

# AS432 **Surveying** (2-0-0)

## **Module-1**

1. Linear measurement and chain survey: use of various types of tape measurement etc of correct length of line, direction and indirect ranging, chaining along sloping ground. Obstacles in chaining, errors, and their elimination

## **Module-2**

2. Compass surveying: Use of prismatic compass, temporary adjustment, bearing of a line, local attractions, correction of bearing.  
3. Plane table surveying : Methods of plane table, radiations. Intersections , traversing and resection. 2-point and 3-point problem, adjustment and common error in plane table survey.

## **Module-3**

4. Levelling: Use of dumpy level and leveling staff. Temporary and Permanent adjustments of dumpy level. Reduction of levels by H.I and rise and fall method. Curvature and refraction error, sensitiveness of level tube, reciprocal leveling, leveling difficulties and common errors.

## **Module-4**

5. Contouring: Contour interval and horizontal equivalent . Characteristics of contours, methods of contouring - direct and indirect method, contour gradient.  
6. Theodolite Survey: Use of theodolite, temporary adjustment, measuring horizontal and vertical angles, theodolite traversing or measurement of included angles

## **References:**

*Surveying and levelling Vol - 1, T. P. Kanetkar and S. V. Kulkarni*

*Surveying - Vol - I, B. C. Punmia*

*Surveying, Husain and Nagnas*

*Surveying and leveling – R. Agor*