Enrolment No./Seat No_____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Arch- SEMESTER–III EXAMINATION – WINTER 2024

Subject Code:2X35006 Date:16-12-2024

Subject Name:Surveying and Levelling

Time:10:30 AM TO 12:30 PM Total Marks:50

Instructions:

1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Simple and non-programmable scientific calculators are allowed.**

Q.1	**(a)**	What is surveying? State the classification of it based on instruments used and explain anyone.	**05**
	(b)	Write difference between surveyor's compass and prismatic compass.	**05**
Q.2	**(a)**	Draw the neat sketch of the instruments necessary for Chain & Tape survey. Explain their uses.	**10**
Q.3	**(a)**	What is Contour? Explain the Characteristic of Contour. Draw the sketch for contour of hill and pond.	**10**
Q.4	**(a)**	Define theodolite. Draw the sectional view of theodolite also list out & show all its part.	**10**
Q.5	**(a)**	List out the modern surveying instrument used for the surveying and explain in details of any two.	**10**
Q.6	**(a)**	Explain the following terms : 1) Metric chain 2) Main Station 3) True meridian 4) Change point 5) Ranging 6) Reduce level	**06**
	(b)	Convert following WCB to RB : 1) 30˚30' 2) 90˚00' 3) 169˚12' 4) 218˚42'	**04**
Q.7	**(a)**	What is plane table? Give names and explain any one method used for plane table survey? Explain the advantages & limitations of plane table.	**10**

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