	P	P	P
27	209Y1A04A2	NEELAKANTHAM PRIYA (W)	P	P	P	þ	P	P	P	A	P	P	P

28	209Y1A04A3	NEELOLLA HARATHI (W)	P	P	P	P	P	P	A	P	P	P	P
29	209Y1A04A6	PALLENNAGARI BHUMIKA (W)	P	P	P	P	P	P	P	P	P	P	<del>f</del>
30	209Y1A04A7	PANDILLAPALLE NANDINI (W)	P	P	P	P	P	P	P	P	P	P	P
31	209Y1A04B0	PATUKURI MOUNIKA (W)	P	P	A	P	P	P	A	P	P	P	P
32	209Y1A04B2	PENDEM USHA RANI (W)	P	P	A	P	P	P	P	A	P	P	P
33	209Y1A04B7	RAMIREDDY GARI BHARATHI (W)	P	P	P	P	P	P	P	P	P	P	P
34	209Y1A04B8	RANGANI JYOTHIPRIYA (W)	P	P	P	P	A	P	P	P	P	P	P
35	209Y1A04C1	SABBASANI PRIYA (W)	P	P	P	P	A	P	P	P	P	P	P
36	209Y1A04C2	SANA YASHWANTH	P	P	P	P	P	P	P	P	P	P	P
37	209Y1A04C5	SHAIK BEEBI AYESHA SIDDIKA (W)	P	P	P	P	P	P	P	P	P	P	A
38	209Y1A04C9	SHAIK MOHAMMED TAYYAB	P	P	P	P	P	A	A	P	P	p	P .
39	209Y1A04D4	SINGANAMALA VENKATA SAI	P	P	P	P	P	P	P	P	P	P	P
40	209Y1A04D6	SUDHA SUMANTH REDDY	P	P	P	P	P	P	P	P	P	P	P
41	209Y1A04D9	SYED MOHAMMED FAREEDUDDIN	P	P	P	P	4	P	P	P	P	P	P
42	209Y1A04F0	VADUGURU ARUN KUMAR	P	P	P	P	8	P	P	P	P	P	P
43	209Y1A04F2	VANGITI VARSHINI (W)	P	P	P	P	P	P	P	P	P	P	P
44	209Y1A04F8	YARRAKALVA MAHESWAR REDDY	P	P	P	P	A	P	P	P	P	ρ	P

45	219Y5A0402	B.Pallavi	P	P	P	P	P	P	P	P	$\theta$	P	P
46	219Y5A0403	B.Parimala	P	P	P	P	p	P	A	P	P	P	P
47	219Y5A0405	G.Kavya	P	P	P	P	P	P	P	P	P	P	P
48	219Y5A0408	G.maina	P	A	P	P	P	P	P	P	A	P	P
49	219Y5A0409	K.Raghavendra	P	P	P	A	P	P	P	P	P	P	P
50	219Y5A0411	M.Mounika	P	P	P	P	P	P	P	P	P	P	P
51	219Y5A0415	Sane Arun Kumar	P	P	P	P	P	P	P	P	P	P	P

٠.

Coordinator

٠.

· ·

HOD

Professor & M.O.O.

Department of E.C.E.

K.S.R.M. College of Engineering

KADAPA - 516 003





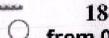
Kadapa, Andhra Pradesh, India - 516003 Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.





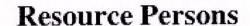
# **Department of ECE**

Certification Course on "PCB DESIGN" in Association with APSSDC



18-04-2022

from 09: 00AM to 04: 00 PM



Sri Kuldeep & Sri Shankar Technical Skill Trainers from APSSDC.

