

Seat No.:	Q. Paper Code:FTC-A-006			SET	A	
	Fabtech Technical Campus, College of Engineering & Research, Sangola					
	(An Autonomous Institute)					
	Geotechnical Engineering					
	Academic Year: -2025-26, Semester-I					
Ground Improvement Methods (25PCE11172)						
Regular End Semester Examination Winter 2025-26 [Dec./Jan]						
Class:	F. Y. M. Tech.	Day & Date:	Saturday, 03/01/2026			
Duration:	03 Hrs.	Max. Marks:	60 Marks			
Time:	11:00 AM TO 02:00 PM					
Instructions:						
1) All Questions are compulsory. 2) Figures to the right indicate full marks. 3) Draw neat diagram wherever necessary. 4) Make suitable assumptions if necessary and state it clearly. 5) Use of non-programmable calculator is allowed.						
Q. No.	Questions			Marks	CO	BL
Q. 1	Attempt any two of the following			12		
1	Explain in details classification of ground modification technique.			6	1	2
2	Explain in details Emerging Trends in ground improvement.			6	1	2
3	Explain in details with their types of shallow compaction.			6	1	2
Q. 2	Attempt any two of the following			12		1
1	Write a difference between the shallow and deep compaction techniques.			6	2	1
2	Explain in detail dynamic consolidation.			6	2	2
3	Explain in detail Field compaction control and geometrical replacement concept.			6	2	2
Q. 3	Attempt any two of the following			12		
1	List out the hydraulic modifications and explain any one in detail.			6	3	1
2	Explain in detail Vacuum dewatering wells.			6	3	2
3	List out the hydraulic modifications and explain any one in detail.			6	3	1

Q. 4	Attempt any two of the following	12		
1	Define admixture. List out the types of admixture. Explain any three in details.	6	4	2
2	Explain grouting with their types.	6	4	2
3	Write a short note on grout materials	6	4	1
Q. 5	Attempt any two of the following	12		
1	Explain Concept of soil reinforcement in detail.	6	5	2
2	Explain in detail reinforcing materials.	6	5	2
3	Explain design and construction of reinforced earth structures	6	5	2