

# Lesson Plan

Name of Faculty : Kanwal Sachdeva, H.O.D  
 Discipline : I&C Engg.  
 Semester : 4th Sem.  
 Subject : ACS  
 Lesson Plan Duration : 15 weeks(from March 2023 to June 2023)

Work Load (lecture/practical)per week (in hours) :

Lectures- 03, practical- 03

Week	Lecture Day	Theory Topic (including assignment/test)	Practical Day	Practicals Topic
1st	1st	Brief introduction about subject and syllabus	1st	To perform of non-Linearity in a relay
	2nd	Single and Multiloop Control System	2nd	do
	3rd	Introduction to single and multiloop control system and its types like feedback,	3rd	do
2nd	4th	revised previous topics	4th	To perform of dead- zone non-linearity
	5th	feedforward, cascade, ratio,	5th	do
	6th	cascade, ratio, split range, control system.	6th	do
3rd	7th	feedback from students	7th	To perform cascade control system
	8th	revision	8th	do
	9th	Study of each of above control system with a suitable example, three element drum level control. 2 Non-Linear Control System	9th	do
4th	10th	revision	10th	Introduction to ladder diagram concepts, instruction list syntax
	11th	Introduction, behaviour of non-linear control system.	11th	do
	12th	Different types of non-linearities	12th	do
5th	13th	saturation, backlash, hysteresis	13th	viva voice of previous practicals
	14th	class test	14th	viva voice of previous practicals
	15th	dead zone, relay, fiction,	15th	viva voice of previous practicals
6th	16th	characteristics of non-linear control system,	16th	To perform ratio control system
	17th	revision	17th	To perform ratio control system
	18th	limit cycles, jump resonance	18th	To perform ratio control system
7th	19th	jump phenomenon	19th	To perform split-range control system
	20th	non-linear control system.	20th	To perform split-range control system
	21st	Introduction to Artificial Intelligence and Robotics,	21st	To perform split-range control system
8th	22nd	feedback from students	22nd	practicals revisions
	23rd	Fuzzy Logic and neuro fuzzy logic in control system	23rd	practicals revisions
	24th	Artificial Neural Networks,	24th	viva voice of previous practicals
9th	25th	revision	25th	viva voice of previous practicals
	26th	revision	26th	viva voice of previous practicals
	27th	class test	27th	viva voice of previous practicals
10th	28th	Robotics,	28th	viva voice of previous practicals
	29th	revision	29th	viva voice of previous practicals
	30th	degree of freedom	30th	viva voice of previous practicals
11th	31st	the robot arm configuration	31st	viva voice of previous practicals
	32nd	revision	32nd	viva voice of previous practicals
	33rd	Difference between linear and non linear system	33rd	viva voice of previous practicals
12th	34th	revision	34th	viva voice of previous practicals
	35th	revision	35th	viva voice of previous practicals
	36th	revision	36th	viva voice of previous practicals
13th	37th	revision	37th	viva voice of previous practicals
	38th	revision	38th	viva voice of previous practicals
	39th	revision	39th	viva voice of previous practicals
14th	40th	revision	40th	viva voice of previous practicals
	41st	revision	41st	viva voice of previous practicals
	42nd	revision	42nd	viva voice of previous practicals
15th	43rd	revision	43rd	viva voice of previous practicals
	44th	revision	44th	viva voice of previous practicals
	45th	revision	45th	viva voice of previous practicals