

Sindalagundu post, Dindigul-624 002, Tamilnadu. Ph: 0451-2448800 (Approved by AICTE, Affiliated to Anna University, Chennai Accredited by NAAC)

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Technology Training Programme on Industrial Automation using PLC/SCADA



2022-23 (Even Semester) II Year EEE (20.02.2023 to 24.02.2023

&

27.02.2023 to 03.03.2023)

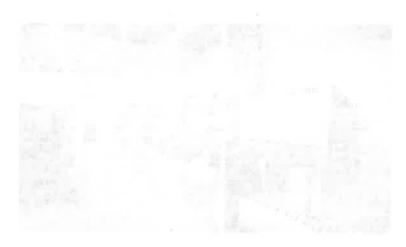
Trained by

Spot Light Technology, Dindigul

A DOMESTIC AND A STATE OF A PARTY OF THE ART THE PARTY OF A PROPERTY OF A PARTY OF A PAR

STANDARD BUT THE STANDARD STAN

The maining framework had a substantial property gainst a gainst a state of the substantial property of the substa



TART TO A CALL OF THE STATE OF

die de la complete de

and the second second second

From

Dr. G.Mohan Babu,
Professor & Head,
Department of Electronics and Electronics Engineering,
SSM Institute of Engineering and Technology,
Dindigul-02

To The Principal, SSM Institute of Engineering and Technology, Dindigul-02

Respected Sir,

Sub: Requesting Approval of conducting Technological Teaching for II Year EEE Students-Reg

The Department of EEE has planned to conduct Technological Teaching for Second Students on "Training on Industrial Automation using PLC/SCADA" which is scheduled to be conducted on the month of February 2023. In this regard, I request your permission to conduct this training on the scheduled month. The quotation details, syllabus and Training Schedule are attached with this letter. Kindly do the needful sir.

Name of the Technological Training	Name of the Company	Total Number of Students	No of Hours	Date	Amount	Coordinator/Faculty in Charges
Training on Industrial Automation using PLC/SCADA	SPOTLIGHT TECHNOLOGY, Dindigul.	51	60	20.02.23 to 24.03.23, 27.02.23 To 03.03.23	76500 Rs. 1,02,000	Mr.T.Arulkumar, AP / EEE Mr.P.Siva Subramanian, AP/EEE Mr.D.Manoj, AP/EEE

Resource Person Details:

Mr. A. Stephen Gaspar, Managing Director, Spotlight Technology, Dindigul.

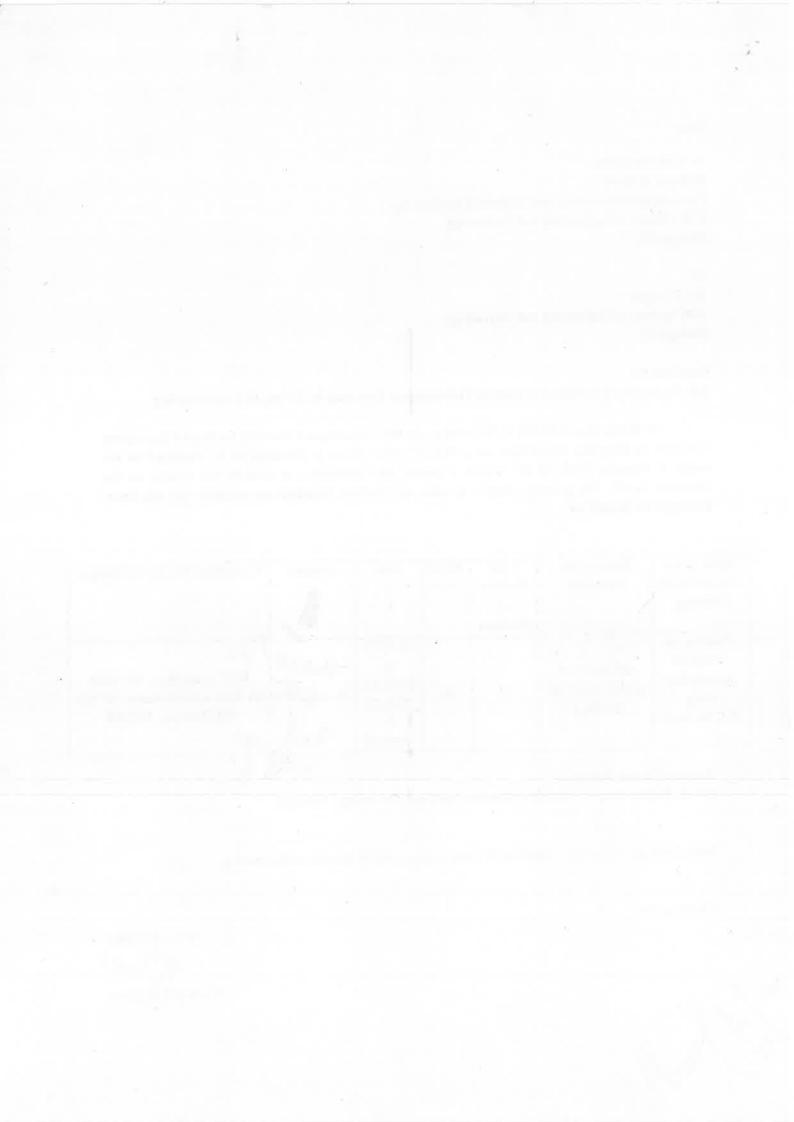
Note: Training Cost will be settled to the company two days before the end of training

Thanking you.

Yours faithfully

(Dr.G.Mohan Babu)

by Birthy Witers





(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai / Accredited by NAAC)

Dindigul-Palani Highway, Dindigul-624002

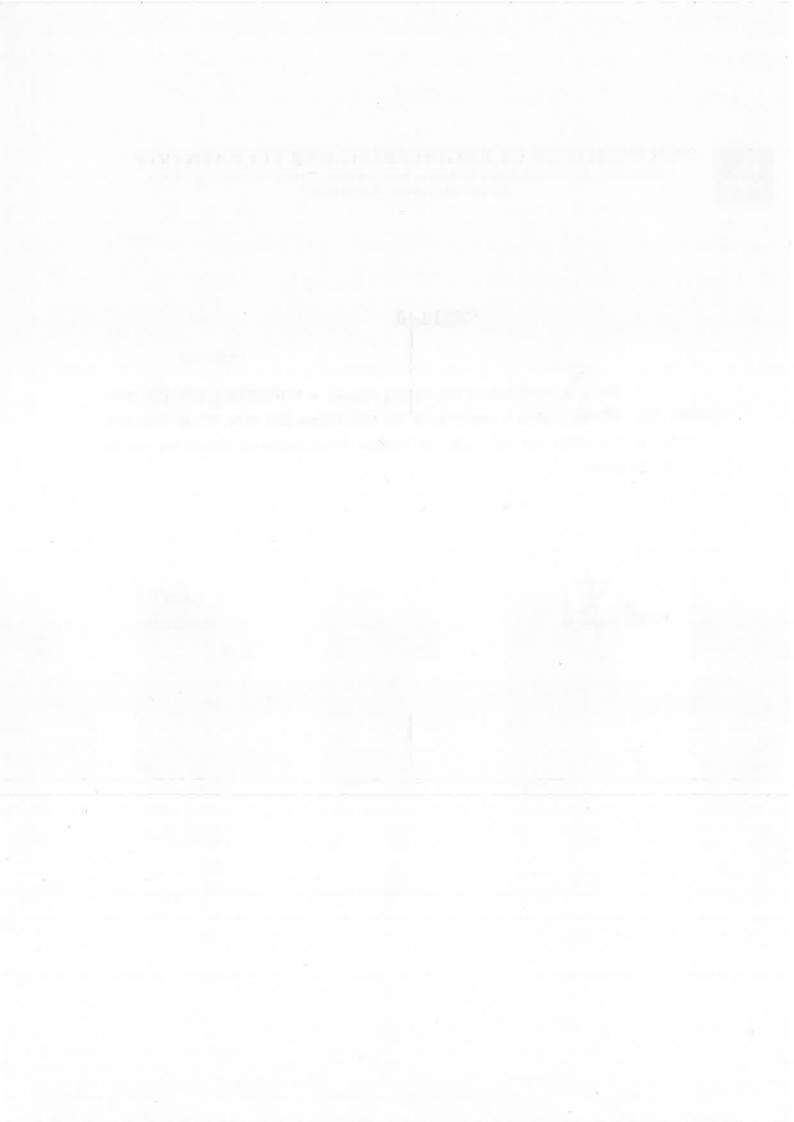
CIRCULAR

17/02/2023

This is to inform that ten days training program on **INDUSTRIAL AUTOMATION USING PLC \ SCADA** is going to conduct for II year EEE students from 20.02.2023 to 24.02.2023, 27.02.2023 to 03.03.2023 by Spot light Technology Dindigul. All the students are informed to attend and enrich your knowledge.

