

SRI BHARATHI

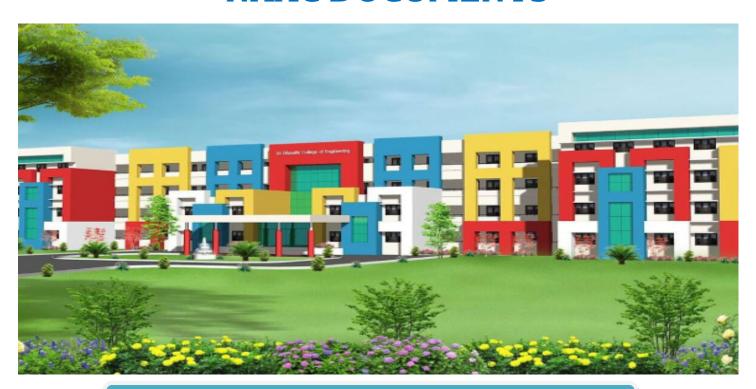
ENGINEERING COLLEGE FOR WOMEN

(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

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) KAIKKURUCHI, PUDUKOTTAI – 622 303

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2019-2020 / ODD 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:		ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS										
Resource Person	:	Resource Person K.Kamaraj, Co-Founder, Power Integrated		VT L	Resource Person 2: R.Anbalagan Senior Engineer							
Date of conduct	from :	24.06.2019	To:	28	.06.2019	Duration:	30 Hours					
Organized Depa	rtment :	ELECTRICA	AL AND I	LEC	TRONICS E	NGINEERIN	G					
Participant Year	2, 3,4	4 Semester:	ODE		No. of Students Registered :							
Venue: Tutorial Hall-42,SBECW												

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KAIKKURUCHI, PUDUKOTTAI – 622 303
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
ACADEMIC YEAR 2019-2020 / ODD SEMESTER

DEPARTMENT CIRCULAR

Value Added Course offered by the Department of EEE will be conducted for II, III, IV year students on "ELECTRICAL CONTROL

Date: 14/06/2019

DESIGN IN REAL TIME APPLICATIONS" from 24.06.2019 to 28.06.2019. Certificates will be issued to all the eligible participants at the end of the Course.

RESOURSE PERSON DETAILS:

Name:	Mr.K.Kamaraj	Mr.R.Anbalagan						
Designation:	Co-Founder	Senior Engineer						
Company name with Address:	Power Integrated Solutions #10A/3 Radhakrishna Color Sastri Road, Thennur, Trich	ny,						
Mail id:	powerintegratedsolutions@gmail.com							

Cc:

• Principal's Office

• IQAC Coordinator

• Class In charges - II, III & IV-year of EEE

• II, III & IV-year EEE Students

• Notice Board

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

Dr. S.THILAGAVATHI M.E.,Ph.D., PRINCIPAL



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KAIKKURUCHI, PUDUKOTTAI – 622 303
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
ACADEMIC YEAR 2019-2020 / ODD SEMESTER

VALUE ADDED COURSE

ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS

SCHEDULE

S.NO	TOPICS	DURATION	DATE	
1.	Electrical Control system and their classifications.	2	24.06.2019	
2.	Design of Electrical control circuits.	2	24.06.2019	
3.	Real time applications of control system	2	24.06.2019	
4.	Design, installation, testing and monitoring of electrical network systems	3	25.06.2019	
5.	Model control system theory and its applications, state variable for engineering.	3	25.06.2019	
6.	Bandwidth, sensitivity, damping and oscillations	3	26.06.2019	
7.	Fully automated system with stability analysis	3	26.06.2019	
8.	Filters, sensors, and encoder responses of the system	3	27.06.2019	
9.	Robust control system and Intelligent control schemes	3	27.06.2019	
10.	Digital processing of signals, Analog and digital conversion	3	28.06.2019	
11.	Study of simulation of electrical control techniques with a systematic approach to digital logic design.	3	28.06.2019	
	TOTAL HOURS	30H	OUR	

VAC COORDINATOR

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HoD/EÉE

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SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN (Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) KAIKKURUCHI, PUDUKKOTTAI-622 303. DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ACADEMIC YEAR 2019-2020 / ODD SEMESTER

