

Home Assignment(2021)
B.Sc. 6th Semester
Hydrostatics
Paper-M601(Major Course)
Total Marks: 20

Date of Submission is on or before 8th August 2021

1. Answer the following questions: 1×5
- (a) Define Homogeneous liquids.
 - (b) What you mean by Lines of Forces.
 - (c) Define Centre of Pressure of a plane area immersed in a fluid.
 - (d) Define Centre of Buoyancy.
 - (e) What you mean by Surface of Equal Pressure.
2. Answer the following questions: 3×5
- (A) Find the necessary and sufficient conditions which must be satisfied by a given distribution of forces X, Y, Z acting in a fluid so that the fluid may maintain equilibrium.
 - (B) If a given plane area turns in it's own plane about a fixed point, prove that the centre of pressure changes it's position and describes a curve on the area.
 - (c) Show that the equilibrium is stable or unstable according as the metacentre is above or below the centre of gravity of the body.