Faculty In-charge

HODEEE





Sindalagurdu post, Dindigul-624002, Tamilnadu.Ph:0451-2448800 DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

TECHNOLOGY TRAINING ON "INDUSTRIAL AUTOMATION USING PLC\SCADA"

						A	TENT	ATTENDANCE SHEET	SHEE	5.				Ì		ŀ		1		
2	c	Constitution	20.02.23	2.23	21 0223	2	2 02.23	23.02.23	23	24.02.23		27.02.23	28.02.23	2.23	01.03.23	23	02.03.23	23	03.03.23	23
S. No.	Reg.no.	Student Name	FN	AN F	FN AN	FN	AN	EN.	AN	FN AN	N FN	AN	FN	AN	FN	AN	Z.	AN	FN	AN
1	922121105001	ABIRAMI G	Calcian	CARLOW OF WELL CARLOW C	ALL BACK	STA CA PRO	から	Mad D	S. ADDING	play GA	CAN (A. DE	Me Calbaig	G DELL	C. Pert	A phid G	Though Co.	PENT C	2 157.2	· Phis C	Diright.
2	922121105003	AISHWARYA M,P	かくされ	wind and and on he de sing sing sing sing sing sing sing sing	AL DE	The for	And G	Obia 9	TO THE	THE OFFI	本社	J. 75 94	THE PERSON NAMED IN	Shirt.	1777	्र वर्	Act of the state o	A:200 A	13	3
3	922121105004	ARCHANA DEVI B	B.A.	BANDE AND RANDERS FOR READER OF BENDERAL STANDERS BANDERS BAND	136	B. A.	18. P	P. D. D.	BALB	Ja Tru	AR BA	Land & Land	R.D.	8-Pach	STACKS	Ded.	Prod ?	SPO 8	7	. Arch
4	922121105005	ARUN KUMAR S	S.ACY	SACHEN SABLES OF SAELS DE STANDER DE ALD SALD SALD STANDS LONDS LONDS AND STANDS LONDS AND STANDS A	15 14 S	12 5 AB	VS. DE	S.A.S	Shills	. Luls	4.8 mg	SP	S. Jan	S.A.B	S. Josh S	S Property	S	SANS	Sylves	Post
ru.	922121105006	BALAMURUGAN M	ABOP W	and degrader alson	and a	San San	Day 4	A STAN TO WE WANTED	San E	200	To K	A C. C.	SONE OF THE PROPERTY OF	34	adir.	W. W.	100 N	3	A.V.	N.Y.
9	922121105007	BALA SUBRAMANIYAN R	Rella	Rado Bala Bala Bala Bala Bala Rada Rada Rada Rada Rada Rada Rada Bala Rada Bala Bala Bala Bala Bala Bala	18 B3	Der Ball	& Role	do a	Pala	S. A.	Per Per	a Sala	Sala	Rala	ala B	SA SA	विष	S OPS	The T	a
7	922121105008	BHUVANESWARI G	香	अन्य तक मा ता के मा ति के कि के के कि के कि के कि के कि के कि	3.5	A STATE	100	0.5	香	Sala	3	である	G. 87.	C. Shill	3000	De la Contraction	13	70	To a	C. Shi
80	922121105009	CATHRIN NISHA M	P.Cali	nces mak make make makemak make make make ma	ake Mc	S. M. G.	No mich	W.Co.	F STOR	A-Contant	SH NG	the Prices	M.Col	Made	A Cale	1 Cale V	A Color	A Calar	Cole	बुरुप
6	922121105010	CELIN JAYAMARY A	A Cell	are of Archin redit or colina	Ca): 10 (PI P C	1. 1. CC	P. D. Col.	Acel F	र्वकुर्	कि व	Str A. Colle	Acelo	Doll	Calin	Colise P	1987	Colla	o ago	ego.
10	922112105011	DEENA DHAYALAN P A	P-100	AU MO THE THE PARTY TO THE PARTY BUT TO BE TO THE WAS TO THE WAS TO THE WASTER	AL P.	る古	1	NO.	E CO	DELEG	10 PC	でする	D'S	B	TO TO	à	TX CX	弘	30	2
11	922121105013	DIVYA J	Divya	Divya Divya Bit B. B. B. Caris pive and ond pive side ond pive and pive	4	de	SNO -	MARA	BANG	NOW YOU	TA YOU	Strice &	Sylva	1876	And	BNIC	BAKA	S JANE	BURG	ANIA.
12	922121105014	DOMINIC SCAPLARRAJ A.	dry	dry Day Date N. B.	Oth M.S	A.E	60 80	1 Ba	A.O.	300 01	3. Q.E	A. O. S. A. B. A. D. A. S. O. B. D. O. B. D. O. B.	A.D.	D.B. (a. D. D. D.	1.00	4.0	A. Re A. De	A Second	A.B.
13	922121105015	EZHUMALAI NAGA VISHHU S	SAM	Jak 2012 6 42 92 92 92 92 12 8 12 8 12 8 12 8 12 8 1	L.S.	182	200	2	SPEDS	2000	8.546	163. S. Ju	S.28	89.3	SUF	Sales	300	59.20	3	3
14	922121105016	GOPLJ	7-65	J-92 5 Gai T. Cau J. Cau J. Cau J. Cau J. Cau J. Cau J. Gai J. Cau J. Ca	Sing	36	136	1) Gi	5.60	J. G. B. J.	A. 3G	100 TO	'S	Yan.	I de	Ce.	ड	[Gal]	100	I Cra
15	922121105017	HARIHARAN T	T.Hasi Lasen	Tippos Tipos	San Le	100 THE TOP	on hase	n Presan	T.HAM	HASA IN	ten has	24 - Mar	haken	1 Hate	ings.	asan h	ASSA	- hate	havan h	horan
16	922121105018	JAYASRI S	(D)	Os Pro Re	. 3	S. C.	S. C.	R	30	場の日	Ties Ties	at Did it at some at an an at a tring a fait of a later at	T.	Too.	Die C	9	12	300	9	命
17	922121105020	KALEESWARAN M	JE W	W. TO THESE PHILES MISS IN TO THE MAST MAST MISS LAND WISH IN THE MASTER IN THE MASTER IN THE MASTER IN THE	2	MK W	ST M.R	NA CA	MA	MEN	FM W	NA LAN	智之	M. M.	N S	TOF	No.	METAN	屋	MAN
18	9221211050021	KAMALEEA	マイ	A had	T T	AN	W. K.	TO Y	A July	A LALA	M A L	JA M	July M	July 6	A MA	FMI	季	AMA	3	TO THE
19	922121105022	KAMILA SAJ K	Parkal Bank	KINGERION KIND KIND KIND KIND KIND KIND KIND KIN	13	77 90	47	KIN	To have	K toby	2	Cal Tr. Ja	には	100	1001	JAN 1	3	N. Park	更	3
20	922121105023	KANYA K	T	March Clariff Clariff Clariff Clariff Clariff Clariff Clariff Law Clariff Clar	值	The land		133	1	13	13	唐香	1	The second	CTEON	N. Contraction	13	TOTAL ELICIA PROPERTY AND ADDRESS OF THE PARTY	E.	电
21	922121105024	KARTHICK RAJ D	00	ochoor of other poly of the po	S. C.	0000	- Por	NOO.X	3	The Day	0010	000	DO	000	3	0	O O	0	G	3
22	922121105025	KAVIYA LAKSHMI S	だら立る	S Fres	× 7	is T	エネエ	ガンゴ	ざた	シブン	ご	からたらたらからからたらならならならならならならならならならならならならならなら	25.7	Z.	37	T.	ZZ.	ンプン		25
8	922121105026	KISHORE N	孝	天天	2	オイ	光	¥	美	天天天天天天天天	芝	老	芝芝芝		芝生		关条	¥	並	¥

33 32 37 36 35 34 42 4 4 39 38 51 50 49 48 47 8 \$ 4 43 922121105027 922121105028 922121105033 922121105044 922121105043 922121105042 922121105041 922121105036 922121105035 922121105034 922121105050 922121105049 922121105045 922121105303 922121105051 922121105302 MANIKANDANS LOKENDRA SOWMIYAN S NARMATHA DEVI P MANI VEL G MANIVASAGAN B RAGAVI R PRIYA DHARSHINI. PRADISH V S PONRAJ R MOHAMMED SIDDIQ MANOJKUMAR M VAIHLINYS SAWAY G REETHANA N RAJESHWARI SELVAKUMAR O SANTHOSH C YUVARAJ T M ITVHSIVA SRI SUPRAJA SRI SAKTHI J SHARMILA M SARAN RAHUL G SALAMON VINCENT RAI VANAJA G VEERACHAMY 9 TOPKS OF BY EVENENT STANDENT STANDEN KAKAKAKAKAKA ありからなったったったらんとのでいるとなったのなりなったったったいたった 5- Hail & Man & Ma 1, 82 X -----PY DY RED.S They have created created created from the committee of the created cr THE BOY DIVE BUILD die dred and Mary Trans THE OF B. GOVER BY B. CO. B. C いってため、ためてたらくだらいたらいためへんといるといるとはくてもくてもくできしてなっても、 Grand Bough Brand Bord Bord Brand Brand Brand Brand र्रेड रेड रेड रेड रेड रेड रेड रेड रेड रेड for the fire find find the to traited find the the the top the find the 0 and the soline Part Part Part Part Part Part Part or of the transfer of the particular of the part The state of the s Sold Sold Sold Dan Brit Brit Voise North Book North Boil Thory Promi Rigal Rigal Rigal Rigary Rigary Rigary Rigary Rigary Rigary 1. (0.4) (5.40) (5.40) A いるといるといるといるといるといるといるといると TOWARD SARE BEATING から から から から から Line of Lines Property Property Property September 1 part pest Story . Root Park Rock Rock 100 P Losy Crow John William & Short State of the State of t Rox F-M PB 2 30 15 30 5.50 TO E TI.

