



Civil Engineering

Vision: “To impart quality technical education beneficial to industry and the society in the field of Civil Engineering.”

Mission: •To arrange academic and technical expertise.

- To improve the practical knowledge of the student as per current scenario of industry.
- To make the students socially and ethically responsible.

Assignment No :- 01

Topic Name :-General Geology & Overview Of Geotechnical Engineering

- Define Geology and Mineralogy.
 - State the importance of geology for Civil Engineering.
 - Give the classification for rock based on its mode of origin.
 - Explain the importance of geology in civil engineering constructions.
 - State the necessity of soil investigation.
 - Explain the field applications of Geotechnical Engineering.
 - Explain importance of soil as construction material.
 - Define soil as per IS 2809-1972.
-

Date of Submission :-Within the one week after completion of the chapter.

Assign By: - Mrs. Pranjali Chafale



Civil Engineering

Vision: "To impart quality technical education beneficial to industry and the society in the field of Civil Engineering."

Mission: • To arrange academic and technical expertise.

- To improve the practical knowledge of the student as per current scenario of industry.
- To make the students socially and ethically responsible.

Assignment No :- 02

Topic Name :- Physical Properties Of Soil

- Explain the soil as three phase system.
- Explain the experimental procedure of determination of liquid limit of given soil sample.
- Calculate the voids ratio and dry density if the soil sample has 30% porosity and specific gravity as 2.6.
- Explain Atterberg's limits of consistency.
- Define water content, specific gravity, void ratio of soil.
- Explain experimental procedure of determination of specific gravity of soil by pycnometer as per IS 2720, part 3.
- Explain the sieve analysis test for grading of soil with the help of particle size distribution curve.

Date of Submission :- Within the one week after completion of the chapter.

Assign By: - Mrs. Pranjali Chafale



Civil Engineering

Vision: “To impart quality technical education beneficial to industry and the society in the field of Civil Engineering.”

Mission: • To arrange academic and technical expertise.

- To improve the practical knowledge of the student as per current scenario of industry.
- To make the students socially and ethically responsible.

Assignment No :- 03

Topic Name :- Permeability & Shear Strength of Soil

- State and explain the factors affecting permeability of soil.
 - Explain procedure for determination of falling head Permeability Test.
 - Define flow net and state applications of flow net.
 - A constant head permeability test gives discharge of 250 ml in 210 seconds under a constant head of 600 mm. Determine the permeability if the soil sample was 100 mm long and 78.5 cm² in area.
 - Draw strength envelope for purely cohesive and cohesion less soil.
-

Date of Submission:- Within the one week after completion of the chapter.

Assign By: - Mrs. Pranjali Chafale



Civil Engineering

Vision: “To impart quality technical education beneficial to industry and the society in the field of Civil Engineering.”

Mission: • To arrange academic and technical expertise.

- To improve the practical knowledge of the student as per current scenario of industry.
- To make the students socially and ethically responsible.

Assignment No :- 04

Topic Name :- Bearing Capacity Of Soil

- State any four assumptions made in Terzaghi’s analysis.
 - State and explain the methods of improving the bearing capacity of soil.
 - Define active earth pressure and passive earth pressure.
 - Calculate active and passive earth pressure at depth of 8 m in dry cohesionless soil with an angle of internal friction of 30° and unit weight of 16 kN/m^3 .
 - State the effect of water table on bearing capacity of soil.
-

Date of Submission :- Within the one week after completion of the chapter.

Assign By: - Mrs. PranjaliChafale



Civil Engineering

Vision: “To impart quality technical education beneficial to industry and the society in the field of Civil Engineering.”

Mission: •To arrange academic and technical expertise.

- To improve the practical knowledge of the student as per current scenario of industry.
- To make the students socially and ethically responsible.

Assignment No :- 05

Topic Name :- Compaction & Stabilization Of Soil

- State compaction equipment's used for soil compaction.
 - State any two field situation where compaction is required.
 - Differentiate between compaction and consolidation.
 - Explain different methods of soil stabilization.
 - Explain the plate load test for determination of bearing capacity of soil.
-

Date of Submission :- Within the one week after completion of the chapter.

Assign By: - Mrs. PranjaliChafale