SHANTILAL SHAH ENGINEERING COLLEGE, BHAVNAGAR

B.E. SEM. – VIII : Foundation Engineering (2180609)

Following Students have to submit their Active Learning Assignment (PPT) on given Topic and submit on 16th March 2018.

Note:

- First Slide should contain College name, Topic title, and Enrollment numbers.
- Make at least 10-15 slides on topic

Roll No.	Topic Title
1001-1005	Types of foundation, Factors affecting the selection of type of foundations
1006-1010	steps in choosing types of foundation based on soil condition, Objectives and planning of exploration program
1011-1015	methods of exploration-wash boring and rotary drilling-depth of boring
1016-1020	soil samples and soil samplers-representative and undisturbed sampling,
1021-1025	field penetration tests: SPT, SCPT, DCPT.
1026-1030	Introduction to geophysical methods, Bore log and report writing, data interpretation.
1031-1035	Introduction, significant depth, design criteria, modes of shear failures.
1036-1040	bearing capacity determination using IS Code, Presumptive bearing capacity. Settlement, components of settlement & its estimation
1041-1045	permissible settlement, Proportioning of footing for equal settlement, allowable bearing pressure
1046-1050	Bearing capacity from in-situ tests(SPT, SCPT, PLATE LOAD)
1051-1055	Factors affecting bearing capacity including Water Table
1056-1060	Bearing capacity of raft/mat foundation as per codal provisions
1061-1065	Contact pressure under rigid and flexible footings. Floating foundation.
1066-1070	Types of pavements & its design
1071-1075	Introduction, load transfer mechanism
1076-1080	types of piles and their function
1081-1085	factors influencing selection of pile
1086-1090	Pile method of installation and their load carrying characteristics for cohesive and granular soils
1091-1095	pile load carrying capacity from static formula,dynamic formulae (ENR and Hiley)
1096-1000	penetration test data & Pile load test
1101-1105	Pile group: carrying capacity,
1106-1110	Pile group: efficiency and settlement.
1111-1115	Negative skin friction.
1116-1120	Significant characteristics of expansive soil
1121-1125	footing on such soils, Problems and preventive measures.
1126-1130	Under-reamed pile foundation-its concept,design & field installation
1131-1135	Significant characteristics of silt and loess
1136-1140	introduction to geosynthetics-types and uses.
1141-Rest ALL	Types (types of flexible and rigid earth retention systems: counter fort, gravity, diaphragm walls, sheet pile walls, soldier piles and lagging).

Faculty Name: Prof. P. S. Parekh