SRI BHARATHI
ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Kaikkurichi, Pudukkottai -622 303

www.sbec.edu.in

NAAC DOCUMENTS

Quality Indicator Frame Work

Criterion – 1
CURRICULAR ASPECTS

Submitted by

IQAC
Internal Quality Assurance Cell

Sri Bharathi Engineering College for Women

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

KAIKKURUCHI, PUDUKOTTAI – 622 303

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2018-2019 / EVEN SEMESTER

1.2 Academic Flexibility (30)

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

AND

1.2.2 Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

VAC Title:	**PLC PROGRAMMIMNG**
Resource Person:	**Resource Person :** Mr.S.Kamala Kannan, Embedded cum IOT developer, Galwin Technology, #12a,Periyasamy Towers,3rd floor, Chathiram Bus stand,Trichy-2 info@galwintech.in

Date of conduct from :	**10.12.2018**	**To:**	**15.12.2018**	**Duration:**	**36 Hours**
Organized Department :	ELECTRICAL AND ELECTRONICS ENGINEERING				

Participant Year:	2,3,4	**Semester**:	**EVEN**	**No. of Students Registered :**	36
Venue:	Tutorial Hall-42,SBECW				

TABLE OF CONTENTS

DEPARTMENT CIRCULAR   Date: 03/12/2018

It is planned to conduct Value added course by the Department of Electrical and Electronics Engineering in association with **GALWIN TECHNOLOGY**, Trichy for all Second, Third & Final year Value on **"PLC PRORAMMING"** from 10.12.2018 to 15.12.2018. Certificates will be issued to all the eligible participants at the end of the Course. The Resource person details are given in the table.

RESOURSE PERSON DETAILS:

Name	Mr.R.Rajkumar
Designation:	PLC Developer
Company name with address	Galwin Technology, #12a, Periyasamy Towers, 3rd floor, Chathiram Bus stand, Trichy-2.
Mail id	info@galwintech.in

HoD/EEE 3/12/18

HOD EEE
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI,
PUDUKKOTTAI - 622 303.

Cc:

- Principal's Office
- IQAC Coordinator
- Class In charges - II, III & IV-year of EEE
- II, III & IV-year EEE Students
- Notice Board

Dr. **S.THILAGAVATHI** M.E.,Ph.D.,
PRINCIPAL
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KAIKKURUCHI, PUDUKOTTAI – 622 303

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2018-2019 / EVEN SEMESTER

VALUE ADDED COURSE – PLC PROGRAMMING

SCHEDULE

S.NO	TOPICS	DURATION	DATE
1.	Introduction to Logic Circuit, Interfacing Peripheral Chips.	3	10.12.18
2.	Introduction to PLC	3	10.12.18
3.	PLC Construction	3	11.12.18
4.	PLC Basic Instructions	3	11.12.18
5.	Process Control Problems Classification	3	12.12.18
6.	Timers and Counters	3	12.12.18
7.	Word and Branching Instruction	3	13.12.18
8.	Program Control Instruction, Data Handling Instruction, Arithmetic Instruction.	3	13.12.18
9.	PLC Internal Facilities, Logic Instruction, I/O Instruction.	3	14.12.18
10.	Program Control Instruction , Sensors, Switches, Solid State Relays.	3	14.12.18
11.	Sequential Process Control: Sequential control	3	15.12.18
12.	Application Examples of Production Lines	3	15.12.18
TOTAL HOURS		**36HOUR**	

VAC COORDINATOR

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ACADEMIC YEAR 2018-2019 / EVEN SEMESTER

