## Subject: PC/CE/3-T SURVEYING-I

Week	Theory			Topic covered and Remarks		
	Lecture Day	Topic (Including assignment / Test)	Date	HOD	Director principal	
1 <sup>st</sup>	1	Fundamental Principles of Surveying: Definition, objects, classification, fundamental principles, methods of fixing stations				
	2	Measurement of distances: Direct measurement, instruments for measuring distance				
	3	Instruments for making stations, chaining of line, errors in chaining, tape correctionsexamples				
	4	Compass and Chain Traversing: Methods of traversing				
2 <sup>nd</sup>	5	Instruments for measurement of angles-prismatic and surveyor's compass				
	6	Bearing off lines, local attraction, examples.				
rd	7	Leveling: Definition of terms used in leveling, types of levels and staff				
314	8	Temporary adjustment of levels, principles of leveling				
	9	Reduction of levels, booking of staff readings examples				
4 <sup>th</sup>	10	characteristics of contours lines, locating contours, interpolation of contours	\$			
	11	Plane Table Surveying: Plane table, methods of plane table surveying				
	12	Radiation, intersection, traversing and resection				
th	13	Two point and three point problems				
5	14	<b>Theodolite</b> and <b>Theodolite</b> Traversing: Theodolites, temporary adjustment of theodolite				
	15	Measurement of angles, repetition and reiteration method				
6 <sup>th</sup>	16	Traverse surveying with theodolite, checks in traversing				
	17	Checks in traversing				
	18	Adjustment of closed traverse				
7 <sup>th</sup>		1 <sup>st</sup> Minor Test	1			
oth	19	Examples				
ð	20	Tacheometry: Uses of tacheometry				
	21					
	<i>4</i> 1	Tacheometry: Uses of tacheometry				

9 <sup>th</sup>	22	Principle of tacheometric surveying						
	23	Principle of tacheometric surveying						
	24	Surveying, instruments used in tacheometry,						
10 <sup>th</sup>	25	Systems of tacheometric surveying-stadia system fixed hair method						
	26	Systems of tacheometric surveying-stadia system fixed hair method						
	27	Determination of tacheometric constant						
11 <sup>th</sup>	28	Tangential systems, examples						
	29	Tangential systems, examples						
	30	Curves: Classification of curves						
12 <sup>th</sup>	31	Curves: Classification of curves						
	32							
	33	Elements of simple circular curve						
13 <sup>th</sup>	34	Location of tangent points-chain and tape methods						
	35	Instrumental methods						
	36	Examples of simple curves.						
14 <sup>th</sup>	2 <sup>nd</sup> Minor test							
15 <sup>th</sup>	37	Transition Curves-Length and types of transition curves						
	38	Length of combined curve, examples						
	39	Vertical Curves: Necessity and types of vertical curve						