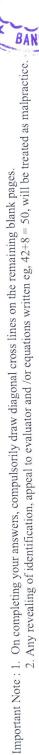
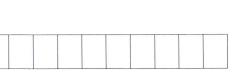
(20 Marks)





Seventh Semester B.E. Degree Examination, Jan./Feb. 2021 Ground Improvement Techniques

Time: 3 hrs.

Stone columns.

Max. Marks:100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART - A

1	a.	Discuss the objectives of Ground Improvement Techniques.	(10 Marks)
	b.	Mention and briefly explain the measures adopted for Black cotton soil.	(10 Marks)
		Description of the soil	(10 Mowles)
2		Describe the effect of compaction on engineering properties of the soil.	(10 Marks)
	b.	Explain Dynamic compaction and Vibrofloatation.	(10 Marks)
3	a.	Explain the principle and techniques of dewatering systems.	(10 Marks)
5	b.	Briefly explain Electro kinetic dewatering system.	(10 Marks)
	υ.	Briefly explain blocks kinetic dewatering system.	
4	a.	Explain the following: i) Prefabricated vertical drains ii) Electrokinetic dew	atering.
7	α.	iii) Preloading.	(15 Marks)
	h	List advantages and disadvantages of preloading technique.	(05 Marks)
	0.	List advantages and disadvantages of protoading teeningae.	(
		PART – B	
		TAKE D	
5	a.	What do you mean by chemical modification of soils? Discuss benefits.	(06 Marks)
5	b.	Describe effect of cement stabilization on various properties of soils.	(08 Marks)
	c.	Explain fly ash stabilization.	(06 Marks)
	٠.	Explain II) uni dilicinati	
6	a.	Explain soil cement reactions.	(10 Marks)
U	b.	Explain the construction of soil – asphalt.	(05 Marks)
	c.	How the soil stabilization using calcium and sodium chloride is done?	(05 Marks)
	С.	Tiow the son studing the same and a same	
7	a.	Classify the methods of grouting and explain any two.	(10 Marks)
,	b.		(10 Marks)
	U.	Explain with skeepings e approximate as a grand	
8	Wı	rite short notes on the four of the following with sketches:	
U	a.	~	
	b.	Gabions and mattresses.	
	c.	Micropiles.	
	d.	· · · · · · · · · · · · · · · · · · ·	
	u.	Ground anonors.	
