

UNIT WISE QUESTION BANK

UNIT-I

S.No.	Questions	BTL	CO	PO
Part-A(Short Answer Questions)				
1	Define challenging soil.	L1	CO1	1
2	What is expansive soil? Give one example.	L1	CO1	1
3	What are the difficulties faced with soft clay?	L2	CO1	2
4	Name the various soil deposits found in India.	L1	CO1	1
5	What is the need for improving the ground?	L2	CO1	2
6	Define ground improvement.	L1	CO1	1
7	What is compaction? When is it adopted?	L1	CO1	1
8	When is pre-loading adopted as a ground improvement technique?	L2	CO1	2
9	What is the advantage of using vertical drains along with pre-loading?	L2	CO1	2
10	What is vibro-compaction? In which soils is it adopted?	L2	CO1	2
11	What are the various methods of grouting?	L1	CO1	1
12	How is blasting a ground improvement technique?	L2	CO1	2
13	What is soil reinforcement?	L1	CO1	1
14	What are four major applications of geosynthetics?	L2	CO1	2
15	What do you understand from the term chemical stabilization?	L2	CO1	2
Part- B(Long Answer Questions)				
1	Explain in detail the role of ground improvement in foundation engineering.	L2	CO1	2
2	(a) Explain the geotechnical problems associated with black cotton soil, laterite soil and alluvial deposits. (b) Discuss factors influencing selection of ground improvement techniques.	L4	CO1	2
3	Write brief notes on (a) Compaction (b) Vibro-compaction (c) Pre-loading (d) Pre-loading with vertical drains.	L3	CO1	2
4	Write short notes on (a) Dewatering (b) Heating (c) Freezing (d) Lime columns.	L3	CO1	2
5	Explain (a) Soil reinforcement (b) Chemical stabilization (c) Grouting (d) Electro-kinetic stabilization.	L4	CO1	3
6	(a) Explain stone columns and their installation. (b) Explain geosynthetics and their applications.	L4	CO1	3
7	Explain the various methods of ground improvement.	L4	CO1	2