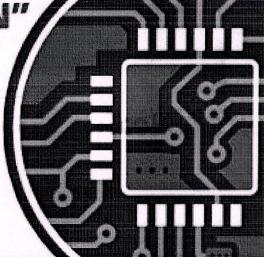


SJ IOT LAB-SJ215

### Coordinator

Smt.T. Uma Maheswari

**Assistant Professor** 



Dr G Hemalatha HOD

Dr. V.S.S. Murthy

Principal

Dr. Kandula Chandra Obul Reddy

Smt. K. Rajeswari

Sri K. Madan Mohan Reddy

Sri K. Raja Mohan Reddy

Managing Director

Correspondent Secretary,

Vice-Chairman

Chairman

Tresurer



ksrmceofficial



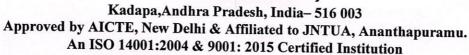
www.ksrmce.ac.in



© 8143731980, 8575697569



(UGC-AUTONOMOUS)

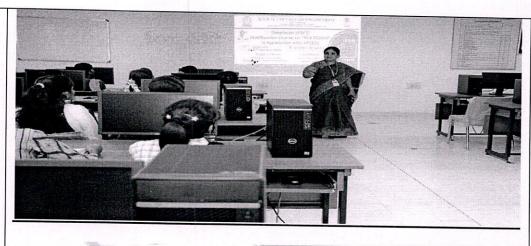




## **ELECTRONICS & COMMUNICATION ENGINEERING**

Activity	Danaut	
Activity	Report	

Name of the Activity	PCB DESIGN
Type of the Activity	Certification Course
Date of Activity	18-04-22 to 29-04-22
Details of Participants	ECE IV sem Students
Coordinator	T.Umamaheswari
Organizer/Supportin g Team	Dept. of ECE
Report	The Department of ECE in association with APSSDC organized a six day Certification Course from 18/04/22 to 29/04/22. More than 50 participants successfully completed the course. On 18 <sup>th</sup> , Prof. G. Hemalatha, Head of the department, Electronics and Communication Engineering, addressed the gathering and welcomed all the participants. She shared the experience of conducting the events. Six hours per day, for 6 days, a total of 36 hours were successfully conducted with experienced subject's experts from APSSDC. The Valedictory function was conducted on 29/04/22 from 03.00PM-04.00PM. More than 50 participants successfully received participation certification. Many of the participants gave positive feedback and are able to design PCBs in software and Hardware.





**Photos** 

Coordinator

HOD

Professor & H.O.D. Department of E.C.E.

K.S.R.M. College of Engineering KADAPA - 516 003

/ksrmce.ac.in Follow Us: 🛐 🞯 💓 /ksrmceofficial







(UGC - Autonomous)

Kadapa, Andhra Pradesh, India - 516003 Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

# Certificate of Participation

This is to certify that

Mr/Ms SHAIK BEEBI AYESHA SIDDIKA

with



Roll. No. 20941A04C5

has attended the Certification course on "PCB DESIGN" from 18th to 23rd April, 2022 organized by Dept. of Electronics and Communication Engineering in Association with APSSDC

Coordinator

Smt T.Umamaheswari Asst.Professor, ECE Dr. G. Hemalatha

HOD, ECE

V. S.S. muly

Prof V S S Murthy Principal



(UGC - Autonomous)

Kadapa, Andhra Pradesh, India - 516003 Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.





Mr/Ms BOGGULA PARIMALA with Roll.No. 219Y5A0403 has attended the Certification course on "PCB Design" from 18-04-22 to 29-04-22 organized by Dept. of Electronics and Communication Engineering.

Mrs.T.Umamaheswari
Co-cordinator

Dr. G. Hemalatha HOD, ECE Prof V S S Murthy
Principal



(UGC - Autonomous)

Kadapa, Andhra Pradesh, India - 516003 Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.



# Certiliecte of Participation

This is to certify that

Mr/Ms SANE ARUN KUMAR with Roll.No. 219Y5A0415 has attended the Certification course on "PCB Design" from 18-04-22 to 29-04-22 organized by Dept. of Electronics and Communication Engineering.

