22EEEVAC01 – INDUSTRIAL AUTOMATION USING PLC AND SCADA
EVENT REPORT

Name of the Course: INDUSTRIAL AUTOMATION USING PLC AND SCADA

Name of the Instructor: 1. Dr. M. Sivasubramanian, Associate Professor /EEE/ SVCET

2. Mrs. S. Geetha Assistant Professor /EEE/SVCET.

Year and Branch: II,III,IV,& ME-PED-ELECTRICAL AND ELECTRONICS ENGINEERING

Duration of Course: 32 Hrs (17.10.2022 to 22.10.2022)

SUMMARY OF THE EVENT:

The Course was inaugurated on **17.10.2022** at 8.30 am by our respectable Principal and HOD. As per the Course plan session was started and went smooth for the Remaining days. On the last day **22.10.2022** by 2.30 pm the course was completed successfully.

During the Six Days of the program Students were participated with enthusiasm and they finally gained Knowledge on **"INDUSTRIAL AUTOMATION USING PLC AND SCADA"**

ASSESMENT MODE:

No of Students Enrolled: 78   Scheme of Exam: Offline

No of Students appeared: 78   No of Students Passed:78

Date of Exam: **22.10.2022**

OUTCOME:

After the completion of the course the students will be able to understand develop block diagram of PLC and explain the working, the students will be able to understand develop an automation system that can efficiently and effectively monitor and control industrial processes.

COORDINATOR

(Mr. D. Siva Kumar)

HOD /EEE

(Mr. M. Namachivayam)

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22EEEVAC01 – INDUSTRIAL AUTOMATION USING PLC AND SCADA
TEST QUESTIONS

1. Pressure Load Control
   (A) Capstan
   (B) Programmable Logic Controller
   (C) Pneumatic Logic 1. The acronym PLC stands for
   (D) PID Loop Controller
   (E) Pressure Loss Chamber

2. 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
   (E) Hieroglyphics

3. 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
   (E) transmitted data communications must finish

4. In PLC programming, a retentive function is one that:
   (A) Defaults to the "on" state
   (B) Comes last in the program
   (C) Defaults to the "off" state
   (D) Cannot be edited or deleted
   (E) Is not reset after a power cycle

5. 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
   (E) 32,767

6. 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
   (E) Normally-closed contacts in parallel

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7. 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

   (E) A "watchdog" timer

8. When _____ contacts are actuated, they disrupt the power supply through them.

   (A) Normally open type

   (B) Normally closed type

   (C) Normally open and closed type

   (D) None of the mentioned

9. The main difference between online and offline PLC programming is

   (a) whether the programming pc has internet connectivity

   (b) where the edited program resides

   (c) whether the PLC is running or stopped

   (d) the type of program used

10. To increase the number of inputs and outputs of the PLC, one can use expansion modules.

    (A) True

    (B) False

    (C) None of the mentioned

11. The SCADA systems used to ___

    (A) Monitor

    (B) Control

    (C) Both a and b

    (D) None of the above

12. The standard form of RTU is

    (A) Reverse Terminal Unit

    (B) Remote Terminal Unit

    (C) Reverse Unit

    (D) None of the above

13. The standard form of HMI is

    (A) Human Master Interface

    (B) Human Machine Interface

    (C) Human Main Interface

    (D) None of the above

14. What are the types of SCADA systems?

    (A) Monolithic, Distributed

    (B) Monolithic, Networked

    (C) Monolithic, Distributed, Networked

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(D) None of the above

15. Where SCADA can be used?

   (A)Manufacturing
   (B) Mass transient
   (C) Traffic signals
   (D)All of the above

16. How many levels does complex SCADA system have?

   (A)One
   (B) Two
   (C) Three
   (D)Four

17. The SCADA system performs ____

   (A) Data presentation
   (B) Data acquisition
   (C) Networked data communication
   (D)All of the above

18. .. ____ is not a component of a. SCADA system

   (A) Sparger controller
   (B) Output system
   (C) Database server
   (D) None of the above

19. The RAID level 50 is a combination of ____

   (A) RAID 1 and RAID 0
   (B)RAID 5 and RAID 0
   (C) RAID 3 and RAID 0
   (D)None of the above

20. What is the standard form of RAID?

   (A) Reduced Array of Independent Disks
   (B)Reverse Array of Independent Disks
   (C)Redundant Array of Independent Disks
   (S) Random Array of Independent Disks

COORDINATOR

(Mr. D. Siva Kumar)

HOD /EEE

(Mr. M. Namachivayam)

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TEST QUESTIONS

Student Reg. No. & Name: 112421105348 $ M. Vignesh

Sem & Year: 03 $ II   Date: 22 / 10 / 2022

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Name of the Course	INDUSTRIAL AUTOMATION USING PLC AND SCADA
Duration of the Course	32 HOURS
Academic Year	2022-23
Period of the Course	17.10.2022-22.10.2022