24

27 26 25



Alarm

TrendsRecipeODBC

OLEProject

Kit training PLC with SCADA linking

FACULTYNAME: STEPHEN GASPAR A

COURSE: PLC & SCADA

		SYLLABUS
	>	Introduction
,		Industrial Automation
7	>	120
,		About PLC & Brands
		 programming methods in PLC Ladder Logic Diagram Functional Block Diagram Structured Text Flow Chart
,	>	Programming exercise
1	A A	Introduction to cx-programmersoftware Tools in software
	A A A	Implementing programs in software Simulation Practical session
	>	PLC o Generate PLC Layout Modules o PLC parametric selection o Module layout o Insert PLC modules o Edit PLC module
		PLC Database File
		> SCADA Introduction
		o Designing the layout
>	•	Library



Sindalagundu post, Dindigul-624 002, Tamilnadu. Ph: 0451-2448800 (Approved by AICTE, Affiliated to Anna University, Chennai Accredited by NAAC)

Summary Report

The department of Electrical and Electronics Engineering, SSM Institute of Engineering and Technology conducted **Technology training on Industrial Automation using PLC/SCADA**. from 20th February 2023 to 24th February 2023 and 27th February 2023 to 3rd March. The course covered topics including Industrial Automation consists of an array of elements, which are well synchronized with each other. It performs functions such as controlling, sensing, supervision and monitoring of industrial processes. Functionally, industrial automation includes field-level (Sensors & Actuators), Control level, Supervisory, production control level (SCADA) and Information & enterprise level (MES & ERP). Students have attended assessment tests at the end of the course and certificates were issued. The students from second year EEE attended the course and got benefitted.





contract or communicate





(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai / Accredited by NAAC)

Dindigul - Palani Highway, Dindigul 624 002

Department of Electrical and Electronics Engineering

TECHNOLOGY TRAINING PROGRAMME ON INDUSTRIAL AUTOMATION USING PLC/SCADA

PLC/SCADA MULTIPLE CHOICE QUESTION

Name of the student:

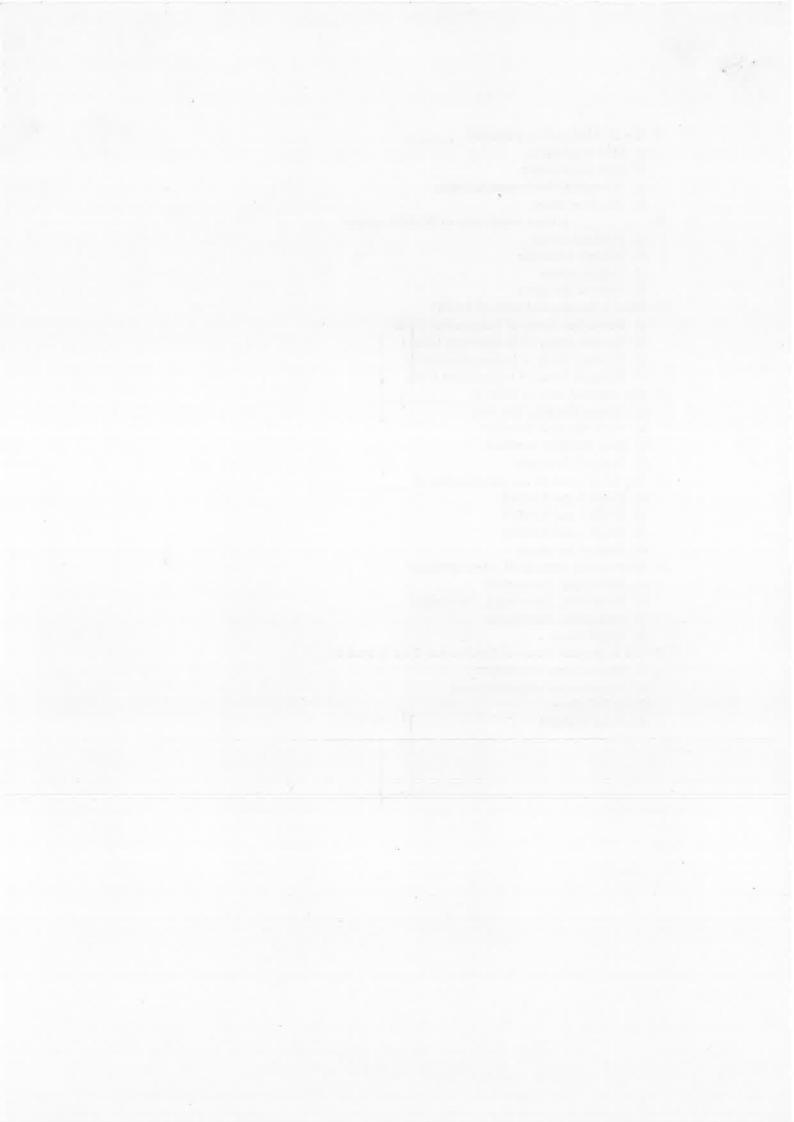
Year/sem:

Date:

- 1. The acronym PLC stands for
 - a) Pressure Load Control
 - b) Programmable Logic Controller
 - c) Pneumatic Logic Capstan
 - d) PID Loop Controller
- 2. In PLC programming, a retentive function is one that
 - a) Defaults to the "on" state
 - b) Is not reset after a power cycle
 - c) Defaults to the "off" state
 - d) Cannot be edited or deleted
- 3. A good application for a timed interrupt in a PLC program would be
 - a) A communications function block
 - b) A PID function block
 - c) A math function block
 - d) A motor start/stop rung
- 4. In a PLC, the scan time refers to the amount of time in which
 - a) the technician enters the program
 - b) timers and counters are indexed by
 - c) one "rung" of ladder logic takes to complete
 - d) the entire program takes to execute
- 5. The difference between online and offline PLC programming is
 - a) whether the PLC is running or stopped
 - b) whether the programming PC has internet connectivity
 - c) the type of programming cable used
 - d) where the edited program resides
- 6. Ladder logic programming consists primarily of
 - a) Virtual relay contacts and coils
 - b) Logic gate symbols with connecting lines
 - c) Function blocks with connecting lines
 - d) Text-based code
- 7. An OR function implemented in ladder logic uses
 - a) Normally-closed contacts in series
 - b) Normally-open contacts in series
 - c) A single normally-closed contact
 - d) Normally-open contacts in parallel

8. What is the largest integer number that a PLC counter function can reach if it uses a 16 bit register?
a) 32,768
b) 65,535
c) 65,536
d) 65,537
9. The part that monitors the inputs and makes decisions in a PLC is the CPU.
a) True
b) False
10. In a PLC "I" is used for output and "Q" is used for input
a) True
b) False
11. To increase the number of inputs and outputs of the PLC, one can use expansion modules.
a) True
b) False
12. An example of discrete (digital) control is
a) Varying the volume of a music system
b) Turning a lamp ON or OFF
c) Varying the brightness of a lamp
d) Controlling the speed of a fan
13. The is moved toward the relay electromagnet when the relay is on.
a) Armature
b) Coil
c) NO contact
d) NC contact
14. Which of the following RLL applications is not normally performed in early automation systems?
a) On/off control of field devices
b) Logical control of discrete devices
c) On/off control of motor starters
d) Proportional control of field devices
15. When a relay is NOT energized
a) There is an electrical path through the NO contacts
b) There is an electrical path through the NC contacts
c) Neither the NO or the NC contacts have an electrical path
d) Both the NO and the NC contacts have an electrical path
16. How many levels does complex SCADA system have?
a)One
b)Three
c)Four
d)Two
17. The functions of the SCADA systems performed by using a) Remote telemetry units
b) SCADA master units
c) Sensors, communication network
d) All of the above
18. Where SCADA can be used?
a) Mass transit
b) Traffic signals
c) Manufacturing
d) All of above

19.	The	e SCADA system performs
	a)	Data acquisition
		Data presentation
	c)	Networked data communication
	d)	All of the above
20.		is not a component of SCADA system
	a)	Database server
	b)	Sparger controller
		Output system
	d)	None of the above
21.	Wh	nat is the standard form of RAID?
		Redundant Array of Independent Disks
		Reverse Array of Independent Disks
	c)	Random Array of Independent Disks
	d)	Reduced Array of Independent Disks
22.	The	e standard form of MMI is
	a)	Master Machine Interface
	b)	Main Machine Interface
	c)	Man Machine Interface
	-	None of the above
23.		e RAID level 50 is a combination of
	-	RAID 5 and RAID 0
	-	RAID 3 and RAID 0
	,	RAID 1 and RAID 0
		None of the above
24.		nat are the types of SCADA systems?
		Monolithic, Networked
		Monolithic, Distributed, Networked
		Monolithic, Distributed
		All of above
25.		e Redundant Array of Independent Disk is used for
		Improvement of reliability
		Improvement of performance
	-	All of above
	d)	None of above





Sindalagundu post, Dindigul-624002, Tamilnadu.Ph:0451-2448800 DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

TECHNOLOGY TRAINING ON "INDUSTRIAL AUTOMATION USING PLC\SCADA"

MARK SHEET

5. No.	Reg.no.	Student Name	MARK
1	922121105001	ABIRAMÎ G	14
2	922121105003	AISHWARYA M.P	19
3	922121105004	ARCHANA DEVI B	13
4	922121105005	ARUN KUMAR S	13
5	922121105006	BALAMURUGAN M	12
6	922121105007	BALA SUBRAMANIYAN R	13
7	922121105008	BHUVANESWARI G	15
8	922121105009	CATHRIN NISHA M	13
9	922121105010	CELIN JAYAMARY A	08
10	922112105011	DEENA DHAYALAN P A	10
11	922121105013	DIVYAJ	12
12	922121105014	DOMINIC SCAPLARRAJ A	13
13	922121105015	EZHUMALAI NAGA VISHNU S	12
14	922121105016	GOPIJ	15
15	922121105017	HARIHARAN T	18
16	922121105018	JAYASRI S	13
17	922121105020	KALEESWARAN M	14
18	9221211050021	KAMALEE A	13
19	922121105022	KAMILA SAI K	18
20	922121105023	KANYAK	17
21	922121105024	KARTHICK RAJ D	10
22	922121105025	KAVIYA LAKSHMI S	08
24	922121105027	LOKENDRA SOWMIYAN S	12
25	922121105028	MANIKANDAN S	18
26	922121105029	MANIVASAGAN B	13
27	922121105030	MANI VEL G	08
28	922121105031	MANOJKUMAR A	15
29	922121105032	MINIPRIYA K	16
30	922121105033	MOHAMMED SIDDIQ A	12
31	922121105034	NARMATHA DEVI P	11
32	922121105035	PONRAJ R	10
33	922121105036	PRADISH V S	13

34	922121105037	PRIYA DHARSHINI J	04
35	922121105038	RAGAVI R	12
36	922121105039	RAJESHWARI J	13
37	922121105041	REETHANA M	10
38	922121105042	SANJAY G	08
39	922121105043	SANTHIYA M	11
40	922121105044	SANTHOSH C	09
41	922121105045	SARAN RAHUL G	22
42	922121105046	SELVAKUMAR C	15
43	922121105047	SHARMILA M	16
44	922121105048	SRI SAKTHI J'T	11
45	922121105049	SRI SUPRAJA S	13
46	922121105050	VAISHALI M	11
47	922121105051	VANAJA G	18
48	922121105052	VEERACHAMY S	12
49	922121105301	SALAMON VINCENT RAJ R	16
50	922121105302	YUDISH M	11
51	922121105303	YUVARAJ T	10