Mrs.T.Umamaheswari
Co-cordinator

Dr. G. Hemalatha HOD, ECE Prof V S S Murthy
Principal

# Feedback form on Certificate Course

PCB DESIGN(18/04/2022 to 29/04/2022)

* R	equired	
1.	Roll Number *	
2.	Name of the Student *	
3.	B.Tech Semester *  Mark only one oval.	
	☐ I SEM	
	☐ III SEM	
	○ IV SEM	
	○ V SEM	
	○ VI SEM	
	◯ VII SEM	

VIII SEM

	4.	Branch *	
		Mark only one oval.	
		Civil Enginerring	
		EEE	
		◯ ME	
		ECE	
		CSE	
		☐ AI&ML	
			,
	5.	Email ID *	
)			
	6.	Is the course content meet your exceptation. *	
		Mark only one oval.	
		Yes	
		No	
	7.	Is the lecture sequence well planned. *	
		Mark only one oval.	
		Strongly disagree  Disagree	
		Neutral	
		Agree	
		Strongly agree	
			· 5·

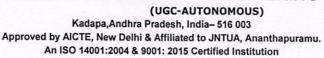
	8.	The contents of the course is explained	with examples. *
		Mark only one oval.	
		Strongly disagree	30
		Disagree	
		Neutral	
		Agree	
		Strongly Agree	
	9.	Is the level of course high. *	
		Mark only one oval.	
)		Strongly disagree	· •
		Disagree	
		Neutral	
		Agree	
		Strongly Agree	
	10.	Is the course exposed you to the new l	knowledge and practice. *
		Mark only one oval.	
		Strongly disagree	•
		Disagree	
		○ Neutral	
		Agree	
		Strongly Agree	

	11.	Is the lecture clear and easy to understand. *
		Mark only one oval.
		Strongly disagree  Disagree  Neutral Agree
		Strongly agree
	12.	Rate the value of the course increasing your skills. *  Mark only one oval.
		Strongly disagree
		Disagree
		Neutral
		Agree
		Strongly Agree
	13.	Any suggestions
)		
		·

This content is neither created nor endorsed by Google.

Google Forms







Department of Elelctronics & Communication Engineering Feed back of certification Course on PCB Design

S.no,	Roll Number	Name of the Student	Organization of Course and session	Clarity in content delivery.	Content is relevant and useful	Adequate opportunity to	Overall rating
1	209Y1A0405	A.shashikala	Good	Very good	Good	Good	Good
2	209Y1A0411	B. Shafikha	Excellent	Excellent	Excellent	Excellent	Excellent
3	208Y1A0428	C.Kavyanjali	Excellent	Excellent	Excellent	Excellent	Excellent
4	209Y1A0433	C.Haripriya	Excellent	Very good	Excellent	Excellent	Excellent
5	209Y1A0447	E. Nithya Sree	Very good	Fair	Very good	Very good	Very good
6	209Y1A04D6	SUDHA SUMANTH RE	Good	Good	Good	Good	Good
7	219Y5A0415	SANE ARUN KUMAR	Excellent	Excellent	Excellent	Excellent	Excellent
8	219y5a0408	GORLA MAINA	Excellent	Excellent	Excellent	Excellent	Excellent
9	209Y1A04C9	Shaik Mohammed Tay	Very good	Excellent	Very good	Excellent	Excellent
10	219y5a0409	Karella raghavendra	Excellent	Very good	Very good	Excellent	Excellent
11	209Y1A04C2	Sana yashwanth	Very good	Very good	Very good	Very good	Very good
12	209y1a0446	ELADI STALIN CHAKE	Excellent	Poor	Poor	Poor	Poor
13	209Y1A0454	G.Sai Prathap	Excellent	Excellent	Excellent	Excellent	Excellent
14	209y1a04c1	S. Priya	Excellent	Very good	Very good	Very good	Excellent
15	209Y1A04C5	SHAIK. BEEBI AYESH	Excellent	Excellent	Excellent	Fair	Excellent
16	209Y1A04D9	Syed Mohammed Fare	Excellent	Excellent	Excellent	Excellent	Excellent
17	219Y5A0403	B. Parimala	Excellent	Excellent	Very good	Very good	Excellent
18	219y5a0402	B. Pallavi	Excellent	Very good	Excellent	Very good	Excellent
19	219Y5A0411	Meesala mounika	Very good	Very good	Good	Very good	Excellent
20	209y1a04f8	Yarrakalva Maheswarr	Excellent	Very good	Very good	Excellent	Excellent
21	209y1a0426	C. Rohithayadav	Good	Excellent	Very good	Very good	Excellent
22	209y1a04f0	Arun Kumar	Good	Good	Very good	Good	Very good
23	209Y1A0441	D.Swetha	Very good	Very good	Excellent	Good	Good
24	209Y1A0416	B.Rajya lakshmi	Excellent	Excellent	Excellent	Excellent	Excellent
25	209Y1A0406	B.Manaswitha	Very good	Very good	Very good	Very good	Very good
26	209y1a04d0	Shaik Waseet	Very good	Very good	Very good	Very good	Very good
27	209y1a0421	C.s.Abdullah	Very good	Excellent	Excellent	Excellent	Excellent
28	219Y5A0404	E.KIRAN KUMAR	Good	Good	Good	Good	Good

