

TALEEMI DUNYA

Test Syllabus: Unit # 6

St. Name		Test	physics	T. Marks	30	Time	60 Min
F. Name		Class	11 th	T. Code	U#6	T. Date	

NOTE: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that Question with Marker or Pen ink. Cutting or filling two or more circles will result in zero mark in that question. **6.**

1. The study of properties of fluids in motion is called							
a	Fluid	b	Fluid statics	c	Fluid dynamics	d	None
2. The dimensions of coefficient viscosity are							
a	$ML^{-1}T^{-1}$	b	$M^2L^{-1}T^{-1}$	c	$ML^{-1}T^{-1}$	d	$M^2L^{-1}T^{-1}$
3. η is denoted for coefficient of:							
a	Friction	b	viscosity	c	Linear expansion	d	Gravitational customer
4. The SI unit of coefficient of viscosity is:							
a	$Kgm^{-1}s^{-1}$	b	$Kgm^{-2}s^{-1}$	c	$Kg m^{-2}s^{-2}$	d	$Kg m^2s$
5. An object moving through a fluid experience a retarding force called							
a	Drag force	b	Gravitational force	c	Terminating force	d	Frictional force
6. The equation: $F=6\mu\eta rv$ is called							
a	Newton's law	b	Stoke 's law	c	Ohm's law	d	Lenz's law

Q.2 Write short answers of the following questions.

(8x2=16)

1. Why fog droplets appear to be suspended in air?
2. Two row boats moving parallel in the same direction are pulled towards each other. Explain
3. Explain how the swing is produced in a fast moving cricket ball?
4. Explain what do you understand by the term viscosity?
5. Explain the working of a carburetor of motorcar using by Bernoulli's principle.
6. A tiny water droplet of radius 0.010 cm descends through air from a high building calculate its terminal velocity given η for air $=10 \times 10^{-4} kg m^{-1}s^{-1}$ and density of water $=1000 kg m^{-3}$
7. Define terminal velocity?
8. Define fluid flow

NOTE: Attempt the long questions.

(4+4=8)

3(a) Explain Bernoulli's Equations.

(b) How large must a heating duct be if air moving $3.0 m s^{-1}$ along it can replenish the air in a room of $300 m^3$ volume every 15 min? Assume the air's density remain constant.