STUDENT NAME LIST FOR VALUE ADDED COURSE

PLC PROGRAMMING

S.NO	NAME	REG.NO	YEAR & SEMESTER
1	NAZEERA BANU.I	912617105001	II & IV
2	PARTHIKA.S	912617105002	II & IV
3	PRIYA.T	912617105003	II & IV
4	SAJINA.K	912617105004	II & IV
5	SELSIYA.R	912617105005	II & IV
6	THENMOZHI.J	912617105006	II & IV
7	VANITHA.E	912617105007	II & IV
8	PRASANNA P	912617105301	II & IV
9	SIYAMALADEVI S	912617105302	II & IV
10	ABIRAMI.M	912616105001	III &VI
11	AJITHA.R	912616105002	III &VI
12	GIRIJA.V	912616105003	III &VI
13	JOTHIKA.A	912616105006	III &VI
14	KARUNAMBIGAI.A	912616105007	III &VI
15	PRASANNA.K	912616105008	III &VI
16	SARANYA.G	912616105009	III &VI
17	SNEHA.V	912616105010	III &VI
18	SUBHASRI.T	912616105011	III &VI
19	SURIYAKALA.R	912616105013	III &VI
20	MAHESWARI R	912616105301	III &VI
21	PRINCY ROSELIN I	912616105302	III &VI
22	ASWINI .B	912615105001	IV & VIII
23.	DHANALAKSHMI .A	912615105003	IV & VIII

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24	DIVYADHARSHINI .B	912615105004	IV & VIII
25	MANJULA .S	912615105005	IV & VIII
26	PRAVEENA .K	912615105006	IV & VIII
27	PRAVEENA .R	912615105007	IV & VIII
28	PRIYADHARSINI .R	912615105008	IV & VIII
29	SANGEETHA .M	912615105009	IV & VIII
30	SANTHIYA RANI .C	912615105011	IV & VIII
31	SUGANYA .A	912615105012	IV & VIII
32	SUWATHI .D	912615105013	IV & VIII
33	SWARNALATHA .R	912615105014	IV & VIII
34	VAISHNAVI .B	912615105015	IV & VIII
35	AISHWARYA .S	912615105301	IV & VIII
36	MALINI.K	912615105302	IV & VIII

VAC COORDINATOR

HoD/EEE

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PRINCIPAL
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
ACADEMIC YEAR 2018-2019 / EVEN SEMESTER
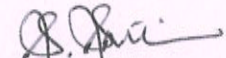### ATTENDANCE SHEET FOR VALUE ADDED COURSE
PLC PROGRAMMING

S.NO	REG. NO	NAME	YEAR/ SEM	10.12.18 F.N	10.12.18 A.N	11.12.18 F.N	11.12.18 A.N	12.12.18 F.N	12.12.18 A.N	13.12.18 F.N	13.12.18 A.N	14.12.18 F.N	14.12.18 A.N	15.12.18 F.N	15.12.18 A.N	NO. OF CLASS ATTENDED	SIGN OF STUDENT
1	912617105001	NAZEERA BANU.I	II & IV	/	a	/	/	/	/	/	/	/	/	/	/	11	2.Nimmebra
2	912617105002	PARTHIKA.S	II & IV	/	/	/	/	/	/	/	/	/	/	/	/	12	S.Parthika
3	912617105003	PRIYA.T	II & IV	/	/	/	/	/	/	/	/	/	/	/	/	12	T.Pya
4	912617105004	SAJINA.K	II & IV	/	/	/	/	/	/	/	/	/	/	/	/	12	K.Sajina
5	912617105005	SELSIYA.R	II & IV	/	/	/	/	a	a	/	/	/	a	/	/	09	P.Selsiya
6	912617105006	THENMOZHI.J	II & IV	/	/	/	/	/	/	/	/	/	/	/	/	12	J.Thenmzhi
7	912617105007	VANITHA.E	II & IV	/	a	/	/	/	/	/	/	/	/	/	/	11	E.vanitha
8	912617105301	PRASANNA P	II & IV	/	/	/	/	/	a	/	/	/	/	/	/	11	Prasanna
9	912617105302	SIYAMALADEVI S	II & IV	/	/	/	/	/	/	/	/	/	/	/	/	12	S.Syamaladevi
10	912616105001	ABIRAMI.M	III &VI	/	/	/	/	/	/	/	/	/	/	/	/	12	Abirai