29	209Y1A0416	BIJINEPALLI RAJYAL	Very good	Fair	Very good	Very good	Very good
30	209Y1A0417	BOGEM SANGEETHA	Good	Good	Good	Good	Good
31	209Y1A0421	CHABUKSAWAR SHA	Excellent	Excellent	Excellent	Excellent	Excellent
32	209Y1A0426	CHAVALI ROHITHA Y	Excellent	Excellent	Excellent	Excellent	Excellent
33	209Y1A0428	CHEMIKELA KAVYAN	Very good	Excellent	Very good	Excellent	Excellent
34	209Y1A0433	CHINTHA HARIPRIYA	Excellent	Very good	Very good	Excellent	Excellent
35	209Y1A0436	DANDE BHARGAV	Very good				
36	209Y1A0441	DEVAGANI SWETHA	Excellent	Poor	Poor	Poor	Poor
37	209Y1A0447	ELLURU NITHYA SRE	Excellent	Excellent	Excellent	Excellent	Excellent
38	209Y1A0454	GODLAVETI SAI PRA	Excellent	Very good	Very good	Very good	Excellent
39	209Y1A0465	JETTI NAGAMANI (W)	Very good	Excellent	Very good	Excellent	Excellent
40	209Y1A0471	KASETTI RAMYA SRE	Excellent	Very good	Very good	Excellent	Excellent
41	209Y1A0472	KETHIREDDY BHAGY	Very good				
42	209Y1A0473	KONERU DEEPA ASR	Excellent	Poor	Poor	Poor	Poor
43	209Y1A0474	KOVVURU LAVANYA	Excellent	Excellent	Excellent	Excellent	Excellent
44	209Y1A0478	LAKSHMIGARI POOJI	Excellent	Very good	Very good	Excellent	Excellent
45	209Y1A0482	MADDEPALLI SUJITH	Very good				
46	209Y1A0486	MANNURU VENKATA	Excellent	Poor	Poor	Poor	Poor
47	209Y1A0488	MAREPALLI SUSHMIT	Excellent	Excellent	Excellent	Excellent	Excellent

G. H. A. HOD

Professor & H.O.D. Department of E.C.E. K.S.R.M. College of Engineering KADAPA - 818 003.

