

TRIBHUWAN UNIVERSITY
INSTITUTE OF ENGINEERING
PULCHOWK CAMPUS
DEPARTMENT OF CIVIL ENGINEERING

SURVEY INSTRUCTION COMMITTEE
BEARINGS AND INDEPENDENT CO-ORDINATES CALCULATION OF STATIONS

Line	Internal Angle	Length	Observed Angle			Forward Bearing			Backward Bearing			Corrected Bearing			Departure	Latitude	Independent Co-ordinates (Forward station)		Independent Co-ordinates (Backward station)	
			d	m	s	d	m	s	d	m	s	d	m	s			Easting	Northing	Easting	Northing
A-B		62.501				348	47	4	166	47	4	11	12	56	-12.156	61.307	1000	1000	987.844	1061.307
	CAB		87	31	45															
A-C		49.116				261	15	19	81	15	19	81	15	19	-48.545	-7.467	1000	1000	951.455	992.533
	DAB		87	27	29															
A-D		42.836				76	14	33	256	14	33	76	14	33	41.607	10.187	1000	1000	1041.607	1010.187
	ABC		39	5	55															
B-C		77.808				207	52	59	27	52	59	27	52	59	-36.388	-68.775	987.844	1061.307	951.455	992.533
	ABD		35	13	42															
B-D		74.188				133	33	22	313	33	22	46	26	38	53.764	-51.120	987.844	1061.307	1041.607	1010.187
	CBE		50	20	50															
B-E		64.273				258	13	49	78	13	49	78	13	49	-62.922	-13.110	987.844	1061.307	924.921	1048.197
	ECB		53	22	9															
C-E		61.665				334	30	50	154	30	50	25	29	10	-26.534	55.664	951.455	992.533	924.921	1048.197
	FCE		66	11	14															
C-F		47.082				268	19	36	88	19	36	88	19	36	-47.062	-1.375	951.455	992.533	904.393	991.158
	CEF		45	16	48															
E-F		60.621				199	47	38	19	47	38	19	47	38	-20.528	-57.039	924.921	1048.197	904.393	991.158
	FEG		26	47	42															
E-G		62.445				226	35	20	46	35	20	46	35	20	-45.362	-42.914	924.921	1048.197	879.559	1005.283
	GFE		80	9	50															
F-G		28.570				299	37	48	119	37	48	60	22	12	-24.834	14.125	904.393	991.158	879.559	1005.283