A view to remember

End Semester Exams for second, third and fourth year students.



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"The road to success is always under construction" Get it right....CIVIL ENGINEERS

This paper gives an account of a study performed for the raft foundation of a commercial building of considerable height and area. A raft 175 m long was designed without due consideration to the buoyancy effect due to high groundwater table as the building is near the sea. Although the raft was designed as an uninterrupted system, the designer used different, and insufficient, thicknesses for the foundation in order to lower costs. A 3D study was subsequently undertaken to analyze the settlements of the raft using finite elements. There was reasonable agreement between the computed and the measured settlements. However, the front block of the raft was observed to float as soon as pumping for lowering of the groundwater table was halted. This instigated the analyzers to tie this portion of the raft to the surrounding piled curtain that was used for excavation of the foundation pit, by means of reinforced concrete beams. The computations show that the heave of the floor was restrained at acceptable levels. It is planned to stop pumping in the near future and compare the computed and measured vertical movements

<u>Source</u>: American Concrete Institute (ACI)

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S.No	Date	Event	Name	Prize
1	20/02/2015	Mimicry	K.Prakash	Ι
2	23/02/2015	Quiz	Md.Anwarullah	Ι
3	25/02/2015	Drawing	S.V.Ranganath V.Harika	I II
4	26/02/2015	Skit	S.Naveed K.Prakash	I II
5	27/02/2015	Dancing(group, Solo)	R.Dhanush U.Sai Krishna	II III

Dhanekula's Samskruthi 2014-2015:

STRUCTURAL ENGINEERING:

Structural engineering is concerned with the structural design and structural analysis of buildings, bridges, towers, flyovers (overpasses), tunnels, off shore structures like oil and gas fields in the sea, aerostructure and other structures. This involves identifying the loads which act upon a structure and the forces and stresses which arise within that structure due to those loads, and then designing the structure to successfully support and resist those loads. The loads can be self weight of the structures, other dead load, live loads, moving (wheel) load, wind load, earthquake load, load from temperature change etc.

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The structural engineer must design structures to be safe for their users and to successfully fulfill the function they are designed for (to be serviceable). Due to the nature of some loading conditions, subdisciplines within structural engineering have emerged, including wind engineering and earthquake engineering. Design considerations will include strength, stiffness, and stability of the structure when subjected to loads which may be static, such as furniture or self-weight, or dynamic, such as wind, seismic, crowd or vehicle loads, or transitory, such as temporary construction loads or impact. Other considerations include cost, constructability, safety, aesthetics and sustainability.



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