LESSON PLAN

NAME OF THE FACULTY : Navneet kaur

DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 2nd sem

SUBJECT : SURVEYING

LESSON PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 07

WEEK		THEORY &
	LECTURE	PRACTICAL
	DAY	TOPIC
1 ST	1.	Introduction:
	2.	Basic principles of surveying and types of surveying
	3.	Concept of surveying
2ND	4.	Purpose of surveying
_	5.	Measurements-linear and angular, units of measurements
	6.	Instruments used for taking these measurement
3RD	7.	Classification of survey based on instruments
-	8.	System of conversion of land measurements from traditional revenue Maps/records to MKS.
	9.	Test of 1 st unit .
4 TH	10.	. Compass surveying : Purpose of compass surveying, Construction and working of prismatic compass
	11.	Use of prismatic compass: Setting and taking observations
	12.	Practical Exercises of compass surveying
5 TH	13.	Use of prismatic compass: Setting and taking observations
	14.	Concept of: (a) Meridian - Magnetic and true b) Bearing - Magnetic, True and Arbitrary
	15.	IST SESSIONAL TEST

6 TH	16.	Practical Exercises of compass surveying
	17.	Whole circle bearing and reduced bearing Fore and back bearing
	18.	Local Attraction-causes, Detection & precautions against local attraction
7 TH	19.	Practical Exercises of compass surveying
	20.	Submission of assignment of compass surveying
-	21.	Test of unit 2
8тн	22.	Levelling : Purpose and concept of levelling, reduced level and bench marks
	23.	Construction of Dumpy level Concepts of line of collimation, axis of the bubble tube, axis of the telescope and vertical axis.
	24.	Practical Exercises of levelling.
9тн	25.	Temporary adjustment: setting up and leveling
	26.	Concept of back sight, foresight, intermediate sight, station change point, to determine reduced levels
	27.	Submission of assignment of levelling
10 TH	28.	Problem solution of unit 1, unit 2 and unit 3
	29.	Test of unit 3
-	30.	2ND SESSIONAL TEST
11 TH	31.	Level book and reduction of levels by
	32.	Height of instrument method and Rise and fall method Arithmetic checks, problems on reduction of levels
	33.	Practical Exercises of levelling.
12 TH	34.	Computations of Areas of regular figure and irregular figure. Simpson rule
	35.	Plane Table Surveying: Purpose of plane table surveying, equipment used in plane table survey: (a) Plane table and its accessories
-	36.	Practical Exercises of Plane Table Surveying.

13 ^{⊤н}	37.	Setting of a plane table:(a) Centering (b) Leveling (c) Orientation
	38.	Methods of plane table surveying (a) Radiation, (b) Intersection (c) Traversing Two Point Problem
	39.	Practical Exercises of Plane Table Surveying.
14 TH	40.	In field surveying with instruments(practical)
	41.	Problem solution
	42.	.Test of plane table
15™	43.	Instruments: Demo and uses of : Theodolite
	44.	Use of Digital instruments
	45.	3RD SESSIONAL TEST
16 ^{тн}		Auto Level and Theodolite
		Total station and EDM
		GPS and GIS systems
		Problem solution
		Test of instruments
		Revision of all syllabus
• • 17 ™		Solution of previous papers
		Important questions solution
		Pre board of all units