# K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003 DEPARTMENT OF ELECTRONICS AND COMMINICATION ENGINEERING VALUE ADDED/CERTIFICATE COURSE ON PCB Design FROM 18-04-22 to 29-04-22

### AWARD LIST

S.No	Roll Number	Name of the Student	Marks Obtained
1.	209Y1A0406	B MANASWITHA (W)	08
2.	209Y1A0411	BANGASH SHAFIKHA (W)	06
3.	209Y1A0416	BIJINEPALLI RAJYALAKSHMI (W)	08
4.	209Y1A0417	BOGEM SANGEETHA (W)	09
5.	209Y1A0421	CHABUKSAWAR SHAIK ABDULLAH	05
6.	209Y1A0426	CHAVALI ROHITHA YADAV (W)	05
7.	209Y1A0428	CHEMIKELA KAVYANJALI (W)	06
8.	209Y1A0433	CHINTHA HARIPRIYA (W)	07
9.	209Y1A0436	DANDE BHARGAV	08
10.	209Y1A0441	DEVAGANI SWETHA (W)	09
11.	209Y1A0447	ELLURU NITHYA SREE (W)	08
12.	209Y1A0454	GODLAVETI SAI PRATHAP	09
13.	209Y1A0465	JETTI NAGAMANI (W)	05
14.	209Y1A0471	KASETTI RAMYA SREE (W)	08
15.	209Y1A0472	KETHIREDDY BHAGYA LAKSHMI (W)	09
16.	209Y1A0473	KONERU DEEPA ASRITHA (W)	06
17.	209Y1A0474	KOVVURU LAVANYA (W)	07
18.	209Y1A0478	LAKSHMIGARI POOJITHA (W)	08

19.	209Y1A0482	MADDEPALLI SUJITHA RANI (W)	09
20.	209Y1A0486	MANNURU VENKATA PREETHI (W)	09
21.	209Y1A0488	MAREPALLI SUSHMITHA (W)	08
22.	209Y1A0491	MOOLE SAI SWARUPA (W)	08
23.	209Y1A0495	MUTHUKURU BHAVITHA (W)	08
24.	209Y1A0496	NAGAYAPALLE GEETHA (W)	05
25.	209Y1A0499	NALLANI NAVYA (W)	05
26.	209Y1A04A1	NARPALA VIJAYALAKSHMI (W)	07
27.	209Y1A04A2	NEELAKANTHAM PRIYA (W)	07
28	209Y1A04A3	NEELOLLA HARATHI (W)	07
29	209Y1A04A6	PALLENNAGARI BHUMIKA (W)	08
30	209Y1A04A7	PANDILLAPALLE NANDINI (W)	08
31	209Y1A04B0	PATUKURI MOUNIKA (W)	09
32	209Y1A04B2	PENDEM USHA RANI (W)	09
33	209Y1A04B7	RAMIREDDY GARI BHARATHI (W)	08
34	209Y1A04B8	RANGANI JYOTHIPRIYA (W)	08
35	209Y1A04C1	SABBASANI PRIYA (W)	05
36	209Y1A04C2	SANA YASHWANTH	08
37	209Y1A04C5	SHAIK BEEBI AYESHA SIDDIKA (W)	09
38	209Y1A04C9	SHAIK MOHAMMED TAYYAB	09
39	209Y1A04D4	SINGANAMALA VENKATA SAI	08
40	209Y1A04D6	SUDHA SUMANTH REDDY	07
41	209Y1A04D9	SYED MOHAMMED FAREEDUDDIN	07
42	209Y1A04F0	VADUGURU ARUN KUMAR	07
43	209Y1A04F2	VANGITI VARSHINI (W)	08

44	* * *	YARRAKALVA MAHESWAR	08
	209Y1A04F8	REDDY	X
45	219Y5A0402	B.Pallavi	08
46	219Y5A0403	B.Parimala	08
47	219Y5A0405	G.Kavya	09
48	219Y5A0408	G.maina	04
49	219Y5A0409	K.Raghavendra	07
50	219Y5A0411	M.Mounika	06
51	219Y5A0415	Sane Arun Kumar	03

Coordinator

HoD

Professor & H.O.D.
Department of E.C.E.
K.S.R.M. College of Engineering
KADAPA - 518 083

## K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003 DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### VALUE ADDED /CERTIFICATE COURSE ON

