



No: **CTETVM/2879/2025-D1**

Office of the
Controller of Technical Examinations
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CIRCULAR

Sub:- Technical Education – Examination Wing - Diploma November 2025-Question paper complaint-Decision taken- Regarding.

Ref :- 1.Complaints received from students of various college.

Camp Officers of all the centralised valuation camps of November 2025 Diploma Examination are informed that the following guidelines should be followed for distribution of marks in connection with out of syllabus/scope questions,of below mentioned codes.

Sl no:	Revision	Subject,Code	Remarks
1	21	5014-B(Ground Improvement Techniques)	Total mark scored by the student x 1.39 (Following questions must be excluded from valuation. PART-A,Question no:(3), PART-B,Question no:(3,6), PART-C,Question no: (V,VI,VII,VIII))
2	21	3014(Theory of Structures)	Total mark scored by the student X 1.11 (Following questions must be excluded from valuation. PART-C Question no:(XIII ,XIV))
3	15	4026(Production Drawing)	1. Calculate the percentage of marks obtained by the student, considering the total mark excluding the marks of PART-B QUESTION(2)-(15 marks) 2. Then, the proportionate marks of above omitted question shall be calculated based on the above obtained percentage. 3. Marks obtained in the above cases shall be added to get actual marks admissible to the student.

Ray V V

JOINT CONTROLLER OF TECHNICAL EXAMINATIONS

To: 1.Camp officers of centralised valuation camps
2.Office copy

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER - 2025**

GROUND IMPROVEMENT TECHNIQUES

[Maximum Marks:75]

[Time: 3 Hours]

PART - A

I. Answer all the following questions in one word or one sentence. Each question carries 'one' marks.

(9 x 1 = 9 Marks)

Module Outcome Cognitive level

1	Determine the equipment having projecting studs on the surface of rollers.	M1.02	A
2	List the various surface compaction equipments.	M1.02	R
3	Choose a commonly available and relatively inexpensive aqueous solution.	M2.03	A
4	Define permeation.	M2.03	R
5	List the types of soil reinforcement materials.	M3.02	R
6	List the forms of soil reinforcement.	M3.02	R
7	Choose the two major groups in geosynthetics.	M3.04	A
8	List the uses of preloading in civil engineering works.	M4.04	R
9	List the types of vertical drains.	M4.04	R

PART - B

II. Answer *any eight* questions from the following. Each question carries 'Three' marks.

(8 x 3 = 24 Marks)

Module Outcome Cognitive level

1	List the disadvantages of wellpoint systems with pumps.	M1.04	R
2	Illustrate the vacuum dewatering system.	M1.04	A
3	Draw the figure of permeation.	M2.03	A
4	Define groutability ratio.	M2.03	R
5	Draw the figure of compaction grouting.	M2.03	A
6	Sketch two-shot and one-shot methods of chemical grouting.	M2.03	A

7	List the major disadvantages of sheep foot rollers.	M1.02	R
8	Illustrate deep-well dewatering.	M1.04	A
9	List the applications of soil reinforcement in ground improvement.	M3.02	R
10	List the advantages of geodrains.	M4.04	R

PART - C

Answer all the questions from the following. Each question carries ‘seven’ marks.

(6 x 7 = 42 Marks)

Module Outcome Cognitive level

III.	Describe single-stage wellpoint installation by progressive system with a neat sketch. OR	M1.04	U
IV.	Discuss about vibrating smooth-drum rollers.	M1.02	U
V.	List the various aqueous solutions. OR	M2.03	R
VI.	Report the applications of the various grout types: a) PFA, b) cement, c) clays d) clay/cement e) emulsions f) solutions, one shot, g) solutions, two shot.	M2.04	U
VII.	Describe non-woven with a neat sketch. OR	M3.04	U
VIII.	Describe Geosynthetic nets.	M3.04	U
IX.	Discuss geometrical aspects of geosynthetics. OR	M3.04	U
X.	Describe the following properties of geosynthetics: a) Abrasion Resistance b) Ultra Violet Resistance	M3.04	U
XI.	Illustrate the following. a) consolidometer b) floating ring cell c) fixed ring cell OR	M4.03	A
XII.	Discuss the advantages of preloading methods.	M4.04	U
XIII.	Explain sand drains construction by wash boring. OR	M4.04	U
XIV.	Explain cardboard drains with a neat sketch.	M4.04	U