STUDENT NAME LIST FOR VALUE ADDED COURSE

ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS

S.NO	NAME	REG.NO	YEAR & SEMESTER
1	AARTHI G	912618105001	II & III
2	AASHA R	912618105002	II & III
3	AGARI S	912618105003	II & III
4	JEEVITHA R	912618105004	II & III
5	NISHA K	912618105005	II & III
6	RAMANA R	912618105006	II & III
7	SNEHA S	912618105007	II & III
8	VINOTHINI V	912618105301	II & III
9	NAZEERA BANU I	912617105001	III & V
10	PARTHIKA S	912617105002	III & V
11	PRIYA T	912617105003	III & V
12	SAJINA K	912617105004	III & V
13	SELSIYA R	912617105005	III & V
14	THENMOZHI J	912617105006	III & V
15	VANITHA E	912617105007	III & V
16	SIYAMALADEVI S	912617105302	III & V
17	ABIRAMI M	912616105001	IV & VII
18	AJITHA R	912616105002	IV & VII
19	GIRIJA V	912616105003	IV & VII
20	JOTHIKA A	912616105006	IV & VII
21	KARUNAMBIGAI A	912616105007	IV & VII
22	PRASANNA K	912616105008	IV & VII
23	SARANYA G	912616105009	IV & VII

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24	SNEHA V	912616105010	IV & VII
25	SUBHASRI T	912616105011	IV & VII
26	SURIYAKALA R	912616105013	IV & VII
27	MAHESWARI R	912616105301	IV & VII
28	PRINCY ROSELIN I	912616105302	IV & VII

VAC COORDINATOR

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PUDUKKOTTAI - 622 303.



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KAIKKURICHI, PUDUKKOTTAI-622 303
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
ACADEMIC YEAR 2019-2020 / ODD SEMESTER
ATTENDANCE SHEET FOR VALUE ADDED COURSE

ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS

				24.06.19		25.	25.06.19		06.19	27.0	06.19	28.06.19		NO. OF	
S.NO	REG. NO	NAME	YEAR/ SEM	F.N	A.N	F.N	A.N	F.N	A.N	F.N	A.N	F.N	A.N	CLASS ATTENDED	SIGN OF STUDENT
1	912618105001	AARTHI G	II & III	/	1	1	/	1	1	/	1	/	1	10	G1. Auth
2	912618105002	AASHA R	II & III	1	1	/	1	1	1	/	1	1	/	10	R. Aashar
3	912618105003	AGARI S	II & III	1	a	1	1	1	1	1	1	1	1	09	e damai
4	912618105004	JEEVITHA R	II & III	/	/	/	1	1	1	1	/	1	1	10	Riedhas
5	912618105005	NISHA K	II & III	1	1	/	/	/	/	/	1	1	1	10	of Dishej
6	912618105006	RAMANA R	II & III	/	1	/	/	1	a	1	1	1	/		2. Runane
7	912618105007	SNEHA S	II & III	/	1	1	1	1	1	1	/	1	1	10	S. 8 none

Dr. S.THILAGAVATHI M.E., Ph.D.

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

8	912618105301	VINOTHINI V	II & III	T						1	T	1			
8				/	1	1	1	/	1	1	/	/	1	10	V. V99
9	912617105001	NAZEERA BANU I	III & V	1	/	1	1	1	1	1	1)	1	10	1.00mmalan
10	912617105002	PARTHIKA S	III & V	/	/	1	1	1	/	1	1	1	1	10	5. Panthage
11	912617105003	PRIYA T	III & V	/	1	/	1	/	1	1	1	,	1	10	Propo
12	912617105004	SAJINA K	III & V	1	1	1	/	1	1	1	1	1	,	10	
13	912617105005	SELSIYA R	III & V	1	1	1	/	1	1	1	/	/	1	10	K. Sajina P. Selsiya
14	912617105006	THENMOZHI J	III & V	1	1	/	1	1	/	/	1	1	1	10	J. Therman
15	912617105007	VANITHA E	III & V	1	1	1	/	1	1	/	1	/	1	10	F. Varilta
16	912617105302	SIYAMALADEVI S	III & V	1	1	1	1	1	1	1	1	1	1	10	5. Symboli
- 17	912616105001	ABIRAMI M	IV & VII	1	1	/	1	1	1	1	1	/	1	10	Arbirain
18	912616105002	AJITHA R	IV & VII	1	1	1	/	1	1	1	/	/	1	10	Arbirain Rogran
19	912616105003	GIRIJA V	IV & VII	1	1	1	/	1	/	1	1	/	/	10	Ginja
20	912616105006	JOTHIKA A	IV & VII	1	1	1	1	/	1	1	/	/	1	10	Stripa
21	912616105007	KARUNAMBIGAI A	IV & VII	1	1	1	1	1	1	,	1	1	1	10	Konvenzi
22	912616105008	PRASANNA K	IV & VII	1	1	1	/	1	1	1	/	1	/	10	Frasamon
23	912616105009	SARANYA G	IV & VII	/	1	1	1	1	1	1	/	1	1	10	Cr. Soroupa

