

ECAT Pre General Science Physics Chapter 6 Fluid Dynamics

Sr	Questions	Answers Choice
1	According to the Bernoulli's equation, where the speed of the fluid is high, the pressure will be	A. low B. zero C. high D. all of them
2	What are the SI base units of the coefficient of viscosity	A. Kg m s^{-2} B. $\text{kgm}^2 \text{s}^{-2}$ C. Kg m s^{-1} D. $\text{kg m}^{-1} \text{s}^{-1}$
3	Blood pressure is measured in torr. Which of the following units could belong to torr?	A. N m^{-1} B. N m^{-2} C. N m D. $\text{N}^{-1} \text{m}^{-2}$
4	Terminal velocity is the maximum velocity attained by a spherical droplet when the drag force _____ the weight of droplet:	A. Is smaller than B. Is greater than C. Becomes equal to D. None of these
5	The body passing a viscous medium affected by:	A. One force only B. Two forces only C. Four forces D. None of these
6	A massive object falls through a fluid:	A. Faster B. Slower C. Slowest D. None
7	According to the Bernoulli's theorem the pressure velocity are	A. equal to each other B. proportional to each other C. inversely proportional to each other D. none of them
8	Blood is an	A. Compressible fluid B. incompressible fluid C. hard D. none of them
9	The dimensions of viscosity are:	A. $\text{M}^2 \text{L}^{-1} \text{T}^{-2}$ B. $\text{M}^{-1} \text{L}^{-1} \text{T}^{-1}$ C. $\text{M}^{-1} \text{L}^{-1} \text{T}$ D. $\text{ML}^{-1} \text{T}^{-1}$
10	The electrical forces between the molecules of a liquid are	A. Repulsive B. Attractive C. Both A and B D. None
11	The value of viscosity of a fluid is dependent on (at constant temperature)	A. the fluid itself B. the fluid and its container C. anything in contact with the fluid D. all of the above
12	Internal friction of fluid is called	A. Surface tension B. Viscosity C. Resistance D. Cohesive force
13	In case of streamed lined flow of liquid, the loss of energy is	A. Maximum B. Minimum C. Infinite D. equal to what is in turbulent flow
14	Which of the following is a characteristic of an ideal fluid?	A. it is non-viscous B. it is incompressible C. it's motion is steady D. all of the above

15	Substances that flow easily have	<p>A. large coefficient of viscosity</p> <p>B. small coefficient of viscosity</p> <p>C. either of them</p> <p>D. none of them</p>
16	Viscosity is defined as	<p>A. the friction between fluid and its container's walls</p> <p>B. the internal friction between two layers of fluid</p> <p>C. the resistance to flow a fluid experiences</p> <p>D. the extent to which outside factors effect the fluid's flow</p>
17	The drag force acting on a spherical droplet of radius 10^{-5} m moving with a velocity of 1 cm/sec in a fluid of velocity 5.31×10^{-7} m/sec. The units comes out to be:	<p>A. 10^{-16}N</p> <p>B. 10^{-14}N</p> <p>C. 10^{-12}N</p> <p>D. 10^{-10}N</p>
18	When a fluid is in motion, its flow can be considered as	<p>A. turbulent</p> <p>B. streamline</p> <p>C. either or them</p> <p>D. neither of them</p>
19	A person standing near the track of a fast moving train has tendency to fall towards it because of	<p>A. Vibration due to motion of train</p> <p>B. Gravitation force of attraction between person and trains</p> <p>C. The high speed of train</p> <p>D. Some other effect</p>
20	Fluid friction is _____ the friction between two solid surfaces:	<p>A. Greater than</p> <p>B. Smaller than</p> <p>C. Equal to</p> <p>D. None of these</p>