

1 Assignment 1

1. Explain wave motion. Define surface wave. [426]
2. Find the kinematic condition at the free surface. [427]
3. Establish the pressure condition at the free surface. [428]
4. Explain surface wave. [429]
5. Derive the equation of kinetic energy of progressive waves. [433]

Problem 1.1. Explain wave motion. Define surface wave.

Solution.

Problem 1.2. Find the kinematic condition at the free surface.

Solution.

Problem 1.3. Establish the pressure condition at the free surface.

Solution.

Problem 1.4. Explain surface wave.

Solution.

Problem 1.5. Derive the equation of kinetic energy of progressive waves.

Solution.