or. S.THILAGAVATHI M.E., Ph.D.,
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24	912616105010	SNEHA V	IV & VII	1	a	/	1	1	/	/	/	1	1	09	Lula
25	912616105011	SUBHASRI T	IV & VII	/	/	/	1	/	/	/	/	./	/	10	Suboshii
26	912616105013	SURIYAKALA R	IV & VII	/	/	1	1	1	1	1	1	1	1	10	R. Sonighla
27	912616105301	MAHESWARI R	IV & VII	/	/	/	1	1	1	1	1	1	1	10	Mabel
28	912616105302	PRINCY ROSELIN I	IV & VII	/	/	/	1	1	1	1	1	1	1	10	Princy romb

VAC COORDINATOR

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PUDUKKOTTAI - 622 303.

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

Report on Value Added Course

Title:

ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS

Resource Person:

1.K.Kamaraj,

2. R.Anbalagan

Co-Founder,

Senior Engineer

Power Integrated Solutions PVT LTD,

#10A/3 Radhakrishna Colony, Sastri Road, Thennur, Trichy-17.

Date of conduct from:

24.June.2019

To: 28.June.2019 Duration:

30 Hours

Organized Department:

ELECTRICAL AND ELECTRONICS ENGINEERING

Participant Year:

2/3/4 Semester: ODD

No. of Students Registered:

28

Venue:

Tutorial Hall:42,SBECW

Outcome of Value Added Course (VAC)

At the end of the Course, Students can able to

- Explain about the basics of electrical control system and their classifications.
- Describe about the design, installation, testing and monitoring of electrical network systems.
- Obtain the insight about optimizing control techniques.
- Comprehend about fully automated system with stability analysis.
- Demonstrate about robust control system and intelligent control schemes.
- Illustrated about simulation of electrical control techniques with a systematic approach to digital logic design.

No. of students successfully completed the VAC course is 28 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

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

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PUDUKKOTTAI DISTRICT

Dr. S.THILAGAVATHTM.E., Ph.D. PRINCIPAL

CERTIFICATE OF COMPLETION





Power Integrated Solutions #10A/3 Radhakrishna Colony, Sastri Road,Thennur,Trichy-17 powerintegratedsolutions@gmail.com

This is to certify that Mr/Ms_AARTHI G, Reg No 912618105001 has successfully completed the value-added program on "ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS" conducted at Sri Bharathi Engineering College for Women, Pudukkottai in association with Power Integrated Solutions, Trichy from 24.06.2019 to 28.06.2019.

HR MANAGER

Power Integrated Solutions

HOD/EEE_D

EEDr. S.THILAGAVATE M.E., Ph.D.,

PRINC

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt. SBECW

PRINCIPAL

CERTIFICATE OF COMPLETION





Power Integrated Solutions #10A/3 Radhakrishna Colony, Sastri Road, Thennur, Trichy-17 powerintegratedsolutions@gmail.com

This is to certify that Mr/Ms SAJINA K, Reg No 912617105004 has successfully completed the valueadded program on "ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS" conducted at Sri Bharathi Engineering College for Women, Pudukkottai in association with Power Integrated Solutions, Trichy from 24.06.2019 to 28.06.2019.

HR MANAGER

Power Integrated Solutions

HOD/EEE Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL

SBECW

Kaikkurchi - 622 303 Pudukkotta' Dt

SBECW

CERTIFICATE OF COMPLETION





Power Integrated Solutions #10A/3 Radhakrishna Colony, Sastri Road,Thennur,Trichy-17 powerintegratedsolutions@gmail.com

This is to certify that Mr/Ms <u>SUBHASRI T</u>, Reg No <u>912616105011</u> has successfully completed the value-added program on "ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS" conducted at Sri Bharathi Engineering College for Women, Pudukkottai in association with Power Integrated Solutions, Trichy from 24.06.2019 to 28.06.2019.

