## C.U. SHAH UNIVERSITY

## **Summer Examination-2019**

Subject Name: Surveying-I

Subject Code: 4TE03SUR1 Branch: B.Tech (Civil)

Semester: 3 Date: 18/03/2019 Time: 02:30 To 05:30 Marks: 70

## **Instructions:**

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

a) What is magnetic declination? b) What is the error, if the difference between face left and face right observations of theodolite is 3'? c) Define representative fraction. d) What are the uses of planimeter? e) A building is situated on the far side of a river and is inaccessible. It can be located by	Q-1		Attempt the f	ollowing que	estions			(14				
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		- <del>-</del> /										
Traverse data:												
Line AB BC CD DA			Line	AB	BC	CI	)	DA				



	Length	156.40	178.30	234.90	202.50			
	Bearing	78°42′	152°30′	251°20′	356°12′			
<b>B</b> )			es of abney level					
Q-5	Attempt all	questions	•					
<b>A</b> )	Explain procedure to measure horizontal angle with repetition method.							
<b>B</b> )	Describe var	Describe various accessories required for plane table survey with neat sketch and						
	write their use.							
Q-6	Attempt all	Attempt all questions						
<b>A</b> )	Explain the r	Explain the method of carrying out temporary adjustment of the theodolite and						
	write uses of	theodolite.		-				
<b>B</b> )	What is benc	What is benchmark? Briefly explain different types of benchmark used in						
	surveying.							
<b>)-7</b>	Attempt all	questions						
<b>A</b> )	Describe any one method of orienting plane table.							
<b>B</b> )	Explain the p	Explain the procedure for setting out a building.						
<b>Q-8</b>	Attempt all	questions						
<b>A</b> )	Explain briefl	y the instrument u	sed in chain surve	ying.				
<b>B</b> )	The following is the page of a level field book. Fill in the missing readings and							
	calculate the reduced levels of all the points. Apply the usual checks.							

STA.	BS	IS	FS	RISE	FALL	RL	Remarks
1	2.150					450.00	BM 1
2	1.640		?	0.500		?	
3		2.345			?	?	
4	?		1.965	?		?	
5	2.050		1.825		0.400	?	
6		?		?		451.500	BM 2
7	1.690		?	0.120		?	
8	2.865		2.100		?	?	
9			?	?		452.250	BM 3

