

# 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.  $\text{kg/m}^3$
- B.  $\text{m/s}^2$
- C.  $\text{Pa}\cdot\text{s}$
- D.  $\text{J/kg}$

**Answer: C.  $\text{Pa}\cdot\text{s}$**

**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**