HR MANAGER

Power Integrated Solutions

Blanda

SBECW

HOD/EEE Dr. S.THILAGAVATHIM. E., Ph.D., PRINCIPAL

PRINCIPAL

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt. SBECW



Name of student:

Year/Sem:

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2019-2020 / ODD SEMESTER

VALUE ADDED COURSE

ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS.

AU Reg.No:

MULT	TIPI	LE CHOICE QUESTIONS (25	X1 =25 MARKS)
	1.	What is Control System?	
		a) Control system is a system in	which the output is controlled by varying the input
		b) Control system is a device that	at will not manage or regulate the behavior of other
		devices using control loops	
		c) Control system is a feedback	system that can be both positive and negative
		d) Control System is a system in	which the input is controlled by varying the output
	2.	Which of the following is not th	e feature of a modern control system?
		a) Correct power level	b) No oscillation
		c) Quick response	d) Accuracy
	3.	A control system working under	unknown random actions is called
		a) Adaptive control system	b) Stochastic control system
		c) Computer control system	d) Digital data system
	4.	Which of the following element	is not used in an automatic control system?
		a) Final control element	b) Sensor
		c) Oscillator	d) Error detector
	5.	A major part of the automatic co	ontrol theory applies to the:
		a) Casual systems	b) Linear Time invariant systems
		c) Time variant systems	d) Non-linear systems Dr. S.THILAGAVATHI M.E., Ph
			SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

6.	Traffic light system is the examp	ple of:
	a) Open-loop system	b)Closed-loop system
	c) Both (a) and (b)	d) None of these
7.	The impulse response of an RL of	circuit is:
	a) Parabolic function	b)Step function
	c) Rising exponential function	d)Decaying exponential function
8.	Which of the following is an ope	en loop control system?
	a) Ward Leonard control	b) Metadyne
	c) Stroboscope	d) Field controlled D.C. motor
9.	What should be the nature of bar	ndwidth for a good control system?
	a) Small b) Medium	c) Large d) All of the mentioned
10.	Which of the following statemen	at is true about Feedback control system?
	a) Equally sensitive to forward for	
		d feedback path parameter changes
		h parameter changes than to forward path parameter
	changes	
	d) Less sensitive to forward path	parameter changes than to feedback path parameter
	changes	
11	In a stable control system backle	ash can cause which of the following?
11.	a) Overdamping	b) Low-level oscillations
	c) Underdamping	d) Poor stability at reduced values of open loop
	gain	a) I our stability at reduced variets of open loop
12.	In a control system the output of	f the controller is given to
	a) Amplifier	b) Sensor
	c) Final control element	d) Comparator
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13. A Control System with excessive following?	re noise, is likely to suffer from which of the
a) Oscillations	b) Saturation in amplifying stages
c) Loss of gain	d) Vibrations
14. In a temperature control system,	what conversion in signal takes place?
a) Error to Digital	b) Error to Analog
c) Digital to Analog	d) Analog to Digital
15. Which of the following control s	systems have unpredictable & non-repeatable?
a) Stochastic control systems	b) Deterministic control systems
c) Static control systems	d) Dynamic control systems
16. In pneumatic control systems the converts	e control valve used as the final control element
a) Position change to pressure si	gnal b) Electric signal to pressure signal
c) Pressure signal to electric sign	d) Pressure signal to position change
M to the variation in G?	hat is the sensitivity of the gain of the overall system,
a) G/1GH b) 1/1+GH	c) G/1+G d) 1/1+G
18. Feedback control system is basic	ally
a) Band pass filter b) Band filter	stop filter c) High pass filter d) Low pass

