Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY** PDDC - SEMESTER - II • EXAMINATION - WINTER 2012

Subject code: X 20601		ode: X 20601 Date: 16/01/2013	<b>,</b>
•		ame: Advanced Surveying	
Time	e: 10.	<b>30 am - 01.00 pm</b> Total Marks: <b>7</b> 0	)
Insti	ructi	ons:	
	2. N	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Discuss instruments used in tacheometry. What are the different errors in tacheometry? What are the permissible errors?	07 07
Q.2	(a)	A Staff was held vertically at a distance of 50 m and 100 m from the centre of a theodolite fitted with stadia hairs and the staff intercepts with the telescope horizontal were 0.5 and 1 m respectively. The instrument was set over the station A f RL is 1050.50 m and the height of instrument was 1.45 m. The stadia hair readings of a staff held vertically at a station B were 1.000, 1.850 and 2.7000 m while the vertical angle was -9 <sup>0</sup> 20'. Find the distance AB and RL of B.	07
	<b>(b)</b>	Write a short note on "Anallatic lens"	07
	()	OR	
	<b>(b)</b>	Explain the elements of simple circular curve with neat sketch.	07
Q.3	(a) (b)	What are the objectives of field astronomy? Explain Explain – Zenith, Nadir, Celestial Poles, Vertical Circle OR	07 07
0.3	(a)		07
Q.3	(a) (b)	What are the purposes of Total Station? What are the advantages of EDM instruments?	07
	(D)	what are the advantages of EDW instruments:	U/
Q.4	(a)	Explain the terms of photogrammetry:  (i) Tilt  (ii) Exposure station  (iii) Principal Plane  (iv) Azimuth  (v) Swing	07
	<b>(b)</b>	Explain the components of Remote Sensing?  OR	07
Q.4	(a) (b)	Define remote sensing. Explain principle of remote sensing. Explain the field application of GIS.	07 07
Q.5	(a) (b)	Explain key components of GIS. Write a short note on "Transition Curve"  OR	07 07
Q.5	(a)	Enlist the methods of sounding. Explain any one in detail.	07
<b>V.</b> 5	(b)	Differentiate between Fixed hair method & Movable hair method.	07

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