

DIAGONAL EDUCATION INSTITUTE @ TRICHY

NATIONAL DEVELOPMENT AGENCY PROMOTED BY GOVT OF INDIA

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SYLLABUS FOR DIPLOMA IN LAND SURVEY ENGINEERING

INTRODUCTION

Land surveying is the science and art of determining the physical boundaries, dimensions, and position of land. It plays a vital role in infrastructure development, construction, property registration, and legal land documentation. In India, land surveying is governed by a combination of traditional practices and modern technologies like Total Station, GPS, DGPS, GIS, and AutoCAD.

TOTAL STATION

INTRODUCTION - APPLICATION OF TOTAL STATION- COMPONENT PART OF A TOTAL STATION - ACCESSORIES USED - SUMMARY OF TOTAL STATION CHARACTERISTICS - FEATURES OF TOTAL STATION - ELECTRONIC DISPLAY AND DATA REDING - INSTRUMENT PREPARATION, SETTING AND MESUREMENT ((DISTANCE , ANGLE , BEARING ETC.) - FIELDY PROCEDURE FOR CO- ORDINATE MEASUREMENT - FIELD PROCEDURE OF RUN A TRAVERSE SURVEY - LINKING DATA FILES.

TOTAL STATION APPLICATIONS

- ✓ORI – With Angle Method
- ✓ORI – With Coordinate Method
- ✓Resection / Free Station
- ✓Surveying
- ✓Stake-out
- ✓Reference Line
- ✓Level Transfer & Benchmarks
- ✓Tie Distance Measurement
- ✓Remote Height Observation
- ✓Area & Volume Calculation

✓Data Download Procedures

✓LISP AutoCAD & Drafting.

MAJOR PRACTICAL FIELD SESSIONS

✓Topographic Survey

✓Contour Survey

✓Road Project Alignment

✓Railway Project Set-out

✓Tunnel Survey & Profile Marking

✓Water Supply Scheme Layout

✓Levelling – Fly, Check & Differential

✓Cut & Fill Volume Computation

✓Column Alignment & Set-out

✓Stake-out of Pile Points (referenced to structures)

✓Establishment of New Benchmarks

✓Cross-checking of Existing Control Points

✓Pipeline Layout & Invert Level Marking

✓Layout of Storage Tanks

✓Transmission Line Layout & Bolt Fixing

✓Preparation of Survey Reports to International Standards

FMB & DOCUMENTATION PRACTICE

✓FMB Interpretation

✓FMB Drafting in AutoCAD

✓Subdivision Planning & Plotting

✓Area Boundary Measurement Systems:

(Kuli – Cent – Acre – Hectare – Ares)

✓Survey Documentation for Land Registration & Legal Use

- ✓ **DURATION :- 35 TO 45 DAYS**
 - ✓ **99% PLACEMENT**
 - ✓ **ADVANCE INSTRUMENTS**
 - ✓ **GOVT OF INDIA CERTIFICATE**
 - ✓ **FIELD PRACTICAL**
-

....Thank you...

Register No. : 982403

Date : 10/06/2024



BHARAT SEVAK SAMAJ

NATIONAL DEVELOPMENT AGENCY, ESTABLISHED IN 1952 BY PLANNING COMMISSION, GOVERNMENT OF INDIA



CERTIFICATE



This is to certify that **T. LOGANATHAN**

has successfully completed the

LAND SURVEYING (USING TOTAL STATION & GPS)

conducted in the Year 04/03/24 - 29/05/24 at

[TN/7698] DIAGONAL EDUCATION INSTITUTE, NO:11, ARASU TOWER, 2ND FLOOR,

KALAINAR ARIVALAYAM BACK SIDE, CHATHIRAM BUS STOP, TRICHY-620002

and has been placed in **DISTINCTION** *Division*

with **DISTINCTION** *Division in Theory and*

DISTINCTION *Division in Practicals.*


DIRECTOR




CHAIRMAN
BOARD OF EXAMINATIONS



Started at the instance of Planning Commission, Government of India with the object of enabling individual citizen to contribute, in the form of an organized co-operative effort, to the implementation of the National Development Plan. The constitution and functioning of Bharat Sevak Samaj is approved unanimously by the Indian Parliament.



BHARAT SEVAK SAMAJ

NATIONAL DEVELOPMENT AGENCY, ESTABLISHED IN 1952 BY PLANNING COMMISSION,
GOVERNMENT OF INDIA

CENTRAL BOARD OF EXAMINATIONS

STATEMENT OF MARKS



NAME OF THE CANDIDATE		COURSE WITH DURATION
T. LOGANATHAN		LAND SURVEYING (USING TOTAL STATION & GPS) THREE MONTHS - 04/03/2024 - 29/05/2024
REGISTER NUMBER	DATE	INSTITUTION NAME AND ADDRESS
982403	10/06/2024	DIAGONAL EDUCATION INSTITUTE, NO:11, ARASU TOWER, 2ND FLOOR - [TN/7698] KALAIAGNAR ARIVALAYAM BACK SIDE, CHATHIRAM BUS STOP, TRICHY-620002

Sl.No.	SUBJECTS	MAXIMUM MARKS	MINIMUM MARKS	MARKS AWARDED	
				IN FIGURES	IN WORDS
	THEORY				
1	COMMUNICATIVE ENGLISH & COMPUTER FUNDAMENTALS (MS-OFFICE)	100	40	89	EIGHT NINE
2	BASIC CONCEPTS	100	40	86	EIGHT SIX
3	CHAIN SURVEYING AND AREAS AND VOLUMES	100	40	81	EIGHT ONE
4	COMPASS SURVEYING AND PALNE TABLE SURVEYING	100	40	88	EIGHT EIGHT
5	TOTAL STATION	100	40	88	EIGHT EIGHT
6	CONTOURING AND THEODOLITE SURVEYING	100	40	87	EIGHT SEVEN
	TOTAL	600	240	519	FIVE ONE NINE
	PRACTICAL				
1	PRACTICAL - I	100	40	92	NINE TWO
2	PRACTICAL - II	100	40	91	NINE ONE
3	PRACTICAL - III	100	40	92	NINE TWO
4	PRACTICAL - IV	100	40	94	NINE FOUR
5	PRACTICAL - V	100	40	93	NINE THREE
6	PRACTICAL - VI	100	40	93	NINE THREE
	TOTAL	600	240	555	FIVE FIVE FIVE
GRAND TOTAL		1200	480	1074	ONE ZERO SEVEN FOUR