A Faculty incharge

HOD/EEE

PRINCIPAL



(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai / Accredited by NAAC)

Dindigul – Palani Highway, Dindigul 624 002

Department of Electrical and Electronics Engineering



TECHNOLOGY TRAINING PROGRAMME ON INDUSTRIAL AUTOMATION USING PLC/SCADA

PLC/SCADA MULTIPLE CHOICE QUESTION

Name of the student: Days J

Date: 24-2-2922

1. The acronym PLC stands for

a) Pressure Load Control

(b) Programmable Logic Controller

c) Pneumatic Logic Capstan

d) PID Loop Controller

2. In PLC programming, a retentive function is one that

a) Defaults to the "on" state

(b) Is not reset after a power cycle

c) Defaults to the "off" state

d) Cannot be edited or deleted

3. A good application for a timed interrupt in a PLC program would be

a) A communications function block

(b) A PID function block

c) A math function block

d) A motor start/stop rung

4. In a PLC, the scan time refers to the amount of time in which

the technician enters the program

b) timers and counters are indexed by

c) one "rung" of ladder logic takes to complete

d) the entire program takes to execute

5. The difference between online and offline PLC programming is

(a) whether the PLC is running or stopped

b) whether the programming PC has internet connectivity

c) the type of programming cable used

d) where the edited program resides

6. Ladder logic programming consists primarily of

a) Virtual relay contacts and coils

b) Logic gate symbols with connecting lines

(c) Function blocks with connecting lines

d) Text-based code

7. An OR function implemented in ladder logic uses

a) Normally-closed contacts in series

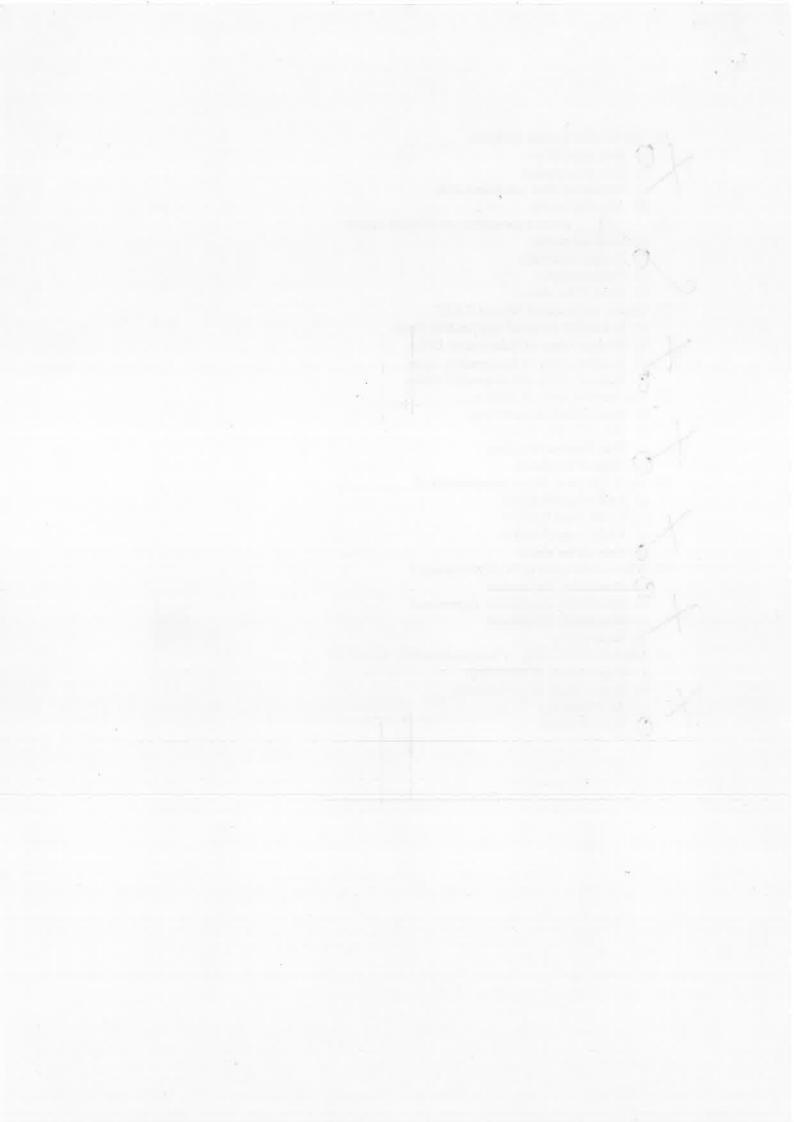
b) Normally-open contacts in series

c) A single normally-closed contact

(a)Normally-open contacts in parallel

8. What is the largest integer number that a PLC counter function can reach if it	uses a 16 bit register?
a) 82,768	
65,535	
c) 65,536	
d) 65,537	
9. The part that monitors the inputs and makes decisions in a PLC is the CPU.	
True	
) False	20
10. In a PLC "I" is used for output and "Q" is used for input	
a)True	
(5) False	
11. To increase the number of inputs and outputs of the PLC, one can use expans	sion modules
True	non modulos.
(b) False	
12. An example of discrete (digital) control is	
a) Varying the volume of a music system	
Turning a lamp ON or OFF	
c) Varying the brightness of a lamp	
d) Controlling the speed of a fan	
13. The is moved toward the relay electromagnet when the relay is on. a) Armature	
b) Coil	
NO contact	
d) NC contact	
14. Which of the following RLL applications is not normally performed in early	automation systems?
a) On/off control of field devices	
Logical control of discrete devices	
c) On/off control of motor starters	
d) Proportional control of field devices	
15. When a relay is NOT energized	
a) There is an electrical path through the NO contacts	
There is an electrical path through the NC contacts	
c) Neither the NO or the NC contacts have an electrical path	
d) Both the NO and the NC contacts have an electrical path	
16. How many levels does complex SCADA system have?	
a)One	
b)Three	
C)Four	
17. The functions of the SCADA systems performed by using	
a Remote telemetry units	
SCADA master units	
Sensors, communication network	A
All of the above	
18. Where SCADA can be used?	
Mass transit	
b) Traffic signals	
c) Manufacturing	
d) All of above	

19. The SCADA system performs	
Data acquisition	
b) Data presentation	
Networked data communication	
d) All of the above	
20. is not a component of SCADA system	
a) Database server	
Sparger controller	
c) Output system	
d) None of the above	
21. What is the standard form of RAID?	
a) Redundant Array of Independent Disks	
b) Reverse Array of Independent Disks	
c) Random Array of Independent Disks	
Reduced Array of Independent Disks	
22. The standard form of MMI is	
a) Master Machine Interface	
b) Main Machine Interface	
Man Machine Interface	
None of the above	
23. The RAID level 50 is a combination of	
a) RAID 5 and RAID 0	
b) RAID 3 and RAID 0	
c) RAID 1 and RAID 0	
None of the above	
24. What are the types of SCADA systems?	
Monolithic, Networked	
b) Monolithic, Distributed, Networked	
c) Monolithic, Distributed	
d) All of above	
25. The Redundant Array of Independent Disk is used for	
a) Improvement of reliability	
b) Improvement of performance	
c) All of above	
None of above	





(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai / Accredited by NAAC)

Dindigul – Palani Highway, Dindigul 624 002

Department of Electrical and Electronics Engineering



TECHNOLOGY TRAINING PROGRAMME ON INDUSTRIAL AUTOMATION USING PLC/SCADA

PLC/SCADA MULTIPLE CHOICE OUESTION

Name of the student: Lokardra Sowriyan
Year/sem:

Date: 24-02-2023

1.	The	acronym	PLC	stands	for
----	-----	---------	-----	--------	-----

(a) Pressure Load Control

b) Programmable Logic Controller

(e) Pneumatic Logic Capstan

d) PID Loop Controller

2. In PLC programming, a retentive function is one that

a) Defaults to the "on" state

b) Is not reset after a power cycle

c) Defaults to the "off" state

(1) Cannot be edited or deleted

3. A good application for a timed interrupt in a PLC program would be

A communications function block

b) A PID function block

c) A math function block

d) A motor start/stop rung

4. In a PLC, the scan time refers to the amount of time in which

the technician enters the program

b) timers and counters are indexed by

c) one "rung" of ladder logic takes to complete

d) the entire program takes to execute

5. The difference between online and offline PLC programming is

a) whether the PLC is running or stopped

b) whether the programming PC has internet connectivity

o) the type of programming cable used

Where the edited program resides

6. Ladder logic programming consists primarily of

(a) Virtual relay contacts and coils

b) Logic gate symbols with connecting lines

c) Function blocks with connecting lines

d) Text-based code

7. An OR function implemented in ladder logic uses

a) Normally-closed contacts in series

b) Normally-open contacts in series

A single normally-closed contact

(1) Normally-open contacts in parallel

8. What is the largest integer number that a PLC counter function can reach if it uses a 32,768 65,535	16 bit register?
c) 65,536	
d) 65,537	
9. The part that monitors the inputs and makes decisions in a PLC is the CPU.	
a) True	1
False	1
10. In a PLC "I" is used for output and "Q" is used for input	
True	
(b) False	
11. To increase the number of inputs and outputs of the PLC, one can use expansion m	nodules.
True True	
b) False	
12. An example of discrete (digital) control is	
a) Varying the volume of a music system	
Turning a lamp ON or OFF	
c) Varying the brightness of a lamp	
d) Controlling the speed of a fan	
13. The is moved toward the relay electromagnet when the relay is on.	
3 Armature	
b) Coil	
c) NO contact d) NC contact	
14. Which of the following RLL applications is not normally performed in early auton a) Omoff control of field devices	iation systems?
by Logical control of discrete devices	
c) On/off control of motor starters	
Proportional control of field devices	
15. When a relay is NOT energized	
(a) There is an electrical path through the NO contacts	
b) There is an electrical path through the NC contacts	
c) Neither the NO or the NC contacts have an electrical path	
d) Both the NO and the NC contacts have an electrical path	
16. How many levels does complex SCADA system have?	
a)One	
b)Three	
c)Four	-
17 Two	
17. The functions of the SCADA systems performed by using	
(a) Remote telemetry units b) SCADA master units	
8) Sensors, communication network	
d) All of the above	
18. Where SCADA can be used?	
Mass transit	
b) Traffic signals	
Manufacturing	
d) All of above	

