DETERMINATION OF BEARING CAPACITY FOR BUILDING AND STRUCTURAL DESIGN IN OWO LOCAL GOVERNMENT AREA, ONDO STATE, NIGERIA

OTUAGA, Philips Moses
Department of Civil Engineering and Technology
Rufus Giwa Polytechnic, Ondo State, **NIGERIA**

ABSTRACT

Owo, one of the largest producer of timber and cocoa, a commercial city in Ondo State requires adequate planning in terms of building and structural design for both low rise and multi-storey structures, as regards the bearing capacity that is, the ability of a soil to support a load from a structural foundation without failing in shear .This implies that the stability of a foundation depends on bearing capacity of the soil beneat5h the foundation and the settlement of the foundation. This paper presents the shear strength parameters: Cohesion(C) and the angle of internal friction (ϕ) of some sampled coordinated points in the study area. It is found that the minimum bearing capacity is acceptable. This implies that high –rise building pose none or very little risks irrespective of the technology used in the study area.

Keywords: Planning; Building and Structural Design; Load; Cohesion; Internal Friction; and Minimum Bearing Capacity.