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M.E. 2nd Semester(KSV)

MID SEMESTER EXAMINATION

Date/Day: 21/03/2014, friday Branch : CIVIL(SEM-2) Sub Code: Subject Name: SOIL IMPROVEMENT **TECHNIQUES** Time : 08:30 AM to 10:00 AM Max. Marks : 30 Instructions:1) All questions are compulsory 2) Figures to the right indicate full marks. 3) Indicate clearly, the options you attempt along with its respective question number. Q.1 Write a note on Vibrofloation method with its backfilling material (A) [5] Explain formation of Residual soil and sedimentary soil. (B) [5] (A) Write about the objectives considered for the ground improvement techniques to [5] be applied for the different types of soil. What are the factors affecting groutability of the grouts used for particular soil, Also **(B)** [5] explain types of grouting material giving example depending on phase. (A) What is meant by grouting. Explain the application and aspect of this method. [5] Write about the objectives considered for the ground improvement techniques to [5] (B) be applied for the different types of soil. Explain relation between Moisture and density of soil. [5] Q.3(A) Write short note on different types of roller and give suitability for the same. [5] **(B)** OR [5] Explain laboratory test for determining density of soil. (A) Explain effects of water seepage, surface erosion, vibration and mining [5] (B) on ground after formation.