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S.No	Register No	Name	Sem													Total	Signature
11	912616105002	AJITHA.R	III &VI	/	/	/	/	/	/	/	/	/	/	/	/	12	R.ajitha
12	912616105003	GIRIJA.V	III &VI	a	a	/	/	/	a	/	/	/	/	/	/	09	Girija
13	912616105006	JOTHIKA.A	III &VI	/	/	/	/	/	/	/	/	/	/	/	/	12	Jothika
14	912616105007	KARUNAMBIGAI.A	III &VI	/	a	/	/	/	/	/	/	/	/	/	/	12	Karunambigai
15	912616105008	PRASANNA.K	III &VI	/	/	/	/	/	a	/	/	/	/	/	/	12	Prasanna
16	912616105009	SARANYA.G	III &VI	/	/	/	/	/	/	/	/	/	/	/	/	12	G.saranya
17	912616105010	SNEHA.V	III &VI	/	/	/	/	/	/	/	/	/	/	/	/	12	Sneha
18	912616105011	SUBHASRI.T	III &VI	/	/	/	/	/	/	/	/	/	/	/	/	12	Subashri
19	912616105013	SURIYAKALA.R	III &VI	/	/	/	/	a	a	/	/	a	/	/	/	09	R.Suriyakala.
20	912616105301	MAHESWARI R	III &VI	/	/	/	/	/	/	/	/	/	/	/	/	12	Mahesh
21	912616105302	PRINCY ROSELIN I	III &VI	/	/	/	/	/	/	/	/	/	/	/	/	12	Princy roln
22	912615105001	ASWINI .B	IV & VIII	/	/	/	a	/	/	/	/	/	/	/	/	11	Aswini.B.
23	912615105003	DHANALAKSHMI .A	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	Dhana.A
24	912615105004	DIVYADHARSHINI .B	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	Divyadh.B
25	912615105005	MANJULA .S	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	Manjula.S
26	912615105006	PRAVEENA .K	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	10	Praveena.K
27	912615105007	PRAVEENA .R	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	Praveena.R
28	912615105008	PRIYADHARSINI .R	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	R.Priyadhni
29	912615105009	SANGEETHA .M	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	Sangeetha
30	912615105011	SANTHIYA RANI .C	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	Santhiyarani.C

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PRINCIPAL
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S.No	Reg. No	Name	Sem														Total	Signature
31	912615105012	SUGANYA .A	IV & VIII	/	a	/	/	/	/	/	/	/	/	/	/	11	Suganya A
32	912615105013	SUWATHI .D	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	Suwathi.D
33	912615105014	SWARNALATHA .R	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	R.Swarna
34	912615105015	VAISHNAVI .B	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	Vaishnavi.B
35	912615105301	AISHWARYA .S	IV & VIII	a	a	/	/	/	a	/	/	/	/	/	/	09	S.Aishwarya
36	912615105302	MALINI.K	IV & VIII	/	/	/	/	/	/	/	/	/	/	/	/	12	Malini.K

VAC COORDINATOR

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PRINCIPAL
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SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

Report on Value Added Course

Title:	PLC PROGRAMMIMNG
Resource Person:	Mr.S.Kamala Kannan, Embedded cum IOT developer, Galwin Technology, #12a,Periyasamy Towers,3rd floor, Chathiram Bus stand,Trichy-2 info@galwintech.in

Date of conduct from :	10.12.2018	To:	15.12.2018	Duration:	36 Hours

Organized Department :	ELECTRICAL AND ELECTRONICS ENGINEERING

Participant Year:	2/ 3 /4	Semester:	EVEN	No. of Students Registered :	36

Venue:	TUTORIAL HALL:42,SBECW

Outcome of Value Added Course (VAC)

At the end of the Course, Students can able to

- Explain about the need and benefits of PLC and its programming.
- Describe about PLC Construction, its memory and ladder instructions and its Basic Instructions.
- Obtain the insight about the types of Process Control, Interlock control, Sequential control, Random control, Interlock control examples.
- Comprehend about word and Branching Instruction: Data Handling Instruction, Arithmetic Instruction, and PLC Internal Facilities.
- Demonstrate about Program Control Instruction. Sensors, Switches, Solid State Relays.
- Illustrate about sequential Process Control.
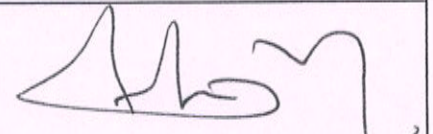
No. of students successfully completed the VAC course is **36** students based on the following assessment process.