### PCB Design FROM 18-04-22 to 29-04-22

### ASSESSMENT TEST

Rol	II N	umber: <u>20</u> °	BOYLANYPE	Name of the	Student: B. M	anaswiha
		15 Min		(Objective Q		Max.Marks: 10
No	te: A	Answer the fol	lowing Questic	ons and each qu	estion carries one mar	k.
	1.	accordance t a) Removal o	to the supply li of heat	ines for	lation of stray curren	[8]
	2.	What is a fire	m structure w	ith targets and	d planes embedded	in it known as
		a)Electrical De			c) System	d) PCB [ 🔴 ]
	3.	Where the co	omponents pl	laced on the b	oard are soldered?	[ 🔞 ]
		a)Traces	b) Planes	c) Metal Pads	d) Regions	
						/
	4.		ayers does a l		ANGER FORCESTOR DE DE SERVICIO DE GASET ANGENES	1 ()
		, ,	.5		d) All Mentioned Abo	ve
	5.			egories of PCB		l A
		a)Rigid	350	(5)	d) All Mentioned Abo	ve
	6.		monly used ir		N -701 - 1 - 1 - 1 - 1 - 1 - 1	I B
	15-52-10	a)Rigid	180		d) All Mentioned Abo	/
	7.				mpared to standard	boards?[
		a)Less	b) More	c) Severe	d) Moderate	
	8.	How a PCB	board can be	designed initia	ally?	[ D ]
		a)Using a Har	rdware	b) Usi	ng CAD Tools	
		c) Using Elect	tronic Devices	d)Usii	ng Equipment's	
	9.	What is inclu	uded in library	y CAD parts in	PCB design?	[ A ]
		a) Schematic	Symbols	b) Simulation	Models	

d) All Mentioned Above

d) a & b

b) Vendor Part Numbers

10. Validation in pre-layout of PCB design involves verification of

c)PCB Layout Footprints

c)Virtual Private Network

a) Manufacturer Part Numbers

### K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003 DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING VALUE ADDED /CERTIFICATE COURSE ON

### PCB Design FROM 18-04-22 to 29-04-22

### ASSESSMENT TEST

Roll Number:			Name	of the	Student:			-
Time:	15 Min		(Object	tive Q	uestions)		Max.M	larks: 10
Note: A	Answer the fol	llowing Que	stions and ea	ch que	estion carries one m	ark.		
1.	accordance	to the suppl of heat	y lines for _	b) Isol	ation of stray curre		of PCB ir [	]
2.	What is a fir	m structure	e with targe	ts and	l planes embedde	d in it k	nown as	<b>;</b>
	a)Electrical D	evice b0	Machine		c) System	d) P	CB [	]
3.	Where the c	omponents	s placed on	the bo	oard are soldered	?	[	]
	a)Traces				d) Regions			
			D0D I				r	1
4.	How many I				d) All Montioned A	hove	L	]
5	a)Single What are th				d) All Mentioned A s?	DOVE	Г	]
٦.	a)Rigid				d) All Mentioned A	bove		
6.	FR-4 is com						[	]
	a)Rigid				d) All Mentioned A			
7.	Flexible boa	ards have _	thickne	ess co	mpared to standa	rd boar	ds?[	]
	a)Less	b) More	c) Seve	re	d) Moderate			
8.	How a PCB	board can	be designe	d initia	ally?		[	]
	a)Using a Ha				ng CAD Tools			
					ng Equipment's			
9.	What is inc	luded in libi	rary CAD pa	rts in	PCB design?			1
	a) Schematic	c Symbols	b) Simu	ulation	Models			
	c)PCB Layou	ut Footprints	d) All M	1ention	ed Above			
10	). Validation i	in pre-layou	t of PCB de	sign i	nvolves verificatio	n of	[	]
	a)Manufacti	urer Part Nun	nbers	b)Ven	dor Part Numbers			
	c)Virtual Priv	vate Network		d) a &	b			

