**Engineering surveying**

General introduction on surveying, measurements of lines by tape, Tap correction, Leveling, Temporary adjustment of a level, permanent adjustment of a level, difference in height between two points, Rise and fall method, height of collimation method, reciprocal leveling, effect of curvature and refraction on leveling, errors in leveling, longitudinal sections (profile leveling), cross-sections, area of cross-sections, volumes of earth works, volumes of contour lines, correction for volumes, theodolite, total station, directions, traverse, traverse adjustment, photogrammetry and remote, global positioning system (GPS), geographic information system (GIS).