18 Lecture - PHY101

Important Mcqs

What is the relationship between pressure and velocity in a fluid, according to Bernoulli's principle?
A. Pressure and velocity are directly proportional
B. Pressure and velocity are inversely proportional
C. Pressure and velocity are not related
D. None of the above
Answer: B. Pressure and velocity are inversely proportional
What is the unit of viscosity?
A. kg/m^3
B. m/s ²
C. Pa·s
D. J/kg
Answer: C. Pa·s
What is the term for the force per unit area acting on a surface in contact with a fluid?
A. Buoyancy
B. Pressure
C. Surface tension
D. Viscosity
Answer: B. Pressure
Which type of fluid flow occurs when the fluid moves in a straight line at a constant velocity?
A. Laminar flow

B. Turbulent flow

C. Transitional flow D. Viscous flow Answer: A. Laminar flow What is the term for the ratio of a fluid's density to its viscosity? A. Mach number B. Reynolds number C. Weber number D. Froude number Answer: B. Reynolds number What is the term for the point in a fluid flow where the velocity is at its maximum and the pressure is at its minimum? A. Stagnation point B. Separation point C. Vortex point D. Turbulent point Answer: A. Stagnation point Which principle states that the total pressure in a fluid flow system is constant? A. Pascal's principle B. Archimedes' principle C. Bernoulli's principle D. Hooke's principle Answer: C. Bernoulli's principle What is the term for the upward force on an object submerged in a fluid? A. Pressure B. Buoyancy

C. Drag
D. Lift
Answer: B. Buoyancy

What is the term for the resistance of a fluid to flow?
A. Viscosity
B. Surface tension
C. Compressibility
D. Reynolds number
Answer: A. Viscosity

Which type of fluid flow occurs when the fluid moves in a chaotic and unpredictable manner?
A. Laminar flow
B. Turbulent flow
C. Transitional flow

D. Viscous flow

Answer: B. Turbulent flow