Assessment Process

- Students, who are securing **more than 60% on total score** and secured more than 60% in attendance is eligible to receive the certificate for the VAC course conducted.
- Total Score = (0.5 *Attendance in VAC out of 100 percentage + 0.5 *Test mark in VAC out of 100 marks)

VAC Coordinator

HoD/ EEE 18/12/18
HOD EEE
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI,
PUDUKKOTTAI - 622 303.

Principal 18/12/18
PRINCIPAL
SRI BHARATHI ENGINEERIN
COLLEGE FOR WOMEN
KAIKKURICHI - 622 303.
PUDUKKOTTAI DISTRICT

Dr. S.THILAGAVATHI M.E.,Ph.D.,
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GALWIN™ TECHNOLOGY

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(App

KAIKKURICHI, PUDUKKOTTAI-622303

Certificate of completion

VALUE ADDED PROGRAM

This is to certify that Mr/Ms **PARTHIKA.S of II EEE** has successfully completed Value Added Course on **"PLC PROGRAMMING"** organised by the department of **Electrical and Electronics Engineering** in association with **Galwin Technology** from 10.12.2018 to 15.12.2018.

PLC DEVELOPER
Galwin Technology

HOD/EEE
SBECW

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SBECW

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Certificate of completion

VALUE ADDED PROGRAM

This is to certify that Mr/Ms **JOTHIKA.A of III EEE** has successfully completed Value Added Course on **"PLC PROGRAMMING"** organised by the department of **Electrical and Electronics Engineering** in association with **Galwin Technology** from 10.12.2018 to 15.12.2018.

PLC DEVELOPER
Galwin Technology

HOD/EEE
SBECW

PRINCIPAL
SBECW

Dr. **S.THILAGAVATHI** M.E., Ph.D.,
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KAIKKURICHI, PUDUKKOTTAI-622303

Certificate of completion

VALUE ADDED PROGRAM

This is to certify that Mr/Ms **MALINI.K** of **IV** EEE has successfully completed Value Added Course on **"PLC PROGRAMMING"** organised by the department of **Electrical and Electronics Engineering** in association with **Galwin Technology** from 10.12.2018 to 15.12.2018.

PLC DEVELOPER
Galwin Technology

HOD/EEE
SBECW

PRINCIPAL
SBECW

Dr. **S.THILAGAVATHI** M.E., Ph.D.,
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COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

ACADEMIC YEAR 2018-2019 / EVEN SEMESTER

VALUE ADDED COURSE

PLC PROGRAMMING

Name of student: Year/Sem:

AU Reg.No:

MULTIPLE CHOICE QUESTIONS (25 X1 =25 MARKS)

1. The programmable logic controllers are used in _____
   a) Manufacturing   b) Automation
   c) Both a and b   d) None of the above

2. What are the components that make the programmable logic controller work?
   a) Input and output module   b) CPU
   c) Power supply   d) All of the above

3. The programmable logic controller is classified into _____
   a) 1   b) 2   c) 3   d) 4

4. Which one is the PLC programming language?
   a) HMI   b) MMI   c) FBD   d) None of the above

5. The ladder logic in PLC consists of _____
   a) Logic gates   b) Functional blocks
   c) Relay contacts and coils d) Relays

6. The relays operates on _____
   a) Low power   b) Control circuits of very high power
   c) Both a and b   d) None of the above

7. What are the components that are used to make relay _____
   a) Electromagnet   b) Spring
   c) Armature   d) All of the above

8. Which mode accepts and converts signals from sensors into a logic signal?
   a) Input module   b) Output modular
   c) Both a and b   d) None of the above

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9. Which is not a graphical programming language for the programmable logic controller?

