



CMR INSTITUTE OF TECHNOLOGY		USN											
Internal Assessment Test –1													
Sub:Advanced Surveying										Code: 15CV46			
Date:14/03/2018	Duration: 90 mins	Max Marks: 50	Sem: IV	Sections:CV (A & B)									
Answer <b>any five</b> questions. Good luck!													
										Marks	OBE		
											CO	RBT	
1	Explain the Rankines method of deflection angles for setting out a simple circular curve.										10	1,4	L1,L2
2	Two tangents intersect at a chainage of 59+60, the deflection angle being 50°30'. It is required to connect the two tangents by a curve of radius 15 chains. Taking the peg interval as 100 links, calculate the necessary data for setting out the curve by offset from chords produced method. Take length of the chain as 20m (100 links).										10	1,4	L1,L2
3	Draw a neat sketch of compound curve giving the various elements. Also explain the method of setting out the compound curve.										10	1,4	L1
4.	Explain with neat sketches, the various triangulation systems.										10	1,4	L1

P.T.O

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5	Calculate the ordinates at 10 m distance for a circular curve having long chord of 80 m and a versed sine of 4 m.	10	1,4	L1,L2
6	A compound curve consists of two simple circular curves of radii 350m and 500m and is to be laid out between two straights $T_1I$ and $IT_2$ . PQ is the common tangent at the point of compound curvature D. The angles IPQ and IQP are $55^\circ 00'$ and $25^\circ 00'$ respectively. Sketch and calculate the distances of the tangent points $T_1I$ and $IT_2$ .	10	1,4	L1,L2
7.	Explain Satellite station and reduction to centre.	10	1,4	L1

**C.I.**

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