AIET	Lesson Plan & Execution	Format No.	ACD 08
		Issue No.	01
		Rev. No.	00

Name of the faculty	Prasad. V. B
Semester and Section	7th
Date of Commencement	11/9/2023.
Last Working Day of the Semester	06/01/24
Source Materials List	
1. Automatic Control Systems.	Farid. G. K.
2. Control. Systems.	Manik. D.N
3. Control. System. Engineering	I J. Nagrath M.
4. Control. System. Engg.	S. Palani
5.	

Subject Name: Control System. [18ME71].

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
1	11/09	Introduction: Module 1 Components of a Control System.	1,2,3	Introduction to Control System → Introduction.	11/09	1, 3
2	13/09	Components of a Control. System.	1, 2, 3, 4	→ Definition of Control system, system, etc.	13/09	1, 3
3	15/09	Open loop & closed loop System.	1, 2, 3, 4	Components of a Control System.	15/09	1, 3,
4	15/09	Open loop & closed loop System.	1, 2, 3, 4	open loop & closed loop System.	15/09.	1, 3

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
5	18/09	Types of Controllers: Proportional Integral Differential	1-2 ?.4	Types of Controllers Proportional	18/09	1, 3
6	18/09	P-I Controller	1-2,?.4	Integral, (I) P+I.	18/09	1-3
7	22/09	P-I-D Controller	1-2,?.4	Differential(D) P+D	22/09	1, 3
8	22/09	Modelling of physical Systems: Mathematical models of Mechanical	1-2,?.4	P+I+D	22/09	1, 3
9	25/09	Electrical Systems	1-2,?.4	mathematical models of physical Syst.	25/09	1, 3
10	25/09	Thermal Systems.	1-2,?.4	Electrical System	25/09	1, 3
11	26/09	Hydraulic Systems.	1-3 ?.4	Electrical System	26/09	1, 3
12	27/09	Module-2 :- Time domain performance of Controllers	1-2,?.4	Thermal System	27/09	1, 3
13	3/10	Typical test signal. unit step response.	1,2,3.4	Hydraulic System.	3/10	1, 3
14	4/10	Time domain Specifications of first order.	1,2,3.4	Module-3 :- Block diagram algebra.	4/10	1, 3
15	6/10	Second order System.	1-3,?.4	Block diagram Reduction Technique.	6/10	1, 3
16	9/10	Steady State Error.	1-2,?.4	numerical problems.	9/10	1, 3
17	9/10	error Constants.	1-2,?.4.	numerical problems.	9/10	1, 3

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
18	10/10	Module 3:- Block diagram algebra.	1,2,3,4	numerical problems.	10/10	1,3
19	11/10	Reduction of Block diagram.	1,2,3,4	numerical problems.	11/10	1,3
20	13/10	numerical problems	1,2,3,4	numerical problems.	13/10	1,3.
21	16/10	numerical problems	1,2,3,4	Signal flowgraph. mason's gain formula	16/10	1,2,3,4
22	17/10	numerical problems.	1,2,3,4	mason's gain formula	17/10	1,2,3,4
23	18/10	Signal flow graphs. numerical problems.	1,2,3,4	numerical problems	18/10	1,2,3,4
24	19/10	Gain formula for Signal flow graph.	1,2,3,4	numerical problems	20/10	1,2,3,4
25	30/10	State diagram from differential eqns	1,2,3,4	numerical problems.	30/10	1,2,3,4
26	31/10	numerical problems	1,2,3,4	Combination of Block diagram & Signal flowgraph.	31/10	1,2,3,4
27	2/11	numerical problems	1,2,3,4	Root locus Introduction. numerical problems	2/11	1,2,3,4
28	6/11	numerical problems	1,2,3,4	numerical problems	6/11	1,2,3,4
29	7/11	numerical problems	1,2,3,4	numerical problems	7/11	1,2,3,4
30	8/11	numerical problems.	1,2,3,4	numerical problems	8/11	1,2,3,4

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	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
31	9/11	Module-4 Stability of linear control Systems:	1.2 3 4	numerical problems	9/11	1,2,3,4.
32	10/11	Routh's Criterion	1.2 3 4	~~Book plot~~ Coaching Class	10/11	1,2,3,4
33	10/11	numerical Problems	1.2 3 4	Coaching class.	10/11	1,2,3,4.
34	11/11	numerical problems	1.2 3 4	Coaching class + Bode plot.	11/11	1,2,3,4
35	11/11	numerical problems.	1,2 3 4	Coaching class + Bode plot	11/11	1,2,3,4
36	20/11	Root locus. numerical Problems.	1,2 3 4	Bode plot. numerical problems	20/11	1,2 3 4
37	20/11	numerical problems	1,2 3 4	Bode plot. numerical problems	20/11	1,2 3 4
38	20/11	Determination of phase margin & gain margin using root locus.	1,2 3 4	Bode plot numerical problems.	20/11	1,2 3
39	21/11	numerical problems	1,2 3 4	Bode plot problems.	20/11	1,2,3,4
40	23/11	numerical problems	1,2 3,4	Bode plot problems.	27/11	1,2,3,4
41	23/11	Module-5:- Stability Analysis using Polar plot	1,2 3 4	Bode plot problems.	29/11	1,2 3,4
42	27/11	Nyquist plot	1,2 3,4	Bod plot problems	29/11	1,2,3,4
43	27/11	Determination of phase margin & gain margin using	1,2 3,4.	Bode plot problems	29/11	1,2,3,4

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	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
44	28/11	Bode plot	1, 3, 4	Module 2:- Time domain performance → First order System → unit step, unit ramp	6/12	
45	29/11	numerical problems	1, 3, 4	→ unit parabolic	7/12	
46	29/11	numerical problems	1, 2, 4	→ Second order system. → numerical problems	11/12	
47	4/12	numerical problems	1, 2, 3, 4	numerical problems	12/12	
48	4/12	numerical problems	1, 2, 3, 4	numerical problems	13/12	
49	6/12	numerical problems	1, 2, 3, 4	numerical problems	20/12	
50	6/12.	numerical problems.	1, 2, 3, 4.	numerical problems.	27/12	
51.	7/12			numerical problems	03/01	
52				numerical problems	06/01	

Others	Planned	Actual	Remarks :
Special Classes	05	02	
Tutorials	—		
Assignments	05	05	
Seminars	—		
IA Tests	3	03	
Portions Covered in the entire Semester	100% portion Covered.		
Course Effectiveness			
Students Feedback	92.97 %		
Students Responce			
Result	No. of Students AP	No. of Students Passed	% of Result
	24	24	100%

Faculty in Charge

HOD's Signature

26/1/24

Signature of Principal (& Remarks if any)