

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. Illustrate your answers with neat sketches, diagrams etc. where ever necessary.
- 2.

		(Level/ CO)	Marks
Q. 1	1) Type of surveying in which the shape of the earth taken into account is a) Topographic Surveying b) Hydrographic Surveying c) Geodetic Surveying d) Plane Surveying	CO1	6 X 1
	2) Which among the following is one of the principles of surveying? a) Taking measurements b) covering entire area c) Determining the elevation differences d) working from whole to part	CO1	
	3) Which line passes through true north and true south? a) True Meridian b) Magnetic Meridian c) Arbitrary Meridian d) Dip	CO1	
	4) Alidade is used for _____ a) Sighting b) Drawing lines c) Both a) & b) d) Only a)	CO2	
	5) Orientation of table involves which among the following? a) Traversing b) Fore sighting c) Back sighting d) Measuring bearings	CO1	
	6) In usual bubble tube used in dumpy level has the division reading approximately a) 2mm-5mm b) 0.5mm-1mm c) 10mm-20mm d) None of the above	CO2	
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. a) N 12°24' E b) S 31°36' E c) N 5°42' W	CO3	
(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	

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(B)	a) Find the interior angle from the bearings taken as follows on a closed compass traverse. Determine the error if any.	CO3	4m																		
	<table><tr><td>LINE</td><td>FB</td><td>BB</td></tr><tr><td>AB</td><td>80°10'</td><td>259°0'</td></tr><tr><td>BC</td><td>120°20'</td><td>301°50'</td></tr><tr><td>CD</td><td>170°50'</td><td>350°50'</td></tr><tr><td>DE</td><td>230°10'</td><td>49°30'</td></tr><tr><td>EA</td><td>310°20'</td><td>130°15'</td></tr></table>	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'		
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	b) Define: Local Attraction, Magnetic Declination, Traversing, Resection,		4m																		
	*** End ***																				