19. A control system is generally met with the time response specifications:

b) Setting time

a) Damping factor

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c) Non-Stationary

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DEFINITION ELECTRICA	AL AND ELECTRONICS ENGINEERING
c) Steady state accuracy	d) All of the mentioned
20. Which of the following is not a featu	are of a good control system?
a) Slow response	b) Sufficient power handling capacity
c) Good stability	d) Good accuracy
	a, cood documey
21. With negative feedback in a closed le	oop control system, the system sensitivity to
parameter variation:	
a) Becomes infinite	b) Becomes zero
c) Decreases	d) Increases
22. Which of the following is the input o	f a controller?
a) Signal of fixed amplitude not depe	
b) Desired variable value	
c) Sensed signal	
d) Error signal	
22 Effect of feedback and the second	
23. Effect of feedback on sensitivity is m	
a) Closed loop control system	b) Open and closed loop control
c) Open loop control system	J) NI C.1
c) Open loop control system	d) None of the mentioned
24. Sampling is necessary	
a) Non automated control system	b) Automated control control
c) In complex control system	b) Automated control system
-, - complex control system	d) Where high accuracy is required
25. Which of the motions in actuators are	preferred?
a) Rotary	b) Stationary
	o) Stationary

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d) Translator



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2019-2020 / ODD SEMESTER

<u>VALUE ADDED COURSE</u> <u>ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS.</u>

ANSWER KEY FOR MCQ

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

Dr. S.THILAGAVATHIME., Ph.D.

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ACADEMIC YEAR 2019-2020 / ODD SEMESTER

VALUE ADDED COURSE

	ELECTRICAL CONTROL D	ESIGN IN REAL TI	ME APPLICA	TIONS.
Name of s Year/Sem	tudent: G1:AARTH1 : II / III	25	AU Reg.No:	912618
MULTIPI	LE CHOICE QUESTIONS (25	X1 =25 MARKS)		•
1.	a) Control system is a system in b) Control system is a device that			
	devices using control loops c) Control system is a feedback s d) Control System is a system in			
2.	Which of the following is not the a) Correct power level c) Quick response	b) No oscillation d) Accuracy	control system?	
3.	A control system working under a) Adaptive control system c) Computer control system	unknown random acti b) Stochastic contro d) Digital data syste	l system	
4.	Which of the following element is a) Final control element of Scillator	s not used in an auton b) Sensor d) Error detector	natic control syst	em?

5. A major part of the automatic control theory applies to the:

a) Casual systems

Linear Time invariant systems

c) Time variant systems

d) Non-linear systems

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6.	Traffic light system is the exan	aple of:
	Open-loop system	b)Closed-loop system
	c) Both (a) and (b)	d) None of these
7.	The impulse response of an RL	circuit is:
	a) Parabolic function	b)Step function
	c) Rising exponential function	Decaying exponential function
8.	Which of the following is an op	pen loop control system?
	a) Ward Leonard control	b) Metadyne
	c) Stroboscope	d) Field controlled D.C. motor
9.	What should be the section C1	
7.		andwidth for a good control system?
	a) Small b) Medium	C) Large d) All of the mentioned
10.	Which of the following stateme	nt is true about Feedback control system?
	a) Equally sensitive to forward	feedback path parameter changes
	b) Insensitive to both forward an	nd feedback path parameter changes
	c) Less sensitive to feedback par	th parameter changes than to forward path parameter
	changes	
	d) Less sensitive to forward path	n parameter changes than to feedback path parameter
	changes	
11.	In a stable control system backl	ash can cause which of the following?
	a) Overdamping	b) Low-level oscillations
	c) Underdamping	d) Poor stability at reduced values of open loop
	gain	
12.	In a control system the output of	f the controller is given to
	a) Amplifier	b) Sensor
(Final control element	d) Comparator
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	ive noise, is likely to suffer from which of the
following?	
a) Oscillations	b) Saturation in amplifying stages
c) Loss of gain	d) Vibrations
14. In a temperature control system	m, what conversion in signal takes place?
a) Error to Digital	b) Error to Analog
c) Digital to Analog	Analog to Digital
15. Which of the following control	l systems have unpredictable & non-repeatable?
Stochastic control systems	b) Deterministic control systems
c) Static control systems	d) Dynamic control systems
16. In pneumatic control systems to convertsa) Position change to pressure soc) Pressure signal to electric signal	
17. In closed loop control system, M to the variation in G?	what is the sensitivity of the gain of the overall system,
a) G/1GH b) 1/1+GH	c) G/1+G d) 1/1+G
18. Feedback control system is basea) Band pass filterb) Band filter	ically I stop filter c) High pass filter d\(\text{Low pass} \)
19. A control system is generally ma) Damping factor	net with the time response specifications: b) Setting time