STUDENT EVALUATION SHEET

S.NO	YEAR	REGISTER NUMBER	NAMEOF STUDENTS	ATTENDANCE	MARKS
1	II	112421105320	GAYATHRI.V	32	90
2	II	112421105321	GNANAGURUDOSS. M	32	80
3	II	112421105323	HARIHARAN.R	32	80
4	II	112421105324	INBASELVAN.D	32	90
5	II	112421105325	JOHN WESLY. S	32	90
6	II	112421105326	KAMESH. K	32	85
7	II	112421105327	KARTHICK.K	32	85
8	II	112421105328	KISHORE. L	32	90
9	II	112421105329	KOTTESSWARAN.S	32	90
10	II	112421105330	NARESH.M	32	95
11	II	112421105331	PARANTHAMAN.S	32	80
12	II	112421105332	PARTHIBAN.R	32	80
13	II	112421105333	PAVITHRA. K	32	90
14	II	112421105334	PRABHU. M	32	90
15	II	112421105335	PRASANTH. M	32	80
16		112421105336	PRAVEEN.M	32	80

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S.NO	YEAR	REGISTER NUMBER	NAMEOF STUDENTS	ATTENDANCE	MARKS
17	II	112421105337	PUSHPARAJ. M	32	80
18	II	112421105338	RAJA PRIYA. K	32	80
19	II	112421105340	RAJKUMAR. N	32	90
20	II	112421105342	SARAVANAN.T	32	90
21	II	112421105343	SATHISH KUMAR. B	32	90
22	II	112421105344	SENTHAMIZH. I	32	85
23	II	112421105345	SUBASH CHANDRABOSE. E	32	90
24	II	112421105346	THARUN KUMAR. V	32	95
25	II	112421105347	VARUNRAJ.N	32	95
26	II	112421105348	VIGNESH. M	32	95
27	II	112421105349	VIJAY. R	32	80
28	II	112421105350	VISHNU.S	32	80
29	II	112421105351	YOUGANDERAN. R	32	80
30	III	112420105319	FRANKLIN JOSEPH.D.R.	32	80
31	III	112420105320	GOPIKRISHNAN.B	32	90
32	III	112420105321	GOWTHAMAN.M	32	90
33	III	112420105322	JAYAKUMAR.S	32	90
34	III	112420105323	JEEVANANDHAM.M	32	95
35	III	112420105324	JUSTIN.J	32	95
36	III	112420105325	KISHORE.V	32	85
37	III	112420105326	KODHANDAN.M.D	32	85
38	III	112420105328	LOKESH.S	32	80
39	III	112420105329	MANIKANDAN.G	32	80
40	III	112420105330	MANIKANDAN.P	32	80

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41	III	112420105331	MANIVANNAN.T	32	90
42	III	112420105332	MONISHA.P	32	90
43	III	112420105333	NARENDRAN.M.G	32	80
44	III	112420105334	NAVEEN KUMAR.C	32	80
45	III	112420105335	NITHISH.M	32	80
46	III	112420105336	PARTHASARATHY.P	32	80
47	III	112420105337	PARTHIBAN.V	32	80
48	III	112420105338	PAVITHRA.R	32	85
49	III	112420105339	PUGAZHENTHI.K	32	85
50	III	112420105340	RAGHUL.S	32	85
51	III	112420105341	RAGHUL.V	32	90
52	III	112420105342	RAJESH.D	32	90
53	III	112420105343	RAMKUMAR.R	32	95
54	III	112420105345	SAKTHIVEL.S	32	95
55	III	112420105346	SAMPATHRAJ.R	32	80
56	III	112420105347	SANJAI.M	32	80
57	III	112420105348	SANJAY GOKUL.S	32	80
58	III	112420105349	SARAN.R	32	95
59	III	112420105350	SARANRAJ.M	32	95
60	III	112420105351	SATHISH.C	32	95
61	III	112420105352	SELVA.B	32	95
62	III	112420105353	SELVA GANAPATHY.M	32	80
63	III	112420105354	SILAMBARASAN.M	32	85
64	III	112420105356	SIVA KUMAR.V	32	80

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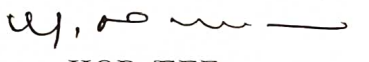Thirupachur, Thiruvallur - 631 203

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S.NO	YEAR	REGISTER NUMBER	NAMEOF STUDENTS	ATTENDANCE	MARKS
65	III	112420105357	TAMILANBAN.N	32	80
66	III	112420105358	TAMILARASU.M	32	80
67	III	112420105360	VIGNESHWARAN.G	32	90
68	III	112420105361	VIJAY.L	32	80
69	III	112420105362	VIGNESH.N	32	80
70	III	112420105363	ASHOK KUMAR.G	32	85
71	IV	112419105006	RAKESHKUMAR J	32	90
72	IV	112419105007	SNEHA N	32	90
73	IV	112419105008	SONIYA K	32	95
74	IV	112419105009	SRIDEVI K	32	80
75	IV	112419105010	SUNILKUMAR B	32	80
76	ME-PED I	112422415001	MATHIYAZAGAN.G	32	90
77	ME-PED I	112422415002	SAKTHIVEL.S	32	95
78	ME-PED I	112422415004	SUGADEVAN.R	32	90

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms ....**S. SAKTHIVEL (1124224I5002)**.... UG/PG

Department of Electrical and Electronics Engineering has successfully completed

Value Added Course titled 'INDUSTRIAL AUTOMATION USING

PLC & SCADA ' held from 17.10.2022 to 22.10.2022

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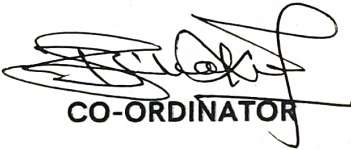APPROVED by AICTE, New Delhi and Affiliated to Anna University , Chennai

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