

ECAT Physics Chapter 6 Fluid Dynamics

Sr	Questions	Answers Choice
1	The resistance offered by a fluid to a solid moving inside it is called:	A. Drag force B. Surface force C. Viscosity D. None of these
2	According to Stoke's law, drag force depends on	A. Initial velocity B. Final velocity C. Terminal velocity D. Instantaneous velocity
3	The terminal velocity of a small size spherical body of radius R moving in a fluid varies as	A. R B. $R^{2/\sup}$ C. $1/R$ D. $(1/R)^{2/\sup}$
4	0.10 cm can be written as:	A. $1.0 \times 10^{-2/\sup}$ m B. $1.0 \times 10^{-3/\sup}$ cm C. $1.0 \times 10^{-4/\sup}$ cm D. $1. \times 10^{-4/\sup}$ m
5	Fire fighters have jet attached to the head of their water pipes in order to	A. Increase the mass of water flowing per second B. Increase the velocity of water flowing out C. Increase the volume of water flowing per second D. Avoid wastage of water
6	During the free fall motion of an object, when its weight becomes equal to the drag force, then it will move with	A. maximum speed B. zero speed C. maximum speed D. none of them
7	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
8	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 viscosity 5.31×10^{-7} m/sec. The units comes out to be:	A. $10^{-16/\sup}$ N B. $10^{-14/\sup}$ N C. $10^{-12/\sup}$ N D. $10^{-10/\sup}$ N
9	Fire fighters have a jet attached to the head of their water pipes in order to head of their water pipes in order to	A. Increase the mass of water flowing per second B. Avoid wastage of water C. Increase the velocity of water flowing out D. Increase the volume of water flowing per second
10	Viscosity is defined as	A. the friction between fluid and its container's walls B. the internal friction between two layers of fluid C. the resistance to flow a fluid experiences D. the extent to which outside factors effect the fluid's flow
11	The property of fluids due to which they resist their own flow is called:	A. Drag force B. Surface tension C. Viscosity D. None of these
12	The body passing a viscous medium affected by:	A. One force only B. Two forces only C. Four forces D. None of these
13	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

14	The study of fluid in motion basically involves law of conservation of:	A. Mass B. Energy C. Change D. Both A and C E. Both A and B
15	The body will move with terminal velocity when it acquires	A. minimum speed B. zero speed C. maximum speed D. none of them
16	Fog droplets are suspended in air when their weight is balanced by:	A. Force of gravity B. Upward thrust due to air C. Surface tension D. None of these
17	The pressure will change in the pipe, as the fluid moves through that pipe of varying	A. cross-section B. height C. none of them D. both of them
18	When the velocity of a liquid flowing steadily in a tube increases, its pressure?	A. Decreases B. Increases C. Remains same D. Zero
19	The product of cross-sectional area of the pipe and the fluid speed at any point along the pipe is	A. very high B. very low C. constant D. zero
20	Unit of viscosity is:	A. $\text{Kg m}^{-1}\text{sec}^{-1}$ B. N s m^{-2} C. J s m^{-3} D. All of these