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c) Steady state accuracy	d) All of the mentioned
20. Which of the following is not a feature	of a good control system?
a) Slow response	b) Sufficient power handling capacity
c) Good stability	d) Good accuracy
21. With negative feedback in a closed loo parameter variation:	p control system, the system sensitivity to
a) Becomes infinite	b) Becomes zero
c) Decreases	d) Increases
22. Which of the following is the input of a	controller?
a) Signal of fixed amplitude not depend	lent on desired variable value
b) Desired variable value	
c) Sensed signal	
d) Error signal	
23. Effect of feedback on sensitivity is mini	imum in:
a) Closed loop control system	b) Open and closed loop control
systems	, I
c) Open loop control system	d) None of the mentioned
24. Sampling is necessary	
a) Non automated control system	b) Automated control system
c) In complex control system	d) Where high accuracy is required
25. Which of the motions in actuators are pr	referred?
a) Rotary	b) Stationary
c) Non-Stationary	d) Translator

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ACADEMIC YEAR 2019-2020 / ODD SEMESTER

VALUE ADDED COURSE

	ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS.			
Name of st Year/Sem:	tudent: T. Priya	AUR	Reg.No: 91261710	
MULTIPL	LE CHOICE QUESTIONS (25	X1 =25 MARKS)		
1.	What is Control System?			
	a) Control system is a system in	which the output is controlled	by varying the input	
	b) Control system is a device th			
	devices using control loops			
	c) Control system is a feedback	system that can be both positive	ve and negative	
	d) Control System is a system in	n which the input is controlled	by varying the output	
2.	Which of the following is not the	ne feature of a modern control s	system?	
	a) Correct power level	b) No oscillation		
	c) Quick response	d) Accuracy		
3.	A control system working unde	r unknown random actions is c	alled	
	a) Adaptive control system	b) Stochastic control system	1	
	c) Computer control system	d) Digital data system		
	White Call Call is			
4.	Which of the following element	1	ntrol system?	
	a) Final control element	b) Sensor		
	c) Oscillator	d) Error detector		
_				

5. A major part of the automatic control theory applies to the:

b) Linear Time invariant systems a) Casual systems

c) Time variant systems d) Non-linear systems

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6.	Traffic light system is the example	le of:
	a) Open-loop system	b)Closed-loop system
	c) Both (a) and (b)	d) None of these
7.	The impulse response of an RL ci	ircuit is:
	a) Parabolic function	b)Step function
	c) Rising exponential function	d)Decaying exponential function
8.	Which of the following is an open	n loop control system?
	a) Ward Leonard control	,b) Metadyne
	c) Stroboscope	d) Field controlled D.C. motor
9.	What should be the nature of band	dwidth for a good control system?
	a) Small b) Medium	c) Large d) All of the mentioned
	a) Equally sensitive to forward feb) Insensitive to both forward andc) Less sensitive to feedback pathchanges	edback path parameter changes I feedback path parameter changes I parameter changes than to forward path parameter parameter changes than to feedback path parameter
11.	a) Overdampingc) Underdamping	sh can cause which of the following? b) Low-level oscillations d) Poor stability at reduced values of open loop
12.	gain In a control system the output of	the controller is given to
		b) Sensor
	c) Final control element	d) Comparator Dr. S.THILAGAVATHI LE., Ph. C



