

UNIT-III

S.No	Questions	BTL	CO	PO
Part–A (Short Answer Questions)				
1	What is pressure bulb.	1	3	1
2	What are the expressions for the Boussinesq's and westergaard's	1	3	1
3	State Boussinesq's equation for vertical stress at point due to a load on the surface of an elastic medium	1	3	1
4	Derive the principle of construction of Newmark's chart and its use	1	3	1
5	A load 1000KN acts as a point load at the surface of the soil point of action of the load by Boussinesq's formula. Compare the value with the result from Westergaard's theory.	3	3	1
6	A circular area on the surface of an elastic mass of great extent carries a uniformly distributed load of 120KN/m ² . The radius of the circle is 3m. compute the intensity of vertical pressure at a point 5m beneath the Centre of the circle using Boussinesq's Method.	3	3	1
7	What is the mechanism of compaction?	1	3	1
8	Discuss the effect of compaction on soil properties.	1	3	1
9	Write a short note on field compaction control	1	3	1
10	Discuss the effect of compaction on soil properties	1	3	1
Part–B (Long Answer Questions)				
11	State the Boussinesq's equation for vertical stress at a point due to a load on the surface of an elastic medium.	1	3	2
12	Derive as per Boussinesq's theory, expression for vertical stress at any point in a soil mass due to strip load.	3	3	1
13	Derive the Westergaard's solution and limitations of elastic theories.	3	3	2
14	Derive vertical stress under trapezoidal loads, horizontal load, Inclined load.	3	3	3
15	Explain the Newmark's Influence charts and their uses.	2	3	3
16	Describe standard proctor test and the modified proctor test	3	3	1

Blooms Taxonomy Level (BT) : (L1–Remembering; L2–Understanding; L3–Applying; L4– Analyzing; L5–Evaluating; L6–Creating)