### K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003 DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

## VALUE ADDED /CERTIFICATE COURSE ON PCB Design FROM 18-04-22 to 29-04-22

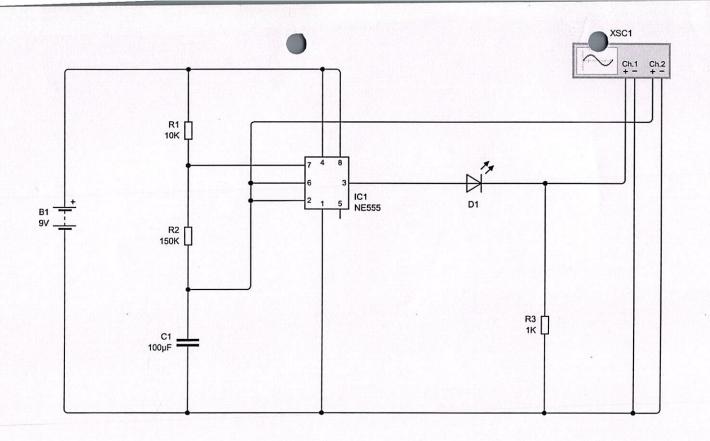
### ASSESSMENT TEST

Roll	Νι	umber: <u>20941AC</u>	)441_Name	of the	Student: _	1).	SWA	rtha		
			(Object					Max.M	arks: 10	
Note	: A	answer the following (	Questions and ea	ach que	estion carrie	es <b>one</b> m	iark.			
1		High current circuits are purposely located or placed near the edge of PCB in accordance to the supply lines for [B]  a) Removal of heat b) Isolation of stray current c) Reduction of path length d) All of the above								
2		What is a firm struc	ture with targe	ets and	l planes er	mbedde	d in it kn	own as		
		a)Electrical Device	b0 Machine		c) System		d) PC	B [	]	
3		Where the compone	ents placed on	the bo	oard are so	oldered	?			
		a)Traces b) Plan	nes c) Meta	al Pads	d)	Regions				
4		How many layers do						[ C	]	
			ıble c) Mult			tioned Al	bove	- A-1	1	
3	٠.	What are the general a)Rigid b) Flex	c categories o			tioned A	bove	[ "1	1	
6	<b>.</b>	FR-4 is commonly u			-,			[ B	]	
		a)Rigid b) Flex	c) Meta	al-core	d) All Men	tioned A	bove	_		
7	<b>7</b> .	Flexible boards hav					rd board	ls?[ C	]	
		a)Less b) Mor	re c) Seve	ere	d) Modera	ite				
8	3.	How a PCB board c						D		
		<ul><li>a)Using a Hardware</li><li>c) Using Electronic De</li></ul>			ng CAD Too					
(	)	What is included in						[A		
	•	a) Schematic Symbols				AE-2016			•	
		c)PCB Layout Footpri			ed Above					
0.0	10	Validation in pre-lay	AND THE PERSONNEL CONTRACTOR OF THE PERSONNEL CONTRACTOR O			rificatio	n of	-A	1	
	٠.	a)Manufacturer Part N			dor Part Nu				F.	
		c)Virtual Private Netw		d) a &						

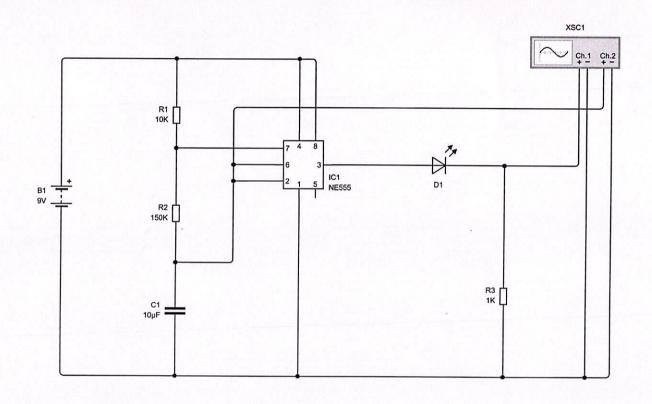
### K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003 DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING VALUE ADDED /CERTIFICATE COURSE ON

