



LESSON PLAN, SESSION-SUMMER-2024
SWAMI VIVEKANANDA SCHOOL OF ENGG & TECH, BBSR

DISCIPLINE- ETC ENGG.	SEMISTER- 6TH	NEME OF THE FACULTY- ER. ARUN KUMAR PRUSTY
SUBJECT- CONTROL SYSTEMS & COMPONENT	NO OF CLASS ALLOTTED/WEEK- 4	SEMESTER FROM- 16.01.2024 TO 26.04.2024
WEEK	DATE	TOPICS
3RD	16.01.2024	Fundamental of Control System
	17.01.2024	Classification of Control system
	19.01.2024	Open loop system & Closed loop system and its comparison
	20.01.2024	Effects of Feed back
4TH	23.01.2024	Standrad Test Signal
	24.01.2024	Step, Ramp, Parabolic, Impulse Functions
	25.01.2024	Servomechanism
	27.01.2024	Regulators (Regulating systems)
5TH	29.01.2024	Transfer Functions
	30.01.2024	Transfer Function of a system & Impulse response
	31.01.2024	Properties, Advantages & Disadvantages of Transfer Function
1ST	02.02.2024	Poles & Zeroes of transfer Function
	03.02.2024	Representation of poles & Zero on the s-plane
2ND	06.02.2024	Simple Problems of Transfer Networks
	07.02.2024	Control system Components & mathematical modelling of physical System
	09.02.2024	Components of Control System
	10.02.2024	Potentiometer, Synchros, Diode modulator & demodulator ,
3RD	13.02.2024	DC Motors, AC Servomoters
	14.02.2024	Modelling of Electrical Systems(R, L, C, Analogous systems)
	16.02.2024	Definition of Basic Elements of a Block Diagram
	17.02.2024	Canonical Form of Closed loop Systems
4TH	20.02.2024	Rules for Block diagram Reduction
	22.02.2024	Procedure for of Reduction of Block Diagram
	23.02.2024	Simple Problem for equivalent transfer function
	24.02.2024	Basic Definition in SFG & properties
5TH	26.02.2024	Mason's Gain formula
	27.02.2024	Steps foe solving Signal flow Graph
	29.02.2024	Simple problems in Signal flow graph for network
1ST	01.03.2024	Time Domain Analysis of Control Systems
	02.03.2024	In-sensitivity and robustness.
2ND	04.03.2024	System Time Response
	05.03.2024	Analysis of Steady State Error
	06.03.2024	Types of Input & Steady state Error(Step, Ramp, Parabolic)
	09.03.2024	Parameters of first order system & second-order systems
3RD	12.03.2024	DOUBT Clearing Class
	13.03.2024	Discuss Examination oriented Questions & Answers
	15.03.2024	Class Test

4th	19.03.2024	Derivation of Time response specification
	20.03.2024	time, Setting time, Peak over shoot)
	22.03.2024	Effect of parameter variation in Open loop System & Closed loop Systems
	23.03.2024	proportional, integral and derivative
5TH	25.03.2024	PI, PD, PID) with OPAMP
	27.03.2024	Stability concept & Root locus Method
	29.03.2024	Effect of location of poles on stability
	30.03.2024	Routh Hurwitz stability criterion.
1ST	02.04.2024	Steps for Root locus method
	03.04.2024	Root locus method of design (Simple problem)
	05.04.2024	Frequency response analysis & Bode Plot
	06.04.2024	Frequency response, Relationship between time & frequency response
2ND	09.04.2024	Class Test
	10.04.2024	Methods of Frequency response
	12.04.2024	Polar plots & steps for polar plot
	13.04.2024	Bodes plot & steps for Bode plots
3RD	16.04.2024	Stability in frequency domain
	17.04.2024	Nyquist plots. Nyquist stability criterion.
	19.04.2024	Nyquist plots. Nyquist stability criterion.
	20.04.2024	Simple problems as above
4TH	23.04.2024	Simple problems as above
	24.04.2024	time functions (Simple)


HOD


DEAN (ACADEMICS)


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