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	ve noise, is likely to suffer from which of the
following?	
a) Oscillations	b) Saturation in amplifying stages
c) Loss of gain	d) Vibrations
	, what conversion in signal takes place?
a) Error to Digital	b) Error to Analog
c) Digital to Analog	Analog to Digital
15. Which of the following control s	systems have unpredictable & non-repeatable?
a) Stochastic control systems	b) Deterministic control systems
c) Static control systems	d) Dynamic control systems
16. In pneumatic control systems the	e control valve used as the final control element
converts	
a) Position change to pressure si	gnal b) Electric signal to pressure signal
c) Pressure signal to electric sign	nal d) Pressure signal to position change
17 In algoridate an acutual acutous	And in the country is a Color of the Color o
	that is the sensitivity of the gain of the overall system,
M to the variation in G?	
a) G/1GH b) 1/1+GH	c) G/1+G d) 1/1+G
18. Feedback control system is basic	pally
	stop filter c) High pass filter d) Low pass
filter	
19. A control system is generally me	et with the time response specifications:
a) Damping factor	1) C D. C TIBLE & CALABARTA
a) Damping 100001	PRINCIPAL
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c) Steady state accuracy	All of the mentioned
20. Which of the following is not a	feature of a good control system?
a) Slow response	b) Sufficient power handling capacity
c) Good stability	d) Good accuracy
c) Good stability	d) Good accuracy
21. With negative feedback in a clo	sed loop control system, the system sensitivity to
parameter variation:	
a) Becomes infinite	b) Becomes zero
c) Decreases	d) Increases
22. Which of the following is the in	put of a controller?
a) Signal of fixed amplitude not	dependent on desired variable value
b) Desired variable value	
c) Sensed signal	
d) Error signal	
23. Effect of feedback on sensitivity	is minimum in:
a) Closed loop control system	b) Open and closed loop control
systems	
c) Open loop control system	d) None of the mentioned
24. Sampling is necessary	
a) Non automated control system	n b) Automated control system
c) In complex control system	d) Where high accuracy is required
of in complex control system	where high accuracy is required
25. Which of the motions in actuato	rs are preferred?
a) Rotary	b) Stationary
c) Non-Stationary	d) Translator

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ACADEMIC YEAR 2019-2020 / ODD SEMESTER

VALUE ADDED COURSE

	ELECTRICAL CONTROL DE	SIGN IN REAL TIM	IE APPLICATIONS.
Year/Sem	() ()	24	AU Reg.No: 912616105010
MULTIPI	LE CHOICE QUESTIONS (25 X	1 =25 MARKS)	
1.	What is Control System?		
	(a) Control system is a system in w	hich the output is con	trolled by varying the input
	b) Control system is a device that		
	devices using control loops		
	c) Control system is a feedback sy	stem that can be both	positive and negative
	d) Control System is a system in w	which the input is conti	rolled by varying the output
2.	Which of the following is not the f	feature of a modern co	ntrol system?
	a) Correct power level	b No oscillation	
	c) Quick response	d) Accuracy	
3.	A control system working under un	nknown random action	ns is called
	a) Adaptive control system	b Stochastic control s	system
	c) Computer control system	d) Digital data system	
4.	Which of the following element is	not used in an automa	tic control system?
	a) Final control element	© Sensor	
	c) Oscillator	d) Error detector	
5.	A major part of the automatic contr	rol theory applies to th	ne:

a) Casual systems

c) Time variant systems

d) Non-linear systems

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(b) Linear Time invariant systems



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

6.	Traffic light system is the examp	ple of:
	(a) Open-loop system	b)Closed-loop system
	c) Both (a) and (b)	d) None of these
7.	The impulse response of an RL of	circuit is:
	a) Parabolic function	b)Step function
	c) Rising exponential function	Decaying exponential function
8.	Which of the following is an ope	en loop control system?
	a) Ward Leonard control	b) Metadyne
	c) Stroboscope	Field controlled D.C. motor
9.	What should be the nature of bar	ndwidth for a good control system?
	a) Small b) Medium	(c) Large d) All of the mentioned
10	Will Cal Cili	
10.		t is true about Feedback control system?
	a) Equally sensitive to forward for	
		d feedback path parameter changes
		n parameter changes than to forward path parameter
	changes	
		parameter changes than to feedback path parameter
	changes	
11.	In a stable control system backla	ash can cause which of the following?
	a) Overdamping	(b) Low-level oscillations
	c) Underdamping	d) Poor stability at reduced values of open loop
	gain	
2.	In a control system the output of	the controller is given to
	a) Amplifier	b) Sensor
	Final control element	d) Comparator
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13. /	A Control System with excessiv	re noise, is li	kely to suffer from which	ch of the
f	following?			
8	a) Oscillations	(b) Saturation	on in amplifying stages	
(c) Loss of gain	d) Vibratio		
1.4 T	n a tanananatuna aantu-l	1		
	n a temperature control system,			ce?
	n) Error to Digital		b) Error to Analog	
C	e) Digital to Analog	(d) Analog to Digital	
15. V	Which of the following control s	systems have	e unpredictable & non-re	epeatable?
	Stochastic control systems		b) Deterministic contro	
c	e) Static control systems		d) Dynamic control sys	stems
16 I	n nneumatic control systems the	2 22mtmal 1:01	vo was doe the final con-	411
	n pneumatic control systems the onverts	control var	ve used as the final con-	troi element
		1	1) [1]	
) Position change to pressure si		b) Electric signal to pr	
C) Pressure signal to electric sign	nal	d Pressure signal to p	osition change
17. I	n closed loop control system, w	hat is the ser	nsitivity of the gain of the	he overall system,
N	If to the variation in G?			
a) G/1GH 6) 1/1+GH	c) G/1+G	d) 1/1+G	
10 E		11		
	eedback control system is basic		•	
		stop filter	c) High pass filter	(d) Low pass
fi	llter			
				A 1 ~ (
19. A	control system is generally me	et with the ti	me response specification	ons:
) Damping factor		b) Setting time	Th

