DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination – Sept./Oct. 2019

Course: B. Tech in Civil Engineering   **Sem: I**

Subject Name: Surveying I   **Subject Code: CV 304**

**Max Marks: 20**   **Date:- 07-10-19**   **Duration:- 1 Hr.**

Instructions to the Students:
1.
2. Illustrate your answers with neat sketches, diagrams etc. where ever necessary.

		(Level/ CO)	Marks
Q. 1	1) Type of surveying in which the shape of the earth taken into account is	**CO1**	6 X 1
	a) Topographic Surveying		
	b) Hydrographic Surveying		
	c) Geodetic Surveying		
	d) Plane Surveying		
	2) Which among the following is one of the principles of surveying?	CO1	
	a) Taking measurements		
	b) covering entire area		
	c) Determining the elevation differences		
	d) working from whole to part		
	3) Which line passes through true north and true south?	CO1	
	a) True Meridian		
	b) Magnetic Meridian		
	c) Arbitrary Meridian		
	d) Dip		
	4) Alidade is used for _____	CO2	
	a) Sighting		
	b) Drawing lines		
	c) Both a) & b)		
	d) Only a)		
	5) Orientation of table involves which among the following?	CO1	
	a) Traversing		
	b) Fore sighting		
	c) Back sighting		
	d) Measuring bearings		
	6) In usual bubble tube used in dumpy level has the division reading approximately	CO2	
	a) 2mm-5mm		
	b) 0.5mm-1mm		
	c) 10mm-20mm		
	d) None of the above		
Q.2	**Answer Any Two of the following.**		3 X 2
(A)	Convert the following from Quadrantal Bearings to WCBs. Also find the Back bearings of same.	CO3	
	a) N 12°24' E b) S 31°36' E c) N 5°42' W		
(B)	Explain the principles and objectives of surveying.	CO1	
(C)	Explain in detail Radiation method in plane table surveying	CO2	
Q. 3	**Solve Any One of the following.**		8 X 1
(A)	With neat sketch explain the working principles of Prismatic Compass and Surveyors Compass	CO3	
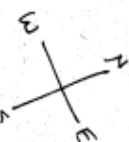
(B)   a) Find the interior angle from the bearings taken as follows on a closed compass traverse. Determine the error if any.

LINE	FB	BB
AB	80°10'	259°0'
BC	120°20'	301°50'
CD	170°50'	350°50'
DE	230°10'	49°30'
EA	310°20'	130°15'

CO3   4m

b) Define: Local Attraction, Magnetic Declination, Traversing, Resection,   4m

*** End ***