    a) Ladder logic   b) Structures text

    c) Functional block diagram   d) Sequential function chart

10. How many input and output pins do a small programmable logic controller have?

    a) 10   b) 30   c) 50   d) 128

11. _____ is connected to the PLC input

    a) Indicating lamp   b) Field sensors

    c) Both a and b   d) None of the above

12. _____ is the device that can't be connected to the PLC output

    a) Pressure Transmitter   b) Motor

    c) Control valve   d) None of the above

13. The programmable logic controller works on _____

    a) Parallel mechanism   b) Sequential mechanism

    c) Both a and b   d) None of the above

14. _____ can be connected to the analogue output of the programmable logic controller

    a) Control valve   b) Level transmitter

    c) Flow transmitter   d) None of the above

15. Which type of memory is used in PLC?

    a) Random Access Memory   b) Read Only Memory

    c) Both a and b   d) None of the above

16. In PLC the user can write the programs with the help of _____

    a) Optical isolation   b) Sensing devices

    c) Programming devices   d) None of the above

17. Which one is the correct sequence for PLC operation?.

    a) Self-test, input scan, logic scan, output scan

    b) Self-test, logic scan, output scan, input scan

    c) Self-test, input scan, output scan, logic scan

    d) None of the above

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18. The DVP-PLC external input-output points are numbered in _____ format

    a) Binary format   b) Decimal format

    c) Octal format   d) None of the above

19. The PLC internally operates, stores, and calculates the value in _____

    a)Binary format   b) Decimal format

    c) Octal format   d) None of the above

20. _____ are the components that are required to change or create a program

    a)PLC, programming device   b) Programming software

    c) Connector cable   d) All of the above

21. The visual programming language also called as _____

    a) Relay logic   b) Ladder logic

    c) Controller logic   d) All of the above

22. The advantages of PLC are _____

    a) Easy maintenance   b) Reliability is high

    c) Small in size   d) All of the above

23. The programmable logic controllers are classified into _____ according to physical size in modular type PLC

    a) Mini PLC, Micro PLC   b) Micro PLC, Nano PLC

    c) Nano PLC, Mini PLC, Macro PLC   d) None of the above

24. In PLC operation _____ retrieves the data into an output module

    a) Input scan   b) Output scan

    c) Program scan   d) None of the above

25. Which one is the oldest programming language?

    a) Ladder logic   b) Function block diagram

    c) Structured text programming   d) None of the above

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PRINCIPAL
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Kaikkurchi - 622 303, Pudukkottai Dt.

ACADEMIC YEAR 2018-2019 / EVEN SEMESTER

VALUE ADDED COURSE
PLC PROGRAMMING.
ANSWER KEY FOR MCQ

1	c	2	d	3	b	4	c	5	d
6	c	7	d	8	a	9	b	10	d
11	b	12	a	13	b	14	a	15	c
16	c	17	a	18	c	19	a	20	d
21	b	22	d	23	c	24	b	25	a

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PRINCIPAL
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COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

ACADEMIC YEAR 2018-2019 / EVEN SEMESTER

VALUE ADDED COURSE

PLC PROGRAMMING

Name of student: R. Selsiya

AU Reg.No: 912617105605

(24/25)

Year/Sem: II / IV

MULTIPLE CHOICE QUESTIONS (25 X1 =25 MARKS)

1. The programmable logic controllers are used in _____

    a) Manufacturing   b) Automation

    c) Both a and b ✓   d) None of the above

2. What are the components that make the programmable logic controller work?

    a) Input and output module   b) CPU

    c) Power supply   d) All of the above ✓

3. The programmable logic controller is classified into _____

    a) 1   b) 2 ✓   c) 3   d) 4

4. Which one is the PLC programming language?

    a) HMI   b) MMI   c) FBD ✓   d) None of the above

5. The ladder logic in PLC consists of _____

    a) Logic gates   b) Functional blocks

    c) Relay contacts and coils   d) Relays ✓

6. The relays operates on _____

    a) Low power   b) Control circuits of very high power

    c) Both a and b ✓   d) None of the above

7. What are the components that are used to make relay _____

    a) Electromagnet   b) Spring

    c) Armature   d) All of the above ✓

8. Which mode accepts and converts signals from sensors into a logic signal?

    a) Input module ✓   b) Output modular

    c) Both a and b   d) None of the above

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   a) Ladder logic

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10. How many input and output pins do a small programmable logic controller have?

