		GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-IV(New)• EXAMINATION – WINTER 2016	
Su	biect	t Code:2142202 Date:22/11	1/2016
	•	Name:Basic Mine Surveying	
	•	2:30 PM to 05:00 PM Total Marks: 70	0
	tructio		
		Attempt all questions.	
		Make suitable assumptions wherever necessary.	
	3.	Figures to the right indicate full marks.	MARKS
			WIZIKIKO
Q.1		Short Questions	14
	1	Where miners dial used?	
	2	Give the use of prismatic compass.	
	3	Draw the figure of Trough Compass.	
	4	Draw the figure of Tubular Compass.	
	5	Write the types of errors in dial surveying.	
	6	Write the principle of leveling.	
	7	Describe any two objects of leveling. Define the term: Datum Line	
	8 9	Define the term: Line of Collimation	
	9 10		
	10 11	Give the name of types of levels according to their general arrangement. List out the classification of leveling.	
	12	Define: Subsidence.	
	13	Write any two aims of subsidence measurements.	
	14	Write the object of shaft depth measurement.	
Q.2	(a)	Write different uses of Miners dial.	03
Q. <u>-</u>	(b)	Explain test and adjustments of Miners dial.	04
	(c)	Explain Temporary adjustment of theodolite.	07
	(0)	OR	0,
	(c)	Explain Permanent adjustment of theodolite.	07
Q.3	(a)	Draw neat and clean diagram of theodolite and make a list of their parts.	03
	(b)	Describe different uses of theodolite.	04
	(c)	Describe construction of Miners dial with neat and clean sketch.	07
		OR	
Q.3	(a)	What is difference between Transit and Non transit types of theodolite?	03
	(b)	Differentiate between Tubular Compass and Trough Compass.	04
	(c)	Give the types of theodolites. Explain any one in detail.	07
Q.4	(a)	Write the principle and use of tachometry surveying.	03
	(b)	Describe basic concept of triangulation surveying.	04
	(c)	Describe Interpolation of Contours in detail.	07
. .	()	OR	0.2
Q.4	(a)	List out various types of Levelling instruments.	03
	(b)	Describe various types of tacheometry in short.	04
	(c)	Write note on Additive and Multiplying constants.	07
Q.5	(a)	Why contours requires in surveying and which place it is uses? Give	03
		reason.	
	(b)	Write note on Characteristics of contours.	04
	(c)	Explain Reduction of data by use of techeometric table in detail.	07
		OR	

(c) Explain measurement of depth of shaft with neat sketch.

07
