

## **DIPLOMA IN LAND SURVEY ENGINEERING**

1. Introduction to Surveying Fundamentals
2. Survey Mathematics Surveying Methods of Measurements (& Problems)
3. Distance Measure Taping Techniques
4. Taping Errors & Corrections / Working With Angles Area Computations /  
Review of Exam Study Guide
5. Introduction to Levelling
6. Types of Levelling Equipment For Levelling Differential Levelling
7. Profile Levelling Construction Application Of Profile Levelling In Drain Pipe  
Installation
8. Cross – Sectional Levelling /Angles and Directions
9. Transits and Theodolites Field Operations With Theodolites
10. Topographic Surveys
11. Basic Trigonometry, Trigonometric Levelling
12. Trigonometric Levelling Problems Stadia Principles
13. Overview of Traverse Surveys EDM And GPS (Multimedia Presentation)
14. Overview of Traverse Surveys
15. Open Traverse Surveys Closed Traverse Surveys And Review of Practicum &  
Exam
16. Laboratory Procedure, Note – Keeping, Standardization of Length Of Pace
17. Taping on Level Ground (Introduction To The 100 – Foot Steel Tape)
18. Horizontal Taping on a Slope (Breaking Tape)
19. Taping Survey of a Five – Sided Polygon (Area Calculations)
20. Introduction To Levelling (Using The Dumpy Level)
21. Differential Levelling (Using Automatic Level)
22. Setting Grade Stakes for a Pipeline (Using The Dumpy Level)
23. Closing the Horizon (Using The Repeating Optical And Theodolite)
24. Prolongation of a Straight Line (Using The Theodolite)
25. Angles (Using The Theodolite)
26. Finding Distances, Elevations, and Measuring Heights (Using The  
Theodolite)

- 27.Layout Of A Building (Using The Digital Theodolite)
- 28.Measurements Using The Total Station
- 29.Handling To The Total Station
- 30.Contouring With (Auto Cad) Software
- 31.Setting Out
- 32.Marking Grid Line
- 33.Road Survey with Download Auto Cad / Topo Survey with Download and  
How To Determine Change Auto Cad File.
- 34.Method of Topo Survey Feeding Into the Auto Cad Systems and  
Downloading the Same.
- 35.Training On Auto Cad (2d And 3d Drawing)
- 36.Route Surveying & Design
- 37.Introduction To GPS For Civil, Surveying & Land Development
- 38.Evidence And Procedures For Boundary Determination
- 39.Boundary Control & Legal Principles