    a) 10   b) 30   c) 50   d) 128

11. _____ is connected to the PLC input

    a) Indicating lamp

    b) Field sensors

    c) Both a and b

    d) None of the above

12. _____ is the device that can't be connected to the PLC output

    a) Pressure Transmitter

    b) Motor

    c) Control valve

    d) None of the above

13. The programmable logic controller works on _____

    a) Parallel mechanism

    b) Sequential mechanism

    c) Both a and b

    d) None of the above

14. _____ can be connected to the analogue output of the programmable logic controller

    a) Control valve

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    c) Flow transmitter

    d) None of the above

15. Which type of memory is used in PLC?

    a) Random Access Memory

    b) Read Only Memory

    c) Both a and b

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16. In PLC the user can write the programs with the help of _____

    a) Optical isolation

    b) Sensing devices

    c) Programming devices

    d) None of the above

17. Which one is the correct sequence for PLC operation?.

    a) Self-test, input scan, logic scan, output scan

    b) Self-test, logic scan, output scan, input scan

    c) Self-test, input scan, output scan, logic scan

    d) None of the above

Dr. **S.THILAGAVATHI** M.E.,Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai Dt.

18. The DVP-PLC external input-output points are numbered in _____ format

    a) Binary format   b) Decimal format

    c) Octal format ✓   d) None of the above

19. The PLC internally operates, stores, and calculates the value in _____

    a) Binary format ✓   b) Decimal format

    c) Octal format   d) None of the above

20. _____ are the components that are required to change or create a program

    a) PLC, programming device   b) Programming software

    c) Connector cable   d) All of the above ✓

21. The visual programming language also called as _____

    a) Relay logic   b) Ladder logic ✓

    c) Controller logic   d) All of the above

22. The advantages of PLC are _____

    a) Easy maintenance   b) Reliability is high

    c) Small in size   d) All of the above ✓

23. The programmable logic controllers are classified into _____ according to physical size in modular type PLC

    a) Mini PLC, Micro PLC   b) Micro PLC, Nano PLC

    c) Nano PLC, Mini PLC, Macro PLC ✓   d) None of the above

24. In PLC operation _____ retrieves the data into an output module

    a) Input scan   b) Output scan ✓

    c) Program scan   d) None of the above

25. Which one is the oldest programming language?

    a) Ladder logic ✓   b) Function block diagram

    c) Structured text programming   d) None of the above

Dr S.THILAGAVATHI M.E.,Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

ACADEMIC YEAR 2018-2019 / EVEN SEMESTER

VALUE ADDED COURSE

PLC PROGRAMMING

Name of student: R. AJITHA $\frac{22}{25}$ Year/Sem: III / VI

AU Reg.No: 912616105002

MULTIPLE CHOICE QUESTIONS (25 X1 =25 MARKS)

1. The programmable logic controllers are used in _____
   a) Manufacturing   b) Automation
   c) Both a and b   d) None of the above

2. What are the components that make the programmable logic controller work?
   a) Input and output module   b) CPU
   c) Power supply   d) All of the above

3. The programmable logic controller is classified into _____
   a) 1   b) 2   c) 3   d) 4

4. Which one is the PLC programming language?
   a) HMI   b) MMI   c) FBD   d) None of the above

5. The ladder logic in PLC consists of _____
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7. What are the components that are used to make relay _____
   a) Electromagnet   b) Spring
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8. Which mode accepts and converts signals from sensors into a logic signal?
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   c) Both a and b   d) None of the above

Dr **S.THILAGAVATHI** M.E.,Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
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9. Which is not a graphical programming language for the programmable logic controller?

   a) Ladder logic
   b) Structures text
   c) Functional block diagram
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10. How many input and output pins do a small programmable logic controller have?

   a) 10   b) 30   c) 50   d) 128

11. _____ is connected to the PLC input

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   c) Both a and b
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12. _____ is the device that can't be connected to the PLC output

   a) Pressure Transmitter
   b) Motor
   c) Control valve
   d) None of the above

13. The programmable logic controller works on _____

   a) Parallel mechanism
   b) Sequential mechanism
   c) Both a and b
   d) None of the above

14. _____ can be connected to the analogue output of the programmable logic controller

   a) Control valve
   b) Level transmitter
   c) Flow transmitter
   d) None of the above

15. Which type of memory is used in PLC?

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25. Which one is the oldest programming language?

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c) Structured text programming   d) None of the above

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PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai Dt.