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c) Steady state accuracy	(d) All of the mentioned
20. Which of the following is not a feature	re of a good control system?
Slow response	b) Sufficient power handling capacity
c) Good stability	d) Good accuracy
21. With negative feedback in a closed lo parameter variation:	pop control system, the system sensitivity to
a) Becomes infinite	b) Becomes zero
© Decreases	d) Increases
 22. Which of the following is the input of a) Signal of fixed amplitude not depend b) Desired variable value c) Sensed signal d) Error signal 	
23. Effect of feedback on sensitivity is m	inimum in
a)Closed loop control system systems	b) Open and closed loop control
c) Open loop control system	d) None of the mentioned
24. Sampling is necessary	
a) Non automated control system	b) Automated control system
c) In complex control system	(1) Where high accuracy is required
25. Which of the motions in actuators are	preferred?
(1) Rotary	b) Stationary
c) Non-Stationary	d) Translator

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2019-2020 / ODD SEMESTER

MARK SHEET FOR VALUE ADDED COURSE ELECTRICAL CONTROL DESIGN IN REAL TIME APPLICATIONS

s.no	REG. NO	NAME	YEAR/ SEM	(.	ACE 50% A)	VAC –MCQ 50%(B)		OVERALL MARK
				No of Session Attended	MARKS	No of Correct Answer	MARKS	(A+B)
1	912618105001	AARTHI G	II & III	10	100	20	80	90
2	912618105002	AASHA R	II & III	10	100	23	92	96
3	912618105003	AGARI S	II & III	9	90	20	80	85
4	912618105004	JEEVITHA R	II & III	10	100	24	96	98
5	912618105005	NISHA K	II & III	10	100	21	84	92
6	912618105006	RAMANA R	II & III	9	90	24	96	93
7	912618105007	SNEHA S	II & III	10	100	20	80	90
8	912618105301	VINOTHINI V	II & III	10	100	23	92	96
9	912617105001	NAZEERA BANU I	III & V	10	100	20	80	90
10	912617105002	PARTHIKA S	III & V	10	100	24	96	98
11	912617105003	PRIYA T	III & V	10	. 100	21	84	92
12	912617105004	SAJINA K	III & V	10	100	23	92	96
13	912617105005	SELSIYA R	III & V	10	100	24	96	98
14	912617105006	THENMOZHI J	III & V	10	100	20	80	90
15	912617105007	VANITHA E	III & V	10	100	20	80	90
16	912617105302	SIYAMALADEVI S	III & V	10	100	24	96	98
17	912616105001	ABIRAMI M	IV & VII	2 10	100	21	84	92

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18	912616105002	AJITHA R	IV & VII	10	100	20	80	90
19	912616105003	GIRIJA V	IV & VII	10	100	24	96	98
20	912616105006	JOTHIKA A	IV & VII	10	100	21	84	92
21	912616105007	KARUNAMBIGAI A	IV & VII	10	100	23	92	96
22	912616105008	PRASANNA K	IV & VII	10	100	24	96	98
23	912616105009	SARANYA G	IV & VII	10	100	20	80	90
24	912616105010	SNEHA V	IV & VII	9	90	24	96	93
25	912616105011	SUBHASRI T	IV & VII	10	100	23	92	96
26	912616105013	SURIYAKALA R	IV & VII	10	100	20	80	90
27	912616105301	MAHESWARI R	IV & VII	10	100	24	96	98
28	912616105302	PRINCY ROSELIN I	IV & VII	10	100	21	84	92

VAC COORDINATOR

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