19. Th	e SCADA system performs
1 (3)	Data acquisition
(b)	Data presentation
(c)	Networked data communication
d)	All of the above
20.	is not a component of SCADA system
a)	Database server
\	Sparger controller
(c)	Output system
	None of the above
21. W	hat is the standard form of RAID?
(a)	Redundant Array of Independent Disks
(6)	Reverse Array of Independent Disks
(c)	Random Array of Independent Disks
d)	Reduced Array of Independent Disks
	standard form of MMI is
	Master Machine Interface
	Main Machine Interface
~	Man Machine Interface
,	None of the above
23. Th	e RAID level 50 is a combination of
a)	RAID 5 and RAID 0
	RAID 3 and RAID 0
10	RAID 1 and RAID 0
(d)	None of the above
	hat are the types of SCADA systems?
	Monolithic, Networked
	Monolithic, Distributed, Networked
	Monolithic, Distributed
	All of above
	e Redundant Array of Independent Disk is used for
	Improvement of reliability
(8)	Improvement of performance
10	All of above
(d)	None of above





(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai / Accredited by NAAC)

Dindigul - Palani Highway, Dindigul 624 002

Department of Electrical and Electronics Engineering



TECHNOLOGY TRAINING PROGRAMME ON INDUSTRIAL AUTOMATION USING PLC/SCADA

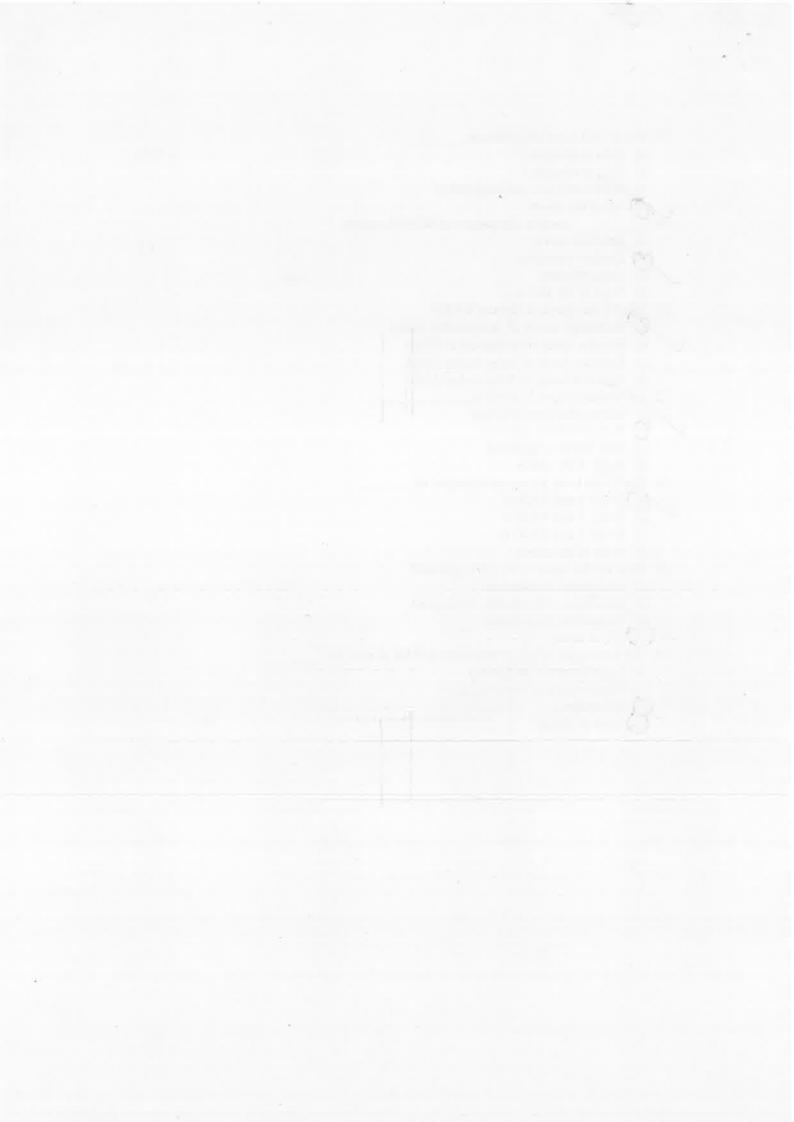
PLC/SCADA MULTIPLE CHOICE QUESTION

Name of the student: Alshwarya M.P Year/sem: 11 Date: 24 -02 -2023

- 1. The acronym PLC stands for
 - a) Pressure Load Control
 - (b) Programmable Logic Controller
 - c) Pneumatic Logic Capstan
 - d) PID Loop Controller
- 2. In PLC programming, a retentive function is one that
 - a) Defaults to the "on" state
 - Is not reset after a power cycle
 - c) Defaults to the "off" state
 - d) Cannot be edited or deleted
- 3. A good application for a timed interrupt in a PLC program would be
 - a) A communications function block
 - A PID function block
 - c) A math function block
 - d) A motor start/stop rung
- 4. In a PLC, the scan time refers to the amount of time in which
 - (a) the technician enters the program
 - b) timers and counters are indexed by
 - (c) one "rung" of ladder logic takes to complete
 - d) the entire program takes to execute
- 5. The difference between online and offline PLC programming is
 - (a) whether the PLC is running or stopped
 - b) whether the programming PC has internet connectivity
 - c) the type of programming cable used
 - d) where the edited program resides
- 6. Ladder logic programming consists primarily of
 - a) Virtual relay contacts and coils
 - b) Logic gate symbols with connecting lines
 - Function blocks with connecting lines
 - d) Text-based code
- 7. An OR function implemented in ladder logic uses
 - a) Normally-closed contacts in series
 - b) Normally-open contacts in series
 - A single normally-closed contact
 - Normally-open contacts in parallel

8. What is the largest integer number that a PLC counter function can reach if it u	ses a 16 bit register?
a) 32,768	
65,535	
c) 65,536	
d) 65,537	
9. The part that monitors the inputs and makes decisions in a PLC is the CPU.	1 1
True	
b) False	
10. In a PLC "is used for output and "Q" is used for input	
A) True	
Talse	
11. To increase the number of inputs and outputs of the PLC, one can use expansi	on modules.
a) True	
(b) False	
12. An example of discrete (digital) control is	
a) Varying the volume of a music system	465
Turning a lamp ON or OFF	
c) Varying the brightness of a lamp	
d) Controlling the speed of a fan	
13. The is moved toward the relay electromagnet when the relay is on.	
Armature	
b) Coil	
c) NO contact	
d) NC contact	
14. Which of the following RLL applications is not normally performed in early a	utomation systems?
a) Oppoff control of field devices	ordination by brothis.
by Logical control of discrete devices	
c) On/off control of motor starters	
Proportional control of field devices	
15. When a relay is NOT energized	
a) There is an electrical path through the NO contacts	
b) There is an electrical path through the NC contacts	
c) Neither the NO or the NC contacts have an electrical path	
1 Both the NO and the NC contacts have an electrical path	
16. How many levels does complex SCADA system have?	
a)One	1.7
b)Three	
c)Four	
Two	
17. The functions of the SCADA systems performed by using	
Remote telemetry units	
SCADA master units	1
Sensors, communication network	
d) All of the above	
18. Where SCADA can be used? a) Mass transit	
b) Traffic signals	
Manufacturing	
All of above	

19. The SCADA system performs
a) Data acquisition
b) Data presentation
c) Networked data communication
All of the above
is not a component of SCADA system
a) Database server
Sparger controller
c) Output system
d) None of the above
21. What is the standard form of RAID?
Redundant Array of Independent Disks
b) Reverse Array of Independent Disks
c) Random Array of Independent Disks
d) Reduced Array of Independent Disks
22. The standard form of MMI is
a) Master Machine Interface
Main Machine Interface
c) Man Machine Interface
d) None of the above
23. The RAID level 50 is a combination of
(M) RAID 5 and RAID 0
b) RAID 3 and RAID 0
c) RAID 1 and RAID 0
d) None of the above
24. What are the types of SCADA systems?
a) Monolithic, Networked
b) Monolithic, Distributed, Networked
Monolithic, Distributed
MAII of above
25. The Redundant Array of Independent Disk is used for
a) Improvement of reliability b) Improvement of performance
All of above
None of above
THORE OF ADOLYC





(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai / Accredited by NAAC)

Dindigul - Palani Highway, Dindigul 624 002

Department of Electrical and Electronics Engineering



TECHNOLOGY TRAINING PROGRAMME ON INDUSTRIAL AUTOMATION USING PLC/SCADA

PLC/SCADA MULTIPLE CHOICE QUESTION

Name of the student: S. Manikandar

Year/sem:

Date: 24-02-23

1. The acronym PLC stands for

a) Pressure Load Control

(b)Programmable Logic Controller

c) Pneumatic Logic Capstan

d) PID Loop Controller

2. In PLC programming, a retentive function is one that

Defaults to the "on" state

(b) Is not reset after a power cycle

c) Defaults to the "off" state

d) Cannot be edited or deleted

3. A good application for a timed interrupt in a PLC program would be

a) A communications function block

(b) A PID function block

c) A math function block

d) A motor start/stop rung

4. In a PLC, the scan time refers to the amount of time in which

athe technician enters the program

b) timers and counters are indexed by

c) one "rung" of ladder logic takes to complete

d) the entire program takes to execute

5. The difference between online and offline PLC programming is

(a) whether the PLC is running or stopped

b) whether the programming PC has internet connectivity

c) the type of programming cable used

d) where the edited program resides

6. Ladder logic programming consists primarily of

a) Virtual relay contacts and coils

b) Logic gate symbols with connecting lines

(c) Function blocks with connecting lines

Text-based code

7. An OR function implemented in ladder logic uses

a) Normally-closed contacts in series

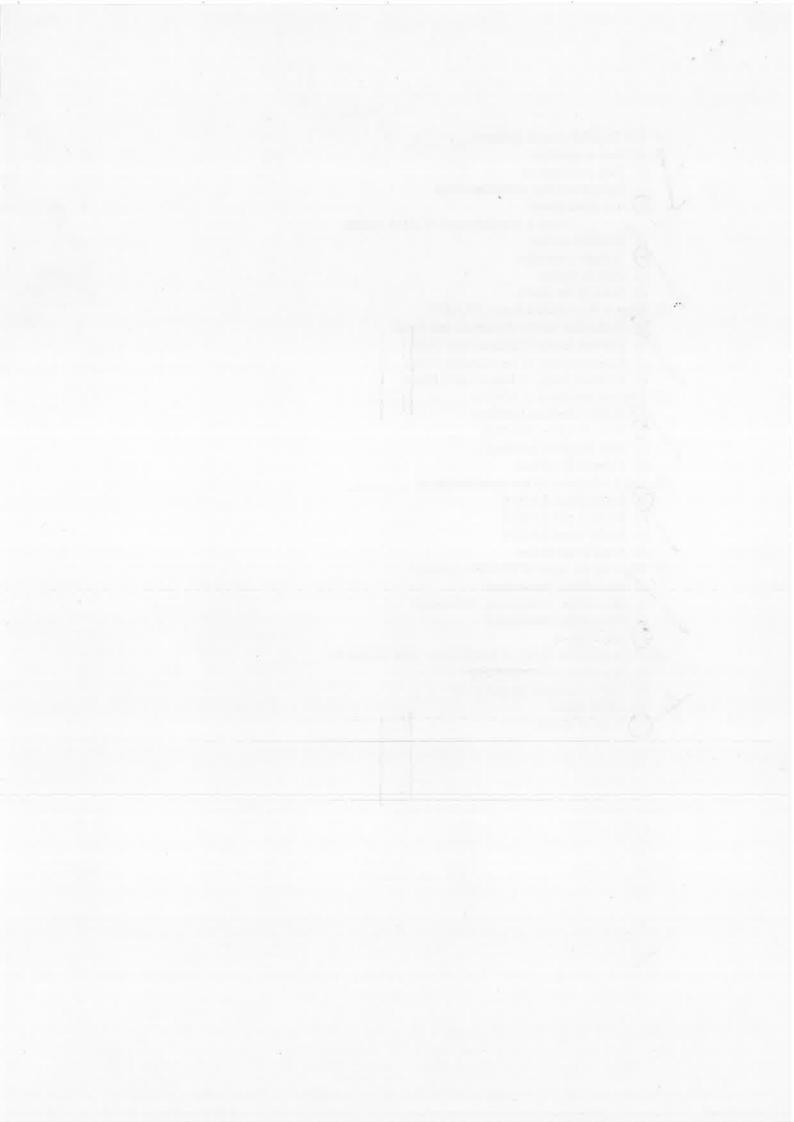
b) Normally-open contacts in series

c) A single normally-closed contact

d) Normally-open contacts in parallel

8. What is the largest integer number that a PLC counter function can reach if it	uses a 16 bit register?
a) 32,768	
6) 85,535	
c) 65,536	
d) 65,537	
9. The part that monitors the inputs and makes decisions in a PLC is the CPU.	
a) True	P. O
6 False	
10. In a PLC "I" is used for output and "Q" is used for input	
(a) True	9
b) False	
11 To increase the number of inputs and outputs of the PLC, one can use expan	ision modules
a) True	istori modules,
(b) False	
12. An example of discrete (digital) control is	
Varying the volume of a music system	(0)
Turning a lamp ON or OFF	
c) Varying the brightness of a lamp	
d) Controlling the speed of a fan	
13. The is moved toward the relay electromagnet when the relay is on.	
Armature	1
b) Coil	
c) NO contact	
d) NC contact	
14. Which of the following RLL applications is not normally performed in early	automation systems?
a) On/off control of field devices	
b) Logical control of discrete devices	
© On/off control of motor starters	
Proportional control of field devices	
15. When a relay is NOT energized	
There is an electrical path through the NO contacts	
here is an electrical path through the NC contacts	
c) Neither the NO or the NC contacts have an electrical path	
d) Both the NO and the NC contacts have an electrical path	
16. How many levels does complex SCADA system have?	
a)One	- 1,
b) Three	
Four	
d)Two	
17. The functions of the SCADA systems performed by using	
a) Remote telemetry units	
6) SCADA master units	- AV
Sensors, communication network	
(d) All of the above	
18. Where SCADA can be used?	
Mass transit	
b) Traffic signals	
(c) Manufacturing	
d) All of above	7. 14

19. The SCADA system performs	
a) Data acquisition	
b) Data presentation	
Networked data communication	
All of the above	
20 is not a component of SCADA system	
Database server	
Sparger controller	
c) Output system	
d) None of the above	
21. What is the standard form of RAID?	
Redundant Array of Independent Disks	
b) Reverse Array of Independent Disks	
c) Random Array of Independent Disks	
d) Reduced Array of Independent Disks 22. The standard form of MMI is	
Master Machine Interface	
6) Main Machine Interface	
c) Man Machine Interface	
d) None of the above	
23. The RAID level 50 is a combination of	
RAID 5 and RAID 0	
b) RAID 3 and RAID 0	
c) RAID 1 and RAID 0	
d) None of the above	
24. What are the types of SCADA systems?	
Monolithic, Networked	
b) Monolithic, Distributed, Networked	
Monolithic, Distributed	
(d) All of above	
25. The Redundant Array of Independent Disk is used for	
a) Improvement of reliability	
b) Improvement of performance	
c) All of above	
(d) None of above	
Y	





Department of Electrical and Electronics Engineering

STUDENT FEEDBACK FORM

Name of the Student: VANAJA. 6

Year/Sem: 1 | W

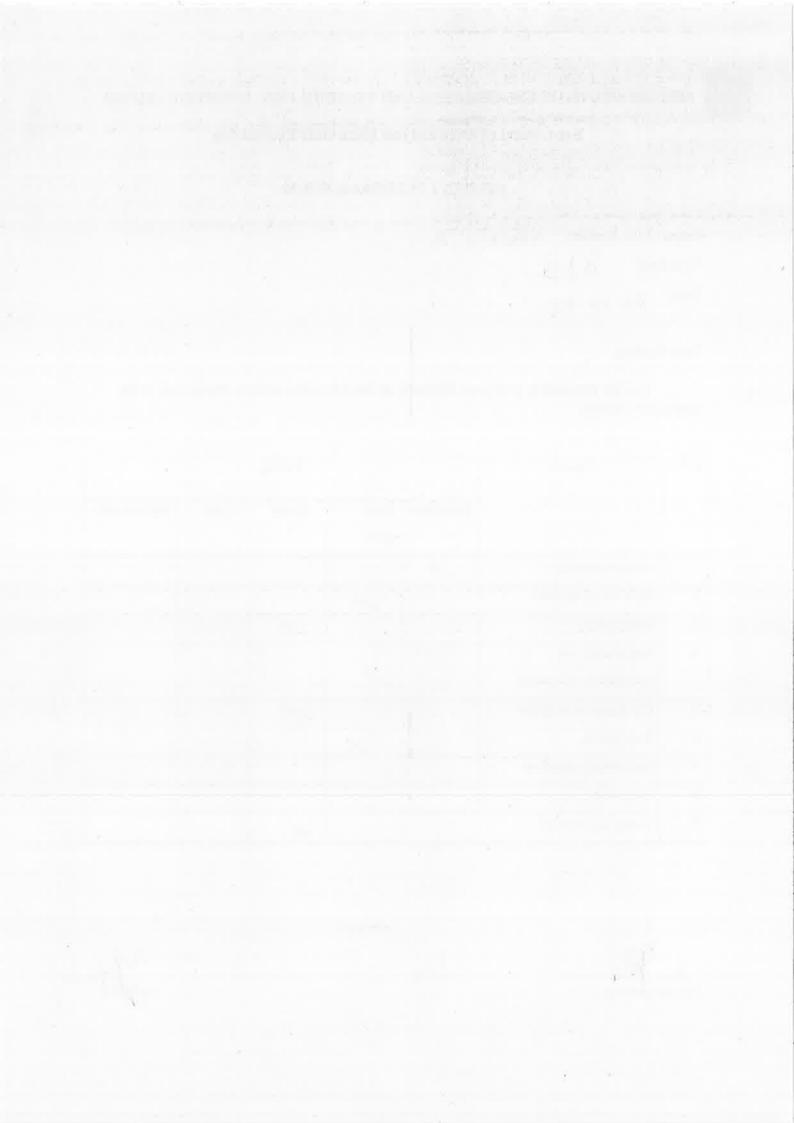
Date: 03.03.23

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very	Good	Fair	Satisfactory
1	Course content	1				
2	Skill development		0			
3	Motivation			1		
4	Regularity and punctuality of trainer		1			
5	Coverage of syllabus			1		
6	Interaction		1			
7	Individual attention	1				
8	Outcome					
9	Other suggestions			*		