ACADEMIC YEAR 2018-2019 / EVEN SEMESTER

VALUE ADDED COURSE

PLC PROGRAMMING

Name of student: B.Aswini $\frac{24}{25}$ Year/Sem: IV / VIII

AU Reg.No: 91261510500)

MULTIPLE CHOICE QUESTIONS (25 X1 =25 MARKS)

1. The programmable logic controllers are used in _____
   a) Manufacturing   b) Automation
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2. What are the components that make the programmable logic controller work?
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SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)
Kaikkurichi, Pudukkottai- 622 303.

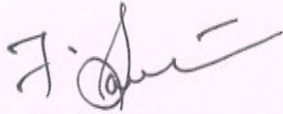## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2018-2019 / EVEN SEMESTER
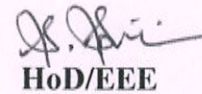
MARK SHEET FOR VALUE ADDED COURSE
PLC PROGRAMMING

S.NO	REG. NO	NAME	YEAR/ SEM	ATTENDACE 50% (A)		VAC –MCQ 50%(B)		OVERALL MARK (A+B)
				No of Session Attended	MARKS	No of Correct Answer	MARKS	
1	912617105001	NAZEERA BANU.I	II & IV	11	92	23	92	92
2	912617105002	PARTHIKA.S	II & IV	12	100	21	84	92
3	912617105003	PRIYA.T	II & IV	12	100	24	96	98
4	912617105004	SAJINA.K	II & IV	12	100	22	88	94
5	912617105005	SELSIYA.R	II & IV	9	75	24	96	86
6	912617105006	THENMOZHI.J	II & IV	12	100	24	96	98
7	912617105007	VANITHA.E	II & IV	11	92	24	96	94
8	912617105301	PRASANNA P	II & IV	11	92	22	88	90
9	912617105302	SIYAMALADEVI S	II & IV	12	100	22	88	94
10	912616105001	ABIRAMI.M	III &VI	12	100	23	92	96
11	912616105002	AJITHA.R	III &VI	12	100	22	88	94
12	912616105003	GIRIJA.V	III &VI	9	75	21	84	80
13	912616105006	JOTHIKA.A	III &VI	12	100	24	96	98
14	912616105007	KARUNAMBIGAI.A	III &VI	11	92	23	92	92
15	912616105008	PRASANNA.K	III &VI	11	92	22	88	90
16	912616105009	SARANYA.G	III &VI	12	100	21	84	92
17	912616105010	SNEHA.V	III &VI	12	100	24	96	98
18	912616105011	SUBHASRI.T	III &VI	12	100	22	88	94
19	912616105013	SURIYAKALA.R	III &VI	9	75	25	100	88

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20	912616105301	MAHESWARI R	III &VI	12	100	24	96	98
21	912616105302	PRINCY ROSELIN I	III &VI	12	100	20	80	90
22	912615105001	ASWINI .B	IV & VIII	11	92	24	96	94
23	912615105003	DHANALAKSHMI .A	IV & VIII	12	100	21	84	92
24	912615105004	DIVYADHARSHINI .B	IV & VIII	12	100	24	96	98
25	912615105005	MANJULA .S	IV & VIII	12	100	22	88	94
26	912615105006	PRAVEENA .K	IV & VIII	10	83	21	84	84
27	912615105007	PRAVEENA .R	IV & VIII	12	100	24	96	98
28	912615105008	PRIYADHARSINI .R	IV & VIII	12	100	20	80	90
29	912615105009	SANGEETHA .M	IV & VIII	12	100	24	96	98
30	912615105011	SANTHIYA RANI .C	IV & VIII	12	100	21	84	92
31	912615105012	SUGANYA .A	IV & VIII	11	92	22	88	90
32	912615105013	SUWATHI .D	IV & VIII	12	100	21	84	92
33	912615105014	SWARNALATHA .R	IV & VIII	12	100	24	96	98
34	912615105015	VAISHNAVI .B	IV & VIII	12	100	21	84	92
35	912615105301	AISHWARYA .S	IV & VIII	9	75	22	88	82
36	912615105302	MALINI.K	IV & VIII	12	100	22	88	94

VAC COORDINATOR

HoD/EEE