PCB Design FROM 18-04-22 to 29-04-22

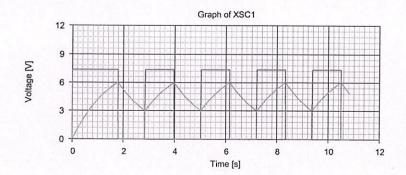
Roll N	umber: _	20971AC	482	ASSESSMEN Name of the		P. Usha		
	15 Min			(Objective (	()uestions		Max.Mark	s: 10
Note:	Answer th	e following	Question	s and each qu	estion carrie	s one mark.		
1.	accorda a) Remo	nce to the soval of heat	upply lin	posely locate es for b) Iso d) All	 lation of str		of PCB in	
2.	What is	a firm stru	cture wit	h targets an	d planes en	nbedded in it k	nown as	1
	a)Electric	cal Device	b0 Mac	hine	c) System	d) P	CB [ AT	
3.	Where t	he compon	ents pla	ced on the b	oard are sc	oldered?	[3]	/
	a)Traces	b) Pla	nes	c) Metal Pads	d) I	Regions		
4.		any layers o		CB have?	d) All Mont	tioned Above	14	
5	a)Single What ar			ories of PCE		lioned Above	[ <del> </del>	
٥.	a)Rigid			c) Metal-core		tioned Above		
6.	FR-4 is	commonly					[13]	/
	a)Rigid			c) Metal-core			-l-2r / 1	
7.						standard boar	as! [ ]	
				c) Severe		te	. 0 1	
8.				esigned initi			101	
	, .	a Hardware		b) Us d)Usi				
9.				CAD parts in			[ A ]	
		matic Symbo		b) Simulation				
	c)PCB L	ayout Footpi	rints	d) All Mentio	ned Above			
10	). Validat	ion in pre-la	ayout of	PCB design	involves ve	rification of	[ A ]	
		facturer Part			ndor Part Nur			
		l Private Net		d) a 8	& b			



# Astable Multivibrator Using 555 Timer

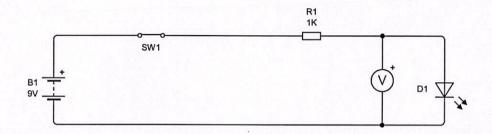


## **Output Waveforms**

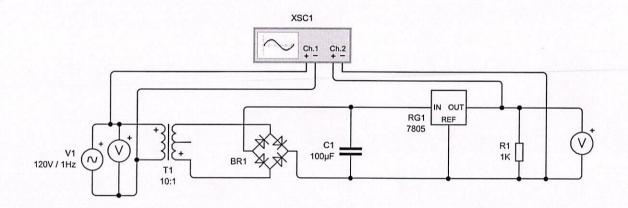


Astable.lvw

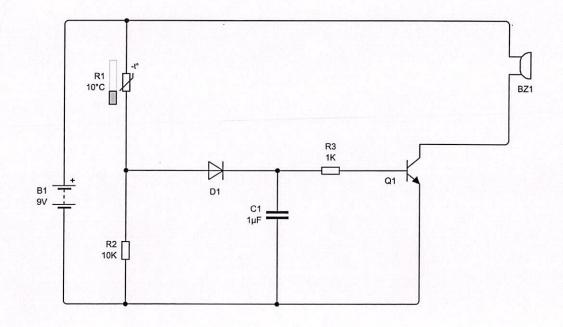
## Button Interfacing With LED



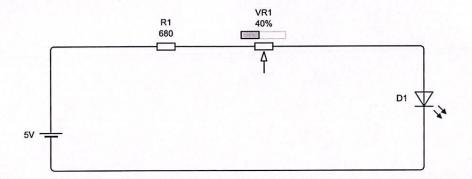
## Design of Regulated Power Supply



## Fire Alarm Circuit



# Light Depandant Resistor LDR



LDR.lvw

# Power Circuit