A-Faculty incharge HoDEEE





SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY, DINDIGUL - 624 002

Department of Electrical and Electronics Engineering

STUDENT FEEDBACK FORM

Name of the Stude	ent: I	Domnic	Scaplar Raj	. A
Year/Sem:	2023	1 1		

Date: 3.3.23

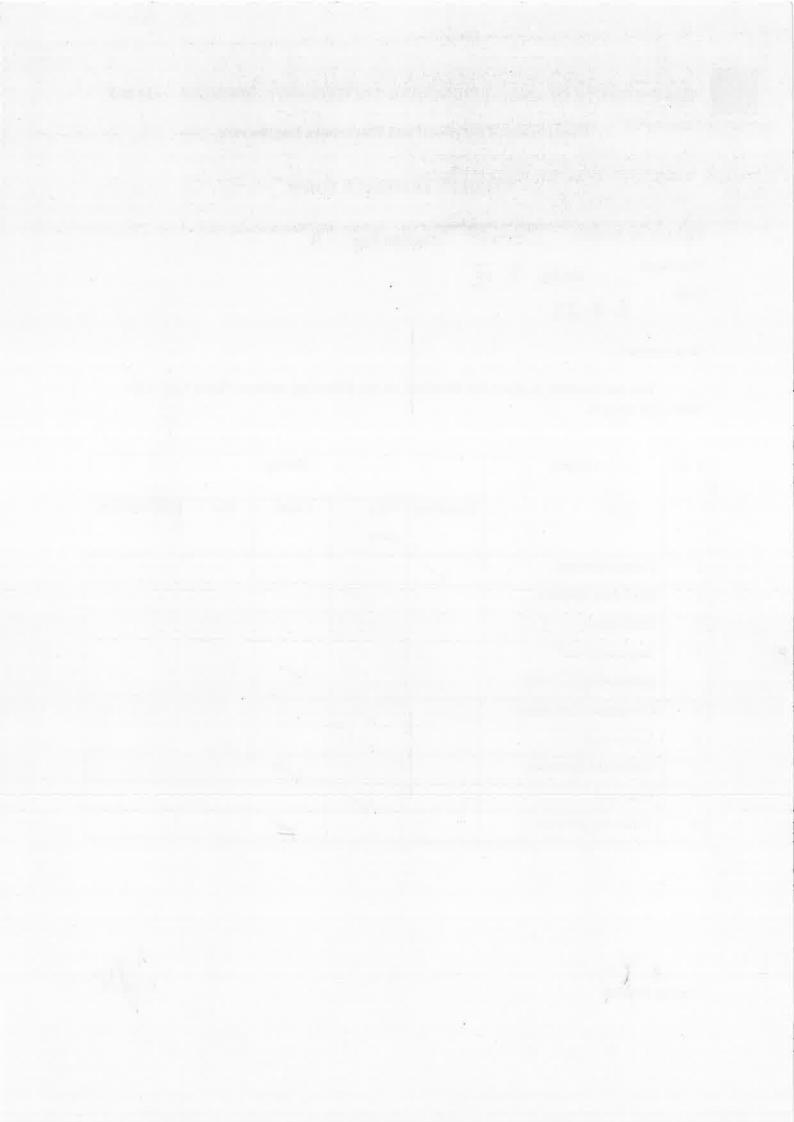
Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating					
		Excellent	Very	Good	Fair	Satisfactory	
1	Course content						
2	Skill development		~				
3	Motivation		~				
4	Regularity and punctuality of trainer			~			
5	Coverage of syllabus			9			
6	Interaction						
7	Individual attention			_			
8	Outcome	-	V				
9	Other suggestions			-			

Faculty inclares

HoDEEE





SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY, DINDIGUL - 624 002

Department of Electrical and Electronics Engineering

STUDENT FEEDBACK FORM

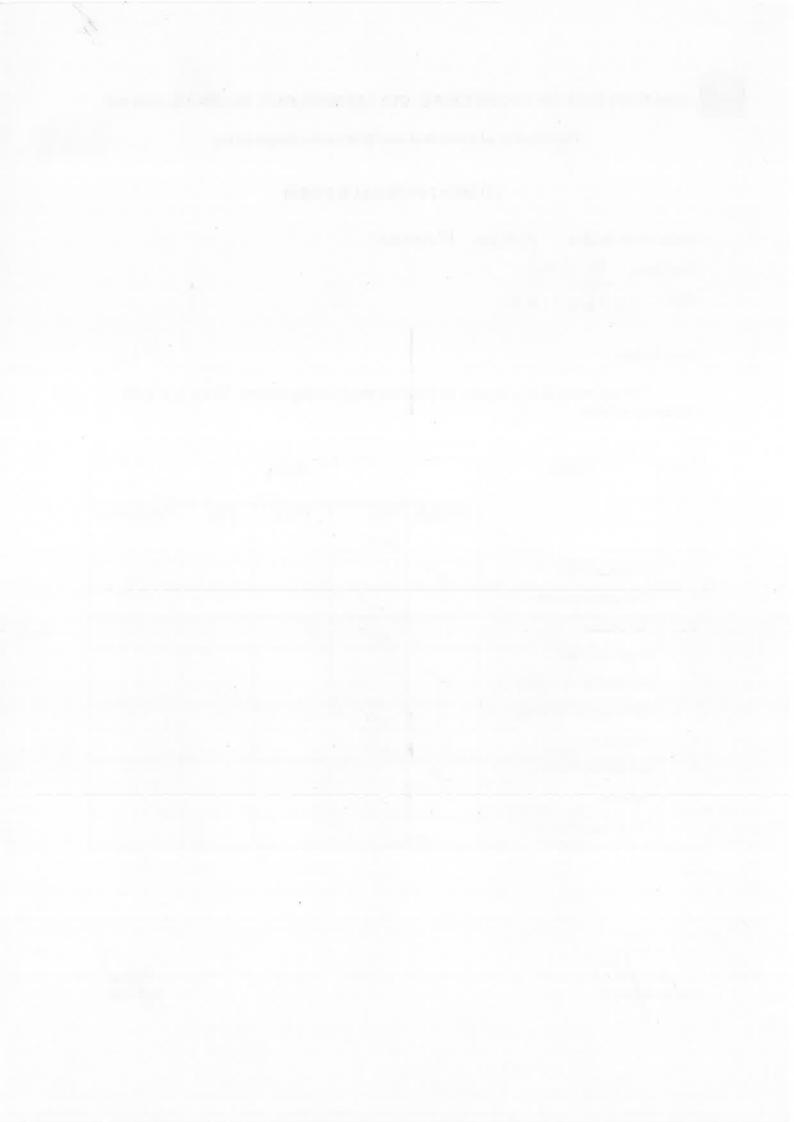
Name of the Student:	Arun	Kuonan.
----------------------	------	---------

Year/Sem: 11 / 12
Date: 03/03/23

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating					
		Excellent	Very	Good	Fair	Satisfactory	
1	Course content						
2	Skill development						
3	Motivation						
4	Regularity and punctuality of trainer	_					
5	Coverage of syllabus		1				
6	Interaction	+					
7	Individual attention	1					
8	Outcome		1				
9	Other suggestions						





SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY, DINDIGUL - 624 002

Department of Electrical and Electronics Engineering

STUDENT FEEDBACK FORM

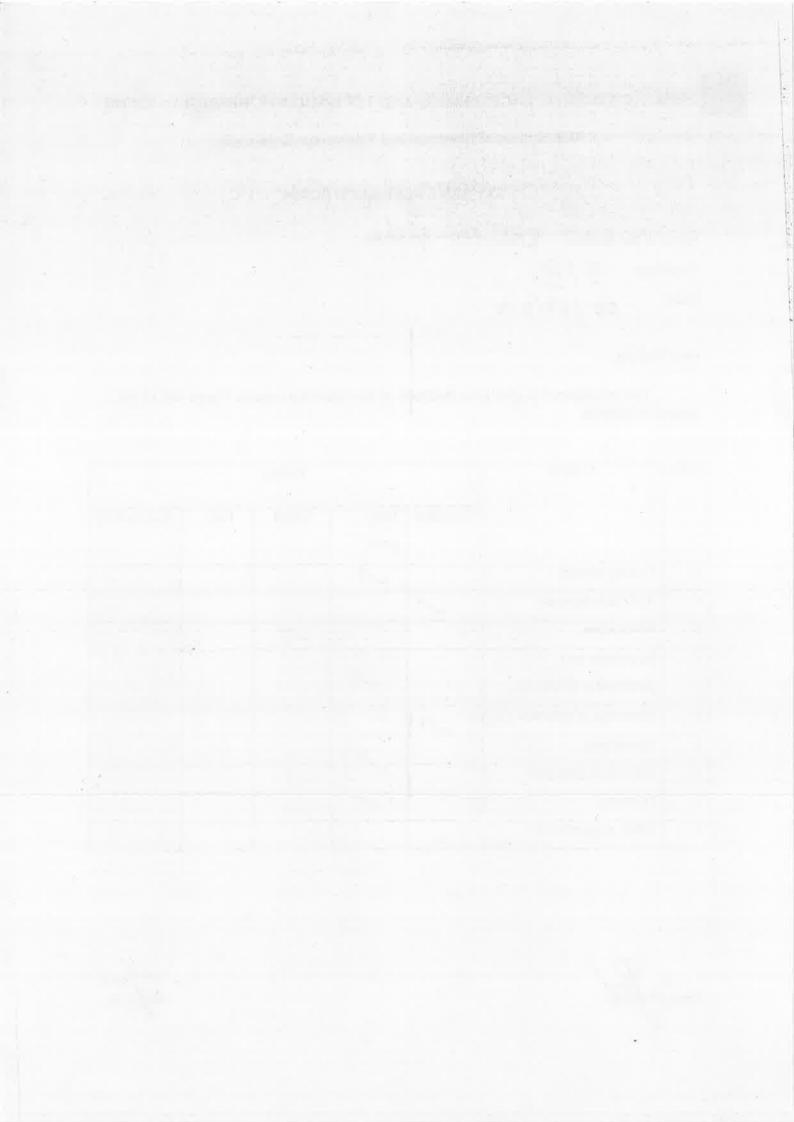
Name of the Student:	Sathsin	Nisha
ranne of the Student.	- Luciani	

Year/Sem: \(\overline{\Pi} / \overline{\V} \)
Date: \(03 / 03 / 2 \)

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating					
		Excellent	Very good	Good	Fair	Satisfactory	
1	Course content		1				
2	Skill development	_					
3	Motivation			1			
4	Regularity and punctuality of trainer		1				
5	Coverage of syllabus	1.0		+			
6	Interaction		V				
7	Individual attention	tones - I	F . 1	1			
8	Outcome						
9	Other suggestions						





SSM INSTITUTE OF ENGINEERING SPOTLICHTS SRIGHTEN YOUR CAREER



Approved by AICTE-New Delhi | Affilited to Anna University - Chennai | Accredited by NAAC & NBA DINDIGUL - PALANI HIGHWAY | DINDIGUL - 624 002 | Tamilnadu.

CERTIFICATE OF PARTICIPATION

This is Certify That Mr/Mrs

CELIN JAYAMARY A

"COURSE ON PLC/SCADA-60 HOURS" of II EEE has actively participated in

organised by

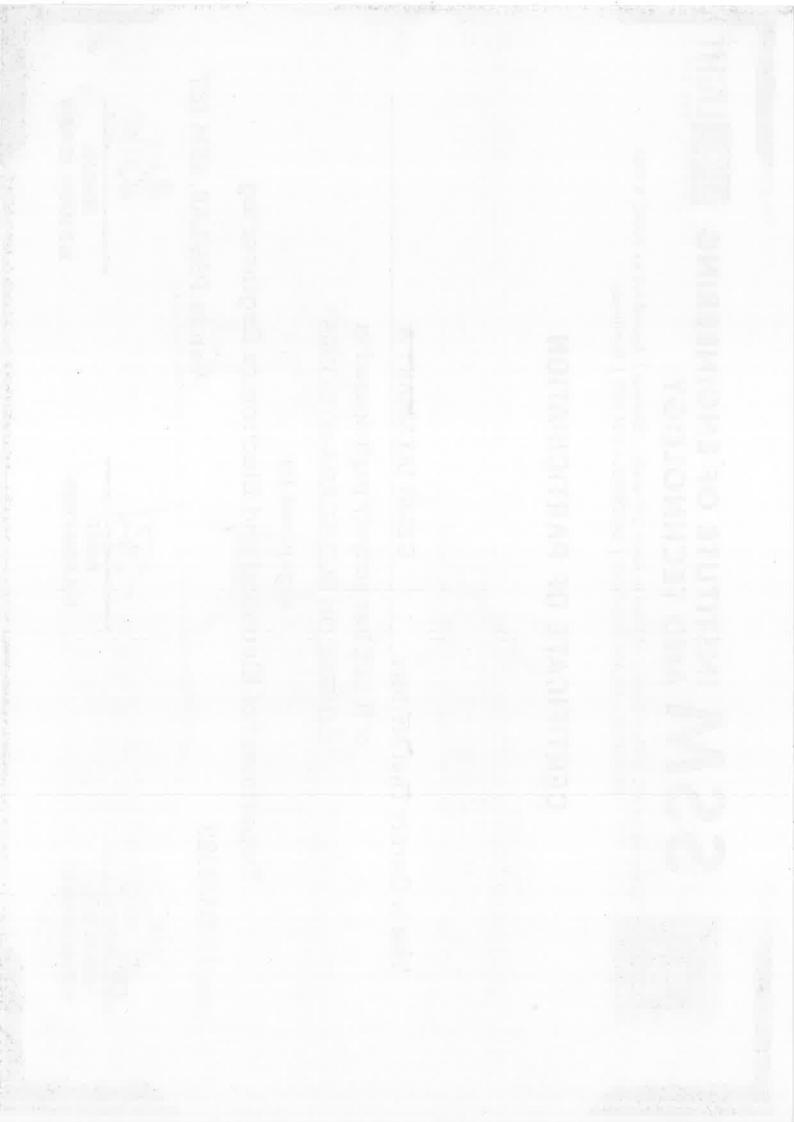
Department of Electrical and Electronics Engineering

Date: 10/03/2023

Dr.G.MOHAN BABU HoD/EEE

Venue: PSS LAB, SSM IET







SSMINSTITUTE OF ENGINEERING SPOTLICHTS AND TECHNOLOGY



Approved by AICTE-New Delhi | Affilited to Anna University - Chennai | Accredited by NAAC & NBA DINDIGUL - PALANI HIGHWAY | DINDIGUL - 624 002 | Tamilnadu.

CERTIFICATE OF PARTICIPATION

This is Certify That Mr/Mrs

CATHRIN NISHA M

"COURSE ON PLC/SCADA-60 HOURS" of II EEE has actively participated in

organised by

Department of Electrical and Electronics Engineering

Date: 10/03/2023



EPHEN-GASPAR A

Venue: PSS LAB, SSM IET





SSMINSTITUTE OF ENGINEERING SPOTLICHTS AND TECHNOLOGY



Approved by AICTE-New Delhi | Affilited to Anna University - Chennai | Accredited by NAAC & NBA DINDIGUL - PALANI HIGHWAY | DINDIGUL - 624 002 | Tamilnadu.

CERTIFICATE OF PARTICIPATION

This is Certify That Mr/Mrs_

BHUVANESWARI G

"COURSE ON PLC/SCADA-60 HOURS" of II EEE has actively participated in

organised by

Department of Electrical and Electronics Engineering

Date: 10/03/2023

Dr.G.MOHAN BABU HoD/EEE

> NEPHEN-GASEAR A CENTRE HEAD



Venue: PSS LAB, SSM IET





SSM INSTITUTE OF ENGINEERING SPOTI



Approved by AICTE-New Delhi | Affilited to Anna University - Chennai | Accredited by NAAC & NBA DINDIGUL - PALANI HIGHWAY | DINDIGUL - 624 002 | Tamilnadu.

CERTIFICATE OF PARTICIPATION

This is Certify That Mr/Mrs

BALAMURUGAN M

"COURSE ON PLC/SCADA-60 HOURS" of II EEE has actively participated in

organised by

Department of Electrical and Electronics Engineering

Venue: PSS LAB, SSM IET

Date: 10/03/2023

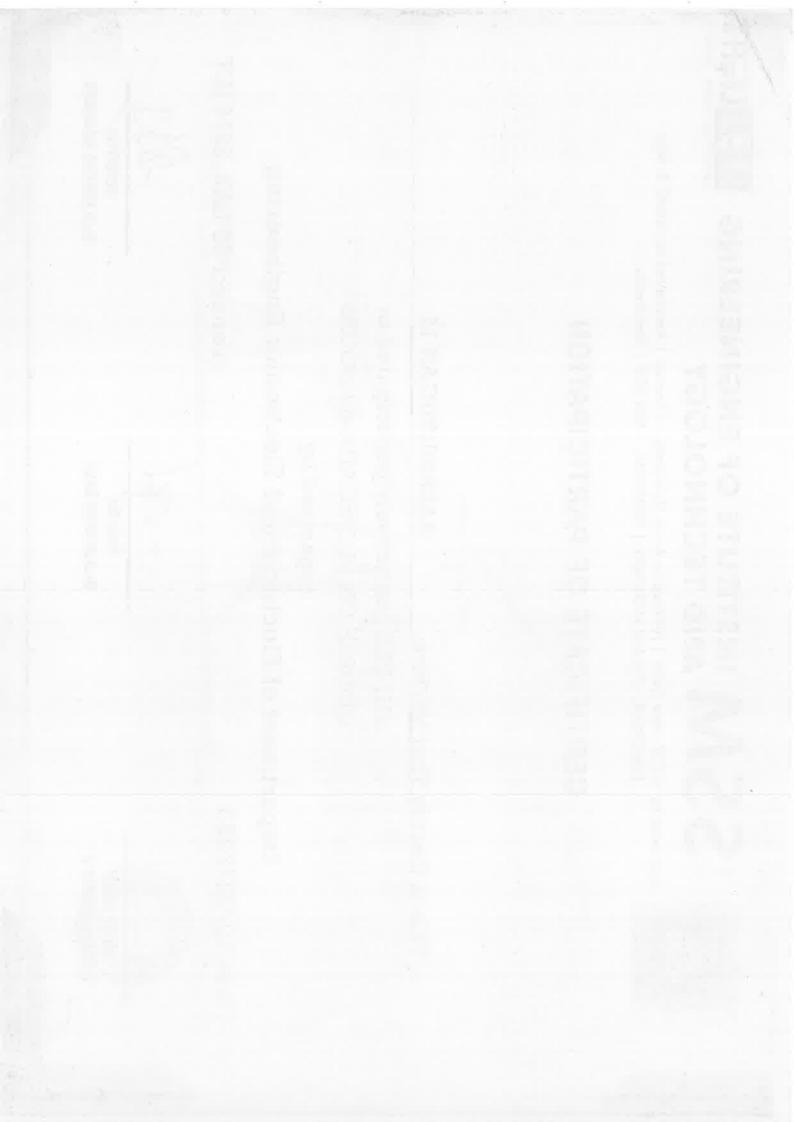
TECH!

HoD/EEE

Dr.D.SENTHIL KUMARAN PRINCIPAL



ENHENIGRSPAR A CENTRE HEAD





SSMINSTITUTE OF ENGINEERING SPOTLICHTS SRICHTER YOUR CAREER



Approved by AICTE-New Delhi | Affilited to Anna University - Chennai | Accredited by NAAC & NBA DINDIGUL - PALANI HIGHWAY | DINDIGUL - 624 002 | Tamilnadu.

CERTIFICATE OF PARTICIPATION

This is Certify That Mr/Mrs_

HARIHARAN T

"COURSE ON PLC/SCADA-60 HOURS" of II EEE has actively participated in

organised by

Department of Electrical and Electronics Engineering

Date: 10/03/2023

Dr.G.MOHAN BABU HoD/REE

> TERHEN, GASPAR A CENTRE HEARS

Venue: PSS LAB, SSM IET



SSMINSTITUTE OF ENGINEERING SPOTLICHTS SRIGHTEN YOUR CAREER



Approved by AICTE-New Delhi | Affilited to Anna University - Chennai | Accredited by NAAC & NBA DINDIGUL - PALANI HIGHWAY | DINDIGUL - 624 002 | Tamilnadu.

CERTIFICATE OF PARTICIPATION

This is Certify That Mr/Mrs_

EZHUMALAI NAGA VISHNU S

"COURSE ON PLC/SCADA-60 HOURS" of II EEE has actively participated in

organised by

Department of Electrical and Electronics Engineering

Date: 10/03/2023



PHEN GASPAR A

CENTRE HE

Venue: PSS LAB, SSM IET

